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Replies to initial written questions raised by Finance Committee Members in examining the Estimates of Expenditure 2020-21

Director of Bureau : Secretary for the Environment

Session No. : 7

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ENB306	6052	MO Claudia	137	(0) -
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CONTROLLING OFFICER'S REPLY

ENB001

(Question Serial No. 1719)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Over the past 3 years, regarding endangered species and smuggling of animals in Hong Kong, would the Government inform this Committee of the following:

- (a) What was the number of prosecutions instituted under the Protection of Endangered Species of Animals and Plants Ordinance? What were the penalties imposed?
- (b) What was the number of cases of possessing endangered species without a licence, and what follow-up actions were taken?
- (c) How many endangered animals were seized each year? What were their types?
- (d) What were the conditions of the animals seized in various control points? What was the number of animals died in course of transit?
- (e) What was the number of illegal trading on the internet? What was the number of enforcement actions taken by means of decoy operations?
- (f) What was the number of animals confiscated and handed to non-profit making organisations in Hong Kong for conservation?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 32)

Reply:

- (a) The number of prosecutions instituted under the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance) and the penalties imposed over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of prosecutions	189	221	226
Maximum penalty (imprisonment / months)	3	8	24
Minimum penalty (fine / \$)	400	400	300

- (b) The Agriculture, Fisheries and Conservation Department (AFCD) conducts law enforcement investigations on cases of possessing endangered species without a licence under the Ordinance and institutes prosecution when there is sufficient evidence. The enforcement figures related to illegal possession of endangered species over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of cases	42	18	13
Number of convictions[#]	37	34	17

[#] The number of convictions is higher than the number of cases in 2018 and 2019 mainly because it takes time to conduct investigations, initiate summons and schedule the court hearings. Hence, some of the cases were convicted in the following year after their occurrence. A few cases may involve more than 1 conviction, for example there is more than 1 defendant or 1 charge.

- (c) The number of endangered animals seized over the past 3 years is tabulated as follows:

Year	2017	2018	2019
Number of individuals	2 812	4 140	2 851

The most commonly seized animals include tortoises, lizards, birds, snakes, fish and stony corals.

- (d) The number of endangered animals seized at various control points over the past 3 years is tabulated as follows:

Year / Control point	2017	2018	2019
Hong Kong International Airport	2 488	2 915	2 723
Lo Wu Control Point	21	6	15
Lok Ma Chau Control Point	--	14	29
Lok Ma Chau Spurline Control Point	--	15	20
Man Kam To Control Point	10	916	--
Shenzhen Bay Control Point	8	193	17
Sha Tau Kok Control Point	--	--	6
West Kowloon Control Point	--	--	8
China Ferry Terminal	6	--	--
Sea boundary	10	--	--

There were 0, 5 and 2 animals died in the course of transit in 2017, 2018 and 2019 respectively.

- (e) All cases of illegal selling of endangered species on the internet are investigated by means of decoy operations. The number of cases involving illegal selling of endangered species through internet platforms and the quantity of seizure over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of cases	19	9	9
Quantity of seizure	45 animals	24 animals	6 animals, 6 plants and 55.3kg of products or specimens

- (f) In 2017, 2018 and 2019, AFCD donated 733, 241 and 130 seized live endangered species respectively to local institutes/organisations for conservation purposes and/or temporary keeping.

- End -

CONTROLLING OFFICER'S REPLY

ENB002

(Question Serial No. 0964)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Agriculture, Fisheries and Conservation Department (AFCD) stated in this Programme that it would strengthen the control of trade in endangered species, in particular ivory, and combating their illegal trade and smuggling. In this connection, would the Government inform this Committee of the following:

- (a) What are the current condition and the effectiveness in combating illegal trade and smuggling?
- (b) How will AFCD strengthen the control of illegal trade and smuggling in the coming year? What are the manpower and resources required?
- (c) Will AFCD enhance collaboration with other government departments? If yes, please set out the departments concerned and the mode of cooperation?

Asked by: Hon CHAN Kin-por (LegCo internal reference no.: 1)

Reply:

- (a) The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 came into effect on 1 May 2018. Starting from 1 August 2018, all import and export of ivory (save for antique ivory) for commercial purposes have been banned. A licence to possess is required for keeping pre-Convention (i.e. the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes.

The Agriculture, Fisheries and Conservation Department (AFCD) has implemented a series of measures that aim at curbing smuggling of ivory and strengthening the control of local trade in ivory. The measures include

enhancing inter-departmental collaboration and stepping up joint operations and intelligence exchange with the Customs and Excise Department (C&ED) and overseas law enforcement agencies (e.g. Interpol); deploying sniffer dogs to detect ivory at import and export control points to assist in detecting and preventing smuggling of ivory; conducting inspections targeted at licensed ivory shops and non-licensed art and craft shops to check the licensing compliance as well as to detect and combat illegal ivory trade; as well as using hi-tech radiocarbon dating analysis to determine the age and hence the legality of ivory.

AFCD has carried out a series of publicity and education activities to publicise the phase-out plan of the local ivory trade and the new penalty regime among the general public, travellers and traders. These include distributing leaflets and displaying posters at various import and export control points; broadcasting TV and radio Announcements of Public Interest on cross-boundary coaches and the YouTube Channel, displaying animated posters on digital screens at 6 Shenzhen to Hong Kong immigration control points as well as conducting visits to licensed ivory shops and other art and craft shops for education and promotion.

Apart from ivory, the Government is also committed to combatting the smuggling of other endangered species. The species seized in operations vary and mainly include dried seahorse, pangolin scales, red wood, American ginseng, orchid, live tortoise/turtle, leather products of reptiles, etc. Figures of enforcement actions related to endangered species in 2019 are tabulated as follows:

Number of cases	659
Quantity seized (kg)	376 000
Estimated value of goods (\$ million)	133
Number of persons arrested	497
Number of persons convicted	199
Maximum penalty (imprisonment/month)	24

- (b) and (c) AFCD has been working closely with C&ED and strictly regulating the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) which gives effect to CITES in Hong Kong. The import, export/re-export and domestic sale of endangered species in Hong Kong are regulated and closely monitored through a permit/certificate system in accordance with the provisions of CITES. AFCD conducts inspections of consignments, registered stock and retail outlets to ensure relevant requirements are complied with and to detect and deter illegal local trade in endangered species. AFCD also conducts joint operations with C&ED at various import and export control points to combat illegal import and export of endangered species. Meanwhile, they also collaborate with overseas and Mainland law enforcement agencies through joint operations and intelligence exchange to combat smuggling of endangered species.

An Inter-departmental Task Force on Wildlife Crime, comprising representatives of AFCD, C&ED and the Hong Kong Police Force, has also been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations. Joint and targeted operations, both local and international, will be undertaken to strengthen the frontline enforcement against smuggling and illegal trade in endangered species.

In 2020-21, AFCD will continue to implement the above measures to curb smuggling and illegal trade in endangered species (including ivory). AFCD's manpower and estimated expenditure for controlling illegal trade in endangered species in 2020-21 are 63 staff members and \$61 million respectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB003

(Question Serial No. 3270)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please advise of the details of the provision for the Biodiversity Education Centre in Hong Kong in 2020-21.

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 57)

Reply:

In 2020-21, the Agriculture, Fisheries and Conservation Department has earmarked \$4.7 million for the management and operation of the Woodside Biodiversity Education Centre. This includes expenditure on educational programmes, cleansing, security, building maintenance and staff cost.

- End -

CONTROLLING OFFICER'S REPLY

ENB004

(Question Serial No. 3271)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please advise of the expenditure on organic fertilisers among the total expenditure on fertilisers involved in seedling production in the 2020-21 Estimates.

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 58)

Reply:

Among the work related to country parks, the provision earmarked for the purchase of fertilisers for seedling production in 2020-21 is \$50,000, of which \$30,000 will be used for organic fertiliser.

- End -

CONTROLLING OFFICER'S REPLY

ENB005

(Question Serial No. 2823)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please set out in tabular form the number of prosecutions against the following 6 types of offences in relation to the management of country parks over the past 5 years:

Year	Carrying bicycle without authorisation	Unauthorised entry of vehicle	Lighting a fire	Removal of plant	Camping	Littering
2015						
2016						
2017						
2018						
2019						

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 3020)

Reply:

The number of prosecutions initiated by the Agriculture, Fisheries and Conservation Department against the following 6 types of offences in country parks and special areas over the past 5 years is tabulated as follows:

Year/ number of cases	Bringing bicycle into country parks or special areas without authorisation	Bringing vehicle into country parks or special areas without authorisation	Illegal lighting of fire	Illegal plucking or damaging of plant	Illegal camping	Littering
2015	340	189	10	12	42	135
2016	363	195	4	9	53	61
2017	352	334	17	26	63	62
2018	228	270	3	15	37	165
2019	212	207	2	15	24	92

- End -

CONTROLLING OFFICER'S REPLY

ENB006

(Question Serial No. 0674)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding illegal display of items in country parks, please advise of the following:

- (a) The respective numbers of reports received in each of the past 5 years on illegal (i) display of vertical banners and (ii) posting of slogans and painting of graffiti in country parks; and the procedures, manpower and expenditure involved in the operations to remove or clear such items;
- (b) (i) The number of patrols conducted in country parks and special areas for combating illegal display of vertical banners, and (ii) the number of operations conducted during patrols to remove or clear such items, by government officers in each month of the past 5 years; the respective manpower, expenditure and time involved in such operations;
- (c) The respective current staffing establishment of those civil servants responsible for patrolling country parks and special areas;
- (d) As the Country Parks and Special Areas Regulations (Cap. 208A) provides that no person without permission shall, within a country park or special area, display any sign, notice, poster, banner or advertisement, please provide the respective numbers of persons prosecuted and convicted in each of the past 5 years for illegal display of large vertical banners within country parks, and the punishments imposed on those convicted. If there were no cases of prosecution and conviction, has the Department studied if this situation was due to insufficient efforts in combating such acts; and
- (e) Whether the Department will raise the relevant penalties and step up law enforcement efforts so as to curb this undesirable trend. If yes, what are the details? If not, what are the reasons?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 80)

Reply:

- (a) Upon receipt of the reports of illegal display of large vertical banners, slogans and graffiti in country parks, the Agriculture, Fisheries and Conservation Department (AFCD) will conduct site inspection and investigation as soon as possible. Depending on situations, AFCD will deploy staff to clean up or refer to the relevant government departments to follow up the cleansing action. For cases of large vertical banners which were located in difficult terrains, joint removal operations will be carried out by various government departments, including the Fire Services Department (FSD), the Government Flying Service (GFS), the Hong Kong Police Force (the Police) and AFCD. The number of cases of illegal display of large vertical banners, slogans and graffiti in country parks received by AFCD and the manpower and time involved in handling cases of illegal display of large vertical banners in country parks by the related government departments over the past 5 years are set out in Table 1 and Table 2 respectively. The related government departments do not have the breakdowns of the expenditure involved for handling such cases.

Table 1: Number of cases of illegal display of large vertical banners, slogans and graffiti in country parks

Year	Number of cases of large vertical banners	Number of cases of slogans/graffiti
2015	3	3
2016	4	1
2017	3	1
2018	3	0
2019	22	0

Table 2: Manpower and time involved in handling cases of illegal display of large vertical banners in country parks by related government departments

Month/Year #	Number of officers involved*	Approximate time required (hours)
January 2015	51	28.4
February 2015	40	22.2
May 2016	52	37.2
June 2016	56	17.4
March 2017	31	17.0
December 2017	59	24.9
March 2018	26	21.5
May 2018	6	5.5
September 2018	3	5.0
May 2019	120	32.7
June 2019	85	40.8
August 2019	87	25.0
September 2019	139	64.5
October 2019	58	34.5
December 2019	16	4.0

The months in which no cases were received are not listed above.

* The departments involved include AFCD, FSD, the Police and GFS.

- (b) The number of patrols carried out by AFCD in country parks and special areas in Hong Kong and the expenditure involved over the past 5 years are tabulated as follows:

Year	Number of patrols
2015	15 381
2016	14 705
2017	14 747
2018	15 456
2019	14 814

Year	Expenditure (\$ million)
2015-16	54.3
2016-17	54.6
2017-18	55.5
2018-19	65.4
2019-20 (revised estimate)	65.4

As patrolling country parks is part of the regular work of AFCD, there are no separate breakdowns of the number of patrols for combating cases of illegal display of large vertical banners and the expenditure involved. Please refer to (a) for information of the number of cleansing actions for large vertical banners and the manpower and time involved, etc.

- (c) At present, a total of 155 civil servants of AFCD are responsible for patrolling country parks and special areas in Hong Kong, enforcing the Country Parks Ordinance (Cap. 208) and other relevant legislation.
- (d) According to the Country Parks and Special Areas Regulations (Cap. 208A) (the Regulations), it is an offence to display any sign, notice, poster, banner or advertisement in country parks or special areas without a permit granted by the Country and Marine Parks Authority. Contravention of the relevant regulations is liable to a maximum fine of \$2,000 and imprisonment for 3 months. Over the past 5 years, AFCD has successfully initiated 2 prosecutions against illegal display of banners in country parks under the Regulations and the fines were \$500 and \$700 respectively. AFCD has investigated other cases of illegal display of large vertical banners, however, no suspects could be identified after the investigation and hence no further actions could be taken.
- (e) AFCD will continue to strengthen patrols in country parks including the locations previously involved in illegal display of large vertical banners, review the patrol routes and frequency from time to time, and arrange special operations to deter activities contravening the Regulations as necessary. AFCD will prosecute against the offenders if there is sufficient evidence.

- End -

CONTROLLING OFFICER'S REPLY

ENB007

(Question Serial No. 0675)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the nuisances caused by wild monkeys to nearby residents or visitors, please advise of the following:

- (a) What were the manpower and expenditures involved in public education and promotion of the feeding ban over the past 3 years (2017-18 to 2019-20)?
- (b) What were the numbers of complaints received by the Department about nuisances of or attacks by wild monkeys over the past 3 years (2017-18 to 2019-20)?
- (c) What were the manpower and expenditures involved in the investigation and study on the control of wild monkeys, as well as the administration of contraceptive and neutering treatment to wild monkeys over the past 3 years (2017-18 to 2019-20)?
- (d) After receiving complaints about monkey nuisances and investigating into the situation and causes of monkey occurrence, what follow-up measures has the Department taken and will the investigation result be publicised to the public?
- (e) Has the management plan for monkeys been updated? If yes, what are the progress, timetable and details involved? If not, what are the reasons?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 81)

Reply:

- (a) The expenditure incurred by the Agriculture, Fisheries and Conservation Department (AFCD) in public education and publicity for the prohibition of feeding monkeys over the past 3 year is tabulated as follows:

Year	Expenditure (\$ million)
2017-18	1.1
2018-19	1.1
2019-20 (revised estimate)	1.2

As the relevant work forms part of AFCD's work on handling the nuisance caused by wild animals (including monkeys, wild pigs, etc.), there is no separate breakdown on the manpower involved in the aforesaid work.

- (b) The number of complaints about monkey nuisance/attack received by AFCD over the past 3 years is tabulated below:

Year	Number of complaints about monkey nuisance/attack
2017-18	399
2018-19	409
2019-20 (as at January 2020)	278

- (c) AFCD's expenditure and manpower involved in handling monkey nuisance over the past 3 years are tabulated below:

Year	Expenditure (\$ million)	Manpower (number of staff)
2017-18	5.2	12
2018-19	5.2	12
2019-20 (revised estimate)	5.2	12

In addition, AFCD's contractor (the Ocean Park Conservation Foundation) arranged regular sterilisation operations for monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks, involving about 10 contractor's staff in each operation.

- (d) AFCD is highly concerned about the nuisance caused by monkeys in residential areas. Upon receiving relevant reports, staff will be deployed to the scene to chase away or capture the monkeys, and offer advice and education leaflets to the concerned public or management offices after investigating the situation and causes of monkey occurrence. If necessary, AFCD will arrange talks for the concerned residents or management offices on the handling of monkey nuisance and drawbacks of feeding

monkeys and not handling refuse properly. AFCD would also contact other government departments to follow up problems arising from monkey nuisance, such as environmental hygiene problems. Traps will also be set up to capture the lingering monkeys in residential areas where necessary and conditions permit in order to alleviate the nuisance caused by them with immediate effect.

AFCD has been carrying out contraceptive/sterilisation operations for monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks since 2007 to control their population growth. Regular surveys are also conducted to monitor changes in the monkey populations. In addition, AFCD has extended the scope of the contraceptive programme to cover the monkey populations causing nuisance to residential areas in the vicinity of country parks since 2018, with a view to mitigating nuisance caused by monkeys in urban areas in a more effective way.

- (e) AFCD is now reviewing the management plan for monkey nuisance, which is expected to be updated upon completion of the review in 2020-21.

- End -

CONTROLLING OFFICER'S REPLY

ENB008

(Question Serial No. 0687)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding marine parks and marine reserves, please advise of the following:

- (a) Please set out the names, locations, sizes and dates of establishment of the marine parks and marine reserves currently established or to be established as well as the sizes of the core areas or restricted zones. Please also provide the boundary maps of these marine parks and marine reserves (including the core areas or restricted zones).
- (b) Please set out the number of fishing permits issued to various types of fishing vessels in each marine park and marine reserve, in the first year after the establishment of the marine parks and marine reserves and over the past 3 years (2017-18 to 2019-20).
- (c) What were the number of operations and the effectiveness of the enforcement operations against illegal fishing activities (including capture, angling as well as any other method) in marine parks over the past 3 years (2017-18 to 2019-20)? What were the penalties and fines imposed?
- (d) What were the expenditures and manpower involved in the enforcement operations against illegal fishing activities in marine parks over the past 3 years (2017-18 to 2019-20)?
- (e) What were the number of patrol vessels deployed by the Government to combat illegal fishing activities in marine parks, the area(s) patrolled, and the number of patrols conducted, over the past 3 years (2017-18 to 2019-20)?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 26)

Reply:

- (a) The names, locations, sizes, core area sizes and dates of designation of existing marine parks and marine reserve are tabulated as follows:

Name of existing marine park/ marine reserve	Location	Size (hectares)		Designation date
		Total	Core area	
Cape D'Aguilar Marine Reserve	Waters at the southeastern tip of Hong Kong Island	20	0	July 1996
Hoi Ha Wan Marine Park	Sheltered bay located north of the Sai Kung West Country Park	260	0	July 1996
Yan Chau Tong Marine Park	Northeast coast of Plover Cove Country Park	680	0	July 1996
Sha Chau and Lung Kwu Chau Marine Park	Waters enclosing the islands of Sha Chau and Lung Kwu Chau on the western side of Hong Kong	1 200	0	November 1996
Tung Ping Chau Marine Park	Waters enclosing the small island Ping Chau northeastern waters of Hong Kong	270	7.4	November 2001
The Brothers Marine Park	Waters in the vicinity of The Brothers in northern Lantau	970	80	December 2016

In addition, the Southwest Lantau Marine Park was designated on 1 April 2020. The marine park is located in the waters in the vicinity of Fan Lau in southwest Lantau and the total area is about 650 hectares. At this stage, we have not set up any core areas.

The names, locations, sizes, core area sizes and tentative designation time of the proposed marine parks are as follows:

Name of proposed marine park	Location	Size (hectares)		Tentative designation time
		Total area	Core area	
South Lantau Marine Park (combining the proposed Soko Islands Marine Park and the proposed marine park for Integrated Waste Management Facilities as a single marine park)	Waters in the vicinity of Soko Islands in southern Lantau	~2 067	~145	2022
Proposed Marine Park for the Three-Runway System	Waters around the airport in northern Lantau	~2 400	To be determined	2024

The boundaries (and core areas) of the existing and proposed marine parks and marine reserve are shown in the map in the **Annex**.

- (b) The number of fishing permits issued to various types of fishing vessels in each marine park and marine reserve is tabulated as follows:

Name of marine park/ marine reserve	Number of permits issued for the respective marine parks/marine reserve			
	1st year	2017-18	2018-19	2019-20
Cape D' Aguilar Marine Reserve	0	0	0	0
Hoi Ha Wan (HHW) and Yan Chau Tong (YCT) ⁽ⁱ⁾	409	243	250	249
Sha Chau and Lung Kwu Chau	208	81	81	81
Tung Ping Chau (TPC) ⁽ⁱⁱ⁾	280	197	200	200
The Brothers	472	472	474	403
Total⁽ⁱⁱⁱ⁾	---	737	744	673

Notes:

(i) Some fishing permits cover TPC, YCT and/or HHW (see Note (ii) below).

(ii) Some fishing permits issued for TPC also cover YCT/HHW.

(iii) The row "Total" gives the total number of fishing permits issued for the marine parks in a particular year. As some permits cover more than 1 marine park, the figure for a particular year in the row "Total" does not equal to the sum of the number of fishing permits issued for the marine parks each year.

- (c) The number of prosecutions against illegal fishing activities in marine parks over the past 3 years and the penalties imposed are tabulated as follows:

Year	Number of cases	Total fine (\$)
2017-18	6	7,300
2018-19	12	12,900
2019-20 (as of February 2020)	7 (including 6 cases in the progress of prosecution)	1,000

- (d) The expenditure and manpower involved in the management of marine parks and marine reserve, including enforcement against illegal fishing, over the past 3 years are tabulated as follows:

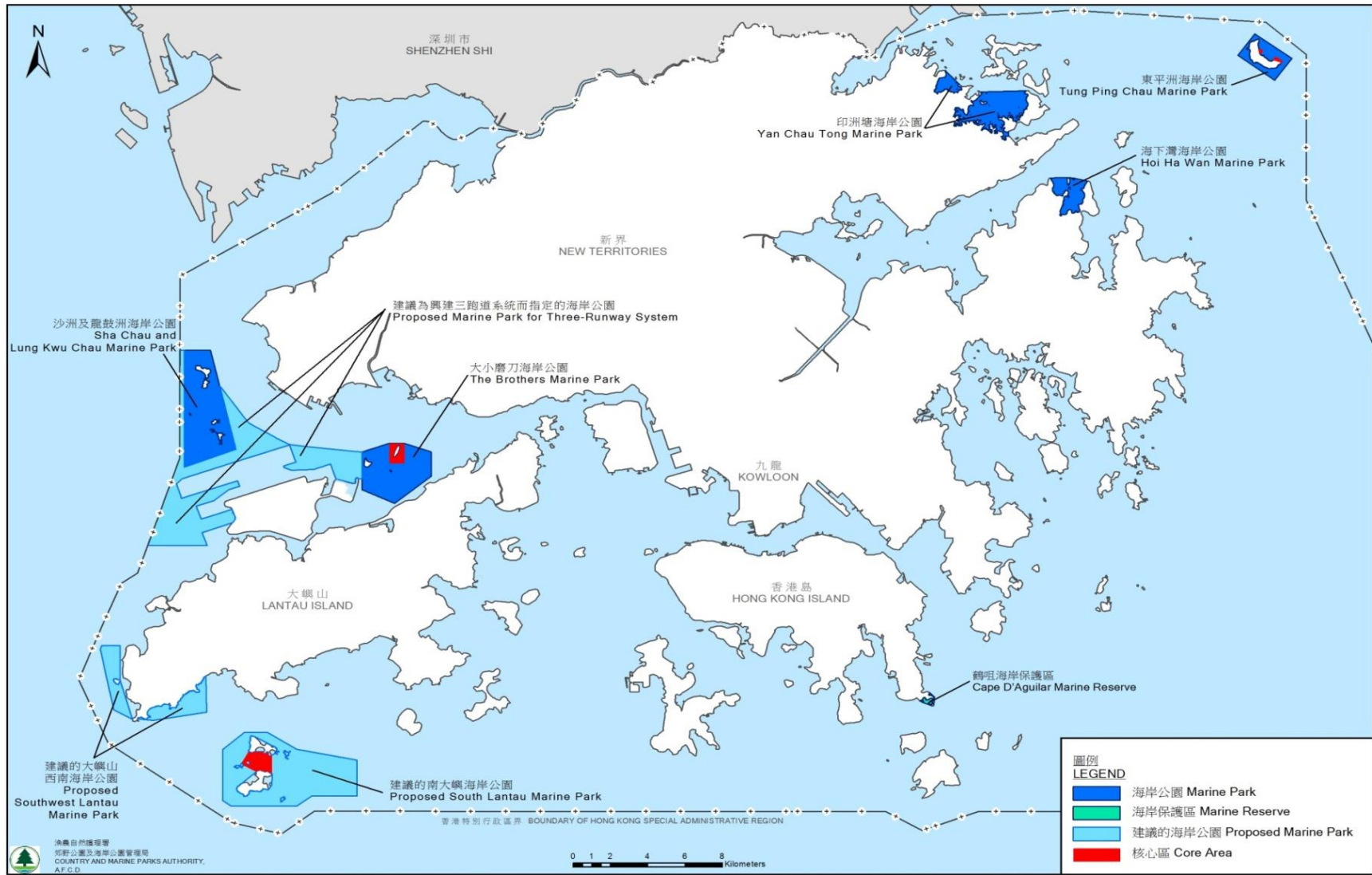
Year	Expenditure (\$ million)	Manpower (Number of staff)
2017-18	23.2	44
2018-19	26.1	51
2019-20 (revised estimate)	30.7	61

- (e) The number of patrol vessels deployed by the Agriculture, Fisheries and Conservation Department (AFCD) to conduct patrols in marine parks, marine reserve and surrounding waters reduced from 11 to 8 in 2019 as a few aged vessels are out of service and pending replacement. The Marine Police and their patrol vessels has rendered assistance in law enforcement within marine parks and marine reserve under AFCD's request.

The areas patrolled included all existing and proposed marine parks and marine reserve. The number of patrols conducted over the past 3 years is tabulated as follows:

Year	Number of patrols
2017-18	4 084
2018-19	3 330
2019-20 (as of February 2020)	3 050

- End -



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CONTROLLING OFFICER'S REPLY

ENB009

(Question Serial No. 0690)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the conservation and management of the wetland, please advise of the following:

- (a) Over each of the past 3 years (2017-18 to 2019-20), what were the respective expenditures incurred by the Government on protecting birds, promoting the development of aquaculture fisheries and agriculture, and assisting such industries in preventing birds from foraging for cultured fish products and crops, together with the details and effectiveness of such efforts?
- (b) Over the past 3 years (2017-18 to 2019-20), what were the number of complaints received by the Government about alleged unlawful bird-proof measures taken by fish farmers and farmers, the average and longest time taken to handle such cases, the number of prosecutions instituted against the contravention of the Wild Animal Protection Ordinance (Cap. 170), and the number of convictions thereof?
- (c) Over the past 3 years (2017-18 to 2019-20), has the Government made any assessment on the expenditures incurred by fish farmers and farmers on taking bird-proof measures, and their financial losses due to birds foraging for their cultured fish products and crops?
- (d) Over the past 3 years (2017-18 to 2019-20), how did the Government compensate fish farmers and farmers for their expenditures and financial losses as mentioned in item (c)? What measures have been put in place by the Government to assist them in reducing such expenditures and financial losses?
- (e) Over the past 3 years (2017-18 to 2019-20), what were the amounts of subventions granted to the management agreement projects under the Environment and Conservation Fund? What were the number of participating fish farmers as well as the figures and percentages of the fish ponds taken up to the total area of the Ramsar Site?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 29)

Reply:

- (a) to (d) The Agriculture, Fisheries and Conservation Department (AFCD) actively works to protect wild animals by different means, including conservation management of habitats in the Ramsar Site and other ecologically important sites, territory-wide law enforcement, public education, as well as animal rescue, studies and research, etc., while bird conservation is also included in all these aspects of work. According to the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance), no person shall, except in accordance with a special permit, wilfully disturb or hunt any protected wild animal, including all wild birds. Over the past 3 years (up to January 2020), AFCD has prosecuted 191 cases for contravening the Ordinance and a total of 175 cases were convicted. During the same period, AFCD received 10 complaints about suspected use of illegal bird prevention measures by farmers or fish pond operators. It usually takes 3 to 6 months to process these cases.

AFCD understands the concern of farmers and fish pond operators over their loss due to bird predation in farmland and fish ponds. AFCD aims to strike a balance between supporting the agriculture and fisheries industries as well as bird conservation, and assists farmers and fish pond operators in taking appropriate measures to reduce bird predation in farmland and fish ponds without causing harm to birds. Regarding farmers, AFCD provides technical advice to them on bird prevention, while farmers who are interested in installing bird preventive netting or other measures can apply for low-interest loans from loan funds administered by AFCD, or purchase the necessary materials for self-installation with the Farm Improvement Scheme grants under the Sustainable Agricultural Development Fund (SADF). Regarding fish pond operators, AFCD regularly organises talks and workshops on good aquaculture practices and general fish farming guidelines, where methods on prevention of bird predation would be introduced, such as pond wiring, hanging of reflective materials, etc., to reduce loss of fish produce. Fish pond operators can also apply for low-interest loans should they need any financial assistance, or purchase the necessary materials with the Equipment Improvement Project grants under the Sustainable Fisheries Development Fund (SFDF).

AFCD has published 2 pamphlets on the methods of preventing bird predation in farmland and fish ponds for the reference of farmers and fish pond operators respectively. According to AFCD's observations, many farmers and fish pond operators have adopted AFCD's recommendations to reduce the risk of bird predation in farmland and fish ponds. Nonetheless, AFCD does not have the information about the cost of bird prevention measures used by farmers and fish pond operators. On the other hand, the loss due to bird predation is subject to many factors, including crop/fish species, location of the farmland/fish pond, and the bird prevention measures implemented on the site, and hence cannot be deduced conclusively. AFCD will continue to carry out the above work to facilitate farmers and fish pond operators to reduce their loss due to bird predation in farmland and fish ponds.

In addition, AFCD has been supporting and promoting the overall development of the agriculture and fisheries industries through various measures, including providing technical support to the industries, promoting local agricultural and fishery produces, implementing SFDF and SADF with a view to promoting the sustainable development of industries, as well as implementing various supportive measures under the New Agriculture Policy. The breakdown of the expenditure on promoting aquaculture fisheries and agricultural development on the wetland is not available.

- (e) 2 Management Agreement projects with funding from the Environment and Conservation Fund were conducted from March 2017 to February 2019 and from March 2019 to February 2021 in the Ramsar Site and Deep Bay Wetland outside the Ramsar Site respectively. Details of the projects over the past 3 years are tabulated as follows:

Project period	March 2017 to February 2019		March 2019 to February 2021
Ramsar Site			
Total approved budget (\$)	7,034,532		7,456,636
Reporting period	March 2017 to February 2018	March 2018 to February 2019	March to December 2019
Number of fishpond operators engaged	65	67	63
Area of fishponds engaged (hectare)	283	286	255
Total area of eligible fishponds (hectare)*	290	290	290
Percentage of area of fishponds engaged in total area of eligible fishponds (%)	98	98	88
Deep Bay Wetland outside Ramsar Site			
Total approved budget (\$)	7,659,992		7,246,276
Project period	March 2017 to February 2018	March 2018 to February 2019	March to December 2019
Number of fishpond operators engaged	87	88	88
Area of fishponds engaged (hectare)	326	327	314
Total area of eligible fishponds (hectare)*	370	370	360

Project period	March 2017 to February 2019		March 2019 to February 2021
Ramsar Site			
Percentage of area of fishponds engaged in total area of eligible fishponds (%)	88	88	87

* Eligible fishponds are those registered under AFCD's voluntary registration scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB010

(Question Serial No. 0702)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding wild pigs, please advise of the following:

- (a) Has the Government estimated the current population of wild pigs in Hong Kong?
- (b) What was the number of help-seeking cases in relation to the appearance of wild pigs received over the past 3 years (2017-18 to 2019-20)?
- (c) What was the number of operations conducted under the pilot programme on the contraception and relocation of wild pigs, the number of wild pigs captured, in which the number of female wild pigs injected with contraceptive vaccines and were surgically sterilised as well as the number of wild pigs relocated to the countryside far away from residential areas over the past 3 years (2017-18 to 2019-20)?
- (d) What were the expenditures and manpower dedicated to the aforesaid pilot programme and the work in relation to wild pigs over the past 3 years (2017-18 to 2019-20)?
- (e) What were the number of arrests made and prosecutions instituted in relation to the illegal feeding of wild pigs over the past 3 years (2017-18 to 2019-20)? What were the average, maximum and minimum penalties imposed respectively?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 42)

Reply:

- (a) Wild pigs are generally solitary or live in small groups, secretive, widely distributed, and have extensive home range. Thus, it is very difficult to conduct large-scale population survey on them. The Agriculture, Fisheries and Conservation Department (AFCD) launched a pilot scheme to estimate the number of wild pigs in the countryside using infrared camera traps in 2019. It was estimated that there were about 1 800 to 3 300 wild pigs in the countryside all over Hong Kong based on the wild pig population density at the trial sites. AFCD will extend the scope of the

study to cover more sites and different seasons in 2020 so as to make a more accurate estimation of the wild pig population in the countryside.

- (b) The number of complaints about wild pigs received by AFCD over the past 3 years is as follows:

Year	Number of cases
2017-18	787
2018-19	1 008
2019-20 (as of January 2020)	950

- (c) AFCD has tried implementing the pilot Capture and Contraception/Relocation Programme (CCRP) to handle the nuisance caused by wild pigs in urban areas since late 2017. To enable a more effective control of the number of wild pigs causing nuisance to urban areas, AFCD has regularised CCRP in phases since 2019-20 to vaccinate or sterilise caught or saved wild pigs where the condition permits. The figures related to the pilot CCRP over the past 3 years are tabulated below:

Year/ number of wild pigs	Captured	Administered with contraceptive vaccine	Surgically sterilised	Relocated to remote countryside
2017-18 (from October 2017)	51	14	0	40
2018-19	115	46	18	81
2019-20* (as of February 2020)	261	54	38	202

* The figures include the number of wild pigs saved in rescue operations.

- (d) The manpower and expenditure involved in AFCD's wild pig management (including the pilot CCRP) over the past 3 years are tabulated as follows:

Year	Manpower (number of staff)	Total expenditure on wild pig management (\$ million)	Expenditure involved in pilot CCRP (\$ million)
2017-18	6	6.8	3.8
2018-19	14	9.9	6.2
2019-20 (revised estimate)	26	13.8	6.8

- (e) Kam Shan, Lion Rock and Shing Mun Country Parks, part of Tai Mo Shan Country Park, Tai Po Kau Nature Reserve, a section of Tai Po Road along Caldecott Road and Piper's Hill section of Tai Po Road are specified places under the Wild Animals Protection Ordinance (Cap. 170) at which the feeding of any wild animals is prohibited (feeding ban area). Persons feeding wild animals in the feeding ban areas are liable to a maximum fine of \$10,000. AFCD arranges regular patrol at the feeding ban areas and will take prosecution actions against anyone who has violated the law and fed wild animals, subject to sufficient evidence. AFCD will, from time to time, review the patrolling arrangements at the feeding ban areas as appropriate, including the deployment of additional manpower to conduct enforcement operations at night and on public holidays. The information on the prosecutions against illegal feeding of wild animals (including wild pigs) over the past 3 years is tabulated as follows:

Year	2017-18	2018-19	2019-20 (as of February 2020)
Number of patrols	564	536	578
Number of prosecutions against illegal feeding of wild animals (including wild pigs)	40	32	26
Number of successful prosecutions against illegal feeding of wild animals (including wild pigs)^	57	20	28
Average fine (\$)	1,000	1,000	1,500

^ Some of the prosecutions initiated in the latter part of the year might be processed next year.

- End -

CONTROLLING OFFICER'S REPLY

ENB011

(Question Serial No. 1605)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The International Union for the Conservation of Nature (IUCN) published the new Red List of Threatened Species in July last year, showing that the number of globally endangered species has increased by about 9 000, bringing the total number to 105 700. Among the species listed as “Vulnerable” in the IUCN Red List of Threatened Species is the Chinese white dolphin (CWD), which is unique in Hong Kong. According to the monitoring report published in August last year, it was estimated that the CWDs sighted during the period from April 2018 to March 2019 in Hong Kong waters were only 32 individuals, which was at a record low since 1995.

- (a) Does the Government have any conservation plan targeting Hong Kong's unique CWDs? If yes, what are details of the conservation, the manpower and expenditure involved? If not, will the Government formulate plans as soon as possible in the future to ensure that CWDs will not be in danger of extinction?
- (b) Please tabulate the number of prosecutions instituted against offenders under the Protection of Endangered Species of Animals and Plants Ordinance and the corresponding penalties imposed over the past 3 financial years.
- (c) In the past financial year, the Government stated that it had implemented a series of measures that aimed at curbing smuggling and strengthening the control of local trade in ivory. How effectiveness were such measures? What were the manpower and expenditure involved?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 16)

Reply:

- (a) To conserve the Chinese white dolphins (CWDs) that occur in the Hong Kong waters, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented the Conservation Programme for CWDs since 2001, which includes a variety of measures

that are conducive to the conservation and the continued survival of CWDs in the Hong Kong waters. They include (i) close monitoring of the occurrence and distribution of CWDs in local waters; (ii) designation of important dolphin habitats as marine parks and subject them to proper conservation and management; (iii) stipulating stringent requirements in environmental impact assessments of coastal development projects sited close to CWD habitats to ensure that the potential impacts to dolphins are adequately addressed; (iv) implementation of fisheries management measures for sustainable and healthy fish stocks which would benefit CWDs with sufficient food; and (v) organising education and publicity programmes to raise public awareness of and solicit their support for the conservation of CWDs. The estimated expenditure for the abovementioned measures in 2020-21 is about \$13 million. The manpower involved is 26 staff members.

- (b) The number of prosecutions instituted under the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) and the respective penalties over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of prosecutions	189	221	226
Maximum penalty (imprisonment/months)	3	8	24
Minimum penalty (fine/\$)	400	400	300

- (c) The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 came into effect on 1 May 2018. Starting from 1 August 2018, all import and export of ivory (save for antique ivory) for commercial purposes have been banned. A licence to possess is required for keeping pre-Convention (i.e. the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes.

AFCD has implemented a series of measures that aim at curbing smuggling of ivory and strengthening the control of local trade in ivory. The measures include enhancing inter-departmental collaboration and stepping up joint operations and intelligence exchange with the Customs and Excise Department and overseas law enforcement agencies (e.g. Interpol); deploying sniffer dogs to detect ivory at import and export control points to assist in detecting and preventing smuggling of ivory; conducting inspections targeted at licensed ivory shops and non-licensed art and craft shops to check the licensing compliance as well as to detect and combat illegal ivory trade; as well as using hi-tech radiocarbon dating analysis to determine the age and hence the legality of ivory.

AFCD has carried out a series of publicity and education activities to publicise the phase-out plan of the local ivory trade and the new penalty regime among the general public, travellers and traders. These include distributing leaflets and displaying posters at various import and export control points; broadcasting TV and radio Announcements of Public Interest on cross-boundary coaches and the YouTube Channel, displaying animated posters on digital screens at 6 Shenzhen to Hong Kong

immigration control points as well as conducting visits to licensed ivory shops and other art and craft shops for education and promotion.

AFCD's manpower and expenditure (revised estimate) for controlling illegal trade in endangered species (including ivory) in 2019-20 were 63 staff members and about \$53 million respectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB012

(Question Serial No. 1972)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the conservation of green turtles and the Sham Wan Restricted Area on Lamma Island, please advise of the following:

- (e) (1) The details of the management of the Sham Wan Restricted Area on Lamma Island and the conservation of green turtles, including the details of work in planning to expand the Sham Wan Restricted Area in the forthcoming year; (2) the expenditures and manpower involved over the past 3 years; and (3) the expenditure and manpower involved in the forthcoming year.
- (f) What is the number of turtles which have been affixed with metal tags? For what purpose(s) will the Government utilise the data obtained from the tags?
- (g) Please advise of the details and expenditures involved in the relevant scientific/academic research project(s) conducted on Sham Wan/green turtles by the Department or other institutions over the past 5 years and the expenditure earmarked by the Department for researches on Sham Wan/green turtles in the forthcoming year.
- (h) Please advise on the number of cleaning operations conducted on the beach between June and October each year, the responsible department, the amount of refuse collected each month as well as the expenditures and manpower involved over the past 3 years.
- (i) Regarding the unauthorised entry to the Restricted Area and vessels exceeding the speed limit at the waters off the area, what were the numbers of complaints received, warnings issued and prosecutions initiated over the past 3 years?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 47)

Reply:

- (a) The sandy beach at Sham Wan, Lamma Island is the only regular nesting site of green turtles in Hong Kong. In order to minimise disturbance to green turtles, including their nests and eggs, the sandy beach at Sham Wan was gazetted as a Restricted Area under the Wild Animals Protection Ordinance (Cap. 170) in 1999. Access to the area is restricted during the period from 1 June to 31 October each year.

During the restricted period, patrols will be conducted to control unauthorised entry or activities and to monitor any nesting activities of green turtles. Before the onset of the nesting season each year, the Agriculture, Fisheries and Conservation Department (AFCD) will carry out conservation management on the nesting site (including removal of climbing plants and refuse) and deploy a remote surveillance camera system to monitor the Restricted Area and the surrounding coastal conditions as well as the nesting activities of green turtles. AFCD will also arrange contractors to survey and remove abandoned fishing nets in Sham Wan when necessary. To strengthen the protection of endangered green turtles, the Government has started preparation work for the expansion of the Sham Wan Restricted Area from the sandy beach at Sham Wan to include the adjacent Sham Wan waters, and the extension of the restricted period, with a view to minimising disturbances of human activities to breeding green turtles. The Government plans to seek the views of stakeholders on details of legislative amendments and draft the amendments this coming year.

As the above work forms part of the nature conservation work of AFCD, there is no separate breakdown on the expenditure involved.

- (b) Since 2000, AFCD has attached metal tags engraved with a unique serial number to 74 sea turtles. The metal tags will help identify individual sea turtles when they are encountered in the future.
- (c) Over the past 5 years, AFCD has conducted satellite tracking of sea turtles to study their migratory routes and to better conserve sea turtles and their habitats. AFCD also conducts population genetic analysis on sea turtles to better understand their genetic diversity. The expenditure involved in the above studies over the past 5 years and the estimated expenditure in 2020-21 are tabulated as follows:

Year	Expenditure (\$)
2015-16	13,000
2016-17	153,000
2017-18	158,000
2018-19	29,000
2019-20 (revised estimate)	38,000
2020-21 (estimate)	100,000

AFCD does not have information on the scientific researches conducted by other institutions on sea turtles in Hong Kong.

- (d) The Food and Environmental Hygiene Department (FEHD) is responsible for regular cleaning of the Sham Wan beach. According to FEHD, regular cleaning at Sham Wan is conducted 1 to 2 times per week under normal conditions during the restricted period. Over the past 3 years, the volume of marine refuse collected each month during such period is tabulated as follows:

Month	Volume of marine refuse (kg)		
	2017-18	2018-19	2019-20
June	410	184	530
July	196	127	347
August	510	136	336
September	270	51	140
October	220	358	280

Apart from commissioning outsourced cleansing contractors, the routine cleaning work carried out by FEHD includes collecting and clearing the marine refuse. There is no breakdown on the manpower and expenditure involved. Under special circumstances, AFCD will arrange contractors and its staff to support FEHD's cleaning operations.

- (e) Over the past 3 years, AFCD did not receive any complaints, issue any warnings or initiate any prosecutions regarding unauthorised access to the Restricted Area at the sandy beach in Sham Wan. In addition, Sham Wan is one of the speed restricted zones for vessels set by the Marine Department (MD) to ensure safe navigation in the Hong Kong waters. MD is responsible for the law enforcement work at the speed restricted zones. AFCD does not have any record on the number of complaints received, warnings issued and prosecutions initiated regarding vessels exceeding the speed limit.

- End -

CONTROLLING OFFICER'S REPLY

ENB013

(Question Serial No. 1973)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Government stated that the provision for the Programme "Nature Conservation and Country Parks" for the coming year will be increased by 22.1% for the following reasons:

- (a) "For tackling the increasing nuisance of wild pigs, monkeys and other wildlife". Please advise of (1) the details of the related work, the expenditure and manpower involved; (2) the number of complaint cases about wild pigs, monkeys and other wildlife (please specify) received by the Department, and the details of follow-up actions over the past 2 years; and (3) the effectiveness of the pilot programme on the contraception/relocation of wild pigs, including the number of wild pigs injected with contraceptive vaccines/were surgically sterilised and that of those relocated away from residential areas every year.
- (b) "For management and promotion of country parks". Please advise of the details of the related work and expenditure involved. In addition, amid the epidemic of novel coronavirus, there is a significant increase in the number of country park visitors and the amount of refuse on mountains. Have the Government's workload and expenditure increased as a result? If yes, what are the details? If not, what are the reasons? How effective is the Government's measure of removing the litter containers in country parks? Is there any increase/decrease in the amount of refuse on mountains? In the face of illegal littering on mountains, how would the Government tackle the problem? Please provide the details, expenditure and manpower involved.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 49)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) is highly concerned about the nuisance caused by monkeys in residential areas. Upon receiving relevant reports, staff will be deployed to the scene to chase away or capture the monkeys, and offer advice and education leaflets to the concerned public or management offices after

investigating the situation and causes of monkey occurrence. If necessary, AFCD will arrange talks for the concerned residents or management offices on the handling of monkey nuisance and drawbacks of feeding monkeys and not handling refuse properly. AFCD would also contact other government departments to follow up problems arising from monkey nuisance, such as environmental hygiene problems. Traps will be set up to capture the lingering monkeys in residential areas where necessary and conditions permit in order to alleviate the nuisance caused by them with immediate effect.

AFCD has been carrying out contraceptive/sterilisation operations for monkeys in Kam Shan, Lion Rock and Shing Mun Country Parks since 2007 to control their population growth. Regular surveys are also conducted to monitor changes in the monkey populations. In addition, AFCD has extended the scope of the contraceptive programme to cover the monkey populations causing nuisance to residential areas in the vicinity of country parks since 2018, with a view to mitigating nuisance caused by monkeys in urban areas in a more effective way.

Regarding wild pigs, AFCD currently adopts a multi-pronged approach to control wild pig nuisance to residential areas, including managing wild pig nuisance, reducing food attraction for wild pigs, educating the public to stop feeding wild animals as well as enhancing public awareness towards wild pigs. AFCD has also set up an advisory group comprising experts from various fields to advise on the management of wild pigs.

When handling complaints about wild pig nuisance, AFCD will first identify the source of food attraction for wild pigs (e.g. mishandled outdoor refuse or feeding). If the source of food attraction for wild pigs can be removed, nuisance can be alleviated swiftly in general. This requires the cooperation of the public and related government departments. If the site conditions permit, AFCD will also install infrared camera traps to monitor the feeding and sighting of wild pigs, and refer the information collected to the Food and Environmental Hygiene Department for following up the environmental hygiene issues caused by feeding. If the situation does not improve, AFCD will capture the nuisance-causing wild pigs for relocation to the countryside far away from residential areas when the conditions permit.

AFCD has tried implementing the pilot Capture and Contraception/Relocation Programme (CCRP) to handle nuisance caused by wild pigs in urban areas since late 2017. To enable a more effective control of the number of wild pigs causing nuisance to urban areas, AFCD has regularised CCRP in phases since 2019-20 to vaccinate or sterilise caught or saved wild pigs when conditions permit.

AFCD's expenditure and manpower involved in handling nuisance caused by monkeys and wild pigs over the past 2 years are tabulated as follows:

Year	Expenditure (\$ million)		Manpower (number of staff)	
	Monkey nuisance	Wild pig nuisance	Monkey nuisance	Wild pig nuisance
2018-19	5.2	9.9	12	14
2019-20 (revised estimate)	5.2	13.8	12	26

The number of complaints about monkey/wild pig nuisance received by AFCD over the past 2 years is tabulated as follows:

Year	Number of complaints about monkey nuisance	Number of complaints about wild pig nuisance
2018-19	409	1 008
2019-20 (as of January 2020)	278	950

The figures related to the pilot CCRP over the past 3 years are tabulated as follows:

Year/number of wild pigs	Administered with contraceptive vaccine	Surgically sterilised	Relocated to remote countryside
2017-18 (from October 2017)	14	0	40
2018-19	46	18	81
2019-20* (as of February 2020)	54	38	202

* The figures include the number of wild pigs caught in rescue operations.

- (b) AFCD is responsible for the management and protection of country parks, among which mainly cover the construction and maintenance of recreational facilities in country parks (such as hiking trails and barbecue sites), routine cleaning, flora and fauna conservation, patrols and law enforcement, etc. Besides, planting of trees, hill fire prevention and fighting, vetting and monitoring of activities and development in country parks, etc. also form part of the regular work of AFCD. On education and publicity, AFCD has organised a series of programmes on protection and promotion of country parks for the general public. These programmes include school visits, eco-tours, guided tours at visitor centres and education centres, thematic exhibitions, educational workshops, trail maintenance workshops, tree planting days, public lectures and volunteer scheme. In 2019-20, the expenditure and manpower involved in the work related to country parks are \$380 million and 691 staff respectively.

AFCD launched the “Take Your Litter Home” publicity and education programme in 2015 in collaboration with a number of local partner organisations to encourage the public to nurture a good habit of taking their own litter away after hiking or visiting

country parks, and all litter containers and recycling bins along the hiking trails within country parks have been removed by the end of 2017. Since the launch of the “Take Your Litter Home” publicity and education programme, it has been effective in enhancing the public awareness towards waste reduction and environmental conservation during their visit to the countryside.

Noting that many members of the public visit country parks recently, AFCD has agilely deployed manpower to step up site inspections and cleansing, and provided litter containers of large volume at specific sites for the use of countryside visitors where necessary. Meanwhile, AFCD will continue to strengthen education and publicity efforts through various channels, including displaying banners and posters in country park areas with high visitor flow, urging countryside visitors to maintain environmental hygiene through radio programmes, further promoting “Take Your Litter Home” and good hiking manners, and publicising relevant messages through the networks of non-profit-making or partner organisations. When patrolling the hiking trails in country parks, AFCD staff will also advise countryside visitors to take their own litter away and take appropriate enforcement actions when littering cases are found.

Since the said measures form part of AFCD’s work on management, promotion, publicity and education of country parks, there is no separate breakdown of the expenditure and manpower involved in this respect.

- End -

CONTROLLING OFFICER'S REPLY**ENB014****(Question Serial No. 2370)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding smuggling activities of ivory, please advise of the following:

- (a) The details of the detected cases of ivory smuggling, including the number of cases, the quantity of ivory, the value of items, the number of persons arrested, the number of persons convicted, the maximum and minimum penalties and the total amount of fines imposed over the past 3 years.
- (b) The weight of ivory destroyed, the estimated value and expenditure involved in each of the past 3 years.
- (c) The details of the work as well as the expenditure and manpower involved in regulating the trade in endangered species and combatting illegal trade in endangered species in the coming year.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 48)

Reply:

- (a) Details of the detected ivory smuggling cases over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of cases	64	55	23
Quantity of ivory seized (kg)	7 300	372	2 058
Market value (\$ million)	80	4	21
Number of persons arrested	60	51	21
Number of persons convicted	47	42	18
Maximum penalty (imprisonment)	3 months	4 months	6 weeks

Year	2017	2018	2019
Minimum penalty	A fine of \$2,000	A fine of \$5,000	Imprisonment of 2 weeks, suspended for 12 months
Total fine (\$ million)	0.2	0.1	--

- (b) The quantity and estimated value of confiscated ivory disposed of by incineration in 2019 were 1.5 tonnes and \$15 million respectively. The expenditure involved in the disposal of the ivory was \$9,200. The Agriculture, Fisheries and Conservation Department (AFCD) did not dispose of any ivory in 2017 and 2018.
- (c) The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 came into effect on 1 May 2018. Starting from 1 August 2018, all import and export of ivory (save for antique ivory) for commercial purposes have been banned. A licence to possess is required for keeping pre-Convention (i.e. the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)) ivory for commercial purposes.

AFCD has implemented a series of measures that aim at curbing smuggling of ivory and strengthening the control of local trade in ivory. The measures include enhancing inter-departmental collaboration and stepping up joint operations and intelligence exchange with the Customs and Excise Department and overseas law enforcement agencies (e.g. Interpol); deploying sniffer dogs to detect ivory at import and export control points to assist in detecting and preventing smuggling of ivory; conducting inspections targeted at licensed ivory shops and non-licensed art and craft shops to check the licensing compliance as well as to detect and combat illegal ivory trade; as well as using hi-tech radiocarbon dating analysis to determine the age and hence the legality of ivory.

AFCD has carried out a series of publicity and education activities to publicise the phase-out plan of the local ivory trade and the new penalty regime among the general public, travellers and traders. These include distributing leaflets and displaying posters at various import and export control points; broadcasting TV and radio Announcements of Public Interest on cross-boundary coaches and the YouTube Channel, displaying animated posters on digital screens at 6 Shenzhen to Hong Kong immigration control points as well as conducting visits to licensed ivory shops and other art and craft shops for education and promotion.

In 2020-21, AFCD will continue to implement the above measures to curb smuggling and illegal trade in endangered species (including ivory). AFCD's manpower and estimated expenditure for controlling illegal trade in endangered species in 2020-21 are 63 staff members and \$61 million respectively.

- End -

CONTROLLING OFFICER'S REPLY**ENB015****(Question Serial No. 1295)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the combat of illegal trade and smuggling of endangered species, would the Government inform this Committee of the following:

- (a) Over the past 5 years, what was the number of reports received in respect of illegal felling of protected trees in country parks? What were the species and the number of protected trees that were felled illegally? What was the number of proactive inspections conducted by law enforcement officers and prosecutions instituted against illegal felling of protected trees?
- (b) What are the actions taken by the Government and the expenditure in relation to the conservation of endangered trees in 2020-2021?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 20)

Reply:

- (a) Over the past 5 years, the number of reports received in respect of illegal felling of protected trees in country parks, the number of trees involved, and the number of proactive inspections conducted by law enforcement officers are tabulated as follows:

Year	Number of cases in respect of illegal felling of protected trees	Number of trees involved	Number of patrols
2015	45	149	15 381
2016	35	100	14 705
2017	25	63	14 747
2018	19	37	15 456
2019	9	21	14 814

All the above illegally felled protected trees were Incense Trees. All criminal cases involving illegal felling of Incense Trees (whether the cases occurred within or outside country parks) were handled by the Hong Kong Police Force (the Police) under the Theft Ordinance (Cap. 210), the Summary Offences Ordinance (Cap. 228) or the Crimes Ordinance (Cap. 200).

Over the past 5 years, the number of prosecutions instituted against illegal felling of Incense Trees is tabulated as follows:

Year	Number of prosecutions
2015	5
2016	8
2017	1
2018	0
2019	0

- (b) Conservation of endangered trees (including Incense Trees) is part of the regular work of the Agriculture, Fisheries and Conservation Department (AFCD) in relation to nature conservation and management of country parks covering flora conservation, habitat management, law enforcement, education and publicity activities. To tackle illegal felling of Incense Trees, AFCD has implemented a species action plan for Incense Trees which covers a series of measures, including:
- (i) establishment of a special task force to conduct targeted patrol of sites at which important populations of Incense Trees are present, in addition to regular patrols in country parks and special areas;
 - (ii) working closely with the Police in gathering and exchanging intelligence; conducting joint law enforcement operations at black spots and investigation of illegal tree felling cases; and enhancing the awareness and vigilance of the public about such offences through social media as well as various education and publicity programmes;
 - (iii) enhancing liaison and cooperation with concern groups and villagers living near Incense Trees for intelligence gathering and reporting of any illegal felling activities;
 - (iv) conducting a pilot scheme using infrared sensor camera traps to monitor illegal felling of Incense Trees at several strategic locations;
 - (v) installing tree guards to prevent felling or vandalism of important individuals of Incense Trees;
 - (vi) dressing the wounds of damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting;
 - (vii) organising training sessions to help frontline staff of the Police and the Customs and Excise Department to identify Incense Trees/agarwood and detect illegal activities;

- (viii) deploying sniffer dogs to facilitate detection of agarwood smuggling at land boundary control points;
- (ix) stepping up the extensive planting of Incense Trees in country parks. Since 2009, about 10 000 seedlings of Incense Trees have been produced and planted every year to assist in the re-stocking of this species in Hong Kong; and
- (x) supporting various research studies and activities to conserve this native species and enhance public awareness in this aspect.

In addition, long-term monitoring of important populations of Incense Trees is in place to monitor its conservation status and check on the effectiveness of the protection measures. The resources involved in implementing the above measures were absorbed in the allocation for nature conservation and management of country parks, hence no separate breakdown on the expenditure involved is available. However, starting from 2020-21, AFCD has allocated an additional provision of \$8.5 million to enhance the support for the above measures.

- End -

CONTROLLING OFFICER'S REPLY

ENB016

(Question Serial No. 1866)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The provision under Programme 2 "Nature Conservation and Country Parks" for 2020-21 is \$178.7 million (22.1%) higher than the revised estimate for 2019-20. The Government stated that it is mainly used for tackling the increasing nuisance of wild pigs, monkeys and other wildlife. Please advise this Committee of the following:

- (a) What was the number of complaints related to wild pig sighting or nuisance in various districts received by the Government over the past 3 years?
- (b) What were the expenditure and staff establishment on wild pig management over the past year?
- (c) What are the details of the policy, expenditure and staff establishment on wild pig management in the coming year?
- (d) The Agriculture, Fisheries and Conservation Department launched a two-year pilot contraception programme for wild pigs at the end of 2017. How many wild pigs have received contraceptive vaccines and what is the total expenditure involved? Will the programme be extended? If yes, what are the details? If not, what are the reasons?
- (e) Will the Government step up publicity and education in order to teach the public to stop feeding wild pigs? If yes, what are the details of the expenditure involved? If not, what are the reasons?

Asked by: Hon LAU Ip-keung, Kenneth (LegCo internal reference no.: 48)

Reply:

- (a) Over the past 3 years, the number of complaints about wild pig sighting or nuisance received by the Agriculture, Fisheries and Conservation Department (AFCD), by district, is tabulated as follows:

District	Year/number of complaints about wild pig sighting or nuisance		
	2017-18	2018-19	2019-20 (as of January 2020)
Central and Western	74	102	97
Wan Chai	59	93	65
Eastern	36	60	45
Southern	205	249	190
Yau Tsim Mong	1	0	0
Sham Shui Po	5	4	22
Kowloon City	3	12	10
Wong Tai Sin	12	25	15
Kwun Tong	5	12	17
Kwai Tsing	12	18	27
Tsuen Wan	57	32	66
Tuen Mun	38	51	45
Yuen Long	24	20	23
North	26	31	20
Tai Po	54	75	68
Sha Tin	53	87	97
Sai Kung	111	127	137
Islands	12	10	6
Total	787	1 008	950

- (b) In 2019-20, AFCD's dedicated team for the management of wild pigs comprised 26 members and the expenditure involved (revised estimate) was \$13.8 million.
- (c) Currently, AFCD adopts a multi-pronged approach to control wild pig nuisance to residential areas, including managing wild pig nuisance, reducing food attraction for wild pigs, educating the public to stop feeding wild animals as well as enhancing public awareness towards wild pigs. AFCD has also set up an advisory group comprising experts from various fields to advise on the management of wild pigs.

In 2020-21, AFCD will continue to implement the said measures. Apart from conducting contraception/sterilisation for wild pigs and relocating them to the remote countryside areas to alleviate the nuisance with immediate effect, AFCD will also step up educational activities to promote the message of "stop feeding wild pigs" in different ways. In addition, AFCD will continue to explore how to improve the design of the refuse collection facilities so as to reduce food attraction for wild pigs in urban areas. AFCD's estimated expenditure involved in wild pig management in 2020-21 is \$23.7 million and the number of staff involved will be increased by 5 to 31.

- (d) AFCD has tried implementing the pilot Capture and Contraception/Relocation Programme (CCRP) to handle nuisance caused by wild pigs in urban areas since late 2017. To enable a more effective control of the number of wild pigs causing nuisance to urban areas, AFCD has regularised CCRP in phases since 2019-20 to vaccinate or sterilise caught or saved wild pigs where the condition permits.

As of February 2020, AFCD has vaccinated a total number of 114 female wild pigs and sterilised another 56 wild pigs. AFCD will continue to implement CCRP in 2021-22 in order to alleviate nuisance caused by wild pigs. Over the past 3 years, AFCD's expenditure on the pilot CCRP is tabulated as follows:

Year	Expenditure on pilot CCRP (\$ million)
2017-18	3.8
2018-19	6.2
2019-20 (revised estimate)	6.8

- (e) The most effective way to reduce the number of wild pigs appearing in residential areas is to stop feeding them. Feeding activities will wrongly impress the wild animals (including wild pigs) that there is stable food supply and attract them to appear regularly near urban or residential areas. In this connection, AFCD has commissioned a contractor to organise educational activities and guided tours at feeding black spots in the countryside since 2018 to enhance public awareness towards wild animals and promote the message of "stop feeding wild animals". Since 2019, AFCD has also extended the educational activities to cover kindergartens and primary schools, with a view to educating the public, when they are at young age, that they should not feed wild animals.

In 2019-20, AFCD's expenditure (revised estimate) on public education and publicity for promoting "stop feeding wild pigs" was \$ 0.83 million. The expenditure mainly covers the cost of commissioning the contractor for organising educational activities and producing publicity materials. As of January 2020, the contractor has organised 55 outdoor educational exhibitions, 18 country park wildlife guided tours, 31 educational seminars and 6 roving exhibitions.

- End -

CONTROLLING OFFICER'S REPLY

ENB017

(Question Serial No. 2640)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 has come into effect on 1 May 2018, banning all import and export of ivory (save for antique ivory) for commercial purposes. In this connection, please advise of the numbers of cases of smuggled ivory seized by the Customs and Excise Department (C&ED) over the past 3 years, including:

- (a) the total value of the products involved;
- (b) the types of ivory products;
- (c) the weight seized;
- (d) the mode of trade (i.e. import, export or re-export);
- (e) countries which the trade involved (i.e. places of origin of the seized ivory products or destinations of the ivory products);
- (f) means of transport;
- (g) penalties; and
- (h) the stakeholders being prosecuted in each case.

If such information is not available, what are the reasons?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 204)

Reply:

The enforcement figures regarding smuggling of ivory over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of cases	64	55	23
Estimated value of ivory seized (\$ million)	80	4	21
Seizure quantity (kg)	7 300	372	2 058
Number of import cases	61	47	22
Major loading countries (number of cases)	Zimbabwe (15) Nigeria (10) Portugal (5) South Africa (5)	Nigeria (14) South Africa (5) Mozambique (4) Senegal (4)	Nigeria (9) Ethiopia (3) Angola (2) Vietnam (2) Zimbabwe (2)
Mode of transport (number of cases)	Air (59) Land (1) Sea (1)	Air (46) Land (1)	Air (21) Sea (1)
Number of export cases	3	4	-
Destination country (number of cases)	Mainland China (3)	Mainland China (4)	--
Mode of transport (number of cases)	Land (1) Sea (2)	Land (3) Sea (1)	--
Number of transit/transshipment cases	-	2	-
Major loading country (number of cases)	-	Peru (1) United States of America (1)	--
Major destination country (number of cases)	-	-	--
Mode of transport (number of cases)	-	Air (2)	--
Others (e.g. abandoned cases)	-	2	1
Number of persons convicted	47	42	18
Maximum penalty (imprisonment)	3 months	4 months	6 weeks
Minimum penalty	A fine of \$2,000	A fine of \$5,000	Imprisonment of 2 weeks, suspended for 12 months

Offenders of the convicted cases mainly entered Hong Kong as visitors or transit passengers via the airport. The ivory seized from these passengers was mostly worked ivory or semi-processed worked ivory while ivory seized from sea consignments was mostly raw tusks and large cut pieces.

- End -

CONTROLLING OFFICER'S REPLY

ENB018

(Question Serial No. 2925)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2020-21 that the Agriculture, Fisheries and Conservation Department (AFCD) would promote public education and publicity on nature conservation and compatible use of country parks and marine parks. Nevertheless, during the epidemic, many citizens have left much refuse while using country parks and marine parks. This does not only affect visitors' impression about countryside of Hong Kong, but also reflects that the sustainable use of country parks and marine parks has to be further enhanced.

Would the Department advise of the efforts and results attained in the management and protection of country parks, special areas, marine parks and marine reserve for the purpose of nature conservation, entertainment, nature-based tourism and education; the numbers of related complaints received and penalty notices issued; and the expenditure and manpower involved in 2019-20?

What specific plans does the Department have to enhance public education and publicity in 2020-21? What are the results to be achieved, and the expenditure and manpower involved?

Asked by: Hon LIAO Cheung-kong, Martin (LegCo internal reference no.: 13)

Reply:

The Agriculture, Fisheries and Conservation Department (AFCD) is responsible for the management and protection of country parks and marine parks, among which mainly cover the construction and maintenance of recreational facilities (such as hiking trails and barbecue sites), routine cleaning, flora and fauna conservation, patrols and law enforcement, etc. Besides, planting of trees, hill fire prevention and fighting, vetting and monitoring of activities and development in country parks, etc. also form part of the regular work of AFCD. Regarding marine parks, the work includes implementing zonal management

measures (such as fishing and management of anchoring activities), and conducting ecological surveys and monitoring, etc. On education and publicity, AFCD has organised a series of programmes on protection and promotion of country parks and marine parks for the general public. These programmes include school visits, eco-tours, guided tours at visitor centres and education centres, thematic exhibitions, educational workshops, trail maintenance workshops, tree planting days, public lectures and volunteer scheme.

Apart from the above regular work, AFCD also carried out the following specific measures in 2019- 20:

- (a) enhanced supporting facilities at some popular hiking trails with good tourism potentials within country parks, as well as the thematic website Enjoy Hiking (<https://www.hiking.gov.hk>) to provide additional information on hiking trails and scenic attractions with a view to further promoting green tourism and enriching visitors' experience;
- (b) installed 15 water filling stations in country parks for public use to encourage the public and visitors to bring their own bottles and reduce the use of one-off disposable water bottles;
- (c) organised a series of MacLehose Trail 40th Anniversary Celebration Programme to promote good hiking and camping practice of leaving no trace in the countryside and showcase the natural scenery, cultural heritage and the ecology of wild fauna and flora in country parks;
- (d) completed a consultancy study on enhancement of the recreation and education potential of country parks and special areas and implemented the enhancement proposals progressively; and
- (e) completed the designation of Southwest Lantau Marine Park and continued the construction of the Hoi Ha Wan Marine Park Visitor Centre (HHWMPVC), which would facilitate AFCD in strengthening the management and protection of important dolphin habitats, as well as promoting the education and publicity on conservation of marine ecology.

AFCD will step up its efforts on individual measures as and when necessary. For instance, in the light of the recent increase in the number of people visiting country parks, AFCD has deployed additional staff to carry out cleansing, publicity and inspection at recreational sites and hiking trails according to actual situation.

In 2019-20 (as of February 2020), AFCD received 1 118 complaints related to the management of country parks, special areas, marine parks and marine reserve. In the same period, AFCD issued a total of 57 fixed penalty tickets. The expenditure (revised estimate) and manpower for the management and protection of country parks and marine parks are \$434 million and 755 staff respectively.

In 2020-21, AFCD will continue to step up the promotion of good visiting habits in countryside such as waste reduction and "Take Your Litter Home", review the orienteering programme in country parks and education programmes for primary and secondary students, as well as organise guided tours with themes on biodiversity and historical heritage with a view to enhancing public awareness on nature appreciation and protection of the countryside. In addition, AFCD will enrich visitors' experience and facilitate their visits by providing more information to visitors and enhancing the interpretation panels and signs in country parks. HHWMPVC, which is expected to be opened in the second half of 2020,

will raise public awareness of and participation in conservation of marine ecology through the information display boards, exhibits, eco-tours and workshops in its exhibition halls.

For the education and publicity of country parks and marine parks, AFCD has earmarked a provision of \$31.8 million and the number of staff involved is 44 in 2020-21.

- End -

CONTROLLING OFFICER'S REPLY

ENB019

(Question Serial No. 0203)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the enhancement of the feeder transport service for the Hong Kong UNESCO Global Geopark (HKUGGp), would the Government inform this Committee of the following:

- (a) Would the Government consider increasing the frequency of minibus service to and from the East Dam of the High Island Reservoir, extending the terminal station from Pak Tam Chung to Sai Kung Town Centre, and providing daily service to facilitate the access of Sai Kung residents and visitors to HKUGGp?
- (b) Would the Government consider increasing the frequency of ferry service running between Ma Liu Shui and Ap Chau/Kat O/Lai Chi Wo, and providing daily service to facilitate the access of Tai Po residents to HKUGGp?
- (c) Would the Government consider stepping up coordination and cooperation with local organisations to organise and promote individual or group guided tours to HKUGGp and local attractions all at a time so as to enable more residents to enjoy the precious natural scenic views in Hong Kong?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 8)

Reply:

- (a) To facilitate the promotion of green tourism, the Transport Department (TD) approved the launch of the New Territories Green Minibus (GMB) Route No. 9A in July 2018 to provide a feeder service between Pak Tam Chung which is a green tourism hub and the East Dam of the High Island Reservoir, in the afternoon on Sundays and public holidays at a headway of 20 minutes. TD has been closely monitoring the route service since its introduction. According to the site inspection carried out by TD in January this year, the headway of the route met the schedule of service. The average occupancy rates of the service from Pak Tam Chung and that from the East Dam of the High Island Reservoir were about 15% and 97% respectively and hence the service

could generally meet the passenger demand on holidays. The passengers of Route No. 9A are mainly countryside visitors and the number of passengers is affected by various factors like seasons, dates, time and weather conditions, etc. To ensure that the route service can be financially sustainable, it is only operated during the peak hours on Sundays and public holidays. Currently, TD does not have any plan to change the route to provide daily services.

Besides, Route No. 9A mainly provides feeder service between Pak Tam Chung and the East Dam of the High Island Reservoir. If it is extended to Sai Kung Town Centre, the journey distance will be increased by about 8.5 km, which may add pressure on the existing fare level and the operator will have to provide more vehicles to maintain the current service level. Since passengers may travel from Pak Tam Chung to Sai Kung Town Centre by taking several bus and GMB routes (namely, Kowloon Motor Bus Route No. 94 and No. 96R and GMB Route No. 7 or No. 9), TD considers that current routing of Route No. 9A should be maintained. TD will continue to monitor and review the transport service to and from the East Dam of the High Island Reservoir.

- (b) At present, the kaito ferry service between Ma Liu Shui and Lai Chi Wo is providing regular service on Sundays and public holidays only. The operator of the kaito ferry service is now considering to provide service on Saturdays. On the other hand, the kaito ferry service between Ma Liu Shui and Ap Chau/Kat O is currently provided on Saturdays, Sundays and public holidays. According to the visitor statistics of the Agriculture, Fisheries and Conservation Department (AFCD), the number of visitors remained at a similar level over the past year. Thus, there is no need to strengthen the service at this stage. The operator will consider deploying vessels with higher carrying capacity to provide service if there is an increase in passenger demand in the future.
- (c) Cooperation with local communities has been a major task of the Hong Kong UNESCO Global Geopark (HKUGG). For example, various story rooms and visitor centres, including the Volcano Discovery Centre, the Ap Chau Story Room, the Kat O Story Room, the Kau Sai Village Story Room and the Lai Chi Wo Geoheritage Centre, have been set up in HKUGG communities. They are managed by local people and exhibit the local culture and heritage. The Siu Ying Story Room located in Lai Chi Wo will open in mid-2020. AFCD will continue to collaborate with local partners to promote HKUGG and local attractions.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2186)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Regarding the Department's work and the total expenditures involved in the conservation of the Chinese white dolphins (CWDs), as well as the expenditures under the grand total (including all expenditures on Sha Chau and Lung Kwu Chau Marine Park, The Brothers Marine Park, the proposed Southwest Lantau Marine Park, the Soko Islands Marine Park and the designation of a new marine park for Integrated Waste Management Facilities at Shek Kwu Chau, etc.), what were the details over the past 5 years? What were the Department's total estimated expenditure and the expenditures under the grand total involved in the abovementioned initiatives in the financial year 2020-21?
- (b) Please set out the statistics of CWDs and finless porpoises within the territory by their major habitats (including the North Lantau waters near Castle Peak, the Sha Chau and Lung Kwu Chau Marine Park, and waters around Chek Lap Kok and Tai O) respectively over the past 5 years.
- (c) Please set out the numbers of CWDs, finless porpoises and other cetaceans stranded within the territory by their major habitats (including the North Lantau waters near Castle Peak, the Sha Chau and Lung Kwu Chau Marine Park, and waters around Chek Lap Kok and Tai O) over the past 5 years.
- (d) What is the Department's evaluation on the 21 water quality parameters of the respective marine parks and marine reserve? Please set out the name(s) of the parameter(s) and the figure(s) recorded which did not meet the standard(s) set by the Environmental Protection Department (EPD) in each of the past 5 years, as well as the standard figure(s) of the respective parameter(s) as set by EPD.
- (e) How does the Department evaluate the effectiveness of marine parks on the conservation of CWDs and other cetaceans? Does the Department have any other measure(s) to enhance the habitats of local cetaceans apart from establishing additional marine parks? If yes, what are the details and the estimated expenditure of the measures?

- (f) Does the Department have any estimate on the future abundance of cetaceans in Hong Kong? If yes, what are the details?

Asked by: Hon MO Claudia (LegCo internal reference no.: 15)

Reply:

- (a) To conserve the Chinese white dolphins (CWDs) that occur in the Hong Kong waters, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented the Conservation Programme for CWDs since 2001, which includes a variety of measures that are conducive to the conservation and the continued survival of CWDs in the Hong Kong waters. They include (i) close monitoring of the occurrence and distribution of CWDs in local waters; (ii) designation of important dolphin habitats as marine parks and subject them to proper conservation and management; (iii) stipulating stringent requirements in environmental impact assessments of coastal development projects close to CWD habitats to ensure that the potential impacts to dolphins are adequately addressed; (iv) implementation of fisheries management measures for sustainable and healthy fish stocks which would benefit CWDs with sufficient food; and (v) organising education and publicity programmes to raise public awareness of and solicit their support for the conservation of CWDs.

Among the established marine parks, 2 of them, i.e. Sha Chau and Lung Kwu Chau Marine Park (SCLKCMP) and The Brothers Marine Park (BMP), incur recurrent expenditures related to the conservation of CWDs. The recurrent expenditures involved in the CWD conservation measures over the past 5 years and that earmarked for 2020-21 are tabulated as follows:

Year	Expenditure (\$ million)
2015-16	6.3
2016-17	6.2
2017-18	9.1
2018-19	11.4
2019-20 (revised estimate)	12.4
2020-21 (estimate)	13.2

- (b) As the 4 areas, i.e. Southwest Lantau, West Lantau, Northwest Lantau and Northeast Lantau, are the major habitats of CWDs in Hong Kong, AFCD's monitoring of the abundance of CWDs mainly focuses on these 4 areas, and the figures are tabulated as follows:

Year	Abundance				Total
	Southwest Lantau	West Lantau	Northwest Lantau	Northeast Lantau	
2015	24	31	10	0	65
2016	9	27	11	0	47
2017	10	16	21	0	47
2018	7	19	6	0	32
2019	(Data being analysed)				

AFCD does not have the estimated abundance of finless porpoises and other cetaceans in Hong Kong waters.

- (c) The numbers of stranded CWDs recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok, Tai O and other areas are tabulated as follows:

Year	Number of CWDs stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2015	2	2	1	2	8
2016	1	0	0	0	3
2017	0	1	1	0	3
2018	0	0	1	1	6
2019	1	0	1	1	6

The numbers of stranded finless porpoises recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok, Tai O and other areas are tabulated as follows:

Year	Number of finless porpoises stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2015	0	0	0	0	21
2016	0	0	0	0	17
2017	0	0	0	0	18
2018	0	0	0	0	32
2019	0	0	0	0	43

The numbers of other stranded cetaceans recorded over the past 5 years in North Lantau waters near Castle Peak, SCLKCMP, waters around Chek Lap Kok, Tai O and other areas are tabulated as follows:

Year	Number of other cetaceans stranded				
	North Lantau waters near Castle Peak	SCLKCMP	Waters around Chek Lap Kok	Tai O	Other areas
2015	0	0	0	0	1
2016	0	0	0	0	2
2017	0	0	0	0	3
2018	0	0	0	0	5
2019	0	0	0	0	3

- (d) AFCD conducts regular water quality monitoring at various marine parks and marine reserve, as well as measures and analyses 21 parameters, which are air temperature, water temperature, salinity, dissolved oxygen, pH, Secchi disc depth, 5-day biochemical oxygen demand, total suspended solid, turbidity, ammoniacal nitrogen, unionised ammonia, nitrite nitrogen, nitrate nitrogen, total inorganic nitrogen, total Kjeldahl nitrogen, total nitrogen, orthophosphate phosphorus, total phosphorus, chlorophyll-*a*, *Escherichia coli* and faecal coliforms. The water quality of the marine

parcs and marine reserve was good and complied with the corresponding Water Quality Objectives (WQO) set by the Environmental Protection Department, except for total inorganic nitrogen (TIN) which is an indicator of nutrient enrichment.

Subject to the influence of water current, the discharge from the river on the periphery of SCLKCMP is rich in nutrients, resulting in TIN concentrations at the aforementioned location being in excess of the WQO over the past 5 years, and that in BMP also exceeded the WQO over the past 3 years. TIN in Cape D'Aguilar Marine Reserve (CDMR) showed fluctuations. Measured TIN concentrations (in mg/L) in the aforementioned marine parks and in CDMR are tabulated as follows:

Year	SCLKCMP (0.3mg/L)	BMP (0.3mg/L)	CDMR (0.1mg/L)
2015	1.23	/	0.20
2016	0.95	/	0.12
2017	1.09	0.73	0.10
2018	0.97	0.82	0.11
2019	0.81	0.54	0.13

Note:

1. The WQO for annual depth-averaged TIN in the respective water control zones are shown in brackets.
 2. Water quality monitoring in BMP commenced in 2017 after its establishment.
- (e) AFCD conduct long-term dolphin monitoring through vessel surveys and passive acoustic monitoring initiated in 2017. The monitoring results indicated that the designation of SCLKCMP and BMP had positive effects on the conservation of CWDs. Please refer to item (a) above regarding CWD conservation measures and the recurrent expenditures involved.
- (f) AFCD will continue to monitor the occurrence of cetaceans in Hong Kong waters. No estimate on the future abundance of cetaceans has been made.

- End -

CONTROLLING OFFICER'S REPLY**ENB021****(Question Serial No. 2072)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the management and protection of country parks, special areas, marine parks and marine reserve, would the Government inform this Committee of the following:

- (a) Please set out the number of inspections conducted by the Agriculture, Fisheries and Conservation Department in tabular form as follows.

Areas managed/Year	2019-20 (Actual)	2020-21 (Estimate)
Country parks		
Special areas		
Marine parks		
Marine reserve		

- (b) Please set out, by year, the number of prosecutions related to offences under the Country Parks and Special Areas Regulations over the past 3 years.
- (c) Please set out, by year, the number of prosecutions related to offences under the Marine Parks and Marine Reserves Regulation over the past 3 years.

Asked by: Hon OR Chong-shing, Wilson (LegCo internal reference no.: 48)

Reply:

- (a) The number of patrols conducted in country parks, special areas, marine parks and the marine reserve by the staff of the Agriculture, Fisheries and Conservation Department (AFCD) is tabulated as follows:

Areas Managed / Year	Number of Patrols	
	2019-20 (as of February) (Actual)	2020-21 (Estimate)
Country parks and special areas*	12 961	14 000
Marine parks	2 473	2 500
Marine reserve	424	420

* As some of the patrols cover both country parks and special areas, AFCD does not have a breakdown on the number of patrols in these managed areas.

- (b) Over the past 3 years, the number of prosecutions initiated by AFCD under the Country Parks and Special Areas Regulations (Cap. 208A) is tabulated as follows:

Year	Number of Prosecutions
2017	757
2018	741
2019	572

- (c) Over the past 3 years, the number of prosecutions initiated by AFCD under the Marine Parks and Marine Reserves Regulation (Cap. 476A) is tabulated as follows:

Year	Number of Prosecutions
2017	8
2018	9
2019	10

- End -

CONTROLLING OFFICER'S REPLY

ENB022

(Question Serial No. 2960)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Government stated that it would carry out licensing control of international trade in endangered species and curb illegal trade in endangered species in Hong Kong. In addition, it is mentioned in the Matters Requiring Special Attention in 2020-21 that the Government will strengthen the control of trade in endangered species, in particular ivory, and combat their illegal trade and smuggling. In this connection, would the Government please advise this Committee of the following:

- (a) the number of operations conducted by the Government to combat the illegal trade and smuggling of endangered species as well as the time frame, manpower and expenditure involved in each operation over the past 3 years;
- (b) the quantities, the species of plants and animals involved as well as the whereabouts of the endangered species seized by the Government in combating the illegal trade and smuggling of endangered species in each of the past 3 years;
- (c) the number of cases processed by the Government in combating the illegal trade and smuggling of endangered species and the number of persons prosecuted, the number of persons arrested, the number of persons convicted and the penalties imposed in each case over the past 3 years (Please set out cases of ivory smuggling separately);
- (d) the number of applications received and the number of permits/certificates issued by the Government in connection with licensing control of international trade in endangered species in each of the past 3 years;
- (e) the quantities of forfeited ivory, the total amount of forfeited ivory in stockpile, of which the amount of ivory destroyed as well as the estimated value, manpower and expenditure involved in each of the past 3 years.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 38)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) has been working closely with the Customs and Excise Department (C&ED) and strictly regulating the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) which gives effect to CITES (i.e. the Convention on the International Trade in Endangered Species of Wild Fauna and Flora) in Hong Kong. AFCD conducts joint operations with C&ED at various import and export control points to combat illegal import and export of endangered species, and they also collaborate with overseas and Mainland law enforcement agencies through joint operations and intelligence exchange to combat smuggling of endangered species. In addition, all CITES-listed products must be inspected by authorised officers prior to their arrival in or departure from Hong Kong to confirm that the relevant consignment details tally with those in the licences. AFCD also conducts inspections at markets and shops that might sell endangered species from time to time to detect and deter irregularities. The total number of consignment and market inspections conducted in 2017, 2018 and 2019 were 30 963, 33 993 and 31 163 respectively.

The manpower and expenditure involved in combating illegal trading and smuggling of endangered species over the past 3 years are tabulated as follows:

Year	2017-18	2018-19	2019-20 (revised estimate)
Expenditure (\$ million)	31.1	35.4	41.5
Manpower (number)	43	44	48

- (b) The endangered species seized in each of the past 3 years involved mainly dried seahorse, pangolin scales, timber, American ginseng, orchid, live tortoise/turtle, leather products of reptiles, etc. The quantity of seizure is tabulated as follows:

Year	2017-18	2018-19	2019-20 (revised estimate)
Quantity and number of items	63 130 kg and 4 272 items	273 160 kg and 18 975 items	37 600 kg

Endangered species seized during law enforcement actions has been disposed of by AFCD according to the CITES guidelines. For live animals, AFCD will seek the advice of the CITES Management Authority of the country of export and send them back to the country of export or the country of origin if deemed appropriate. For animals of a native species, they will be released to a suitable habitat locally if they are diagnosed to be healthy and fit for release. For animals that are not suitable to be returned to the country of export/origin or released to a suitable habitat locally, AFCD will consider donating them to local or overseas institutes for the purposes of education or scientific research. If the physical condition of an animal is not satisfactory, or it is likely to die or be subjected to unnecessary suffering if kept in captivity, it will be disposed of by euthanasia. Regarding specimens of endangered

species, AFCD will consider donating to other CITES Management Authorities, government bodies, schools or non-governmental organisations for training or education purposes or disposing of them by other means that are in line with CITES.

- (c) The statistics on cases involving illegal imports and exports in contravention of the Ordinance over the past 3 years are tabulated as follows:

Year	2017	2018	2019
Number of cases	433	745	659
Number of persons arrested	257	528	497
Number of persons prosecuted	189	221	226
Number of persons convicted	170	178	199
Maximum penalty (imprisonment/months)	3	8	24
Minimum penalty (fine/\$)	400	400	300

Among which the number of cases involving ivory is tabulated as follows:

Year	2017	2018	2019
Number of cases	64	55	23
Number of persons arrested	60	51	21
Number of persons prosecuted	50	42	18
Number of persons convicted	47	42	18
Maximum penalty (imprisonment)	3 months	4 months	6 weeks
Minimum penalty	A fine of \$2,000	A fine of \$5,000	Imprisonment of 2 weeks, suspended for 12 months

- (d) The numbers of applications for permits/certificates received and permits/certificates issued by AFCD with respect to the imports, exports, re-exports and possession of scheduled species under the Ordinance over the past 3 years are tabulated as follows:

Year	Number of applications received	Number of permits/certificates issued*
2017	18 938	19 043
2018	19 092	18 942
2019	19 749	19 995

* The number of permits/certificates issued may differ from the number of applications received within the same year as some permits and certificates were issued in respect of the applications submitted at the end of the previous year.

- (e) The quantities of ivory seized in 2017, 2018 and 2019 were 7 300, 372 and 2 058 kg respectively. Since 2014, a total of 29.5 tonnes of confiscated ivory have been disposed of by incineration. The existing ivory stockpile under government custody is about 10.5 tonnes. Apart from saving some for scientific, education, enforcement or identification purposes, the incineration of the confiscated ivory will be arranged after completion of the necessary legal procedures. The estimated expenditure for the disposal of the remaining ivory by incineration is \$70,000 and the manpower required will be absorbed by the existing staff of AFCD.

- End -

CONTROLLING OFFICER'S REPLY

ENB023

(Question Serial No. 2961)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Import and Export Ordinance and the Protection of Endangered Species of Animals and Plants Ordinance are the primary legislations against illegal trade in wild animals and plants in Hong Kong at present. However, due to the existing system's loopholes, legal vacuum and weak deterrent effect of penalties, Hong Kong has turned into a centre for organised wildlife smuggling syndicates. In this connection, has the Government considered including crimes related to endangered wildlife in the ambit of the Organized and Serious Crimes Ordinance to further stop transnational crime syndicates from using Hong Kong for wildlife smuggling? If yes, what are the details? If not, what are the reasons?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 39)

Reply:

To enhance the deterrent effect against illegal wildlife trade and to demonstrate the Government's commitment in combating wildlife crime, the Government amended the Protection of Endangered Species of Animals and Plants Ordinance (PESAPO) (Cap. 586) in 2018. The penalties thereof have been significantly increased since 1 May 2018. The maximum penalty for any person contravening the PESAPO has been raised from a fine of \$5 million and an imprisonment of 2 years, to a fine of \$10 million and an imprisonment of 10 years, as well as forfeiture of the specimens on conviction. The amended PESAPO has worked well and provided deterrent effect since it came into effect.

When considering whether offences under PESAPO should be added to the Organised and Serious Crimes Ordinance (OSCO) (Cap. 455), all related factors should be taken into account for assessment, including whether doing so aligns with the objective of OSCO, what the current problems with regard to tackling illegal wildlife trade are, and whether adding the relevant offences into OSCO is necessarily the most appropriate way to address these problems. We will continue to closely monitor the situation concerned and consider taking practical measures in due course to combat the illegal trade of endangered wildlife effectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB024

(Question Serial No. 2235)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Although the Agriculture, Fisheries and Conservation Department (AFCD) has launched the "Take Your Litter Home" programme in phases since 2015, the number of littering cases has increased drastically due to the sharp rise in the number of country park visitors amid the epidemic this year.

- (a) What were the total amount of refuse collected in country parks and the number of prosecutions initiated for littering every year since 2015?
- (b) Have there been any material changes in the said figures since the start of this year?
- (c) Has AFCD deployed more frontline staff in response to the increase in the number of country park visitors, in order to deter them from littering by advice or warning? If yes, what are the details?
- (d) Does AFCD have any plans to step up the promotion of "Take Your Litter Home" and other educational messages? If yes, what are the details?

Asked by: Hon WU Chi-wai (LegCo internal reference no.: 62)

Reply:

- (a) The volume of refuse collected by the Agriculture, Fisheries and Conservation Department (AFCD) in country parks and the number of prosecutions related to littering under the Country Parks and Special Areas Regulations (Cap. 208A) in each of the past 5 years are tabulated as follows:

Year	Volume of refuse collected in country parks (tonnes)	Number of prosecutions
2015	3 700	135
2016	3 400	61
2017	3 400	62
2018	3 000	165
2019	2 600	92

(b) In the first 2 months of 2020, the volume of refuse collected by AFCD in country parks has increased by about 10% as compared to the same period last year and the number of prosecutions related to littering is 10. It is normal for the amount of refuse collected and number of prosecutions to vary year to year.

(c) and (d)

Noting that many members of the public visited country parks recently, AFCD has agilely deployed manpower to step up site inspections and cleansing, and provided litter containers of large volume at specific sites for the use of countryside visitors where necessary. Meanwhile, AFCD will continue to strengthen education and publicity efforts through various channels, including displaying banners and posters in country park areas with high visitor flow, urging countryside visitors to maintain environmental hygiene through radio programmes, further promoting “Take Your Litter Home” and good hiking manners, and publicising relevant messages through the networks of non- profit-making or partner organisations. When patrolling the hiking trails in country parks, AFCD staff will also advise countryside visitors to take their own litter away and take appropriate enforcement actions when littering cases are found.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1405)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): ()
Programme: (7) Management of Construction and Demolition Materials
Controlling Officer: Director of Civil Engineering and Development (Ricky C K LAU)
Director of Bureau: Secretary for the Environment

Question:

It was mentioned that the Civil Engineering and Development Department continued to deliver surplus public fill for beneficial reuse in the Mainland. However, as a number of reclamation projects are being undertaken or will be taken forward in future in Hong Kong, the local demand for fill materials will keep rising. In this connection, would the Government inform this Council:

- a) of the costs incurred in the delivery of surplus public fill to the Mainland;
- b) of the costs incurred in the conversion of public fill into fill materials for reclamation and the details of such operations;
- c) of the total quantities of public fill materials locally generated as well as the percentage of those used in local reclamation works in the past 3 years;
- d) whether the Government has examined delivery of all the public fill locally generated for use in reclamation, given the increasing number of local reclamation projects in future; if yes, what were the details and, if not, what were the reasons for that?

Asked by: Hon LUK Chung-hung (LegCo internal reference no.: 36)

Reply:

- a) The Government has been properly managing the inert construction and demolition materials (also known as public fill) arising from various types of construction works through a multi-pronged approach, including encouraging the construction industry to reduce the generation and to reuse the public fill as much as possible. While part of the public fill is directly reused in suitable local construction projects, the rest is delivered to public fill reception facilities (including 2 temporary fill banks) for temporary storage pending future reuse in reclamation or earth filling projects. As local reuse could not absorb all the public fill generated in Hong Kong and the capacity of the temporary fill banks is limited, the Government has been delivering part of the surplus public fill to Taishan in the Guangdong Province for disposal since 2007.

The Government's expenditure on the management of public fill in the past 3 financial years are tabulated as follows:

Financial Year	Expenditure (\$ million)
2017-18	1,032.2 (actual)
2018-19	947.6 (actual)
2019-20	1,259.5 (revised estimate)

Since the temporary fill banks handle the supply of public fill to local construction projects for beneficial reuse and the delivery of public fill to the Mainland simultaneously, and both of which are undertaken by a single contractor, there is no breakdown of the cost for handling the delivery of public fill to the Mainland.

b) The handling and other relevant expenditure involved in the reuse of public fill in reclamation is subject to the design and construction needs of individual reclamation projects.

c) The quantities of public fill received at public fill reception facilities and supplied from the fill banks to local construction projects for beneficial reuse in each of the past 3 years are tabulated as follows:

Year	Quantity of Public Fill Received at Public Fill Reception Facilities (million tonnes)	Quantity of Public Fill Supplied from Fill Banks to Local Projects for Beneficial Reuse (million tonnes)
2017	13.3	0.3
2018	12.3	2.2
2019	11.2*	12.7*

*Provisional actual figure subject to adjustment

Note: The above figures do not include the quantity of public fill that has been directly delivered to other construction projects through matching for reuse without routing through the public fill reception facilities.

Major local reclamation projects in progress (including the Hong Kong International Airport Three-Runway System project and the Tung Chung New Town Extension project) would reuse public fill as far as practicable. These projects have been absorbing public fill from the temporary fill banks for reclamation since mid-2018.

d) The local construction industry generates a large quantity of public fill every year. As mentioned above, while part of the public fill is directly reused in suitable local construction projects, the rest is delivered to temporary fill banks for temporary storage pending future reuse in reclamation or earth filling projects.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2231)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): ()

Programme: (3) Provision of Land and Infrastructure
(6) Supervision of Mining, Quarrying and Explosives
(7) Management of Construction and Demolition Materials

Controlling Officer: Director of Civil Engineering and Development (Ricky C K LAU)

Director of Bureau: Secretary for the Environment

Question:

Whilst sustaining the overall development of Hong Kong, the construction industry generates large amount of construction and demolition (C&D) materials from construction, excavation and demolition works every year. About 90% of these C&D materials are recyclable or reusable inert materials, commonly known as public fill, which can be used as fill materials in reclamation, site formation or earth filling projects. The Department receives surplus public fill, which is temporarily stored in fill banks, for beneficial reuse in future. In this connection, please advise this Council:

1. the quantity of public fill generated in Hong Kong, and the respective (a) quantities of public fill received and (b) operational expenses incurred, by the 4 public fill reception facilities and the 2 fill banks in each of the past 5 years;
2. the quantity and percentage of public fill used in public works in each of the past 5 years;
3. (a) the quantity and percentage of the surplus public fill exported (with a breakdown by export destination), and (b) the quantity and percentage of the surplus public fill discarded at the landfills, by the Government in each of the past 5 years;
4. whether the quantity of public fill generated annually in Hong Kong is suffice to cope with the needs of local reclamation, site formation or earth filling works;
5. the normal proportion of marine sand and public fill used in public works, as well as the difference in their costs;
6. whether the Government has considered the demand for public fill from the local projects and neighbouring areas, given the press report that there was an insufficient supply of marine sand for use in the reclamation works of the airport's third runway project;
7. whether the Government has reserved public fill for use in the possible major reclamation projects in future; if yes, what were the details and estimated provision and if not, what were the reasons for that?

Asked by: Hon MO Claudia (LegCo internal reference no.: 60)

Reply:

1(a) The Government has been properly managing the inert construction and demolition materials (also known as public fill) arising from various types of construction works through a multi-pronged approach, including encouraging the construction industry to reduce the generation and to reuse the public fill as much as possible. While part of the public fill is directly reused in suitable local construction projects, the rest is delivered to public fill reception facilities (including 2 temporary fill banks) for temporary storage pending future reuse in reclamation or earth filling projects. There are currently a total of 4 public fill reception facilities in Hong Kong, namely Tseung Kwan O Area 137 Fill Bank, Tuen Mun Area 38 Fill Bank, Chai Wan Public Fill Barging Point and Mui Wo Temporary Public Fill Reception Facility. The quantities of public fill received at public fill reception facilities and the total quantities received in the past 5 years are tabulated as follows:

Year	Tseung Kwan O Area 137 Fill Bank (million tonnes)	Tuen Mun Area 38 Fill Bank (million tonnes)	Chai Wan Public Fill Barging Point (million tonnes)	Mui Wo Temporary Public Fill Reception Facility (million tonnes)	Total Quantity Received (million tonnes)
2015	6.7	7.2	2.0	0.1	16.0
2016	6.1	6.7	2.1	0.1	15.0
2017	6.0	5.9	1.3	0.1	13.3
2018	4.7	6.4	1.2	Less than 0.05	12.3
2019	The actual quantities of public fill received at each of the public fill reception facilities are subject to verification.				11.2*

*Provisional actual figure subject to adjustment

Note: The above figures do not include the quantity of public fill that has been directly delivered to other construction projects through matching for reuse without routing through the public fill reception facilities.

1(b) The Government's expenditure on the management of public fill in the past 5 financial years is tabulated as follows:

Financial Year	Expenditure (\$ million)
2015-16	918.4 (actual)
2016-17	1,175.3 (actual)
2017-18	1,032.2 (actual)
2018-19	947.6 (actual)
2019-20	1,259.5 (revised estimate)

2, 3 and 4. The Government has been promoting the reuse of public fill in suitable local construction projects as far as possible. The proportion of public fill to be used in various construction projects is subject to their design and construction needs. The fill banks have

supplied public fill to more than 80 local projects (including public and non-public projects) in the past 5 years, including the Three-Runway System project and the Tung Chung New Town Extension which are currently in progress. The overall quantities of public fill supplied to these local projects are tabulated as follows:

Year	Quantity of Public Fill Supplied from Fill Banks to Local Projects for Beneficial Reuse (million tonnes)
2015	0.7
2016	0.2
2017	0.3
2018	2.2
2019	12.7*

*Provisional actual figure subject to adjustment

Note: The above figures do not include the quantity of public fill that has been directly delivered to other construction projects through matching for reuse without routing through the public fill reception facilities.

As local reuse could not absorb all the public fill generated in Hong Kong and the capacity of the temporary fill banks is limited, the Government has been delivering part of the surplus public fill to Taishan in the Guangdong Province for disposal since 2007 and does not dispose of the surplus public fill at landfills. The quantities of surplus public fill delivered to Taishan for disposal in the past 5 years are tabulated as follows:

Year	Quantity of Surplus Public Fill Delivered to Taishan for Disposal (million tonnes)	Percentage against the Total Quantity of Public Fill Stockpiled at Public Fill Reception Facilities in the Beginning of the Year and of Public Fill Received at Public Fill Reception Facilities in the Same Year
2015	13.0	40%
2016	13.6	42%
2017	13.5	42%
2018	10.0	33%
2019	7.7*	26%*

*Provisional actual figure subject to adjustment

5. The proportion of marine sand, public fill or other fill materials to be used in various construction projects is subject to their design and construction needs. The Civil Engineering and Development Department will not charge public works projects for absorbing public fill from fill banks, and hence there is no material cost of absorbing public fill from fill banks incurred by such projects. On the other hand, the cost of marine sand may fluctuate in response to market situation.

6 and 7. The local construction industry generates a large quantity of public fill every year. As mentioned above, while part of the public fill is directly reused in suitable local construction projects, the rest is delivered to fill banks for temporary storage pending future reuse in reclamation or earth filling projects. Both the Three-Runway System project and the Tung Chung New Town Extension project, which are currently in progress, are absorbing public fill from fill banks for use in reclamation.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2319)

Head: (39) Drainage Services Department

Subhead (No. & title): Not Specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (LO Kwok-wah)

Director of Bureau: Secretary for the Environment

Question:

With regard to the design and construction of village sewerage in Tai Po and North District, please advise this Committee of the following:

- (1) the estimate of expenditure involved in each project;
- (2) the works progress and anticipated completion dates of the on-going projects; and
- (3) the details of the projects to be implemented.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 161)

Reply:

- (1) The estimate of expenditure involved in the village sewerage projects for Tai Po and North District in 2020-21 is approximately \$21.6 million.
- (2) The village sewerage project in Nam Wa Po and Wai Tau Tsuen in Tai Po was completed in 2018, while the terminal manhole connection works by the villagers concerned are in full swing. The village sewerage project in Tong To Tsuen in North District is underway and is anticipated to be completed in the fourth quarter of 2021.
- (3) In February 2020, the Legislative Council's Finance Committee (FC) approved the funding proposal for Tolo Harbour village sewerage project covering Ha Wong Yi Au and Care Village in Tai Po. The project is expected to commence in the third quarter of 2020 for completion in 2024.

The Drainage Services Department is preparing to implement a village sewerage project covering Fanling Wai, So Kwun Po and Leng Pei Tsuen in North District. The project was supported by the Legislative Council's Panel on Environmental Affairs in November 2019. Subject to the support of the Legislative Council's Public Works Subcommittee and funding approval by the FC, the project would also commence in the third quarter of 2020 for completion in the first quarter of 2025.

Besides, the design of the village sewerage system in Tai Po and North District covering 24 and 14 villages respectively is underway.

- End -

CONTROLLING OFFICER'S REPLY**ENB028****(Question Serial No. 0208)**Head: (39) Drainage Services DepartmentSubhead (No. & title): Not SpecifiedProgramme: (2) Sewage ServicesControlling Officer: Director of Drainage Services (Lo Kwok-wah)Director of Bureau: Secretary for the EnvironmentQuestion:

How many appeal cases of sewage charge and trade effluent surcharge were there in 2017-18, 2018-19 and 2019-20? Of these, how many were from the restaurant trade? How many appeal cases were approved? Of these, how many were from the restaurant trade? What is the average time needed to complete the processing of an appeal case?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 2)Reply:

The information sought is provided as follows:

		2017-18	2018-19	2019-20 (for the first 11 months only)
Reassessment of Trade Effluent Surcharge Rate	Number of applications received			
	<i>All trades</i>	222	80	75
	<i>Restaurant trade</i>	139	69	16
	Number of applications approved ^{Note}			
	<i>All trades</i>	96	120	45
	<i>Restaurant trade</i>	88	59	35
Reassessment of Discharge Factor	Number of applications received			
	<i>All trades</i>	31	33	7
	<i>Restaurant trade</i>	1	1	0
	Number of applications approved ^{Note}			
	<i>All trades</i>	17	18	14
	<i>Restaurant trade</i>	0	0	0

Note: As there is a time lag for processing the applications, the number of applications approved does not correspond to the number of applications received within the same financial year.

Normally, upon receipt of all the necessary information, it takes 3 to 4 months to process a case of reassessment of trade effluent surcharge rate, while it takes 1 to 2 months to process a case of reassessment of discharge factor.

- End -

CONTROLLING OFFICER'S REPLY

ENB029

(Question Serial No. 2148)

Head: (39) Drainage Services Department
Subhead (No. & title): Not Specified
Programme: (2) Sewage Services
Controlling Officer: Director of Drainage Services (Lo Kwok-wah)
Director of Bureau: Secretary for the Environment

Question:

In 2017, the Drainage Services Department launched Phase 1 of the “Upgrading of West Kowloon and Tsuen Wan Sewerage” (the Project) to improve the quality of coastal waters of West Kowloon and Tsuen Wan and plans to implement Phase 2 of the Project. In this connection, please advise this Committee of the following:

1. the latest progress and anticipated completion dates of the various items under Phases 1 and 2 “Upgrading of West Kowloon and Tsuen Wan Sewerage”;
2. the length (in terms of km) of sewers involved in and the latest progress of the territory-wide sewerage rehabilitation and inspection works; and
3. the number of existing dry weather flow interceptors across the territory and the number of those used to intercept polluted flows from entering the Victoria Harbour Water Control Zone.

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 23)

Reply:

1. Phase 1 works of the “Upgrading of West Kowloon and Tsuen Wan Sewerage” commenced in September 2017. While the construction of 4 new dry weather flow interceptors (DWFIs) in Tsuen Wan was completed first in September 2019, the construction of 4 remaining new DWFIs and enhancement of 43 existing DWFIs in West Kowloon are anticipated to be completed in stages by 2022.

Phase 2 works involving the proposed upgrading of about 33.5 km of sewers in 5 areas of West Kowloon and Tsuen Wan (including Tsuen Wan, Kwai Chung, Sham Shui Po, Kowloon City and Yau Tsim Mong) was supported by the Public Works Subcommittee in November 2019. Subject to funding approval from the Finance Committee, the Drainage Services Department (DSD) will commence the works in stages in 2020-21. It is anticipated that the whole project will take about 7 years to complete.

2. Regarding sewerage inspection and rehabilitation works, the DSD has been conducting routine pipe inspections, implementing minor pipe rehabilitation works on a need basis and launching relatively complicated and large-scale pipe inspections and rehabilitation works through the Public Works Programme to ensure its normal operation. The

DSD is currently formulating a comprehensive plan and implementing a territory-wide inspection and rehabilitation works programme by phases for pipes assessed to be of high risk. This involves inspection and rehabilitation of about 127 km of sewers and sewage rising mains. As at the first quarter of 2020, the DSD has commenced inspection and rehabilitation of about 95 km of sewers and sewage rising mains. The DSD is working on the design for inspection and rehabilitation of the remaining 32 km of sewers and sewage rising mains, and will seek funding to commence the works in stages subsequently.

3. There are 192 existing DWFIs throughout the territory, 74 of which are used to intercept polluted flows in stormwater drains to prevent it from entering the Victoria Harbour Water Control Zone.

- End -

CONTROLLING OFFICER'S REPLY

ENB030

(Question Serial No. 1894)

Head: (42) Electrical and Mechanical Services Department
Subhead (No. & title): Not Specified
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy
Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)
Director of Bureau: Secretary for the Environment

Question:

The EMSD has increased its estimate from the revised estimate of \$391 million for 2019-20 to \$594.3 million for the current year, representing an increase of \$200 million. What is the reason for this significant increase? What is the “innovative energy efficiency” in the “research and development on application of innovative energy efficiency and renewable energy technologies” mentioned under the Programme? Is there any progress in this regard? For instance, how much energy is expected to be supplied upon completion of the research and development? How much of the increase in the estimate will be allocated for the research and development?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 22)

Reply:

The increase in the provision for 2020-21 is mainly for 3 policy measures, namely implementing new energy saving projects under the Green Schools 2.0 (i.e. installing energy saving equipment, such as variable-speed air-conditioners, light emitting diode lighting and real-time energy monitoring systems, etc., at the premises of primary and secondary schools); and enhancing 2 existing measures, i.e. retro-commissioning for existing major government buildings, and installing solar photovoltaic systems via the Solar Harvest at the premises of more schools (except government and profit-making schools) and welfare non-governmental organisations receiving recurrent subventions from the Social Welfare Department. The estimated expenditure for these 3 items for 2020-21 is \$179.3 million higher than the revised expenditure for 2019-20.

The “innovative energy efficiency technologies” mentioned under the Programme refer to the application studies on new technologies conducted by the Electrical and Mechanical Services Department (EMSD). The EMSD carries out trials on innovative energy efficiency and renewable energy technologies every year. The planned studies in 2020-21 include (i) indirect evaporative cooling system; (ii) plate-tube evaporative chiller; and (iii) balanced-wave energy saving technology, involving an estimated expenditure of \$2.8

million. The actual effectiveness of adopting the aforesaid new technologies will be evaluated through the studies. The EMSD will promote the technologies if they are proven effective.

- End -

CONTROLLING OFFICER'S REPLY**ENB031****(Question Serial No. 2649)**

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not Specified

Programme: (3) Energy Efficiency and Conservation, and Alternative Energy

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

Under the Solar Harvest programme, the Government assists schools (except government and profit-making schools) and welfare non-governmental organisations which are receiving recurrent subventions from the Social Welfare Department to install solar photovoltaic (PV) systems. In this connection, will the Government inform this Committee of the following:

- (1) Since the launch of the programme, (i) how many applications have been received in total; (ii) how many applications have been approved; (iii) what is the amount of subsidy granted to approved projects; and (iv) what is the funding balance of the programme;
- (2) Please provide the details of the approved projects in the following format:

Name of applicant organisation	Amount of subsidy granted	Location of solar PV system installed	Electricity generating capacity of PV system (only for government subsidised sections)	Estimated electricity generation efficiency of solar PV system	Estimated annual electricity generation of solar PV system

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 213)

Reply:

Solar Harvest has been implemented since 2019-20. Under Solar Harvest, the Electrical and Mechanical Services Department (EMSD) installs small-scale solar energy generation systems free of charge for eligible schools and welfare non-governmental organisations.

In 2019-20, Solar Harvest received a total of 217 applications with a revised estimated expenditure of \$19.16 million for carrying out works in about 50 eligible schools. The installed capacity of each solar energy generation system, which is equipped with

high-efficiency photovoltaic panels, is around 10kW. The estimated total annual electricity generation of these systems is 400 000 kWh. As the works are still in progress, the EMSD is unable to provide final expenditure figures for 2019-20 at the moment. In 2020-21, the EMSD's estimated expenditure on the implementation of Solar Harvest is \$67.5 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB032

(Question Serial No. 2378)

Head: (42) Electrical and Mechanical Services Department
Subhead (No. & title): Not Specified
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy
Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)
Director of Bureau: Secretary for the Environment

Question:

The Electrical and Mechanical Services Department indicated that during 2020-21, the Department will continue to implement the Mandatory Energy Efficiency Labelling Scheme, conduct studies on the expansion of the scope to cover more appliances under the fourth phase of the scheme, and continue to implement the Voluntary Energy Efficiency Labelling Scheme. Will the Government advise on the details of the schemes and the breakdown of the expenditure involved?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 23)

Reply:

The Mandatory Energy Efficiency Labelling Scheme (MEELS) has been expanding in phases and now covers 8 types of prescribed products. The third phase of MEELS has been fully implemented since 1 December 2019. The Voluntary Energy Efficiency Labelling Scheme (VEELS) has a broad coverage, currently including 22 types of commonly used household appliances, gas appliances and office equipment.

In 2020-21, the Electrical and Mechanical Services Department (EMSD) will continue to consult the trade about the coverage and implementation schedule of the fourth phase of MEELS and at the same time, consider whether it is necessary to upgrade the energy efficiency grading standards of some of the products already covered under MEELS. During the reviewing process, a number of factors will be taken into consideration, including overseas practice, international testing standards, potential energy saving of the products, and views from stakeholders, etc. The EMSD will also fully consult and consider the views from the trade.

Regarding VEELS, the EMSD will continue to review and update the content of the scheme, enhance publicity and public education, and encourage more suppliers to participate in the scheme.

The above-mentioned work was handled by the Energy Efficiency Office of the EMSD with existing manpower and resources, and no breakdown of such expenditure is available.

- End -

CONTROLLING OFFICER'S REPLY

ENB033

(Question Serial No. 1024)

Head: (42) Electrical and Mechanical Services Department
Subhead (No. & title): (661) Minor plant, vehicles and equipment (block vote)
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy
Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)
Director of Bureau: Secretary for the Environment

Question:

The estimate under Subhead 661 Minor plant, vehicles and equipment (block vote) represents an increase of 557.6% over the revised estimate for 2019-20, which is mainly due to the increased requirement for projects. Please explain to the Committee the reason for the increased requirement.

Asked by: Hon YEUNG Alvin (LegCo internal reference no.: 66)

Reply:

The estimated expenditure under Subhead 661 for 2020-21 is \$211.5 million, which represents an increase of \$179.3 million over the revised estimate for 2019-20. The increase in provision is mainly for 3 policy measures, namely implementing new energy saving projects under the Green Schools 2.0 (i.e. installing energy saving equipment, such as variable-speed air-conditioners, light emitting diode lighting and real-time energy monitoring systems, etc., at the premises of primary and secondary schools); and enhancing 2 existing measures, i.e. retro-commissioning for existing major government buildings, and installing solar photovoltaic systems via the Solar Harvest at the premises of more schools (except government and profit-making schools) and welfare non-governmental organisations receiving recurrent subventions from the Social Welfare Department.

- End -

CONTROLLING OFFICER'S REPLY

ENB034

(Question Serial No. 2239)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not Specified

Programme: (1) Energy Supply; Electrical, Gas and Nuclear Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for the Environment

Question:

Regarding the filling stations for liquefied petroleum gas (LPG) vehicles, will the Electrical and Mechanical Services Department please inform this Committee of the following:

1. Details of the 3 LPG filling stations approved in 2019 (including their locations and number of filling nozzles);
2. Details of the 3 LPG filling stations planned to be approved in 2020 (including their locations, number of filling nozzles and date of commencement of operation);
3. While the Government has been increasing the number of LPG filling points, the 12 dedicated LPG filling stations are very popular among the LPG taxis and light buses trade because of their lower LPG prices. In order to divert the vehicles from the 12 dedicated LPG filling stations, will the Government explore whether the LPG prices at general petrol filling stations should be set with reference to those of dedicated LPG filling stations? If yes, what are the details? If no, what are the reasons?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 38)

Reply:

1. The 3 non-dedicated LPG filling stations (non-dedicated stations) approved in 2019 are located at Kwai Chung and Sham Shui Po. Details are as follows:

Address	Number of Filling Nozzles
99 Castle Peak Road, Kwai Chung	6
698-704 Castle Peak Road, Kwai Chung	8
338 Tai Po Road, Sham Shui Po	4

2. The 3 non-dedicated stations planned to be approved in 2020 are located at Tuen Mun, Kowloon Bay and Pok Fu Lam. Details are as follows:

Address	Expected Number of Filling Nozzles	Expected Date of Commencement of Operation
San Tak Street, Area 30A, Tuen Mun	12	By mid-2020
6 Kai Fuk Road, Kowloon Bay (West Bound)	8	By mid-2021
Pokfulam Road (near Mount Davis Road)	8	By end 2020

3. Dedicated LPG filling stations (dedicated stations) were offered with zero land cost. Under their operation contracts, the LPG ceiling prices are required to be set in accordance with the established formula stipulated in the contracts. The pricing formula was set with reference to two key elements, namely the LPG international price and operating cost. The LPG international price refers to the preceding month's LPG international price while the operating cost is adjusted on the first day of February every year based on the change in the Composite Consumer Price Index of the previous year. The dedicated stations follow this mechanism to set the LPG ceiling prices on a monthly basis.

The operators of the non-dedicated stations, who were awarded land grants through open tender, can set their own retail prices of auto-fuels, including LPG. They will in general consider a host of factors, including the LPG prices of dedicated stations, when setting their own LPG prices in order to maintain competitiveness.

- End -

CONTROLLING OFFICER'S REPLY**ENB035****(Question Serial No. 2717)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (297) Fees for operation of waste management facilitiesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Will the Administration advise this Committee on the following:

- (1) Please set out the estimated annual contract payments for the operation of the South East New Territories (SENT) Landfill, the West New Territories (WENT) Landfill, the North East New Territories (NENT) Landfill, the Chemical Waste Treatment Centre, the T • PARK, the WEEE • PARK and the O • PARK1 in 2020-21 respectively. What are the contract payments for the operation of the SENT Landfill, the WENT Landfill and the NENT Landfill in 2020-21 respectively?
- (2) What are the contract payment and recurrent expenditure of the O • PARK1 in 2020-21?
- (3) What were the amount of waste collected, power generated and amount of compost produced by the O • PARK1 in 2019-20?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 56)Reply:

- (1) The estimated annual contract payments for the operation of the South East New Territories (SENT) Landfill, the West New Territories (WENT) Landfill, the North East New Territories (NENT) Landfill, the Chemical Waste Treatment Centre, the T • PARK, the WEEE • PARK and the O • PARK1 in 2020-21 are tabulated below:

	2020-21 Estimate (\$ million)
SENT Landfill	230
WENT Landfill	363
NENT Landfill	247
Chemical Waste Treatment Centre	281
T • PARK	284
WEEE • PARK	240
O • PARK1	55

- (2) The estimated operating costs (i.e. estimated contract payment) of the O • PARK1 in 2020-21 is \$55 million.
- (3) The O • PARK1 collected about 30 000 tonnes of food waste and generated about 6 million kWh of electricity and 640 tonnes of compost in 2019-20 (as at February 2020).

- End -

CONTROLLING OFFICER'S REPLY

ENB036

(Question Serial No. 1723)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding reduction of food waste, will the Government advise this Committee on the following:

- a. What were the expenditure and manpower involved each year?
- b. What were the quantities of food waste generated from commercial and industrial as well as domestic sources and their recovery rates in the past 5 years?
- c. What were the quantities of food waste disposed of at landfills in the past 5 years;
- d. The Government has launched 4 schemes, namely the Food Waste Recycling Partnership Scheme, the Food Waste Reduction Activities, the Food Waste Recycling Projects in Housing Estates, and the food waste reduction and recycling projects under the Environment and Conservation Fund. What were the annual expenditures of the above schemes? What were the respective quantities of food waste recovered?
- e. What is the plan to collect domestic food waste?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 36)

Reply:

- a. The Food Wise Hong Kong Campaign (the Campaign) has been promoting a food wise and waste less culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launching in 2013. The manpower involved in the implementation of the Campaign is absorbed by the existing establishment of the Environmental Protection Department (EPD).

The expenditures involved in the 2018-19 and 2019-20 financial years are tabulated below:

Description	Expenditure 2018-19 (\$m)	Estimated Expenditure 2019-20 (\$m)
Food Wise Hong Kong Campaign	6.3	4.0
Commercial and industrial (C&I) food waste recovery pilot scheme (including Food and Environmental Hygiene Department, Hong Kong Housing Authority, Agriculture, Fisheries and Conservation Department and lunch suppliers for primary and secondary schools)	17.1	24.8
Engagement of contractors by the EPD to provide training and assistance to the C&I sectors	0.3	0.4

Regarding food waste treatment, the Organic Resources Recovery Centre Phase 1 (O • PARK1) and the “food waste/sewage sludge anaerobic co-digestion” trial scheme at the Tai Po Sewage Treatment Works (STW) came into operation in July 2018 and May 2019 respectively. The relevant supervision work is absorbed by the existing establishment of the EPD. The expenditures involved in the 2018-19 and 2019-20 financial years are tabulated below:

Year	Operating expenditure (\$m)	
	O • PARK1	Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at Tai Po STW
2018-19	11	-
2019-20	47	6

b. & c.

According to the reports on “Monitoring of Solid Waste in Hong Kong” compiled by the EPD, the statistics on the respective quantities of food waste (including domestic and C&I food waste) disposed of at landfills, generated and recovered from 2015 to 2018 are tabulated below. The EPD does not have a breakdown of the food waste generated from domestic and C&I sources and the recovery rates. The relevant statistics for 2019 are still under compilation.

Year	Domestic food waste	C&I food waste	Overall municipal food waste		
	Daily quantity of disposal (tonnes) (a)	Daily quantity of disposal (tonnes) (b)	Daily quantity of disposal (tonnes) (c)=(a)+(b)	Daily quantity generated (tonnes)	Recovery rate
2015	2 397	985	3 382	3 420	1.1%
2016	2 326	1 274	3 600	3 643	1.2%
2017	2 363	1 299	3 662	3 702	1.1%
2018	2 418	1 147	3 565	3 639	2.0%

Note 1: The above figures may not add up to total due to rounding off.

d. Since 2010, the EPD has been taking forward the “Food Waste Recycling Partnership Scheme” (the Partnership Scheme) with relevant C&I organisations to promote good food waste management to the C&I sectors. Under the Partnership Scheme, the EPD has collaborated with District Councils and non-profit-making organisations to hold “Food Waste Reduction Activities” which would last for 3 to 6 months in various shopping malls in different districts on a roving basis, so as to enhance public participation and promote food waste reduction at source to the C&I sectors. To tie in with the development of planning and works of Kowloon Bay Action Area, the Pilot Composting Plant in Kowloon Bay has stopped receiving food waste from the end of June 2018 and the associated Partnership Scheme and “Food Waste Reduction Activities” have also ended accordingly.

The annual quantities of C&I food waste recovered under the Partnership Scheme and “Food Waste Reduction Activities” and the expenditures involved from 2014-15 to 2018-19 are as follows:

Year	Expenditure (\$m)	Quantity of food waste recovered (tonnes)
2014-15	0.63	293
2015-16	0.44	324
2016-17	0.56	431
2017-18	0.81	258
2018-19	0.00	30 ^(Note 2)

Note 2: The quantity of food waste recovered as at the end of June 2018.

Since 2011, the EPD has also implemented the “Food Waste Recycling Projects in Housing Estates” through the Environment and Conservation Fund (ECF) to support housing estates to install food waste composters and organise educational and promotion activities, so as to encourage public participation in domestic food waste

recycling. Up to March 2020, 36 housing estates have received funding support with a total amount of approved funding of about \$40 million. This funding scheme has been closed for applications. All funded private housing estates may continue to use the on-site food waste composters for converting part of the domestic food waste into compost for landscape planting. These estates are welcome to join the pilot scheme on free food waste collection. The quantities of domestic food waste recovered and the funding approved under these projects in the past 5 years are as follows:

Year	Funding approved (\$m)	Quantity of food waste recovered (tonnes)
2015-16	1.97	292
2016-17	2.20	469
2017-18	1.78	485
2018-19	3.27	389
2019-20	1.46 ^(Note 3)	181 ^(Note 4)

Note 3: The amount of funding approved as at the end of December 2019.

Note 4: The estimated quantity of food waste recovered as at the end of March 2020.

In addition, the EPD has also implemented food waste reduction and recycling projects under the “Community Waste Reduction Projects” funded by the ECF to subsidise the projects on reducing mainly domestic food waste. The quantities of food waste recovered and the funding approved under the food waste reduction and recycling projects in the past 5 years are as follows:

Year	Funding approved (\$m)	Quantity of food waste recovered (tonnes)
2015-16	5.51	208
2016-17	0.86	170
2017-18	8.23	231
2018-19	3.71	188
2019-20	12.33 ^(Note 5)	258 ^(Note 6)

Note 5: The amount of funding approved as at the end of December 2019.

Note 6: The estimated quantity of food waste recovered by on-site composters as at the end of March 2020; and some of the food waste collected at irregular intervals and delivered to the O • PARK1 for treatment under this funding project as at the end of January 2020.

- e. We will make use of part of the treatment capacity of the O • PARK1 and the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme at the Tai Po STW to recycle part of the domestic food waste collected from households under the free food waste collection pilot scheme, with priority given to housing estates with previous experience in food waste separation and recycling, such as the 36 private housing estates that have participated in the Food Waste Recycling Projects in Housing Estates funded by the ECF. We are also planning to extend the application of the “food waste/sewage sludge anaerobic co-digestion” technology to the Sha Tin STW. The project is anticipated to commence operation in 2022. Domestic food waste will be collected in Sha Tin for trial.

- End -

CONTROLLING OFFICER'S REPLY**ENB037****(Question Serial No. 1724)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding local recycling, will the Government advise this Committee on the following information for the past 3 years:

- What were the amounts of various types of recyclables, including waste electrical and electronic equipment, plastics and paper, imported/exported?
- What were the local recovery rates of various types of recyclables?
- What is the current recycling capacity of the EcoPark?
- What are the estimated recycling capacities of the local recycling facilities in the coming 5 years?
- What were the enforcement and prosecution actions taken against waste import/export offences?
- How many projects have been funded by the Recycling Fund so far? What are the quantities of various types of recyclables processed?
- Will a review of the operation of the Recycling Fund be conducted? If yes, what are the details? If no, what are the reasons?
- The Financial Secretary announced that a rental subsidy of \$100 million would be provided for the recycling industry. What are the details?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 37)Reply:

- The import and export statistics on various major types of recyclables⁽¹⁾ over the past 3 years (i.e. 2017 to 2019) are as follows:

Major type of recyclables ⁽²⁾	Amount of import (million tonnes)	Amount of export ⁽³⁾ (million tonnes)
Ferrous metals		
2017	0.31	1.38
2018	0.30	1.29
2019	0.21	0.96

Major type of recyclables ⁽²⁾	Amount of import (million tonnes)	Amount of export ⁽³⁾ (million tonnes)
Non-ferrous metals		
2017	0.19	0.21
2018	0.25	0.34
2019	0.43	0.44
Paper		
2017	0.02	0.79
2018	0.10	0.72
2019	0.03	0.54
Plastics		
2017	1.89	1.79
2018	0.60	0.29
2019	0.61	0.23

Notes: (1) Data source: The external merchandise trade statistics compiled by the Census and Statistics Department.

(2) Since waste electrical and electronic equipment (WEEE) does not have a corresponding commodity classification code under the current Hong Kong Harmonised System, the import and export statistics on WEEE are not available.

(3) Amount of export includes re-exports and domestic exports.

b. The statistics on the recovery rates of various major types of recyclables in 2017 and 2018 are as follows. The recovery rates of the major types of recyclables in 2019 are still being compiled.

Major type of recyclables	Recovery rate
Ferrous metals	
2017	91%
2018	91%
Non-ferrous metals	
2017	72%
2018	85%
Paper	
2017	46%
2018	41%
Plastics	
2017	13%
2018	7%
WEEE	
2017	65%
2018	63%

c. The quantities of recyclables processed at the EcoPark in the past 3 years are as follows:

Year	Total quantity processed ⁽⁴⁾ (tonnes)
2017	180 000
2018	213 000
2019	185 000

Note (4): The total quantities are rounded to the nearest thousand.

d. Hong Kong relies heavily on service industries, and has very limited capacity to utilise raw or recycled materials in local production. As a result, local recyclables have mainly been for export and their value and outlets have been dictated by the condition of the market outside Hong Kong for many years.

Apart from offering assistance to the tenants of the EcoPark and some private recyclers mainly engaged in the business of exporting recyclables or turning recyclables into raw materials for export, the Government also builds different recycling facilities or supports the recycling and processing of recyclables through legislation so as to create a circular economy. For example, on food waste recycling, the Organic Resources Recovery Centre Phase 1 (O • PARK1), which can process up to 73 000 tonnes of food waste per year, commenced operation in July 2018. The Design-Build-Operate contract of the O • PARK2 was awarded in August 2019. The facility is scheduled for commissioning in 2022, with a processing capacity of about 110 000 tonnes of food waste per year. Meanwhile, the Environmental Protection Department (EPD) is working with the Drainage Services Department to examine the use of existing and planned sewage treatment works to take forward the “food waste/sewage sludge anaerobic co-digestion” trial schemes in order to expedite the enhancement of the overall food waste recycling capacity in Hong Kong. Under the trial schemes, the first project implemented at the Tai Po Sewage Treatment Works commenced operation in May 2019, and the project implemented at the Sha Tin Sewage Treatment Works is expected to be commissioned in 2022. Both facilities can process about 18 000 tonnes of food waste per year. Besides, with the full implementation of the producer responsibility scheme on WEEE, waste regulated electrical equipment (REE) (i.e. air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) generated in Hong Kong will be treated locally. As at early March 2020, the EPD has issued a total of 16 waste REE disposal licences (including the one issued to the WEEE • PARK operator). According to the permitted treatment capacity stipulated in the relevant licences, a total of about 140 000 tonnes of waste REE may be treated each year. As for glass containers, the two glass management contractors engaged by the Government provide waste glass container collection and treatment services across the territory. The recycling target in the first year of the contract is 15 000 tonnes in total, and the Government’s goal is to gradually increase the target to 50 000 tonnes a year. The glass recyclables, after treatment, are used for producing cement and eco-pavers, while some are exported for recycling. The recycled glass materials are also used as fill materials in different public works projects. Furthermore, the Government has indicated earlier that it would press ahead with a producer responsibility scheme on plastic beverage containers. On the recycling of yard waste, the EPD plans to develop a yard waste processing centre which will initially collect and process yard waste arising mainly from government departments and the public works. The facility is expected to commence operation in early 2021.

Its treatment capacity is estimated at 11 000 tonnes in the first year and will gradually increase to 22 000 tonnes a year subsequently.

In parallel, the EPD is actively supporting the development of the local waste paper recycling industry to reduce the reliance on export of local waste paper. The EPD has awarded a lease for 4 adjacent lots in the EcoPark to develop a local waste paper recycling and manufacturing plant capable of processing about 300 000 tonnes a year. The plant is expected to commence operation in 2023.

With the commissioning of the above facilities progressively, the overall processing capability and quantities of local recyclables processed will continue to rise.

- e. Over the past 3 years (i.e. 2017 to 2019), the EPD inspected totally some 2 400 container shipments at various ports and intercepted 237 containers involving illegal waste shipments, with 170 prosecutions completed so far. The total fine meted out by the Court amounts to some \$2.4 million. The types of illegal waste involved were mainly waste flat panel display units, waste printer toner/ink cartridges and disassembled printed circuit boards.
- f. In the past 3 years (i.e. the financial years from 2017-18 to 2019-20 (as at 29 February 2020)), the Recycling Fund (the Fund) approved 241 projects. Among them, excluding 19 which have been withdrawn by the applicant organisations, a total of 222 projects have been or will soon be commenced, involving a total funding of about \$220 million. The types and processed quantities of recyclables involved in these projects are set out in the table below:

Type of recyclables	Processed quantity of approved project (tonnes) ⁽⁵⁾
Waste wood	56 600
Waste metals	32 400
Food waste/Waste cooking oil	26 500
Construction waste	4 000
Waste tyres	2 500
Waste paper	1 900
Waste plastics	1 000
WEEE	400
Used clothes	200
Others (including compact discs, beverage cartons and spent lubricating oil)	1 700
Total	127 200

Note (5): The figures are rounded to the nearest hundred.

- g. The EPD and the Advisory Committee on Recycling Fund have kept under review the operation of the Fund and actively listened and responded to the recycling industry's views and aspirations through various channels such as meetings, seminars and briefing sessions, so as to introduce different facilitation measures timely to meet the needs of the industry in its operation, upgrading and transformation. We completed the mid-term

review of the operation of the Recycling Fund in early 2019 and have immediately introduced a number of enhancement measures. They include expanding the scope of eligible fund applicants, increasing the rental subsidies related to recycling operations, and simplifying the reporting and fund disbursement procedures, etc. Further enhancement measures were introduced in November 2019, which include raising the cumulative maximum funding amount as well as the maximum number of approved projects for each enterprise and extending the project period under the Enterprise Support Programme. In addition, the overall operational period of the Fund, originally from 2015 to 2022, has been extended to 2026. The new measures were generally welcomed by the recycling industry and the number of applications received by the Fund in the 2019-20 financial year (as at 29 February 2020) was 319, which was 1.2 times higher than the 143 applications received in the 2018-19 financial year.

- h. The rental subsidy of \$100 million for the recycling industry announced by the Financial Secretary in this year's Budget means an extension of the "One-off Rental Support Scheme" launched earlier under the Recycling Fund for 6 months to ride out the crisis together with the industry. The "One-off Rental Support Scheme" was open for application at the end of 2019. The original subsidy, which was for a period of 6 months starting from October 2019, is now extended for another 6 months to 12 months in total, i.e. up to September 2020. Upon extension of the Scheme, the monthly subsidy for each recycler will be capped at half the rent or \$25,000 (whichever is lower) and the maximum amount of rental subsidy will be raised to \$300,000. A total of \$200 million has been earmarked under the Recycling Fund to implement this Scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB038

(Question Serial No. 1725)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding reduction of plastics, will the Government advise this Committee on the following:

- a. What were the quantities of plastics generated and their recovery rates in the past 5 years?
- b. What were the percentages of plastic dining wares in the waste plastics disposed of in the past 5 years?
- c. What were the percentages of plastic bags in the waste plastics disposed of in the past 5 years?
- d. The Government has indicated that it would consult the public on the outcome of the review of the plastic shopping bag charging scheme. What are the details and the timetable?
- e. The Government is studying the implementation of the control on disposable plastic tableware. What are the details?
- f. The Government has indicated that it would promote and encourage reduction in the use of plastic packaging materials in collaboration with the retail trade. What are the details and the effectiveness?
- g. The Government has introduced a 2-year pilot scheme to collect waste plastics from the domestic source. What are the details?
- h. What are the details of the pilot scheme on the application of reverse vending machines to be launched by the Government? What are the locations and effectiveness?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 38)

Reply:

- a, b & c. According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), the quantities of waste plastics generated, their recovery rates and the percentages of plastic dining wares (including polyfoam dining wares) and plastic bags in the waste plastics disposed

of between 2014 and 2018 are shown in the table below. The relevant statistics for 2019 are still under compilation.

Year	Waste plastics		Percentage in waste plastics disposed of	
	Quantity generated (thousand tonnes)	Recovery rate	Plastic dining wares (including polyfoam dining wares)	Plastic bags
2014	834	12%	8%	33%
2015	891	11%	8%	30%
2016	906	14%	9%	32%
2017	891	13%	10%	37%
2018	919	7%	9%	36%

- d. The EPD is reviewing the Plastic Shopping Bag (PSB) Charging Scheme to enhance its effectiveness in waste reduction. Among other things, the current minimum charge of 50 cents has not been adjusted since the introduction of the voluntary scheme before 2009, so we are reviewing whether the charge needs to be adjusted. There are also views that the current exemption over PSB used for food hygiene purposes may need to be tightened to further encourage reducing the use of those PSBs. We aim to consult the public on the outcome of the review later this year in order to map out the way forward.
- e. In April 2019, the EPD commenced a study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware. The consultant is currently reviewing the latest international development in controlling or banning disposable plastic tableware as well as the recommendations on the substitutes. Based on the findings of the study and analysis, the consultant will draw up a proposal to the Government that is suitable for implementation in Hong Kong in the long run. The study is scheduled for completion by the end of 2020.
- f. The EPD is proactively meeting the retail trade to have a better understanding of its operation for exploring practical measures to promote and encourage reduction in the use of plastic packaging materials. We aim at materialising these measures, on a voluntary basis, through collaboration with the trade in the second half of 2020.
- g. The EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since January 2020. We

are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020.

- h. The EPD is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs) with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB039

(Question Serial No. 1726)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

On promoting the use of electric vehicles (EVs) in Hong Kong, will the Government advise this Committee on the following:

- a. The Government mentioned that it will formulate a roadmap on the popularisation of EVs. Will the Government set a target on the percentage of EVs? If yes, what are the details? If no, what are the reasons?
- b. How many vehicle owners have enjoyed the first registration tax (FRT) concessions since April 2017? What is the amount of the concessions? Please set out the number of vehicles granted with the FRT concessions by brand.
- c. Since the implementation of the "One-for-One Replacement" Scheme, how many vehicle owners have enjoyed the FRT concessions?
- d. How many vehicles will be procured by various government departments this year? Among them, what is the percentage of EVs? What is the average price of the vehicles?
- e. The Government has allocated \$120 million to provide over 1 000 additional public EV chargers at government car parks. What are the preliminary selected sites? What are the progress and the details of the scheme?
- f. What is the current number of government car parks in various districts? What are the numbers of parking spaces installed with EV chargers in these car parks and their respective percentages?
- g. Further to the above question, what is the present situation of parking spaces installed with EV chargers being occupied by non-EVs?
- h. What is the effectiveness of the trials under the Pilot Green Transport Fund? What are the measures arising from the review?
- i. The Government mentioned that it will launch a pilot scheme for electric public light buses. What are the related quantity and the details?
- j. The Government mentioned that it would launch a pilot scheme to subsidise the installation of EV charging facilities in private buildings. What is the estimated number of vehicle owners to be benefited from the scheme?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 39)

Reply:

a. The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of electric vehicles (EVs) to, among other things, further examine the measures to improve air quality, as well as the policy objective and plan to promote the use of EVs.

b. and c.

During the period from April 2017 to February 2020, there were 3 405 cases in which first registration tax (FRT) concessions were granted for EVs. Among them, 2 751 were cases under the “One-for-One Replacement” Scheme¹, involving a total amount of \$643 million.

The number of EVs granted with the FRT concessions by brand is tabulated below:

Brand	No. of EVs granted with the FRT concessions*
AUDI	25
BMW <i>i</i>	122
BYD	10
DFSK	8
FAW	1
HYSTER	1
HYUNDAI	489
JAGUAR	16
JOYLONG	18
KIA	190
KING LONG	2
KOMATSU	1
LINDE	2
MITSUBISHI	1
NISSAN	483
RENAULT	138
SMART	48
STILL	3
TAYLOR DUNN	3
TESLA	1 728
TOYOTA	12
UGBEST	1
VOLKSWAGEN	101
ZERO	2

*Excluding electric franchised buses as no FRT is required to be paid for franchised buses.

¹ The “One-for-One Replacement” Scheme was introduced on 28 February 2018.

- d. According to the information provided by the Government Logistics Department, the government departments procured a total of 718 vehicles in 2019, among which 6 were EVs, accounting for 0.8% of the total. The average price was \$292,000 each.

e., f. and g.

A total of 857 government public chargers (mostly medium chargers) are currently provided at government car parks. The Government allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming 3 years, including installation of additional medium chargers at the car parks managed by the Transport Department (TD), the Government Property Agency (GPA), the Leisure and Cultural Services Department (LCSD) and the Tourism Commission (TC) which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800. 168 medium chargers whose installation works began in 2019-20 are expected to complete the works progressively by the end of April this year. Moreover, we anticipate that about 570 and 460 medium chargers will be installed in 2020-21 and 2021-22 respectively. Please refer to the Annex for the selected sites for these chargers.

Electric private cars only account for about 2% of the total number of registered private cars at present. Given the supplementary nature of charging facilities provided in the government car parks and the principle that users of EVs and all other vehicles should be treated alike for full utilisation of parking space resources, parking spaces installed with charging facilities are not designated for exclusive use by EVs. That said, contractors of the government car parks managed by the TD and the GPA which are open for public use will, depending on the utilisation situation of the car parks, arrange for traffic cones to be placed and notices to be displayed at parking spaces installed with charging facilities to reserve such spaces for priority use by EVs during non-peak hours whenever practicable.

- h. The Government has put in place the \$300 million Pilot Green Transport Fund (PGTF) in March 2011 to encourage the transport sector to try out green innovative transport technologies. As at the end of February 2020, the PGTF has approved 183 trial applications, including 110 on electric commercial vehicles, 65 on hybrid commercial vehicles and 8 on technologies applicable to conventional buses or ferries, with a total subsidy of about \$154 million.

To further promote wider use of green innovative transport technologies by the transport sector, the Environmental Protection Department has completed a review on the scope of the PGTF. We propose renaming the PGTF to “the New Energy Transport Fund”, enhancing the detailed conditions of subsidy and extending the scope of the PGTF. The results of the review and relevant recommendations received support from the PGTF Steering Committee and the Panel on Environmental Affairs of the Legislative Council in January 2020.

- i. The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

- j. The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower. We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

The number and distribution of EV chargers planned to be installed by the Government

Department	District		Location	No. of EV chargers to be installed
TD	Southern	1.	Aberdeen Car Park	About 650 in total
	Central & Western	2.	Kennedy Town Car Park	
	Kwai Tsing	3.	Kwai Fong Car Park	
	Eastern	4.	Shau Kei Wan Car Park	
	Wong Tai Sin	5.	Sheung Fung Street Car Park	
	Wan Chai	6.	Tin Hau Car Park	
	Tsuen Wan	7.	Tsuen Wan Car Park	
	Sheung Wan	8.	Rumsey Street Car Park	
GPA	Eastern	9.	North Point Government Offices	About 200 in total
	Central & Western	10.	Queensway Government Offices	
	Sha Tin	11.	Sha Tin Government Offices	
	North	12.	North District Government Offices	
	Tuen Mun	13.	Tuen Mun Government Offices	
	Sai Kung	14.	Sai Kung Government Offices	
	Sham Shui Po	15.	Cheung Sha Wan Government Offices	
	Kowloon City	16.	Trade and Industry Tower	
LCSD	Central & Western	17.	Sun Yat Sen Memorial Park	About 310 in total
		18.	Sun Yat Sen Memorial Park Sports Centre	
	Eastern	19.	Siu Sai Wan Sports Ground	
		20.	Island East Sports Centre	
	Southern	21.	Deep Water Bay Beach	
		22.	Ap Lei Chau Waterfront Promenade	
	Wan Chai	23.	Wong Nai Chung Gap Children's Playground	
	Kwun Tong	24.	Kowloon Bay Park	
		25.	Ping Shek Playground	
		26.	Shun Lee Tsuen Park	
		27.	Lei Yue Mun Municipal Services Building	
	Sham Shui Po	28.	Lai Chi Kok Park	
		29.	Sham Shui Po Sports Ground	
		30.	Cornwall Street Park	
		31.	Lung Cheung Road Lookout	

Department	District		Location	No. of EV chargers to be installed
	Wong Tai Sin	32.	Hammer Hill Road Sports Ground	
		33.	Po Kong Village Road Park	
	Yau Tsim Mong	34.	Kowloon Park	
		Islands	35.	
	Kwai Tsing	36.	Tsing Yi Southwest Leisure Building	
		37.	Tsing Yi Northeast Park	
		38.	Tsing Yi Sports Ground and Swimming Pool	
		39.	Kwai Chung Sports Ground	
		40.	Hing Fong Road Playground	
	North	41.	Sheung Shui Swimming Pool	
		42.	North District Sports Ground	
		43.	Wo Hing Sports Centre	
		44.	Po Wing Road Sports Centre	
		45.	Fanling Swimming Pool	
	Sai Kung	46.	Tseung Kwan O Swimming Pool	
		47.	Tseung Kwan O Sports Ground	
		48.	Tiu Keng Leng Sports Centre	
	Sha Tin	49.	Siu Lek Yuen Road Playground	
		50.	Sha Tin Sports Ground and Yuen Wo Playground	
		51.	Sha Tin Jockey Club Swimming Pool and Yuen Wo Road Sports Centre	
		52.	Sha Tin Town Hall	
		53.	Hong Kong Heritage Museum	
		54.	Ma On Shan Swimming Pool	
		55.	Ma On Shan Sports Ground	
		56.	Yuen Chau Kok Complex	
	Tai Po	57.	Tai Po Sports Ground	
		58.	Tai Po Complex	
		59.	Kwong Fuk Park	
	Tsuen Wan	60.	Shing Mun Valley Swimming Pool	
		61.	Shing Mun Valley Sports Ground	
	Tuen Mun	62.	Tuen Mun North West Swimming Pool	
		63.	Tuen Mun Swimming Pool	

Department	District		Location	No. of EV chargers to be installed
	Yuen Long	64.	Yau Oi Sports Centre	
		65.	Yuen Long Swimming Pool	
		66.	Tin Shui Wai Swimming Pool & Tin Shui Wai Sports Centre	
		67.	Tin Shui Wai Sports Ground	
		68.	Tin Yip Road Park	
		69.	Fung Kam Street Sports Centre	
TC	Kowloon City	70.	Kai Tak Cruise Terminal	About 40 in total

Remark: The number of EV chargers listed in the table is a preliminary estimate and the actual number will be affected by factors such as available electricity at venues, availability of venues and other restrictions.

- End -

CONTROLLING OFFICER'S REPLY

ENB040

(Question Serial No. 1728)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Producer Responsibility Scheme on Waste Electrical and Electronic Equipment (WPRS) has been implemented since August 2018. However, quite a number of members of the public have relayed to me that abandoned regulated electrical equipment (REE) were omnipresent on the streets, and the service provided by the service operator was unsatisfactory. In this connection, will the Government advise this Committee on the following:

- a. Please provide the Government's annual expenditure and manpower;
- b. Please set out in tabular form the design capacity of the plant in processing various types of REE;
- c. Please set out the quantities of REE processed by the Government-commissioned operator since its establishment by type of REE;
- d. How many complaints has been received by the Government about the service provided by the service operator?
- e. How many local licensed operators that process REE are there at present? What are their processing capacities?
- f. The Bureau invited tenders for the provision of services for treatment and recycling of washing machines last year. What were the details?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 41)

Reply:

- a. The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) commenced full operation in March 2018. The actual operating cost of the WEEE • PARK in 2018-19 was \$165 million.

The Waste Management Policy Division of the Environmental Protection Department (EPD) is responsible for handling various waste management policies and projects, such as the 3 producer responsibility schemes on waste electrical and electronic equipment (WPRS), glass beverage containers and plastic beverage containers. There

is no breakdown of the expenditure or manpower resources involved in taking forward these schemes.

- b. The total design capacity of the WEEE • PARK is about 30 000 tonnes of waste regulated electrical equipment (REE) (i.e. air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) per year, roughly half of the amount of waste REE generated in Hong Kong every year. If necessary, appropriate adjustment can be made to the processing lines of the plant to increase their capacity to properly treat the waste REE generated locally.
- c. From the end of October 2017 to the end of December 2019, the WEEE • PARK processed a total of about 35 740 tonnes of waste REE. The breakdown is as follows:

REE	Amount processed (tonnes) from the end of October 2017 to the end of December 2019
Washing machine	16 335
Refrigerator	7 190
Air-conditioner	4 950
Television	3 350
Computer and computer products	3 915
Total	35 740

- d. In 2019, the WEEE • PARK operator processed a total of about 195 000 collection service requests, and the EPD has received a total of 53 complaints about the service provided by the operator.
- e. As at early March 2020, the EPD has issued a total of 16 waste disposal licences for REE (including the WEEE • PARK operator). According to the permitted capacity stipulated in the licences, a total of about 140 000 tonnes of waste REE can be processed a year.
- f. To enable a more balanced development of the recycling industry and encourage market participation in the recycling of waste electrical and electronic equipment, we launched an open tender exercise in April 2019 to appoint a recycler with waste disposal licences for e-waste to provide treatment and recycling services for washing machines collected outside the removal services required under the WPRS. The ten-month service contract was awarded in September 2019. Currently, an average of about 150 tonnes of washing machines are processed by the contractor for the provision of such service each month.

- End -

ENB041

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1729)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the work on vehicle emission reduction, will the Government inform this Committee of the following information for the past 3 years:

- a. What were the percentages of the emissions from different types of vehicles in the total vehicle emissions?
- b. Please list in tabular form the types and numbers of buses owned by various franchised bus companies on a yearly basis.
- c. Please provide data on the age of the existing buses.
- d. What was the effectiveness of the franchised bus low emission zones?
- e. What are the number of vehicles expected to be involved and the details of the scheme for progressively phasing out Euro IV diesel commercial vehicles by the end of 2023?
- f. Ever since the Environmental Protection Department used roadside sensing equipment to detect vehicle emissions, what was the average number of vehicles issued with an Emission Testing Notice each month? Please provide a breakdown of figures by vehicle type.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 42)

Reply:

- a. The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The vehicle emission inventory for 2018 is still under compilation. The estimated percentages* of emissions from different types of vehicles in the total vehicle emissions from 2015 to 2017 are tabulated as follows:

* To provide more accurate emission data to facilitate the management of air quality, the EPD will constantly update the methodologies to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods are updated. As the more recent version of EMFAC-HK (version 4.1) is adopted for estimating and recalculating emissions from the Road Transport sector

below, the data from 2015 to 2016 will be different from the estimates provided in the past.

Year	Vehicle type	Percentage in the air pollutant emissions [#]				
		Respirable suspended particulates (RSP)	Fine suspended particulates (FSP)	Nitrogen oxides (NO _x)	Volatile organic compounds (VOC)	Carbon monoxide (CO)
2015	Motorcycle	1%	1%	1%	62%	13%
	Taxi	0%	0%	21%	4%	26%
	Private car	5%	5%	3%	16%	28%
	Light goods vehicle	18%	18%	16%	3%	3%
	Medium & heavy goods vehicle	41%	41%	28%	5%	7%
	Private light bus	1%	1%	1%	1%	2%
	Public light bus	10%	10%	4%	6%	17%
	Non-franchised bus	9%	9%	7%	2%	2%
	Franchised bus	15%	15%	20%	1%	3%
Total in 2015		100%	100%	100%	100%	100%
2016	Motorcycle	1%	1%	1%	65%	12%
	Taxi	0%	0%	21%	4%	28%
	Private car	6%	6%	3%	15%	26%
	Light goods vehicle	18%	18%	17%	2%	3%
	Medium & heavy goods vehicle	37%	37%	27%	4%	6%
	Private light bus	1%	1%	1%	1%	2%
	Public light bus	10%	10%	4%	6%	18%
	Non-franchised bus	10%	10%	8%	2%	2%
	Franchised bus	17%	17%	20%	1%	4%
Total in 2016		100%	100%	100%	100%	100%

Year	Vehicle type	Percentage in the air pollutant emissions [#]				
		Respirable suspended particulates (RSP)	Fine suspended particulates (FSP)	Nitrogen oxides (NO _x)	Volatile organic compounds (VOC)	Carbon monoxide (CO)
2017	Motorcycle	1%	1%	1%	67%	12%
	Taxi	0%	0%	19%	4%	28%
	Private car	6%	6%	3%	14%	24%
	Light goods vehicle	17%	17%	18%	2%	3%
	Medium & heavy goods vehicle	37%	37%	28%	3%	6%
	Private light bus	1%	1%	1%	1%	2%
	Public light bus	8%	8%	4%	6%	20%
	Non-franchised bus	11%	11%	9%	2%	2%
	Franchised bus	19%	19%	18%	1%	4%
Total in 2017		100%	100%	100%	100%	100%

[#]May not add up to 100 due to rounding.

b. and c.

The numbers and average age of licensed buses owned by each franchised bus company (FBC) in Hong Kong in the past 3 years are tabulated by vehicle emission standard as follows:

Bus company	Category	End 2017	End 2018	End 2019
		Number of buses	Number of buses	Number of buses
The Kowloon Motor Bus Company (1933) Limited	Euro II	395	113	22
	Euro III	1 092	1 039	891
	Euro IV	93	93	93
	Euro V	2 369	2 827	2 823
	Euro VI (including hybrid bus)	4	5	220
	Electric bus	14	17	16
	Sub-total	3 967	4 094	4 065
	Average age	7.5	6.9	6.8
Citybus Limited (Franchise for Hong Kong Island and Cross-Harbour Bus Network)	Euro II	0	0	0
	Euro III	9	9	0
	Euro IV	23	24	24
	Euro V	698	679	675
	Euro VI (including hybrid bus)	2	27	47
	Electric bus	6	6	5
	Sub-total	738	745	751
	Average age	4.1	4.9	5.7

Bus company	Category	End 2017	End 2018	End 2019
		Number of buses	Number of buses	Number of buses
Citybus Limited (Franchise for the Airport and North Lantau Bus Network)	Euro II	1	0	0
	Euro III	0	0	0
	Euro IV	0	0	0
	Euro V	205	221	221
	Euro VI (including hybrid bus)	0	12	20
	Electric bus	0	0	0
	Sub-total	206	233	241
	Average age	2.5	3.0	3.9
New World First Bus Services Limited	Euro II	84	10	0
	Euro III	74	34	7
	Euro IV	38	38	38
	Euro V	496	512	528
	Euro VI (including hybrid bus)	6	64	108
	Electric bus	4	4	4
	Sub-total	702	662	685
	Average age	5.9	4.3	4.3
Long Win Bus Company Limited	Euro II	0	0	0
	Euro III	18	17	18
	Euro IV	31	32	32
	Euro V	192	208	225
	Euro VI (including hybrid bus)	0	0	0
	Electric bus	4	4	4
	Sub-total	245	261	279
	Average age	4.1	4.8	5.5
New Lantao Bus Company (1973) Limited	Euro II	0	0	0
	Euro III	31	17	13
	Euro IV	23	23	23
	Euro V	70	113	113
	Euro VI (including hybrid bus)	0	0	5
	Electric bus	0	2	2
	Sub-total	124	155	156
	Average age	7.8	5.9	6.5

- d. The Government has set up franchised bus low emission zones (FBLEZs) at 3 busy road sections in Central, Causeway Bay and Mong Kok since 31 December 2015, allowing only low emission buses (i.e. buses meeting Euro IV or higher emission standards or Euro II and III buses retrofitted with selective catalytic reduction devices and diesel particulate filters) to ply the routes running through the FBLEZs. In the

past 3 years, more than 99%² of the franchised buses passing through the FBLEZs were low emission buses.

To further improve roadside air quality within the FBLEZs, the Government has tightened the emission requirements of low emission buses in the 3 FBLEZs to Euro V emission standards from 31 December 2019.

- e. To continuously improve roadside air quality, the EPD plans, by making reference to the scheme of phasing out pre-Euro IV diesel commercial vehicles (DCVs), to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue the licences of relevant vehicles after the specified deadlines.

We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia of 15% of the average vehicle body price for goods vehicles assembled with additions.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.

- f. The EPD has been using mobile roadside remote sensing equipment to identify petrol and liquefied petroleum gas vehicles emitting excessively since 1 September 2014. As at the end of February 2020, some 4.23 million vehicle counts have been monitored and the average monthly number of emission testing notices (ETNs) issued is tabulated by vehicle type as follows:

Vehicle type	Average monthly no. of ETNs issued since the implementation of the scheme
Light goods vehicle	<1
Private car	About 90
Light bus	About 20
Taxi	About 230

- End -

² In case of traffic congestion, vehicle breakdowns, traffic accidents and ad-hoc trips, etc., the FBCs may need to deploy non-low emission buses to FBLEZs occasionally in order to maintain normal bus service.

ENB042

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1730)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government has indicated that it would roll out a voluntary scheme for phasing out personal care and cosmetic products (PCCPs) containing microbeads. In this connection, will the Government inform this Committee of:

- a. the progress;
- b. whether it has compiled statistics on the types of PCCPs containing microbeads being sold in the market currently;
- c. whether it has compiled statistics on the amount of microbeads in the water discharged into the sea by local sewage treatment works every day;
- d. whether it will implement a labelling scheme to encourage manufacturers and agents of beauty and skin care products to affix labels to their products specifying whether such products contain microbeads; and
- e. whether it will educate the public on the impact of microbeads on the ecosystem and encourage the public to reduce the use of beauty and skin care products containing microbeads; if yes, of the details; if no, of the reasons?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 43)

Reply:

The study on microbeads has been completed. The Government is in the process of making arrangements for a two-year voluntary scheme for phasing out personal care and cosmetic products (PCCPs) containing microbeads, aiming to encourage the trade to stop the production, importation and sale of these products, and to assist consumers in choosing microbead-free products. Making reference to successful overseas experience, we have an initial plan to establish a "Microbead-free Charter". Participants, taking due consideration of their operational conditions, can set their own targets and timetables for reducing or ceasing the production, importation and sale of PCCPs containing microbeads and strive to achieve the targets within the set timeframe.

In the course of the scheme, we will follow up on the participants' phase-out progress and launch complementary publicity and education activities to provide the public with

appropriate and accurate information, so as to enhance their understanding of microbeads-related subjects (including impacts on ecosystems). We are drafting the details of the scheme, including the implementation plan, monitoring methodology, timetable and effectiveness assessment, etc.

Most of the PCCPs in Hong Kong are imported products, with manufacturing bases set up at places outside Hong Kong, including some countries and regions that have already banned the manufacture of microbead-containing products. Therefore, only a small proportion of microbead-containing products are expected in the Hong Kong market.

We do not have any information on the amount of microbeads in treated effluents discharged by local sewage treatment works. According to overseas literature, the removal rate of microplastics by chemically enhanced primary treatment (CEPT) is about 70% to 80% and the removal rate is even higher for secondary treatment. Currently, over 90% of sewage in Hong Kong is receiving CEPT or secondary treatment before being discharged. During the sewage treatment processes, most of the microbeads will remain in the sludge and be sent to our waste-to-energy facility T • PARK for incineration.

- End -

CONTROLLING OFFICER'S REPLY

ENB043

(Question Serial No. 0131)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government launched the Ex-gratia Payment Scheme for Phasing Out Pre-Euro IV Diesel Commercial Vehicles and the “One-for-One Replacement” Scheme for electric private cars last year. Please provide the numbers of applications submitted and approved since the commencement of the Schemes and the amounts of expenditure involved. Please set out the information in detail.

Asked by: Hon CHAN Han-pan (LegCo internal reference no.: 9)

Reply:

Ex-gratia Payment Scheme for Phasing Out Pre-Euro IV Diesel Commercial Vehicles

Diesel commercial vehicles (DCVs) are a major source of roadside air pollution in Hong Kong. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched an incentive-cum-regulatory scheme in March 2014 to phase out by end of 2019 progressively some 82 000 pre-Euro IV DCVs with a funding of \$11.4 billion for offering an ex-gratia payment to the affected vehicle owners. The ex-gratia payment applications for pre-Euro, Euro I and II DCVs closed at the end of 2015, end of 2016 and end of 2017 respectively. The original application deadline for the ex-gratia payment scheme for phasing out Euro III DCVs was 31 December 2019. In view of the economic downturn in the past few months, some transport trades were not able to complete the necessary procedures and submit applications for ex-gratia payment by the original deadline due to operational difficulties. Hence, the EPD has extended the deadline by 6 months to 30 June 2020.

As at end of February 2020, about 77 900 DCVs have been granted an ex-gratia payment, accounting for about 95% of the eligible vehicles, and involving a subsidy amount of about \$10.5 billion.

“One-for-One Replacement” Scheme for Electric Private Cars

To strike a balance between promoting the use of electric private cars (e-PCs) and not increasing the overall number of private cars (PCs), the Government introduced the “One-for-One Replacement” Scheme (the Scheme) on 28 February 2018 to encourage PC owners to choose electric vehicles when they need to replace their cars. Purchasers of e-PCs who scrap and de-register their eligible old PCs and then first register a new e-PC can enjoy a higher first registration tax (FRT) concession of up to \$250,000.

Since the introduction of the Scheme until the end of February 2020, a total of 3 009 applications were received by the Transport Department, among which 2 835 were approved, 139 were under processing and 35 were rejected for not complying with the eligibility criteria. Among the approved applications, 2 751 have completed first registration and the FRT concession involved amounted to about \$576 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB044

(Question Serial No. 0137)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Administration mentioned that \$350 million had been earmarked in preparation for the launch of a pilot scheme for electric ferries and \$80 million had been earmarked for the launch of a pilot scheme for electric public light buses. What are the details of these 2 schemes respectively? Are there any implementation timetables?

Asked by: Hon CHAN Han-pan (LegCo internal reference no.: 19)

Reply:

Pilot scheme for electric ferries

The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric ferries, we will engage an independent consultant to advise on the design of electric ferries and assist the ferry operators to prepare an open tender for the construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We

estimate the total expenditure of the pilot scheme at about \$350 million. The actual expenditure will depend on the results of open tenders for the electric ferries.

Pilot scheme for electric public light buses

The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

- End -

CONTROLLING OFFICER'S REPLY**ENB045****(Question Serial No. 2425)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned that the Environmental Protection Department (EPD) will continue to oversee the operation and management of country parks, as well as the implementation of measures to enhance the recreational and educational potential of country parks.

1. Please tabulate the volume of refuse collected by the EPD in the country parks in the past 3 years. Will there be any measures to improve the hygiene problems in the country parks? If yes, what are the details, expenditure involved and timetable? If no, is the EPD satisfied with the current management performance of the country parks?
2. Hill fires occur frequently in country parks. Does the EPD have any solution to this problem? What are the details and expenditure involved? What is the timetable?
3. Many country parks are now facing the problems of insufficient parking spaces, fresh water supply, aged or dilapidated sanitary facilities, etc. Does the EPD have any improvement measures in place to address the above problems? If yes, what are the details, timetable and expenditure involved?

Asked by: Hon CHAN Han-pan (LegCo internal reference no.: 24)Reply:

1. The total volume of refuse collected by the Agriculture, Fisheries and Conservation Department (AFCD) in country parks in each of the past 3 years is tabulated below:

Year	Refuse collected (tonnes)
2017	3 400
2018	3 000
2019	2 600

Besides strengthening the routine cleansing in recreation sites with higher pedestrian flow, AFCD also continues to implement various measures to improve the hygiene conditions in country parks, which include continuous promotion of the message

“Take Your Litter Home” to encourage the public to develop a good habit of taking away their own litter after hiking in country parks, and installation of animal-proof waste separation bins to prevent wild animals from foraging in rubbish bins and littering the ground. Since the above measures form part of the country park management, promotion, publicity and education work, there is no separate breakdown of the expenditure in this regard.

2. AFCD has been striving to carry out the work on prevention and fighting hill fires in order to reduce the occurrence of hill fires, which include:
 - (a) Fire danger warning signs are erected in all country parks to alert the public the fire risk on the day. Fire breaks, water tanks, fire lookouts, other facilities and equipment have been constructed to prevent the spread of hill fires and to facilitate hill fire fighting during an outbreak;
 - (b) The AFCD Fire Control Centre (FCC) and fire crews are on a 24-hour shift standby on days when the fire risk is high. FCC will coordinate fire crews to attend hill fire outbreaks to fight the fire, and contact the Fire Services Department for taking actions together where necessary;
 - (c) Patrol and enforcement actions are strengthened to prevent visitors from lighting fires illegally (such as lighting fires outside barbecue sites and camping sites); and
 - (d) AFCD has launched publicity and education programmes through school talks, Announcements in the Public Interest, village visits, etc., and has been collaborating with hiking/volunteer groups in distributing promotional leaflets to the public during the Ching Ming Festival and Chung Yeung Festival in order to raise public awareness about the prevention of hill fires and environmental protection.

The expenditure (revised estimate) incurred in preventing and fighting hill fires by AFCD in 2019-20 was \$38.8 million.

3. As the land suitable for providing parking spaces in the vicinity of country parks is scarce, AFCD has been encouraging the public to go to country parks by public transport as far as possible. Moreover, if too many visitors drive to country parks, the main access may be heavily congested, blocking the access of emergency vehicles and vehicles for carrying out management work.

To encourage the public to bring their own bottles and reduce the use of single-use plastic bottles, AFCD has installed 15 water filling stations in country parks for free use by the visitors. AFCD plans to continue to install more water filling stations at suitable locations in 2020-21 and the estimated expenditure involved is about \$1.1 million.

As for the sanitary facilities, AFCD is responsible for providing and managing public toilets in country parks and special areas. AFCD conducts regular cleansing and closely monitors the hygiene conditions of these public toilets. Where necessary, AFCD will step up cleansing frequency and carry out maintenance and enhancement work in order to maintain the facilities in good condition. AFCD has earmarked about \$9 million in 2020-21 to enhance the management of public toilets. Furthermore, AFCD has also commissioned a consultancy study to review and explore

practical options for improving selected sub-standard public toilets in remote areas within country parks and special areas. The study is expected to be completed in the fourth quarter of 2020 and AFCD will follow up with the results and recommendations of the study as appropriate.

- End -

ENB046

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1821)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

A \$2 billion pilot scheme ("pilot scheme") will be launched in this year's Budget to promote the installation of electric vehicle (EV) charging-enabling infrastructure in existing car parks of private residential buildings. In this connection, please advise this Committee on the following:

1. What are the details and timetable for the implementation of the "pilot scheme"?
2. What is the anticipated installation cost for each charger? What is the anticipated number of charging-enabling infrastructure to be provided?
3. Before the implementation of the relevant measures, has the Administration made estimation of the future demand for such facilities, including the growth in the number of EVs in Hong Kong in the coming 5 to 10 years, as well as the geographical distribution of the relevant facilities? If yes, what are the details? If no, what are the reasons and difficulties?

Asked by: Hon CHAN Hoi-yan (LegCo internal reference no.: 31)

Reply:

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020. As the scheme will be launched in the second half

of this year, we do not have such information on the locations of the car parks to be subsidised and their distribution at present.

- End -

CONTROLLING OFFICER'S REPLY

ENB047

(Question Serial No. 1822)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

A sum of not less than \$300 million will be set aside each year for implementing a scheme to recycle waste paper ("Recycling Scheme") that will be launched at the end of this year. Waste paper will be collected across the territory for further processing before exporting to other places for recycling. This will help stabilise the quantity and price of local waste paper. In this connection, will the Government advise this Committee on the following:

1. What are the implementation details and timetable of the "Recycling Scheme"?
2. What are the estimated quantities of waste paper collected and processed each year?
3. Besides stabilising the price of waste paper, what other measures the Administration has in place this year to promote the healthy development of the local waste paper recycling industry? What are the details and the relevant expenditures?

Asked by: Hon CHAN Hoi-yan (LegCo internal reference no.: 32)

Reply:

The Government will set aside a sum of not less than \$300 million each year starting from 2020-21 for implementing a scheme to collect and recycle waste paper. The Environmental Protection Department (EPD) will engage several service contractors through open tender to collect waste paper (including cardboards, newspapers and office papers) from their associated street corner recycling shops/mobile recyclers/frontline collectors across the territory under service contracts. The waste paper collected will be further processed, including screening, sorting and baling, before exporting to the Mainland or overseas (e.g. Southeast Asia) markets for recycling to paper products. This can turn waste into resources and ensure stable and diversified recycling outlets for local waste paper.

Under the service contract, the service contractors and their relevant partners (including street corner recycling shops and mobile recyclers) are required to provide economic incentives to purchase waste paper that meets the specified quality standard from frontline collectors at a price which is not less than the designated recovery price of waste paper (not

less than 70 cents per kilogram in the first 6 months, and from then on the price will be adjusted every 3 months according to the actual export price of waste paper in the market), so as to encourage clean recycling. The monthly service fee payable to the service contractors is calculated according to the quantity of waste paper successfully exported and sold. The scheme will help enhance the overall quality and market competitiveness of local waste paper, thereby providing support to the entire waste paper recycling industry with stabilisation of employment opportunities in the industry, including frontline collectors.

To provide more stable and diversified outlets for locally recycled waste paper and reduce the reliance on a single export market, we have indicated in the service contracts that after obtaining the consent from the EPD, service contractors are allowed to charge a higher service fee for exporting waste paper to overseas markets than to the Mainland market, so as to encourage contractors to explore other export markets and new business opportunities.

The EPD conducted an open tender exercise on 28 February 2020 to invite interested contractors to bid for the service contracts and the tender closing date is 24 April 2020. There is no pre-set ceiling on the number of service contractors and the term of the service contracts will be 23 months, including the preparatory period for a maximum of 3 months and the service period for 20 months. The service is scheduled to commence in the second half of 2020 and it is expected that not less than 40 000 tonnes of waste paper will be processed each month.

On recycling of waste paper, apart from introducing the above service contract, the EPD will also continue to promote the development of local waste paper recycling industry through different measures in this year. Such work includes subsidising the operating cost of street corner recycling shops and mobile recyclers in recycling of waste paper through the \$1 billion Recycling Fund set up by the Government. Moreover, we will continue to allocate short-term tenancy sites and berths at public cargo working areas for bidding by the recycling industry, including the waste paper recycling industry. Assistance has also been rendered to a tenant of the EcoPark in building a local waste paper recycling and manufacturing plant which is expected to be completed in 2023 with an annual processing capability of about 300 000 tonnes of local waste paper. As the above work is part of the duties of the Waste Reduction and Recycling Division of the EPD, we do not have a separate breakdown of the manpower and expenditure involved for such work.

- End -

CONTROLLING OFFICER'S REPLY

ENB048

(Question Serial No. 1823)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department set up the \$1 billion Recycling Fund in 2015 which has continued to facilitate the upgrading of the operational capabilities and efficiencies of the recycling industry. In this connection, please set out the numbers of projects funded by the Recycling Fund, the quantities of recyclables recovered and the subsidy amounts in the past 3 years by type of recyclables.

Asked by: Hon CHAN Hoi-yan (LegCo internal reference no.: 33)

Reply:

In the past 3 years (i.e. the financial years from 2017-18 to 2019-20 (as at 29 February 2020)), the Recycling Fund approved 241 projects. Among them, excluding 19 which have been withdrawn by the applicant organisations, a total of 222 projects have been or will soon be commenced, involving a total funding of about \$220 million.

The quantities of processed recyclables involved in the projects and the amounts of funding approved by the Recycling Fund in the past 3 years are set out in the table below. The aims of some projects funded by the Recycling Fund are to enhance the overall capability and productivity of the recycling industry, including providing training courses to enhance the skills of recycling practitioners, enhancing safety and health standards and certification/registration schemes, purchasing/installing equipment or machinery to promote good recycling practice and reduce nuisance, etc. As these projects do not involve any type of recyclables, they are not included in the table.

Type of recyclables ⁽¹⁾	Target quantity processed ⁽²⁾ (tonnes) ⁽³⁾			Amount of funding approved (\$m)		
	2017-18	2018-19	2019-20 (As at 29 February 2020)	2017-18	2018-19	2019-20 (As at 29 February 2020)
Construction waste	4 000	0	0	1.5 ⁽⁵⁾	0	0
Food waste	200 ⁽⁵⁾	1 800	17 000	2.8 ⁽⁵⁾	20.5	9.6
Waste cooking oil	0	0	7 500	0	0	2.1
Waste wood	900	9 000	46 700	3.7 ⁽⁵⁾	4.1	4.8
Waste tyres	2 500	0	0	5.0	0	0
Waste metals	100	32 300	0	10.2 ^{(4) (5)}	10.7 ⁽⁴⁾	20.3 ⁽⁴⁾
Waste plastics	200	100	700			
Waste paper	1 900	0	0			
Waste Electrical and Electronic Equipment	0 ⁽⁵⁾	0	400			
Used clothes	200	0	0			
Others (including compact discs, beverage cartons and spent lubrication oil)	1 400	0	300			
Total	11 400⁽⁵⁾	43 200	72 600	23.2⁽⁵⁾	35.3	36.8

- Notes:
- (1) As some approved projects process more than 1 type of recyclables, it is not possible to set out the figures for the approved projects individually according to the type of recyclables.
 - (2) Target quantity processed refers to the quantity of recyclables expected to be collected for the whole projects approved in that year.
 - (3) The figures are rounded to the nearest hundred.
 - (4) As some approved projects process more than 1 type of recyclables and the amounts of funding are not approved according to the type of recyclables, it is not possible to provide a separate breakdown.
 - (5) As some applicant organisations withdrew the approved projects or applied for adjusting the estimates of their approved projects, the figures have been revised as compared with those of last year.

- End -

CONTROLLING OFFICER'S REPLY

ENB049

(Question Serial No. 2584)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. How many meetings were convened by the Steering Committee on the Promotion of Electric Vehicles (the Steering Committee) in each of the past 3 years? What were the agenda and minutes of each meeting? What was the attendance rate of its members?
2. What was the work of the Steering Committee on promotion of the use of electric private cars in the past 3 years?
3. Will the Steering Committee submit reports on its work to the Legislative Council? If yes, what are the details? If no, how does the Steering Committee demonstrate accountability and ensure transparency of its work?
4. Did the Steering Committee communicate with stakeholders of the electric vehicle trade and the 18 District Councils in the past 3 years? If yes, what are the details? If no, what are the reasons?
5. The Government launched a \$2 billion pilot scheme last year to enhance the infrastructure in car parks of private residential buildings. What role will the Steering Committee play in promoting this scheme? What is the relevant work?
6. Does the Steering Committee formulate annual work objectives? If yes, what are the details? If no, what are the reasons?
7. Through what channels does the Government publish the discussion items of the Steering Committee's meetings to allow stakeholders to express their opinions?

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 30)

Reply:

The Steering Committee on the Promotion of Electric Vehicles (the Committee) chaired by the Financial Secretary was established in 2009. Over the past 3 years (2017-2019), a total of 6 meetings were convened and the overall attendance rate was about 80%. The strategies and implementation details of the measures to promote the use of electric vehicles (EVs) are examined and discussed at each meeting. Subjects discussed at the meetings include: formulation of a roadmap on the popularisation of EVs, implementation of a pilot scheme for electric public light buses (e-PLB), launching of the \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing

private residential buildings, first registration tax concessions for EVs, promotion of the installation and enhancement of charging facilities including technical support, review of the Pilot Green Transport Fund to encourage trials and the wider use of green innovative transport technologies, promotion of the use of EVs in public transport, as well as review of the development of low-carbon traffic under the long term carbon reduction strategy.

The Government has consulted the Committee on various measures and policy directions regarding the promotion of the use of EVs, and invited the trades to give briefings on the latest technology and market developments from time to time. The Committee has conducted in-depth discussions about the promotion strategies and specific complementary measures and provided valuable recommendations to the Government. The number of electric private cars in Hong Kong has increased from 70 in 2010 to 13 890 as at the end of February 2020, accounting for about 2.2% of the total number of private cars in Hong Kong and ranking second among major Asian cities.

The Committee spares no effort in promoting the use of private EVs and has been concerned about extending EV charging facilities and promoting the use of electric commercial vehicles, including the electrification of various public transport vehicles. The Committee has given valuable advice on the \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure at car parks of existing private residential buildings, so that the scheme can more effectively address the financial and technical problems generally encountered by owners of parking spaces in private residential buildings. The scheme will be launched in the second half of this year. Moreover, the Committee has also provided a lot of constructive advices to the Government and its consultant on the specifications of e-PLB, as well as the charging mode and system, under the pilot scheme for e-PLB preliminarily proposed by the Government.

To encourage frank and open discussion, the Committee's meetings are conducted confidentially. The minutes of meetings are not public information. In formulating policies on promoting the use of EVs and implementing different measures, the Government is committed to consulting and listening to the views of various stakeholders of the trades and the general public through different channels, and conveying the views to the Committee for in-depth study, analysis and discussion of various details with members of the Committee, so as to refine the formulation of policies.

- End -

CONTROLLING OFFICER'S REPLY

ENB050

(Question Serial No. 2585)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. Since April 2011, the Government has granted concessions on gross floor area for car parks in new buildings to encourage developers to provide electric vehicle (EV) charging infrastructures in car parks during the construction stage of new buildings, but developers were not required to arrange for electricity connection. EV owners, therefore, could not use these chargers. What measures did the Government take to improve such situation in the past year?

2. Will the Government revise the Technical Guidelines for Electric Vehicle Charging-enabling for Car Parks of New Building Developments (the Guidelines) as soon as possible to explicitly require that EV chargers should be installed and electricity meter connection should be arranged at parking spaces provided with EV charging-enabling infrastructure? If yes, what are the specific measures, timetable, manpower and expenditure? If no, what are the reasons? Before making amendments to the Guidelines, what measures has the Government put in place to prevent developers from being granted gross floor area concessions by using the loopholes of the Guidelines?

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 31)

Reply:

The Government has required since April 2011 that only underground car parks in new private buildings provided with electric vehicle (EV) charging-enabling infrastructure (including provision of sufficient power supply, cabling and conduits for all parking spaces) at each parking space can be fully exempted from the gross floor area calculations.

The main objective of the policy is to enable owners of parking spaces to install chargers at their parking spaces and arrange for power connection according to their specific needs without any constraints in respect of power supply capacity of the buildings, cabling and conduits of the car parks, etc. In view of the rapid advancement of EV charging technology and the fact that different models of EVs adopt different charging standards, the Government considers that EV owners should be allowed to install suitable models of

chargers according to their particular needs. On the other hand, the Government is examining the requirements for EV charging-enabling infrastructure under the Technical Guidelines for Electric Vehicle Charging-enabling for Car Parks of New Building Developments to improve the policy of encouraging the setting up and addition of EV charging facilities and keep pace with market developments.

In addition, there were views that the Government could require developers to provide EV chargers for public use under the gross floor area concession mechanism. The Government has carried out an examination in this regard. The Building Ordinance (BO) aims to ensure that the planning, design and construction of private premises comply with the prescribed standards regarding safety and sanitation, but not to regulate the usage right of the building services. It is also difficult for the Government to ensure through the BO that the intended use of the building services installed in the premises will continue to be maintained after the occupation. Hence, we consider the suggestion not viable. The Government will continue to review other guidelines and explore feasible instruments so as to strike a balance between requiring developers to continue providing EV charging facilities and not undermining the interest of private property ownership.

- End -

CONTROLLING OFFICER'S REPLY**ENB051****(Question Serial No. 2586)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

1. What were the changes in the numbers of electric private cars, hybrid private cars and diesel private cars respectively in the past 5 years?
2. What were the numbers of newly registered electric private cars, hybrid private cars and diesel private cars each month in the past 5 years?
3. What were the changes in the numbers of public and private electric vehicle (EV) chargers respectively in the past 5 years?
4. What was the number of registered private cars in Hong Kong as at the end of February 2020? How many of them were electric private cars?
5. What was the number of public EV chargers in Hong Kong as at the end of February 2020? Please set out the distribution of public and private chargers in the table below:

District Council district	Number of chargers provided by the Government	Number of public chargers provided by private organisations	Name of private organisation

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 32)Reply:

1. According to the figures provided by the Transport Department (TD), the net growth in the number of registered vehicles for electric private car (PC), hybrid PC and diesel PC in the past 5 years is as follows:

As at	No. of registered vehicles (net growth)		
	Electric PC	Hybrid PC	Diesel PC
End of 2015	3 806 (+2 646)	13 930 (+2 068)	5 655 (+1 545)
End of 2016	6 829 (+3 023)	15 699 (+1 769)	7 532 (+1 877)
End of 2017	10 666 (+3 837)	17 737 (+2 038)	11 760 (+4 228)
End of 2018	11 080 (+414)	19 688 (+1 951)	11 999 (+239)
End of 2019	13 447 (+2 367)	24 187 (+4 499)	11 981 (-18)

Note 1: The net growth in number is the number of registered vehicles as at 31 December in that year less the number of registered vehicles as at 31 December in the previous year.

Note 2: Government electric vehicles (EVs) are not included as government vehicles are not required for registration.

2. According to the figures provided by the TD, the monthly numbers of first registered electric PCs, hybrid PCs and diesel PCs in the past 5 years are as follows:

Year	Month	No. of first registered vehicles in the month		
		Electric PC	Hybrid PC	Diesel PC
2015	January	169	223	208
	February	83	313	353
	March	179	405	78
	April	130	95	146
	May	130	147	137
	June	143	240	162
	July	73	139	70
	August	179	148	54
	September	234	146	79
	October	351	162	68
	November	435	166	92
	December	501	162	146
2016	January	268	108	56
	February	163	151	55
	March	511	138	85
	April	147	166	85
	May	81	176	71
	June	203	182	146
	July	297	179	155
	August	289	142	211
	September	528	132	239
	October	162	128	306
	November	166	164	232
	December	205	174	255

Year	Month	No. of first registered vehicles in the month		
		Electric PC	Hybrid PC	Diesel PC
2017	January	196	152	240
	February	601	152	162
	March	2 964	179	347
	April	0	149	365
	May	5	193	531
	June	8	186	378
	July	3	153	369
	August	14	171	748
	September	13	189	882
	October	6	173	80
	November	32	194	88
	December	18	194	56
2018	January	11	213	75
	February	6	176	50
	March	20	199	51
	April	37	183	56
	May	18	192	21
	June	42	234	4
	July	22	220	1
	August	45	229	1
	September	73	168	1
	October	43	212	1
	November	78	146	0
	December	76	159	4
2019	January	51	442	0
	February	37	293	4
	March	80	354	2
	April	44	372	0
	May	158	356	4
	June	94	355	2
	July	106	443	11
	August	155	426	5
	September	571	426	0
	October	314	456	0
	November	424	476	0
	December	389	455	0

Note: Government EVs are not included as government vehicles are not required for registration.

3. The change in the number of public EV chargers (including government and non-government sector) in the past 5 years is as follows:

Year	No. of public EV chargers		Difference with the number in previous year	
	Government	Non-government sector	Government	Non-government sector
2015	637	584	+77	+19
2016	665	853	+28	+269
2017	680	1 182	+15	+329
2018	782	1 384	+102	+202
2019	857	2 072	+75	+688

4. As at the end of February 2020, the total number of PCs in Hong Kong was 631 473, while the number of electric PCs was 13 890, representing about 2.2% of the total number of PCs in Hong Kong.
5. The numbers of public chargers provided by the Government and non-government sector with a breakdown by 18 districts of Hong Kong as at the end of 2019 are as follows:

District	Number of public chargers					
	Standard charger		Medium charger		Quick charger	
	Government	Non-government sector	Government	Non-government sector	Government	Non-government sector
Central & Western	52	10	93	17	0	38
Eastern	11	17	50	17	0	54
Southern	0	4	0	12	0	29
Wan Chai	18	48	65	56	0	37
Kowloon City	61	3	0	7	0	15
Kwun Tong	39	512	4	177	0	62
Sham Shui Po	11	6	32	72	0	71
Wong Tai Sin	5	19	35	11	0	11
Yau Tsim Mong	40	70	6	118	0	68
Kwai Tsing	9	16	0	13	0	33
Tsuen Wan	7	10	36	13	0	12
Sai Kung	6	18	20	17	0	27
North	40	18	15	10	0	12
Tai Po	25	3	0	3	0	7
Sha Tin	43	32	20	31	0	48
Yuen Long	13	37	2	31	0	18
Tuen Mun	2	10	0	10	0	19
Islands	4	14	89	26	4	23
Total	386	847	467	641	4	584
	2 929					

Among the chargers provided by non-government sector as tabulated above, 24 standard chargers, 12 medium chargers and 31 quick chargers are installed at government premises.

- End -

CONTROLLING OFFICER'S REPLY**ENB052****(Question Serial No. 2587)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

1. Please set out the total amount of the first registration tax concessions for electric private cars in each of the past 5 years;
2. Please set out the total amount of vehicle licence fee paid by electric private cars in each of the past 5 years;
3. Please set out the respective number of newly registered electric private cars in each of the past 5 years by name of manufacturer and model.

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 33)Reply:

1. The total amounts of first registration tax (FRT) waived for electric private cars (e-PCs) in the past 5 years are as follows:

Year	The total amount of FRT waived for e-PCs (\$m)
2015	1,743.4
2016	1,975.4
2017	3,149.4
2018	79.9
2019	478.0

Note: Government vehicles are not included as they are not required to pay FRT.

2. The total amounts of annual vehicle licence fees paid by licensed e-PCs in the past 5 years are as follows:

Year	The total amount of annual vehicle licence fees paid by licensed e-PCs (\$'000)
2015	3,191
2016	5,842
2017	9,491
2018	9,650
2019	11,460

Note: The estimation is made based on the number of licensed e-PCs at the end of each year and their annual vehicle licence fees required to be paid.

3. The numbers of first registered vehicles of various e-PC models in the past 5 years are as follows:

Name of manufacturer	Model	No. of first registered e-PCs				
		2015	2016	2017	2018	2019
BMW	I3 (I01)	226	53	10	0	0
	I3 94AH (I01)	0	21	42	48	3
	I3 120AH (I01)	0	0	0	0	23
	I3S 94AH (I01)	0	0	0	16	1
	I3S 120AH (I01)	0	0	0	0	20
BYD	E6	9	4	3	3	0
HYUNDAI	IONIQ ELECTRIC	0	0	0	89	122
	IONIQ ELECTRIC (URBAN)	0	0	0	32	56
	KONA ELECTRIC	0	0	0	0	117
	KONA ELECTRIC (URBAN)	0	0	0	0	1
	KONA ELECTRIC RANGE+	0	0	0	0	43
	KONA ELECTRIC RANGE+ (URBAN)	0	0	0	0	1
JAGUAR	I-PACE EV400	0	0	0	0	1
	I-PACE EV400 HSE	0	0	0	0	5
	I-PACE EV400 S	0	0	0	0	3
	I-PACE EV400 SE	0	0	0	0	6
KIA	NIRO EV	0	0	0	0	12
	NIRO EV+	0	0	0	0	16
	NIRO EV+ DELUXE	0	0	0	0	149
MITSUBISHI MOTORS CORPORATION	I-MIEV	1	0	1	0	0
NISSAN	E-NV200 5-Seats	1	2	5	7	4
	E-NV200 7-Seats	9	8	3	40	73
	LEAF	30	30	9	1	21
	LEAF LUX	0	0	0	0	242
	LEAF PLUS	3	6	0	0	0

Name of manufacturer	Model	No. of first registered e-PCs				
		2015	2016	2017	2018	2019
RENAULT	FLUENCE Z.E.	0	2	7	0	0
	ZOE	1	2	0	0	0
	ZOE (R240)	11	20	0	0	0
	ZOE ZE40	0	0	31	68	19
	ZOE ZE40 (BOSE)	0	0	0	4	0
SMART	SAMRT FORFOUR ELECTRIC DRIVE	0	0	0	0	40
	SAMRT FORTWO COUPE ELECTRIC DRIVE	0	2	0	0	5
TAZZARI	EM1	1	0	0	0	0
TESLA	MODEL 3 LONG RANGE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	7
	MODEL 3 PERFORMANCE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	355
	MODEL 3 STANDARD RANGE PLUS REAR WHEEL DRIVE	0	0	0	0	990
	MODEL S 60 KWH	87	98	150	0	0
	MODEL S 60 KWH DUAL MOTOR	0	95	102	0	0
	MODEL S 70 KWH	32	429	2	0	0
	MODEL S 70 KWH DUAL MOTOR	469	691	3	0	0
	MODEL S 75 KWH	0	82	90	0	0
	MODEL S 75 KWH DUAL MOTOR	0	132	229	9	3
	MODEL S 85 KWH DUAL MOTOR	421	284	0	0	0
	MODEL S 85 KWH PERFORMANCE DUAL MOTOR	431	65	4	0	0
	MODEL S 85 KWH	583	49	0	0	0
	MODEL S 85 KWH PERFORMANCE	121	0	0	0	0
	MODEL S 90 KWH	10	13	0	0	0
	MODEL S 90 KWH DUAL MOTOR	46	601	403	0	0
	MODEL S 90 KWH PERFORMANCE DUAL MOTOR	59	266	34	0	0

Name of manufacturer	Model	No. of first registered e-PCs				
		2015	2016	2017	2018	2019
TESLA	MODEL S 100 KWH PERFORMANCE DUAL MOTOR	0	2	216	0	0
	MODEL S 100 KWH DUAL MOTOR	0	0	1	3	2
	MODEL X 60 KWH DUAL MOTOR	0	0	404	0	0
	MODEL X 75 KWH DUAL MOTOR	0	0	502	12	11
	MODEL X 90 KWH DUAL MOTOR	0	0	1 105	92	0
	MODEL X 90 KWH PERFORMANCE DUAL MOTOR	0	0	107	0	0
	MODEL X 100 KWH PERFORMANCE DUAL MOTOR	0	0	332	0	1
	MODEL X 100 KWH DUAL MOTOR	0	0	45	4	18
	MODEL X LONG RANGE	0	0	0	0	7
	MODEL X STANDARD RANGE	0	0	0	0	1
VOLKSWAGEN	E-GOLF 85KW 24.2KWH CL	56	63	7	0	0
	NEW E-GOLF	0	0	6	36	45
	NEW E-GOLF LIFE	0	0	7	7	0
Total		2 607	3 020	3 860	471	2 423

Note: Government vehicles are not included as they are not required for registration.

- End -

CONTROLLING OFFICER'S REPLY

ENB053

(Question Serial No. 2588)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. In respect of the "Smart Travel" Plan being implemented by the Government, will the Administration release the information on real-time utilisation of public chargers via mobile applications, so as to reduce the waiting time of electric vehicle owners for chargers? If yes, what are the details? If no, what are the reasons?
2. With the completion of the review of the trial on outdoor chargers by the Government in 2018, which sites have been considered by the Government for setting up quick charging stations? When will such locations be announced?
3. What is the outcome of the Government's study on provision of charging facilities at on-street parking spaces? When will the on-street parking spaces suitable for installing charging facilities as a pilot be announced?

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 34)

Reply:

1. To support the development of smart city, the Government plans to set up a smart system for the Government's public electric vehicle charging network. The features will include instant electronic information on the status of chargers, payment system and management facilities for parking spaces equipped with chargers. The Government will also explore the feasibility of including other features, such as enabling reservation of parking spaces equipped with chargers.
2. The Government commissioned a consultancy study in October 2019 to look for suitable sites in 18 districts of Hong Kong to set up public quick charging stations for trial. Upon completion of the study, we will explore suitable options for developing quick charging stations.
3. Provision of on-street parking spaces is mainly to cater for short-term parking needs, and such spaces are usually installed with parking meters to accelerate the turnover of parking spaces for use by more drivers. Taking into account the power supply and

space constraints, potential impact on nearby traffic as well as related considerations such as other drivers' parking needs, the Government has to look for suitable on-street parking spaces to install charging facilities. Around 10 possible sites have initially been identified for such installation and their feasibility is under detailed study. When these sites are confirmed to be suitable for installing on-street charging facilities, the Government will study on commencing a pilot scheme on installation of such charging facilities.

- End -

CONTROLLING OFFICER'S REPLY

ENB054

(Question Serial No. 1443)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the "Plastic-free" School Lunch Pilot Scheme, please provide the number (and the percentage) of the participating schools that have installed refrigerators, rice steamers, dishwashers and dish dryers, so as to encourage students to use reusable lunch boxes and bring along their own cutlery. What are the implementation details of the pilot programme for provision of smart water dispensers with their exteriors designed by students to participating schools?

Asked by: Hon CHEUNG Kwok-kwan (LegCo internal reference no.: 28)

Reply:

The Environmental Protection Department (EPD) will launch a new pilot scheme through the Environment and Conservation Fund, and has earmarked \$4.5 million for subsidising about 50 secondary and primary schools to install the necessary equipment, including refrigerators, steam cabinets, dishwashers and disinfection machines, so as to encourage students to bring their own lunches using reusable food containers and cutlery.

Besides, the EPD will launch another pilot scheme to encourage students to inculcate a living culture of "bring your own bottle". We will provide smart water dispensers with their exteriors designed by students to about 80 primary and secondary school premises via the contractors, and support the schools to carry out relevant education and experiential activities, such as signing a charter to cease the sale of bottled water, for conveying green messages such as waste reduction at source and clean recycling to students in an interactive approach. Our preliminary objective is to complete the tendering exercise within 2020 before proceeding to the exterior design activities and installation works, as well as continuing to carry out relevant education and experiential activities.

After the COVID-19 epidemic subsides and classes resume, the EPD will introduce the details of the above 2 pilot schemes to schools and invite them to participate. As such, the actual number of participating schools is not available for the time being. Subject to the effectiveness of the pilot schemes, including feedback and comments from schools and

students etc., we will consider expanding the scope of the schemes to include more primary and secondary schools.

- End -

CONTROLLING OFFICER'S REPLY

ENB055

(Question Serial No. 0216)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Under the Environment and Conservation Fund, how many applications were received in each of the past 3 years (i.e. 2016-17, 2017-18 and 2018-19) for recycling commercial waste? Out of these applications, how many were approved and what were the amounts of funding involved? What was the respective number of participating enterprises in each year?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 10)

Reply:

The relevant statistics showing the Environment and Conservation Fund's support of non-governmental organisations to undertake community waste recovery projects for recycling commercial waste in 2016-17, 2017-18 and 2018-19 are provided below:

	2016-17	2017-18	2018-19
No. of applications received	84	99 (Note 1)	36
No. of applications approved	61	46	53
Total provision approved in the year, the expenditure may span over a number of years (\$ million)	16.50	4.13	2.81
No. of participating enterprises/commercial and industrial buildings (Note 2)	about 1 020 companies/shops and 880 buildings	about 810 companies/shops and 930 buildings	about 960 companies/shops and 980 buildings

(Note 1): Some applications were processed in the following year.

(Note 2): The figures include the number of participants of approved projects in that year and on-going projects that were approved in previous years.

- End -

CONTROLLING OFFICER'S REPLY

ENB056

(Question Serial No. 0219)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the establishment of the Green Tech Fund to encourage local research and development on decarbonisation and green technologies, please provide the details, including the implementation timetable, implementation details, stakeholders to be covered, information on whether the catering sector will be included, districts, manpower and expenditure to be involved, etc.

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 13)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management (including food waste) as well as air and water quality. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this

connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is well spent and cost-effective.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB057

(Question Serial No. 0222)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding waste separation, food waste source separation, collection and recycling:

1) Please provide the amounts of the funding allocated for and the numbers of projects applied for encouraging households to participate in waste separation, food waste collection and recycling in each of the past 3 years (i.e. 2017, 2018 and 2019).

2) Regarding waste separation projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2017, 2018 and 2019).

3) Regarding food waste collection projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2017, 2018 and 2019).

4) Regarding recycling projects, please tabulate the total numbers of domestic units, housing estates and single-block buildings participated in each of the past 3 years (i.e. 2017, 2018 and 2019).

5) How will the Administration plan to further promote and encourage the use of the Environment and Conservation Fund by the community to promote environmental protection activities?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 16)

Reply:

1) - 4) Regarding waste separation, food waste source separation, collection and recycling, the Environment and Conservation Fund (ECF) has funded non-profit-making organisations to operate different projects, including Community Waste Reduction Projects, Food Waste Recycling Projects in Housing Estates, On-site Meal Portioning Projects in Schools and Source Separation of Waste Programme. The amounts of funds approved to projects from 2017-18 to 2019-20 are provided in

the table below:

	2017-18	2018-19	2019-20 (as at end of December 2019)
<i>Source separation of domestic waste</i> (Note 1)			
No. of Projects	1	0	0
Total Provision (\$ million)	0.01	0	0
No. of Participants (Note 2)	About 95 housing estates and 101 buildings (Note 3), covering about 135 000 households (Note 4)	About 95 housing estates and 101 buildings (Note 3), covering about 135 000 households (Note 4)	About 95 housing estates and 101 buildings (Note 3), covering about 135 000 households (Note 4)
<i>Food waste reduction and recovery</i>			
No. of Projects	13	19	20
Total Provision (\$ million)	23.36	35.48	53.35
No. of Participants (Note 2)	About 20 housing estates (45 400 domestic units) (Note 5), 126 schools and 33 community groups	About 21 housing estates (52 800 domestic units) (Note 5), 126 schools and 44 community groups	About 12 housing estates (29 600 domestic units) (Note 5), 127 schools, 87 community groups and 50 restaurants
<i>Waste recycling</i>			
No. of Projects	16	11	10
Total Provision (\$ million)	41.04	31.66	27.15
No. of Participants (Note 2)	About 20 housing estates, 4 810 buildings (Note 3), 10 schools, 10 community groups and 810 shops/companies	About 27 housing estates, 3 790 buildings (Note 3), 5 schools, 9 community groups and 960 shops/companies	About 35 housing estates, 3 310 buildings (Note 3), 15 schools, 7 community groups and 970 shops/companies

Note 1: The Building (Refuse Storage and Material Recovery Chambers and Refuse Chutes) (Amendment) Regulation 2008 requires for the provision of a refuse storage and material recovery room on every floor of new domestic buildings and the domestic part of new composite buildings from 2008, with the aim of facilitating separation of domestic waste at source for recycling. Therefore, the number of applications for Source Separation of Domestic Waste has been decreased since then.

Note 2: The figures include the number of participants of the approved projects in that year and the on-going projects that were approved in previous years.

Note 3: It refers to the number of single-block buildings. This number is calculated separately and is not included in the number of housing estates.

Note 4: Rounded to the nearest thousand.

Note 5: The figures include the number of housing estates and domestic units of Food Waste Recycling Projects in Housing Estates which are still using the composters funded by the ECF after project completion.

- 5) Since establishment, the ECF has provided funding to support non-profit-making organisations to operate different educational, research, and other projects and activities in relation to environmental matters. Through organising seminars, sharing sessions and workshops for various environmental schemes, we further encourage the community to use the ECF. Information on funding projects of the ECF is uploaded to the relevant webpage for reference by the community and relevant parties. We also collaborate closely with district organisations to enhance promotion on use less, waste less, and waste recycling to build up a wider community recycling network. In addition, we will use the social media (e.g. Facebook) as a platform to further promote relevant information of the ECF and encourage the use of the ECF by the community to promote environmental protection activities.

- End -

CONTROLLING OFFICER'S REPLY

ENB058

(Question Serial No. 0223)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

During 2019-20, the Department continued to promote reduction of food waste at source and on-site/off-site recycling of unavoidable food waste and encourage avoidance of the use of disposable plastic tableware under the Food Wise Hong Kong Campaign. In this regard, please provide the details, including the specific measures, progress of the Campaign, number of participating merchants, manpower and expenditure involved, etc.

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 17)

Reply:

The Food Wise Hong Kong Campaign (the Campaign) has been promoting a food wise and waste less culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launching in 2013. The element of encouraging avoidance of the use of disposable plastic tableware has been incorporated into the Campaign appropriately since 2019-20. The specific schemes and activities of the Campaign mainly include:

- The Food Wise Charter – As at February 2020, about 870 organisations have signed the Food Wise Charter and are committed to reducing food waste at source. The signees include public organisations and public utilities, commercial and industrial (C&I) sectors, food and beverage sectors, hotel sector, property development and management sectors, higher education institutions, secondary schools, primary schools and kindergartens, etc.
- The Food Wise Eateries Scheme – The Scheme aims to encourage the food and beverage sectors to reduce food waste at source together with customers through offering food in different portion sizes and adopting food waste reduction measures. As at February 2020, about 330 and 580 eateries have been awarded with gold class and silver class status respectively.

- “Food Wise” Talk – As at February 2020, 123 “Food Wise” talks were held by the Government with a total of over 11 400 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, reduction of food waste at source, treatment of food waste, food waste separation and recycling, promotion of using less disposable plastic tableware, etc.
- “Food Wise” Roving Exhibition – As at February 2020, a total of 22 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community, as well as encourage the public to reduce food waste at source and avoid and reduce food wastage. The roving exhibitions featured display panels with food waste reduction tips, including Food Wise Recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. These exhibitions attracted over 30 000 visitors in total.
- The “Big Waster” Facebook and Instagram pages – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with the public, through the Facebook and Instagram pages in which relevant information, including details about food waste reduction, is provided. Up to February 2020, the “Big Waster” Facebook has received more than 65 000 “likes” and there are over 9 200 “followers” on Instagram.
- Publicity activities – To publicise messages related to reduction of food waste and promotion of using less disposable plastic tableware through television and radio stations, “Big Waster” posters, leaflets and slogans.

The manpower involved in the implementation of the Campaign was absorbed by the existing staffing. The total expenditure of the Campaign in 2019-20 was about \$4 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB059

(Question Serial No. 0229)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in paragraph 131 of the Budget Speech that the Government plans to launch a pilot scheme for electric ferries. What are the details? What positive impact on air quality is expected to be brought by the pilot scheme? What are the manpower and expenditure to be involved in the pilot scheme?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 23)

Reply:

Electric ferries do not have exhaust emissions and are quieter than traditional diesel ferries when in operation. The adoption of electric ferries can solve the occasional black smoke and odour problems caused by diesel ferries. This will help improve the environment around ferries and reduce air and noise nuisance to the public, and at the same time enhance Hong Kong's image as a green city.

The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric ferries, we will engage an independent consultant to advise on the design of electric ferries and assist the ferry operators to prepare an open tender for the

construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million. The actual expenditure will depend on the results of the open tenders for the electric ferries. The Government will create 9 time-limited non-directorate posts for a period of 7 years to cope with the additional workload of the pilot scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB060

(Question Serial No. 0230)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

On discouraging the use of disposable plastic tableware, please advise on the following:
Does the Administration have the figures on the existing number of lunchbox suppliers that provide recyclable tableware?

Many lunchbox suppliers show strong support for environmental protection. Will the Administration consider providing these lunchbox suppliers with more resources to encourage them to continue with the research on or the use of recycled materials? If yes, what are the details? If no, what are the reasons?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 24)

Reply:

The Environmental Protection Department (EPD) does not maintain the figures of school lunch suppliers that provide recyclable tableware in Hong Kong.

To encourage school lunch suppliers to reduce the use of disposable plastic food containers and tableware, the Recycling Fund expanded the funding scope of the Standard Project in 2019 to subsidise school lunch suppliers to procure equipment which can facilitate the adoption of reusable food containers and tableware, and the implementation of food waste collection and recycling. Examples of which include lunch box washing machines, disinfection equipment, storage facilities for disinfected lunch boxes, as well as food waste separation and collection bins.

Furthermore, the EPD has, in collaboration with the Education Bureau (EDB) and the Department of Health (DH), updated the Handbook of Selection of Lunch Suppliers (the Handbook), which includes encouraging schools to incorporate service requirements concerning the use of reusable food containers and tableware in the tender. The DH also released the updated Handbook in September 2019.

- End -

CONTROLLING OFFICER'S REPLY

ENB061

(Question Serial No. 0240)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the carrying out of a pilot scheme by the Environmental Protection Department to provide free collection of food waste generated from commercial and industrial sources, please provide the details for 2020-21, including the implementation timetable, implementation details, stakeholders covered, number of restaurants, districts, manpower and expenditure involved, etc. Is there any plan to extend the scheme to general restaurants and merchants? Will there be any plan to try out the scheme in individual districts where restaurants are more concentrated, such as Tsim Sha Tsui or Mong Kok, etc.?

Asked by: Hon CHEUNG Yu-yan, Tommy (LegCo internal reference no.: 35)

Reply:

It is stated in the Chief Executive's 2018 Policy Agenda that a pilot scheme will be introduced to examine the feasibility of implementing government-run food waste collection services in the long run. To encourage the commercial and industrial (C&I) sectors to recycle food waste properly and achieve the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection on 1 July 2018 to separate and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the Organic Resources Recovery Centre Phase 1 (O • PARK1) for recovery. In addition, the Environmental Protection Department (EPD) has been collecting food waste generated from lunch suppliers for primary and secondary schools and food left uneaten by students after lunch, and delivering such food waste to the O • PARK1 since February 2019.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases starting from the second half of 2020, which will extend the services to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale markets under the Agriculture,

Fisheries and Conservation Department, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have participated in the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund or with experience in food waste separation at source. As at the end of February 2020, 260 units have agreed to participate in phase 2 of the pilot scheme, their distribution by type of organisation is set out in Annex 1, and their distribution by district is set out in Annex 2.

Phase 2 of the pilot scheme will adopt the following recommendations based on the actual situation and environment in Hong Kong so as to enhance the collection efficiency and minimise hygiene and odour nuisance:

- Having regard to the public concerns about hygiene and odour problems, it was suggested that proper means to be adopted to contain food waste for disposal. It will be necessary to carry out pilot programme to test the use of different means such as reusable containers, transparent, semi-transparent plastic bags or waste newspaper to containerise food waste with a view to choosing the options that best serve different needs and situations in Hong Kong;
- The domestic households or users/tenants from C&I buildings can bring their food waste to the central refuse room, where property management companies can arrange collection services by food waste collectors;
- Smart food waste collection bins are suggested to be used to facilitate food waste collection. With IT technologies embedded, smart bins may help monitor contaminated food waste, track participation rate, arrange on-time collection services, and minimise odour and hygiene problems;
- Food waste should be collected and removed daily and at non-peak hours;
- Direct haul to food waste recycling facilities is recommended, rather than transferring food waste to interim transfer stations for compressing into containers since food waste in general decomposes quickly and this could avoid odour and hygiene problems;
- Tanker trucks are preferred to tail-lift vehicles for food waste collection because of higher payload, prevention of spillage of leachate and better efficiency during the unloading operation at food waste recycling facilities;
- Voluntary approach to implement food waste collection by phases is recommended, with waste generators producing food waste of large quantities and low level of contamination (that is, the C&I sectors) which is relatively easier to collect, as the initial targets; and
- Free collection services are recommended to encourage food waste generators to join the services.

In 2020-21, the estimated expenditure for the implementation of the pilot scheme on free food waste collection services is about \$40 million. The relevant work will be absorbed by the existing establishment of the EPD.

**Type of organisations that agreed to participate in phase 2
of the pilot scheme on free food waste collection**

Type of organisation	Estimated number of food waste collection points*
Food and Environmental Hygiene Department	53
Hong Kong Housing Authority	18
Agriculture, Fisheries and Conservation Department	8
Restaurants at government facilities	14
Hospital Authority	28
Shopping centres under the LINK	50
Tertiary institutions	14
Non-governmental organisations	45
Private and public housing estates	20
Lunch suppliers	10
Total	260

*As at February 2020

Distribution of organisations that agreed to participate in phase 2 of the pilot scheme on free food waste collection by district

District		Estimated number of food waste collection points*
Hong Kong Island	Central & Western	9
	Wan Chai	11
	Eastern	17
	Southern	17
Islands	North Lantau	9
Kowloon	Sham Shui Po	15
	Yau Tsim Mong	12
	Kowloon City	15
	Wong Tai Sin	16
	Kwun Tong	23
New Territories	Kwai Tsing	20
	Tsuen Wan	8
	Tuen Mun	19
	Yuen Long	15
	North	6
	Tai Po	15
	Sha Tin	24
	Sai Kung	9
Total		260

*As at February 2020

- End -

CONTROLLING OFFICER'S REPLY**ENB062****(Question Serial No. 2794)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the following information of the Environmental Protection Department (EPD) in each of the past 5 years:

- 1) the number of reports of suspected illegal livestock waste discharge received;
- 2) the number of site investigations carried out by law enforcement officers on suspected illegal livestock waste discharge;
- 3) the number of surprise inspections to livestock farms conducted by EPD staff to ensure that the livestock waste of the farms is "disposed of by environmentally-acceptable means";
- 4) the number of prosecution cases against illegal livestock waste discharge;
- 5) the number of convictions for illegal livestock waste discharge and the penalties.

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 3015)Reply:

The numbers of complaints about illegal livestock waste discharge received by the Environmental Protection Department and the relevant enforcement statistics in the past 5 years are tabulated below:

Year	2015	2016	2017	2018	2019
No. of complaints	76	66	80	113	155
No. of inspections to farms	488	648	855	987	1 051
No. of surprise operations ⁽¹⁾	35	84	129	156	139
No. of prosecutions by summonses	3	10	3	12	2
No. of convictions by summonses	3	9	2	9	2
Total amount of fines	\$35,000	\$75,000	\$40,000	\$75,500	\$30,000

Note(1): Each surprise operation is normally targeted at several livestock farms

- End -

CONTROLLING OFFICER'S REPLY

ENB063

(Question Serial No. 2795)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

- 1) How does the Administration confirm that 90% of the livestock waste (i.e. 58 500 tonnes) was “disposed of by environmentally-acceptable means” in 2018 and 2019?
- 2) On what basis does the Administration set the indicator for livestock waste “disposed of by environmentally-acceptable means” in 2020 at 90%?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 3016)

Reply:

The Environmental Protection Department (EPD) calculates the total quantity of livestock waste generated by farms based on the livestock rearing capacities of various livestock farms provided by the Agriculture, Fisheries and Conservation Department, and then estimates the percentage of livestock waste that is disposed of by environmentally-acceptable means based on the quantity of livestock waste collected regularly from the farms for disposal by EPD's contractors, and the assessment on the operational performance of the waste disposal facilities at the various farms.

According to the data of the EPD, the livestock rearing capacities of farms and their means of disposal of livestock waste remained broadly similar in the past few years. The aforesaid method of assessment is still applicable when we set this year's indicator.

- End -

CONTROLLING OFFICER'S REPLY

ENB064

(Question Serial No. 2796)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in Programme (2) that the Environmental Protection Department will “step up educational and publicity efforts to promote awareness of climate change and low-carbon living style”. Will the Administration provide the expenditures incurred by the Administration’s work to promote climate change education in primary and secondary schools in the past 3 years and the specific details of such work?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 3017)

Reply:

Public education has always been an integral part of the Government’s work to combat climate change. The Environment Bureau (ENB) and the Environmental Protection Department (EPD) have been disseminating the message through promotional leaflets, television and radio broadcasts, video clips, posters and dedicated websites over the past 3 years. The target groups included primary and secondary school students. In addition, we launched the Low Carbon Living Calculator in 2018 to encourage members of the public to assess their individual carbon emissions, and primary and secondary school teachers and students in Hong Kong have been invited to make use of it. As the expenditure involved in the above work was met by the recurrent expenditure of the ENB and the EPD, we do not have a separate breakdown.

Meanwhile, in the past 3 years (i.e. 2017-18, 2018-19 and 2019-20), the Environment and Conversation Fund allocated a total of \$20 million to support non-profit-making organisations (including primary and secondary schools) to undertake public education activities and projects on climate change. As at February 2020, \$8,813,817 has been granted to primary and secondary schools to carry out their Environmental Education and Community Action Projects with the specific theme on climate change. These projects can raise the awareness of students about climate change through activities such as installation of renewable energy demonstration facilities, seminars, workshops, video production, environmental education dramas and training camps.

- End -

CONTROLLING OFFICER'S REPLY**ENB065****(Question Serial No. 2797)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide a summary of the Government's attendance at international climate action meetings in the past 3 years in the following table:

Date	Location	No. of government representatives attended	Rank of leading officials	Topic of meetings	Public expenditure involved

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 3018)Reply:

The summary of the Government's attendance at international climate action meetings in the past 3 years is set out below:

Date	Location	No. of government representatives attended	Rank of leading officials	Topic of meetings	Public expenditure involved#
21 to 26 October 2017	Paris, France	6	Secretary for the Environment	Steering Committee meeting of the C40 Cities Climate Leadership Group and CityLab 2017	\$381,830
14 to 18 November 2017	Bonn, Germany	6*	Secretary for the Environment	United Nations Climate Change Conference 2017	\$498,510

Date	Location	No. of government representatives attended	Rank of leading officials	Topic of meetings	Public expenditure involved#
20 to 23 May 2018	Tokyo, Japan	6	Secretary for the Environment	C40 Regional Meeting for East, Southeast Asia and Oceania of the C40 Cities Climate Leadership Group	\$172,200
10 to 15 September 2018	San Francisco, USA	6	Secretary for the Environment	Steering Committee meeting of the C40 Cities Climate Leadership Group and the Global Climate Action Summit co-organised by C40 and the Global Covenant of Mayors for Climate and Energy	\$561,800
8 to 13 December 2018	Katowice, Poland	2*	Principal Environmental Protection Officer	United Nations Climate Change Conference 2018	\$116,290
9 to 13 October 2019	Copenhagen, Denmark	5	Secretary for the Environment	C40 World Mayors Summit and Steering Committee meeting of the C40 Cities Climate Leadership Group	\$361,550
9 to 13 December 2019	Madrid, Spain	1*	Senior Environmental Protection Officer	United Nations Climate Change Conference 2019	\$56,880

Expenses include accommodation fees, passages, subsistence allowance for duty outside Hong Kong and sundry expenses (where applicable).

* Attended as member(s) of the Chinese delegation.

- End -

CONTROLLING OFFICER'S REPLY

ENB066

(Question Serial No. 0670)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the fact that discharging wastewater by the catering industry is subject to control under the Water Pollution Control Ordinance (WPCO), please advise on:

- (a) the number of enquiries about the licence granted under the WPCO that the Environmental Protection Department (EPD) received from members of the catering industry in the past 5 years, and the relevant follow-up actions;
- (b) the details of the EPD's law enforcement in the past 5 years regarding the compliance with the requirements under Cap. 358 by the catering industry (including the numbers of inspections conducted, complaints handled, prosecutions instituted and convicted cases); whether, in addition to taking law enforcement actions, the EPD has rendered support to members of the industry to assist them in complying with the relevant requirements;
- (c) the amount of resources allocated by the EPD in the past 5 years for the development of new technologies for treating oil and grease in wastewater;
- (d) the time when the EPD compiled the aforesaid booklet and the criteria adopted for compiling the booklet; whether members of the public were consulted on the booklet's contents; whether the booklet has been amended or updated; if so, the number of times for which amendments were made so far and the date on which amendments were last made; if not, whether the EPD will revise the booklet on a regular basis to facilitate the promotion of new and effective technologies for oil and grease treatment; if the EPD will, the details; if not, the reasons for that; and
- (e) whether the EPD organised any seminar in the past 5 years to promote new technologies for oil and grease treatment to the catering industry; if not, the channels through which the industry may learn of such new technologies.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 75)

Reply:

- (a) Figures on the enquiries received by the Environmental Protection Department (EPD) from members of the catering industry in the past 5 years regarding the licence granted

under the Water Pollution Control Ordinance (WPCO) for the discharge of wastewater are as follows:

Year	2015	2016	2017	2018	2019
Enquiries	27	30	41	36	48

The enquiries mainly concerned whether a licence would be required and the related application procedures. Upon receipt of enquiries from the catering sector, the EPD always explains in detail the particulars required for making applications and renders necessary assistance.

- (b) Statistics on the EPD's enforcement actions taken under the WPCO (Cap. 358) in relation to the catering industry in the past 5 years are as follows:

Year	2015	2016	2017	2018	2019
Inspections	1 598	1 897	1 696	1 653	1 775
Complaints	202	161	207	229	372
Prosecutions (Convictions)	10 (10)	6 (5)	3 (3)	3 (3)	7 (7)

In addition to taking enforcement actions, the EPD officers will also brief restaurant operators on the legal requirements concerned during their inspections. Relevant information on environmental protection as well as the WPCO provisions will also be provided through various channels such as seminars, dedicated websites and information leaflets to facilitate the catering sector's access to necessary green information and guidelines on pollution control technologies. The relevant websites are as follows:

Green Restaurant:

<https://www.epd.gov.hk/epd/english/greenrestaurant/>

Guidelines and References:

<https://www.epd.gov.hk/epd/english/greenrestaurant/guidelines/guidelines.html>

- (c) Under the Recycling Fund, the Government supports the upgrading of the operational capabilities and efficiency of the recycling sector to promote the recovery, treatment and recycling of waste, including oil and grease in wastewater. The recycling sector is welcome to apply for subsidies under the Fund to develop new technologies for treating oil and grease in wastewater. Separately, if tertiary institutes and non-profit-making organisations are interested in conducting research and development projects in relation to new technologies for treating oil and grease in wastewater, they may also apply for funding through the Environmental Research, Technology Demonstration and Conference Projects under the Environment and Conservation Fund.
- (d) To facilitate compliance with the WPCO by the catering sector, the EPD has prepared and disseminated various publicity posters, green information booklets, guidelines and leaflets. All these have been uploaded to the aforesaid Green Restaurant website, furnishing members of the sector with recommendations on and solutions to pollution

control. Among which, the booklet on “Grease Traps for Restaurants and Food Processors” and the “Environmental Guidebook for the Restaurant Trade” published by the EPD introduce various technologies for treating oil and grease in wastewater, including the use of grease traps, chemical coagulants, air flotation, and grease removal devices adopting biological agents and electro-coagulation. As these materials are prepared for the purposes of reference and not policy-making, they are generally compiled in consultation or collaboration with the catering sector only, without any public consultation. The EPD duly updates the websites and information concerned to advise the sector on the latest green information and technologies. The booklet on “Grease Traps for Restaurants and Food Processors” was prepared by the EPD in 1996 with a view to meeting the needs of the majority of restaurants and eateries, taking into account factors such as the quantity and quality of wastewater generation, space available of the restaurants, efficacy of the treatment facilities, cost effectiveness, operation and maintenance requirements, etc. Based on experience gained and feedback from the catering sector, the booklet was revised and supplemented in 1999 and 2000. The EPD also jointly prepared the “Environmental Guidebook for the Restaurant Trade” with the catering sector in 2002, covering practical green measures, latest technologies, management tips and new technologies for treating oil and grease.

- (e) Through regular participation in the bi-monthly Seminar on Restaurant Licensing organised by the Food and Environmental Hygiene Department, the EPD delivers briefings and reference materials on relevant green information to the catering sector to facilitate their environmental compliance, including that with the WPCO requirements. Besides, the Green Restaurant website set up by the EPD also duly uploads and updates green information relating to the catering industry for its members’ reference. To further enhance the sector’s access to the latest pollution control equipment and technical support available in the market, the EPD has compiled the List of Environmental Pollution Control Equipment Suppliers/Contractors for the catering industry. The wastewater treatment facilities set out therein include relevant devices such as grease traps. The List has been uploaded to the Green Restaurant website:

[https://www.epd.gov.hk/epd/sites/default/files/epd/english/greenrestaurant/suppliers/files/sc_contractorlist & disclaimer 201906p.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/english/greenrestaurant/suppliers/files/sc_contractorlist_%201906p.pdf)

- End -

CONTROLLING OFFICER'S REPLY

ENB067

(Question Serial No. 0673)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water (5) Environmental Assessment and Planning

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the management of marine environment, please advise on:

- (a) the respective work performed by the Task Force on Marine Refuse and the Task Force on Emergency Response to Marine Environmental Incidents under the Inter-departmental Working Group on Marine Environmental Management (the Working Group), their manpower arrangement and terms of reference since their establishment;
- (b) the details of the existing notification mechanism on marine incidents between Hong Kong and Guangdong; and
- (c) the attendance rates of the public engagement sessions on clean shorelines and the relevant seminars organised by the Working Group since its establishment.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 79)

Reply:

The Inter-departmental Working Group on Marine Environmental Management spearheaded by the Environmental Bureau has set up the Task Force on Marine Refuse and the Task Force on Emergency Response to Marine Environmental Incidents to focus on the discussion and coordination work within their respective areas as detailed below.

The Task Force on Marine Refuse (TFMR) is mainly responsible for coordinating Government's efforts in tackling marine refuse, monitoring the cleanliness of waters and coastal areas of Hong Kong, as well as coordinating public education programmes and public engagement campaigns. The TFMR is comprised of representatives from various departments including the Agriculture, Fisheries and Conservation Department (AFCD), the Civil Engineering and Development Department, the Drainage Services Department, the Environmental Protection Department (EPD), the Food and Environmental Hygiene Department (FEHD), the Leisure and Cultural Services Department (LCSD) and the Marine Department (MD). Since the establishment of the TFMR, members have been working closely in expanding the cleanup actions for marine refuse; strengthening the monitoring of marine refuse arising and its accumulation pattern; joining hands to clean up some coastal

sites with special refuse accumulation problems (such as Lap Sap Wan in Shek O, a pebble beach at Pak Kok Tsui on Lamma Island, Shui Hau Beach on Lantau Island, etc.); and conducting a number of inter-departmental cleanup operations and joint enforcement actions. Furthermore, the TFMR closely interacts with the public by organising public engagement sessions on clean shorelines from time to time and promoting participation of individuals and organisations in shorelines cleanup activities through the Clean Shorelines Liaison Platform (including the “Clean Shorelines” social platforms, dedicated website, designated hotline and email, etc.), with a view to consolidating community efforts in tackling the marine refuse problem. The TFMR has organised 5 relevant public engagement sessions so far with over 160 participants, which includes representatives of various concern groups and green groups. In addition, 76 shorelines cleanup activities, with over 2 500 participants, have been organised in collaboration with District Councils and various community partners.

The Task Force on Emergency Response to Marine Environmental Incidents (TFER) is mainly responsible for reviewing the contingency plans for marine environmental incidents; formulating a comprehensive response mechanism and coordinating actions to tackle marine environmental incidents; as well as coordinating and overseeing the inter-departmental drill exercises for handling marine environmental incidents. The TFER is comprised of representatives from various departments, including the AFCD, the Department of Health, the EPD, the Fire Services Department, the FEHD, the Government Flying Service, the Government Laboratory, the Hong Kong Police Force, the LCSD and the MD. The TFER has maintained close liaison with the Guangdong authorities to jointly consummate the Hong Kong-Guangdong Cross Boundary Notification Mechanism on Marine Refuse. Upon the launch of a trial of the Notification and Alert System on Marine Refuse in May 2017, the mechanism has enabled one side to activate the System and immediately notify the other in the event of any significant marine environmental incident or heavy rainstorm, facilitating relevant departments to make timely resource deployment and preparation. Since then, the EPD has issued 18 notifications to the Guangdong authorities in response to adverse weather and environmental incidents. Furthermore, relevant members of the Task Force visited the search and rescue centre in Guangdong Province and the anti-pollution base in Gaolan Port in August 2018 to exchange views with the Guangdong side on matters including enhancement of emergency cooperation in marine environmental incidents, joint protection and improvement of the regional marine environment.

As the work of both Task Forces is part of the routine work of the Environment Bureau and relevant government departments, we do not have a breakdown of the expenditure and manpower in this respect.

- End -

CONTROLLING OFFICER'S REPLY

ENB068

(Question Serial No. 0677)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding handling of refuse on various beaches and at sea, please advise on:

- (a) the staffing of the government departments responsible for collection and cleaning up of marine refuse and the division of work among these departments;
- (b) the total amount of refuse collected by the Environmental Protection Department in the past 3 years (2017-18 to 2019-20) (please set out the information by existing zoning and by month).

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 83)

Reply:

Various government departments collect and clean up marine refuse (including floating refuse and shoreline refuse washed ashore) at the respective locations that are within their purview. The Marine Department, the Leisure and Cultural Services Department and the Agriculture, Fisheries and Conservation Department have outsourced the cleaning services of marine refuse to cleaning contractors. Therefore, the collection of marine refuse does not involve any staffing of the Government. As for the Food and Environmental Hygiene Department, apart from outsourcing to cleaning contractors, its routine cleaning services also include collecting and cleaning up of marine refuse. No separate breakdown of the staffing involved is available.

In the past 3 years, the total amount of marine refuse collected by the above departments each month is tabulated below:

	Total amount of marine refuse collected (tonnes)		
	2017-18	2018-19	2019-20
April	1 110	1 121	1 165
May	1 234	1 162	1 279
June	1 405	1 352	1 353
July	1 503	1 390	1 428
August	1 890	1 418	1 500
September	1 605	2 005	1 411
October	1 314	1 514	1 290
November	1 222	1 216	1 155
December	1 070	1 065	1 043
January of the following year	1 091	1 072	1 030
February of the following year	1 018	1 016	Note
March of the following year	1 108	1 125	Note

Note: The figures are under compilation.

As the zoning demarcations adopted by various departments on cleaning up of marine refuse are different, the total amount of marine refuse collected cannot be further broken down by zone.

- End -

CONTROLLING OFFICER'S REPLY**ENB069****(Question Serial No. 0706)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (4) WaterControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the Water Quality Objectives, please advise on the following:

- (a) What are the details of the tests for the Water Quality Objectives? How will it be regarded as compliance with the Water Quality Objectives?
- (b) What are the definitions of marine waters and inland waters respectively?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 46)Reply:

Hong Kong is divided into a total of 10 Water Control Zones (WCZs), each containing marine and inland waters and having a set of specific Water Quality Objectives (WQOs). "Marine waters" refer to all the waters connected to the sea, while "inland waters" refer to the environmental water bodies on land, including rivers, streams, watercourses, lakes, etc.

The WQOs are composed of a series of physical, chemical and biological parameters, and are used as the scientific benchmarks for measuring the state of health of the water environment and ecosystem to protect different beneficial uses of various waters. The Environmental Protection Department (EPD) assesses WQO compliance rates every year based on data at routine monitoring stations located within various waters of Hong Kong, making reference to relevant parameter limits and calculation methods as set out in the WQOs.

The key WQOs for marine and inland waters are as follows:

- The key WQOs for marine waters:

Parameter	WQOs
Dissolved Oxygen (Depth-averaged)	<ul style="list-style-type: none"> ≥ 4 mg/L (for 90% of the samples collected during the year); Fish Culture Subzones and Mariculture Subzones: ≥ 5 mg/L (for 90% of the samples collected during the year)

Parameter	WQOs
Dissolved Oxygen (Bottom)	≥ 2 mg/L (for 90% of the samples collected during the year)
Unionised Ammonia	Annual mean ≤ 0.021 mg/L
Total Inorganic Nitrogen	Specific to each WCZ: annual mean ranging from ≤ 0.1 mg/L to ≤ 0.7 mg/L
<i>E. coli</i>	<ul style="list-style-type: none"> Secondary Contact Recreation Subzones, Fish Culture Subzones and Mariculture Subzones: annual geometric mean ≤ 610 cfu/100mL; Bathing Beach Subzones: annual (March to October) geometric mean ≤ 180 cfu/100mL

- The key WQOs for inland waters:

Parameter	WQOs
pH	<ul style="list-style-type: none"> Inland waters for abstraction for potable water supply: 6.5 - 8.5; Other inland waters: 6.0 - 9.0
Suspended Solids	Annual median: <ul style="list-style-type: none"> Inland waters for abstraction for potable water supply: ≤ 20 mg/L; Other inland waters: ≤ 25 mg/L
Dissolved Oxygen	≥ 4 mg/L
Chemical Oxygen Demand	<ul style="list-style-type: none"> Inland waters for abstraction for potable water supply: ≤ 15 mg/L; Other inland waters: ≤ 30 mg/L
Five-day Biochemical Oxygen Demand	<ul style="list-style-type: none"> Inland waters for abstraction for potable water supply: ≤ 3 mg/L; Other inland waters: ≤ 5 mg/L

- End -

CONTROLLING OFFICER'S REPLY

ENB070

(Question Serial No. 1606)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

In response to the eruption of the movement of opposition to the proposed legislative amendments last year, the Environmental Protection Department took some countermeasures in mid-November last year and immediately announced a temporary suspension of glass bottle collection services across the territory. There are media reports that the Administration has progressively resumed glass bottle collection services in some districts since mid-January this year, but some members of the public have pointed out that glass bottle collection services in some housing estates have not yet been resumed. In this connection, will the Administration advise on the following:

1. Does the Administration has a timetable for the resumption of collection services in various districts? When can the above services be fully resumed?
2. Please tabulate the details of the Community Green Stations (CGSs) in various districts at the present stage, including the progress, sites selected, number of recycling bins, etc.;
3. What are the manpower and expenditure allocated for the CGSs in various districts?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 17)

Reply:

Glass containers are fragile and may cause danger to the public if they are not handled properly. In view of continued escalation of illegal and violent attacks in society earlier, the Government temporarily suspended waste glass container collection service and recalled the glass container recycling bins from the respective collection points starting from 16 November 2019 to better safeguard public safety. Taking into account the recent social situation, the Government has gradually resumed the waste glass container collection service, mainly starting from the collection points with proper management or relatively low risk of being interfered. In addition, the Environmental Protection Department's Community Green Stations (CGSs) and Community Recycling Centres have already resumed waste glass container collection service at the facilities. As at the end of February

2020, about 45% of the glass container collection points across the territory have resumed service. We will continue to make suitable arrangement to resume the waste glass container collection service at different locations subject to the social situation.

Details of the progress and sites selection of the CGSs in various districts are set out in the table below:

CGS	Site	Latest Progress
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017.
Tuen Mun CGS	9 Tuen Yee Street	The CGS commenced operation in September 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	The CGS commenced operation in November 2018.
Tai Po CGS	25 Dai Wah Street	The CGS commenced operation in October 2019.
Islands CGS	1 Chung Mun Road, Tung Chung, Lantau	The CGS is expected to commence operation in 2020.
Sai Kung CGS	3 Po Lam Lane	Design and construction works are in progress.
Wan Chai CGS	Wan Shing Street, near Hung Hing Road	Design and construction works are in progress.
Wong Tai Sin CGS	Po Kong Village Road, near Tsz Wan Shan Road	The site has been confirmed and the application procedure for temporary government land allocation is in progress.

CGS	Site	Latest Progress
Tsuen Wan CGS, Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site yet to be confirmed	We are continuing with site search and other associated preparatory work.

The CGS have set up totally about 990 glass container collection points in various districts. The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation was about \$31 million in 2019. At present, a total of 18 posts are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

- End -

CONTROLLING OFFICER'S REPLY

ENB071

(Question Serial No. 1607)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

In the Budget previously announced by the Financial Secretary, greater emphasis was given to electric vehicles (EVs) in respect of environmental protection. He mentioned that the Clean Air Plan would be updated to examine the policy of further promoting the use of EVs. Apart from electric transportation, it is proposed in the Budget that a \$200 million Green Tech Fund will be set up to support research and development (R&D) and application of decarbonisation and green technologies, and the sharing of R&D findings, with a view to promoting the development of decarbonisation and green technologies. In this connection, will the Government advise this Committee on the following:

1. Under the Green Tech Fund promoted by the Administration, what is the ceiling of the funding applications? What are the details?
2. What is the latest progress of the Government's work on promoting the recycling of waste EV batteries?
3. Regarding the \$80 million earmarked by the Government to launch a pilot scheme for electric public light buses, how will the funding be allocated to various light bus operators to implement the scheme?
4. What are the locations of the suitable on-street parking spaces for installing EV chargers and the quick charging stations for EVs mentioned by the Government? What are the reasons for choosing the above locations?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 18)

Reply:

- 1) It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite

low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department (EPD). As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

- 2) Waste EV batteries have to be properly handled under the Waste Disposal Ordinance (Cap. 354) and its subsidiary Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). Most EV manufacturers or agents have currently engaged licensed collectors to collect the waste batteries of their brands' EVs. After proper preliminary treatment (e.g. sorting, discharging and insulating) and packaging, these waste EV batteries are exported to appropriate treatment facilities in Japan, Korea or Belgium for recycling. Although the age of most EVs in Hong Kong remains low and the number of retired EV batteries remains small at this stage, as EVs will become more popular in future, the EPD will embark on a study on how to promote recycling of new energy vehicle batteries. Apart from analysing overseas experiences, the EPD will maintain close liaison with the trade and EV suppliers to explore solutions that are applicable to local situation, so as to enhance environmental protection.
- 3) The Government has earmarked \$80 million to the launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable public light bus (PLB) routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

- 4) Provision of on-street parking spaces is mainly to cater for short-term parking needs, and such spaces are usually installed with parking meters to accelerate the turnover of parking spaces for use by more drivers. Taking into account the power supply and space constraints, potential impact on nearby traffic as well as related considerations such as other drivers' parking needs, the Government has to look for suitable on-street parking spaces to install charging facilities. Around 10 possible sites have initially been identified for such installation and their feasibility is under detailed study. When these sites are confirmed to be suitable for installing on-street charging facilities, the Government will study on introducing a pilot scheme on installation of charging facilities.

In addition, the Government commissioned a consultancy study in October 2019 to look for suitable sites in 18 districts of Hong Kong to set up public quick charging stations for trial. After completion of the study, we will explore suitable options for developing quick charging stations.

- End -

CONTROLLING OFFICER'S REPLY

ENB072

(Question Serial No. 1608)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Harbour Area Treatment Scheme, one of the most important environmental protection projects in Hong Kong, has an objective to improve the water quality of Victoria Harbour. However, it is costly and did not go smoothly when the construction works commenced in 1995. Regarding the testing and improvement of the water quality of Victoria Harbour, will the Government advise this Committee on the following:

1. What was the respective marine water quality grading of Victoria Harbour recorded in each of the past 3 financial years?
2. What were the manpower involved and expenditure incurred by the Government for testing and improving the water quality of Victoria Harbour in the past 3 financial years?
3. Will the Administration extend the above scheme to the waters in other districts, such as Tuen Mun District?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 19)

Reply:

In 2017, 2018 and 2019, the overall Water Quality Objective compliance rate of Victoria Harbour was 83%, 97% and 97% respectively. As the monitoring of the water quality of Victoria Harbour and the implementation of water quality improvement measures are part of the routine duties of the Environmental Protection Department and the Drainage Services Department, there is no breakdown on the expenditure and manpower involved in this regard.

Apart from the Harbour Area Treatment Scheme (HATS), the Government has formulated Sewerage Master Plans and has been developing appropriate sewage infrastructure in various districts according to their latest population estimates, development needs and water quality requirements. Taking Tuen Mun as an example, the district is already equipped with the Pillar Point Sewage Treatment Works, which has the same treatment level as the

sewage treatment works of the HATS and has the capacity of serving the entire district and protecting the quality of North Western Waters. In addition, the entire district is served by a sewerage system which is being continuously extended to cover the peripheral villages and new development areas. As at January 2020, the system has been extended to 10 villages. Overall speaking, Hong Kong's public sewerage system has already covered over 93% of its population.

- End -

CONTROLLING OFFICER'S REPLY

ENB073

(Question Serial No. 1609)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The estimated financial provision for the Nature Conservation Programme of the Environmental Protection Department for the current financial year is 157.9% higher than that for 2019-20. Please give an account of the specific allocation of the above newly increased expenditure, staffing and posts, salaries and operational expenses as well as the details of work.

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 20)

Reply:

The Environmental Protection Department launched the Countryside Conservation Funding Scheme (CCFS) in October 2019 to support non-profit-making organisations to implement countryside conservation and revitalisation projects. The increased estimates under this Programme is mainly earmarked for meeting the cash flow requirements for the CCFS, in which no new staffing or operating expenses are involved.

- End -

CONTROLLING OFFICER'S REPLY

ENB074

(Question Serial No. 1610)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Matters Requiring Special Attention in 2020-21 that the Administration will continue to plan and implement the various landfill extension projects. In this connection, please advise on the work progress of the West New Territories Landfill Extension Scheme and East New Territories Landfill Extension Scheme, as well as the estimated expenditure and the staffing for the 2020-21 financial year.

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 21)

Reply:

We are implementing the extension schemes of the 3 strategic landfills (i.e. the South East New Territories (SENT) Landfill, the North East New Territories (NENT) Landfill and the West New Territories (WENT) Landfill). The work progress is as follows:

The SENT Landfill Extension Scheme

- (i) The site involved was handed over to the contractor in 2018; and
- (ii) The basic extension works is expected to be completed in 2021 and the landfill will then start receiving construction waste.

The NENT Landfill Extension Scheme

- (i) The interfacing issues between the extended works and the existing landfill are being taken forward and implemented progressively; and
- (ii) The tendering exercise is expected to be conducted within this year.

The design and site investigation consultancy study of the WENT Landfill Extension Scheme

- (i) The review of the outline design of the project has been substantially completed;

- (ii) The study on the interfacing issues of the extension scheme with the neighbouring projects and facilities (such as the existing power plant, the WENT Landfill, the T • PARK and other government facilities under planning) is ongoing; and
- (iii) The preparatory work for the planning of the associated works is ongoing.

The estimated total expenditure on the design, studies and works of all the extension schemes above in 2020-21 is \$683 million. As the above work is mainly undertaken by relevant staff of the Environmental Infrastructure Division of the Environmental Protection Department, there is no separate breakdown of the manpower resources required for individual projects.

- End -

CONTROLLING OFFICER'S REPLY

ENB075

(Question Serial No. 1611)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department (EPD) stated in the Matters Requiring Special Attention in this Budget that the Administration would prepare to tighten the emission standards for first registered motor cycles to Euro IV and first registered light buses and buses to Euro VI in phases starting from the second half of 2020. In this connection, will the Government advise this Committee on the following:

1. What is the implementation timetable for this plan?
2. Has the EPD consulted the stakeholders on the proposed plan? If yes, what is the outcome of the consultation? If no, what are the reasons?
3. What are the details of the incentive measures under the plan?
4. What are the anticipated number of vehicles involved in the progressive phasing out of Euro IV diesel commercial vehicles by the end of 2023 and the details?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 22)

Reply:

Tightening the emission standards of first registered motor cycles, light buses and buses

To continuously improve roadside air quality, the Government will tighten the emission standards of local motor vehicles, with reference to the international developments in vehicle emission standards and the supply of compliant vehicles to Hong Kong. The Government is now carrying out the work for the amendment of the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J), with a target of implementing Euro 4 emission standards on first registered motor cycles starting from 1 October 2020, and implementing Euro VI emission standards on first registered light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) starting from 1 March 2021.

We have consulted the relevant trades regarding the proposals, and consulted the Advisory Council on the Environment and the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo) on 3 December and 19 December 2018 respectively.

Phasing out of Euro IV diesel commercial vehicles

To continuously improve roadside air quality, the Environmental Protection Department plans, by making reference to the scheme of phasing out pre-Euro IV diesel commercial vehicles (DCVs), to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue licences of the relevant vehicles after the specified deadlines.

We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia of 15% of the average vehicle body price for goods vehicles assembled with additions.

We have consulted the relevant trades regarding the scheme, and the trades in general welcomed the scheme. Furthermore, the details of the scheme received support from the EA Panel of the LegCo in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB076

(Question Serial No. 1612)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The air pollution problem in Hong Kong has become increasingly serious. However, there is not much discussion on environmental issues in this year's Budget and the sections relating to climate change and air pollution are just a repetition of the old tale. Furthermore, the Air Quality Health Index recorded by Environmental Protection Department reached "Very High" level at 16 monitoring stations in November last year. If the Government fails to come up with solutions in a timely manner, this will cause an irreversible impact on the health of the public. In this connection, will the Administration advise this Committee on the following:

1. What were the percentages of the emissions from different types of vehicles in the total vehicle emissions in Hong Kong?
2. Ever since the Environmental Protection Department has used roadside sensing equipment to detect vehicle emissions, what was the average number of vehicles issued with an Emission Testing Notice each month over the past financial year? Please provide a breakdown of figures by vehicle type.
3. Please set out the ambient concentration limits for respirable suspended particulates, fine suspended particulates, nitrogen dioxide, sulphur dioxide and ozone in various districts in the past year.
4. Regarding the Administration's reply to my question on emission reduction measures for local motor vehicles and vessels (ENB078), what is the effectiveness of the said measures in the past financial year?

Asked by: Hon HO Kwan-yiu, Junius (LegCo internal reference no.: 23)

Reply:

1. The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The vehicle emission inventory for 2018 is still under compilation. The estimated percentages of emissions from different types of vehicles in the total vehicle emissions in 2017 are tabulated as follows:

Vehicle type	Percentage in the air pollutant emissions				
	Respirable suspended particulates (RSP)	Fine suspended particulates (FSP)	Nitrogen oxides (NOx)	Volatile organic compounds (VOC)	Carbon monoxide (CO)
Motorcycle	1%	1%	1%	67%	12%
Taxi	0%	0%	19%	4%	28%
Private car	6%	6%	3%	14%	24%
Light goods vehicle	17%	17%	18%	2%	3%
Medium & heavy goods vehicle	37%	37%	28%	3%	6%
Private light bus	1%	1%	1%	1%	2%
Public light bus	8%	8%	4%	6%	20%
Non-franchised bus	11%	11%	9%	2%	2%
Franchised bus	19%	19%	18%	1%	4%
Total	100%	100%	100%	100%	100%

Note: May not add up to 100 due to rounding.

- The EPD has been using mobile roadside remote sensing equipment to detect petrol and liquefied petroleum gas vehicles with excessive emissions since 1 September 2014. As at the end of February 2020, some 4.23 million vehicle counts have been monitored. In 2019, the average monthly number of emission testing notices (ETNs) issued is tabulated by vehicle type as follows:

Vehicle type	Average monthly no. of ETNs issued in 2019
Light goods vehicle	<1
Private car	About 120
Light bus	About 30
Taxi	About 300

- The concentrations of RSP, FSP and sulphur dioxide (SO₂) recorded at various air quality monitoring stations (AQMSs) of the EPD in 2019 all met the relevant Air Quality Objectives (AQOs). For nitrogen dioxide (NO₂), its concentration recorded at some AQMSs still exceeded the concentration limit as set out in the AQOs. Nevertheless, the annual average concentrations of ambient and roadside NO₂ in 2019 have dropped by about 30% respectively as compared with 2013, indicating that the measures taken to reduce air pollutant emissions in recent years are effective. As for ozone (O₃), apart from the influence of regional photochemical smog, the vehicle emission control measures implemented in recent years have reduced the emission of nitric oxide (NO), resulting in less NO to react with O₃. As a result, the O₃

concentration level has increased, thus failing to comply with the concentration limit as set out in the AQOs.

4. The progress of the key measures implemented to cope with emissions from local vehicles and vessels is as follows:
 - The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in mid-2023.
 - As at the end of February 2020, the Pilot Green Transport Fund (PGTF) has approved a total of 183 applications. The Government has completed a review of the scope of the PGTF, and proposes to inject an additional \$800 million into the PGTF to extend its scope.
 - The Government is proceeding to amend the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J), with a target of implementing Euro 4 emission standards on first registered motor cycles starting from 1 October 2020, and implementing Euro VI emission standards on first registered light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) starting from 1 March 2021.
 - Regarding phasing out pre-Euro IV diesel commercial vehicles (DCVs), as at the end of February 2020, about 77 900 DCVs have been granted ex-gratia payments, accounting for about 95% of the eligible vehicles and the ex-gratia payments involved were about \$10.5 billion.
 - Making reference to the scheme of phasing out pre-Euro IV DCVs, the EPD plans to adopt the incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs by the end of 2027 and cease to issue licences of relevant vehicles after the specified deadlines. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.
 - In April 2008, the Government launched a Tax Incentives Scheme for Environment-friendly Commercial Vehicles (the Scheme) to encourage vehicle owners to use environment-friendly commercial vehicles (EFCVs) with exhaust emissions that out-perform the prevailing statutory emission standards. From the implementation of the Scheme to the end of December 2019, the number of first registered EFCVs was about 67 500 and the amount of the first registration tax concession was about \$1.8 billion.
 - The Government is fully subsidising the franchised bus companies to purchase 36 single-deck electric buses for conducting a two-year trial on different routes. At present, 33 electric buses have commenced operation. The remaining 3 buses are expected to commence operation in 2020.

- The EPD is now working with the Transport Department and the franchised bus companies in drafting the technical specifications for retrofitting Euro IV and V double-deck franchised buses with enhanced selective catalytic reduction systems and the detailed arrangements of the trial. The trial scheme is expected to commence in 2020.
- To improve roadside air quality and protect public health, the Government set up Franchised Bus Low Emission Zones (FBLEZs) at the busy road sections in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses to run in these zones. To further improve roadside air quality, we have tightened the emission requirements for buses running in the FBLEZs to Euro V standards starting from 31 December 2019.
- The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries can be replaced by new energy ferries in the long run. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of about 24 months.

- End -

CONTROLLING OFFICER'S REPLY

ENB077

(Question Serial No. 1958)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding illegal disposal of waste and waste charging, please advise on:

1. the expenditures involved and manpower arrangement for combating illegal disposal of waste in the past 3 years, as well as the relevant details of work, estimated expenditure and manpower arrangement in the coming year;
2. the numbers of complaints received by the Administration about illegal disposal of waste, as well as the numbers of persons arrested, the numbers of prosecutions, conviction rates, the maximum and minimum penalties and total amounts of fines in the past 3 years;
3. whether the expenditure involved and manpower arrangement for combating illegal disposal of waste will be increased accordingly if waste charging is implemented smoothly; if yes, the details; if no, the reasons;
4. the details of the work, expenditure involved and manpower arrangement given that the Administration mentioned in the Matters Requiring Special Attention in the coming year that it would continue to take forward the legislative proposal of municipal solid waste charging (MSW charging); whether there will be changes in the details of the Administration's work, expenditure involved and manpower arrangement if the bill on MSW charging is not passed by the current-term Legislative Council; if yes, the details.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 32)

Reply:

1. To step up efforts in combating illegal disposal of waste, the Environmental Protection Department (EPD) will continue to review the enforcement strategy from time to time and increase the installation of surveillance camera systems progressively at blackspots in the territory to facilitate enforcement and enhance the deterrent effect. In the meantime, apart from the manpower arrangement for the daily integrated enforcement duties, the EPD has set up 4 additional dedicated enforcement teams comprising a total of 16 staff members to conduct proactive patrols against waste disposal at various districts and handle the relevant complaints, which help expedite collection of evidence and referrals to relevant departments for waste clearance.

The EPD will continue to maintain close liaison with the relevant departments through inter-departmental collaboration, including exchange of intelligence, sharing of information and joint working meetings, etc., to monitor the overall illegal waste disposal situation and make concerted efforts to combat illegal disposal activities in the coming year according to relevant departments' purview and legislation.

As the relevant enforcement work is part of the integrated enforcement duties of the EPD, there is no separate breakdown of the expenditure on staffing involved.

2. The numbers of complaints about illegal disposal of waste handled by the EPD, as well as the numbers of prosecutions, conviction rates, the numbers of offenders, the maximum and minimum fines and total amounts of fines in the past 3 years are as follows:

	Year		
	2017	2018	2019
Number of complaints*	2 962	2 819	2 319
Number of prosecutions			
(1) Number of summonses issued	198	184	180
(2) Conviction rate by summonses	98%	95%	99%
(3) Number of Fixed Penalty Notices (FPN) issued **	177	246	173
(4) Number of offenders	375	430	353
Maximum fines (\$) #	25,000	24,000	30,000
Minimum fines (\$) #	1,200	1,000	1,200
Total amount of fines (\$) ##	1,282,900	1,222,400	934,000

Notes:

- * Including multiple complaints which may have arisen from a single case.
- ** The fine level of the FPN is \$1,500.
- # The amounts were the maximum and minimum fines of the summons cases.
- ## Including summons and fixed penalty cases.

3. As regards the use of pre-paid designated garbage bags/labels which would be required under municipal solid waste charging (MSW charging), having regard to some 22 000 waste reception points, more than 45 000 buildings and numerous waste reception points across the territory, we plan to adopt a risk-based approach in carrying out enforcement action by targeting at blackspots based on complaints and intelligence. The EPD and the Food and Environmental Hygiene Department (FEHD) may, according to preliminary estimation, require a few hundred enforcement staff.

We will further review and ascertain the actual manpower requirements for the enforcement of MSW charging in future, having regard to the public response to our public education and publicity work; the effectiveness of various waste reduction and recycling measures (including the on-site assistance provided by the newly established outreaching teams; the provision of recurrent funding to the Community Recycling Centres; the launching of the pilot schemes for the provision of free collection services in respect of waste plastics from non-commercial and non-industrial sources as well as food waste from some government and public organisations, schools, tertiary institutions, non-governmental organisations and private housing estates; and the

launching of a pilot scheme on reverse vending machines for plastic beverage containers); and the effectiveness of the FEHD's stepped-up efforts to deal with littering and fly-tipping problems.

4. We will continue to facilitate the scrutiny of the bill on MSW charging by the Bills Committee of the Legislative Council so as to implement MSW charging according to the "polluter pays" principle. No matter whether the bill will be passed in the current legislative session, the EPD will continue to carry out publicity and educational work and other preparatory work for the implementation of MSW charging, which include preparing relevant complementary systems, such as a manufacturing, inventory and distribution system for the designated garbage bags/labels, with some 4 000 sales points in the territory; upgrading the infrastructure at the waste reception facilities at landfills and refuse transfer stations to implement the charging mode of "gate-fee"; and carrying out Community Involvement Projects and pilot projects regarding MSW charging in different types of premises so that participants can try out MSW charging in actual settings and gain first-hand experience in quantity-based charging, which will promote the awareness and acceptance of different stakeholders and members of the public towards waste reduction and waste charging and prepare them for the implementation of MSW charging after the bill is passed in future.

The aforesaid work will be undertaken by 53 EPD staff in the 2020-21 financial year, and the annual estimated expenditure on salaries involved is about \$43 million, while about \$32 million is set aside for the preparatory work for the implementation of MSW charging.

- End -

CONTROLLING OFFICER'S REPLY

ENB078

(Question Serial No. 1959)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Department's work on reduction of food waste, the relevant questions are as follows:

1. Regarding the Food Wise Hong Kong Campaign, please advise on the following:

(a) the latest number of participating merchants, and the details and expenditure of each activity held last year; and

(b) the details of the work and estimated expenditure in the coming year.

2. The Administration mentioned in Reply Serial No. ENB086 of last year that a pilot scheme had been launched since 1 July 2018 to source separate and collect food waste generated from 40 wet markets and cooked food centres managed by the Food and Environmental Hygiene Department, as well as 9 shopping centres managed by the Housing Authority, for delivery to the Organic Resources Recovery Centre Phase 1 (O • PARK1) for recycling. Please advise on the following:

(a) the total numbers of stalls, operators of cooked food venues and merchants of shopping centres covered by the pilot scheme, the numbers of stalls/venue operators/merchants participating in, declined to participate in and dropped out of the pilot scheme; and the main reasons why those stalls/venue operators/merchants declined to participate in or dropped out of the pilot scheme;

(b) the quantity of food waste collected and the amount of biogas and compost generated each month since the launch of the pilot scheme; and

(c) the work details of the pilot scheme, the expenditure to be involved and the manpower arrangements in the coming year, including whether there are plans to expand or regularise the pilot scheme.

3. Please set out the quantity of food waste handled by the O • PARK1 each month since it commenced operation, and among such waste, the quantity and percentage of food waste from the commercial and industrial sectors, and the amount of biogas and compost generated and their outlets.

Please advise on the following:

4. the work details of Phases 1, 2 and 3 of the O • PARK, including the expenditures and manpower resources involved in the last year and the coming year;

5. the progress and details of the pilot scheme on free collection of food waste from commercial and industrial sources, including the quantity of food waste collected each month, as well as the expenditures and manpower resources involved in the last year and the coming year;
6. the details of the Administration's work/relevant projects in promoting/funding the collection of domestic food waste in the past 2 years, including the expenditures involved, manpower arrangements, locations of the projects, the quantity of food waste collected each year, and the work details for the coming year; and
7. whether the Administration has assessed if the quantity of food waste in Hong Kong has reduced since the implementation of the campaign and other food waste reduction initiatives; if yes, of the details; if not, of the reasons for that.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 33)

Reply:

1. The Food Wise Hong Kong Campaign has been promoting a food wise and waste less culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launching in 2013. The contents of the schemes and details of the activities of the Food Wise Hong Kong Campaign mainly include:
 - The Food Wise Charter – As at February 2020, about 870 organisations have signed the Food Wise Charter and are committed to reducing food waste at source. The signees include public organisations and public utilities, commercial and industrial (C&I) sectors, food and beverage sectors, hotel sector, property development and management sectors, higher education institutions, secondary schools, primary schools and kindergartens, etc.
 - The Food Wise Eateries Scheme – The Scheme aims to encourage the food and beverage sectors to reduce food waste at source together with customers through offering food in different portion sizes and adopting food waste reduction measures. As at February 2020, about 330 and 580 eateries have been awarded with gold class and silver class status respectively.
 - “Food Wise” Talk – As at February 2020, 123 “Food Wise” talks were held by the Government with a total of over 11 400 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, reduction of food waste at source, treatment of food waste, food waste separation and recycling, promotion of using less disposable plastic tableware, etc.
 - “Food Wise” Roving Exhibition – As at February 2020, a total of 22 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community, as well as encourage the public to reduce food waste at source and avoid and reduce food wastage. The roving exhibitions featured display panels with food waste reduction tips, including Food Wise Recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. These exhibitions attracted over 30 000 visitors in total.

- The “Big Waster” Facebook and Instagram pages – The “Big Waster” symbolising food wastage in the Food Wise Hong Kong Campaign has strengthened interaction with the public through the Facebook and Instagram pages in which relevant information, including details about food waste reduction, is provided. Up to February 2020, the “Big Waster” Facebook has received more than 65 000 “likes” and there are over 9 200 “followers” on Instagram.
- Publicity activities – To publicise messages related to reduction of food waste and promotion of using less disposable plastic tableware through television and radio stations, “Big Waster” posters, leaflets and slogans.

The total expenditure of the Food Wise Hong Kong Campaign in 2019-20 was about \$4 million.

The Government will continue to promote a food wise and waste less culture through deepening the above schemes and activities. The total estimated expenditure of the Food Wise Hong Kong Campaign in 2020-21 is about \$6.6 million.

2&5. To encourage the C&I sectors to recycle food waste properly and achieve the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection on 1 July 2018 to separate and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the Organic Resources Recovery Centre Phase 1 (O • PARK1) for recovery.

There are some 5 800 stalls in total at the 40 public markets and cooked food venues managed by the FEHD. The FEHD has arranged a contractor to proactively collect food waste generated from all these stalls. There are some 300 wet goods stalls/tenants of eatery shops in total at the 9 shopping centres and wet markets managed by the HA. Among them, more than one third has participated in the pilot scheme. To further promote recycling of food waste and enhance the quality of food waste collected, the Environmental Protection Department (EPD) has arranged a contractor to provide suitable guidance and training for operators of public market stalls, cooked food venues and shopping centres, including advising them on how to practise source separation, collection and delivery of food waste. An incentive programme has been launched to encourage the shops to separate food waste at source and gather it for collection and delivery.

The EPD has also been collecting food waste generated from lunch suppliers for primary and secondary schools and food left uneaten by students after lunch under the above scheme since February 2019. At present, 10 school lunch suppliers have participated in the scheme. In addition, the Agriculture, Fisheries and Conservation Department (AFCD) has also engaged outsourced service contractors to collect food waste at 2 of its wholesale food markets for delivery to the O • PARK1 for turning into energy since August 2018.

Since the implementation of phase 1 of the pilot scheme on free food waste collection, the quantity of food waste collected was about 310 tonnes per month, bringing a cumulative total of about 6 250 tonnes, with a total of about 840 000 cubic metres of biogas and 130 tonnes of compost generated.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases in the second half of 2020, which will extend the service to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale food markets under the AFCD, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have participated in the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund (ECF) or with experience in food waste separation at source. Provision of free collection service for food waste from all sources across the territory is subject to the experiences gained from the pilot scheme, as well as the progress of developing treatment facilities for treating food waste in Hong Kong.

In 2019-20 and 2020-21, the estimated expenditures for the implementation of the pilot scheme on free food waste collection services are about \$25.2 million and \$40 million respectively. The relevant supervision work will be absorbed by the existing establishment.

3. With the adoption of biodegradation technologies in the O • PARK1, food waste is not only treated properly, but is also turned into energy through biogas generation, and the residue produced after anaerobic digestion will also be converted into compost. At present, the O • PARK1 only collects C&I food waste and treats on average about 3 000 tonnes per month, bringing a cumulative quantity of about 53 000 tonnes of food waste, with about 7.2 million cubic metres of biogas, 10 million kWh of electricity and 1 080 tonnes of compost generated. Electricity generated from the O • PARK1 is not only used to sustain its operation. The surplus electricity generated is also exported to the power grids. The compost produced is mainly used in infrastructure projects for landscaping applications.
4. The O • PARK1 was completed and commissioned in July 2018. The expenditures involved in the 2019-20 and 2020-21 financial years are tabulated below:

Year	Capital cost (\$m)	Operating expenditure (\$m)
2019-20	111	47
2020-21	13	55

The Design-Build-Operate contract of the O • PARK2 was awarded in August 2019. The facility is scheduled for commissioning in 2022 with a daily food waste treatment capacity of 300 tonnes. The expenditures involved in the 2019-20 and 2020-21 financial years are tabulated below:

Year	Capital cost (\$m)
2019-20	94
2020-21	460

The EPD is conducting a study of the O • PARK3 and the facility is initially scheduled for commissioning in 2026 with a daily food waste treatment capacity of 300 tonnes. The expenditures involved in the study in the 2019-20 and 2020-21 financial years are tabulated below:

Year	O • PARK3 (\$m)
2019-20	5.85
2020-21	4.51

The relevant work above will be absorbed by the existing establishment.

6. Regarding the promotion of domestic food waste recycling, since 2011, the EPD has implemented the “Food Waste Recycling Projects in Housing Estates” through the ECF to support private housing estates to install food waste composters and organise educational and promotion activities to encourage public participation in food waste recycling. This funding scheme has been closed for applications. All funded private housing estates may continue to use the on-site food waste composters for converting part of the domestic food waste into compost for landscape planting. These estates are welcome to join the pilot scheme on free food waste collection.

Up to March 2020, a total of 36 housing estates have received funding support with a total amount of approved funding of about \$40 million. The funded housing estates are distributed throughout Hong Kong, Kowloon and the New Territories. The total amount of funding approved for these projects and the quantities of food waste recovered over the past 2 years are set out below:

Year	Funding approved (\$m)	Quantity of food waste recovered (tonnes)
2018-19	3.27	389
2019-20	1.46 ^(Note 1)	181 ^(Note 2)

Note 1: The amount of funding approved as at the end of December 2019.

Note 2: The estimated quantity of food waste recovered as at the end of March 2020.

The EPD has also implemented food waste reduction and recycling projects under the “Community Waste Reduction Projects” funded by the ECF to support the projects which mainly reduced and recycled domestic food waste. The funding approved and quantities of food waste recovered under the food waste reduction and recycling projects in the past 2 years are as follows:

Year	Funding approved (\$m)	Quantity of food waste recovered (tonnes)
2018-19	3.71	188
2019-20	12.33 ^(Note 3)	258 ^(Note 4)

Note 3: The amount of funding approved as at the end of December 2019.

Note 4: The estimated quantity of food waste recovered by on-site composters as at the end of March 2020; and some of the food waste collected at irregular intervals and delivered to the O • PARK1 for treatment under this funding project as at the end of January 2020.

In addition, we will make use of part of the treatment capacities of the O • PARK1 and the “food waste/sewage sludge anaerobic co-digestion” trial scheme at the Tai Po Sewage Treatment Works (STW) to provide free collection and recycling services for a portion of the domestic food waste. Priority will be given to food waste from housing estates with experience in food waste separation and recycling, such as the 36 private housing estates that have participated in the “Food Waste Recycling Projects in Housing Estates” under the ECF. We are also planning to extend the application of the “food waste/sewage sludge anaerobic co-digestion” technology to the Sha Tin STW. The project is anticipated to commence operation in 2022. Domestic food waste will be collected in Sha Tin for trial.

7. According to the reports on “Monitoring of Solid Waste in Hong Kong” compiled by the EPD, the average daily quantity of food waste disposed of at landfills was 3 565 tonnes in 2018, which was 2.6% lower than that of 2017. It was mainly driven by the decrease of C&I food waste. The O • PARK1 has started receiving and treating food waste from C&I sectors since July 2018, which has facilitated waste reduction and recovery. The per capita disposal rate of domestic food waste has remained at 0.32 kg per day. On this basis, we will continue with the implementation of the Food Wise Hong Kong Campaign and promotion of a food wise culture in the community, and through the legislative proposal of municipal solid waste charging, to encourage behavioural change of the public to reduce food waste.

- End -

CONTROLLING OFFICER'S REPLY

ENB079

(Question Serial No. 1960)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. It is mentioned by the Administration that it will continue to expand outreaching teams in the coming year to provide on-site support and assistance for residents and property management companies (PMCs). Please advise on the work progress and outcomes of the pilot outreaching service that has been launched. In addition, please provide the quantity of recyclables recovered and the numbers of residents and PMCs contacted by the teams each month, and the work arrangements in the coming year, including the estimated expenditure and manpower resources to be involved and when the service will be extended to other districts.

2. Please advise on the work progress and details of the pilot scheme on free collection of waste plastics, including the scope of service, the number of collection points, the weight and outlets of the plastics collected, and the expenditure involved and manpower arrangements of the scheme.

3. It is mentioned by the Administration that it will introduce waste paper collection and recycling services in the coming year,

(a) please provide more details, including how the scheme will prevent large-scale recyclers/exporters from monopolising the market, protect the livelihood of frontline recyclers and uphold the quality of waste paper;

(b) please provide the expenditure and manpower resources to be involved in the scheme; and

(c) the Administration stated that the services could ensure a stable outlet for locally generated waste paper, in parallel, will the Administration actively encourage government departments and the community to procure recycled products, such as requiring various departments and contractors to give priority to the procurement of recycled materials or increase the score weightings of recycled materials in environmental performance in a tender to avoid Hong Kong's waste paper from being overly dependent on export? If yes, what are the details? If no, what are the reasons? Does the Administration have other policies or measures to increase the community's demand for recycled/reusable materials?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 34)

Reply:

1. To strengthen on-site support to recycling, the Environmental Protection Department (EPD) started to establish outreaching teams in late 2018 to collaborate closely with community partners to educate the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. The outreaching teams have kick-started pilot outreaching service in 3 pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin), and have strived to establish and maintain a direct communication network with different stakeholders such as property management companies (PMCs), cleansing workers, residents' organisations, members of local community, etc. As at the end of 2019, the outreaching teams have conducted about 4 600 visits, covering about 4 000 public and private residential buildings and 45 villages, the residential population of which accounted for over 95% of the total population of the 3 pilot districts. During the visits, the outreaching teams have contacted the PMCs and resident and village representatives/organisations, and conducted on-site assessment for the aforesaid buildings and villages to understand their waste handling and recycling practice, and provided improvement recommendations according to actual circumstances, including participating in this department's waste reduction and recycling programmes, increasing the number of recycling bins and improving the process, identifying proper outlets for recyclables, etc. As the outreaching teams are not involved in collection of recyclables, we do not have figures on direct recycling.

Besides visiting housing estates/residential buildings and villages to provide technical support, the outreaching teams have also conducted over 340 educational and promotional activities of different forms, which included promoting the proper use of recycling bins and clean recycling through on-site demonstrations/game booths, etc., introducing the various waste reduction and recycling policies/programmes (including waste charging) of this department, and providing training to frontline staff of PMCs and cleansing contractors. Over 25 000 people have been attracted to participate in the relevant educational and promotional activities.

We will extend the outreaching service to the whole territory in phases starting from 2020 according to our outreaching experience in the pilot districts and future manpower arrangements. The staffing of the EPD for implementing the outreaching service will be gradually increased to 74 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and 142 non-civil service contract staff. The estimated expenditure on salaries in 2020-21 is about \$110 million.

2. The EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern

District have progressively commenced since late January 2020. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020. As at the end of February 2020, about 65 premises, including housing estates and buildings, have registered to participate in the Pilot Scheme for the Eastern District, and the total quantity of waste plastics recovered during this period was about 8 tonnes. The Pilot Scheme is undertaken by 17 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and the estimated total expenditure in 2020-21 is about \$50 million.

3. The Government will set aside a sum of not less than \$300 million each year starting from 2020-21 for implementing a scheme to collect and recycle waste paper. The EPD will engage service contractors through open tender to collect waste paper across the territory for further processing and export for recycling under service contracts. The current situation of the waste paper recycling market and the opinions of the trade have been taken into full consideration when formulating the scheme. There is no pre-set ceiling for the number of service contractors. Existing waste paper exporters, other companies which are interested in joining the waste paper recycling market or any individuals are welcome to bid for the contracts. Different groups of tonnage of waste paper (tonnage groups) have been set in the tender to attract contractors of different scales in the market to participate in the scheme. Tenderers can opt for 1 of the 3 tonnage groups with due regard to various factors including their own scale of business and processing capacity. The monthly minimum and maximum tonnage of waste paper to be collected and exported by contractors for each tonnage group have been specified in the tender. It is also stipulated in the terms and conditions of the tender that each tenderer (including his/her subsidiary company and related person) can only submit 1 tender to prevent individual large-scale service contractor from monopolising the local waste paper recycling market.

Under the service contract, the service contractors and their relevant partners (including street corner recycling shops and mobile recyclers, etc.) are required to provide economic incentives to purchase waste paper that meets the specified quality standard from frontline collectors at a price which is not less than the designated recovery price of waste paper (not less than 70 cents per kilogram in the first 6 months, and from then on the price will be adjusted every 3 months according to the actual export price of waste paper in the market), so as to encourage clean recycling. The monthly service fee payable to the contractors is calculated according to the quantity of waste paper successfully exported and sold, which helps to ensure the overall quality and market competitiveness of local waste paper. The waste paper collection and recycling services are scheduled to commence in the second half of 2020 and it is expected that not less than 40 000 tonnes of waste paper will be processed each month.

The scheme of waste paper collection and recycling services is undertaken by 12 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades), and the estimated total expenditure in 2020-21 is about \$150 million.

The Government has all along been adopting green procurement and encouraging various sectors of the community to follow suit. The Government's Stores and

Procurement Regulations require various bureaux and departments to take environmental factors into account in setting out the tender specifications and purchase green products as far as possible and where economically rational. The EPD has also developed the green specifications and guidelines for the goods and services commonly used by the Government with reference to the practices and standards generally adopted in the market for adoption by various bureaux and departments to practise green procurement according to the specifications. At present, the Government's green procurement list covers 150 items of products and services, including printing paper, photocopying paper, toilet paper and paper towel containing recovered fibre, etc. The EPD has been actively promoting green procurement by uploading the relevant information, such as the latest Government's green procurement list and the relevant specifications, green procurement tips, as well as the local and international best practices onto the EPD's website for public reference. We have also been organising experience sharing sessions, talks and forums, as well as distributing electronic promotional materials, to share the Government's experience in implementing the green procurement policy with various sectors of the community to encourage the trades to formulate their trade-specific green procurement guidelines having regard to the actual circumstances and needs of their respective industries and to purchase and use green products and services in their daily operations as far as possible.

- End -

CONTROLLING OFFICER'S REPLY

ENB080

(Question Serial No. 1961)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding yard waste, the relevant questions are as follows:

1. Please provide the respective weights of yard waste (a) collected, (b) recycled and (c) disposed of at landfills by various government departments in the past 5 years.
2. Regarding the programmes launched by the Government to recycle Christmas trees and peach blossom trees (PBTs) in recent years, how effective were these programmes? What was the expenditure involved for each programme? Please set out in detail the quantities of Christmas trees and PBTs collected every year, the respective quantities of those converted into mulches for gardening and compost, and sent to schools or non-profit-making organisations. Please set out separately in detail the names of the organisations that received mulches for gardening and/or compost, as well as the quantities received. Please also advise on the outlets of the remaining Christmas trees and PBTs not converted into useful substances, especially the quantities of the remaining Christmas trees and PBTs that were sent to landfills.
3. At present, are various government departments still following the "Guidelines on Yard Waste Reduction and Treatment" (the Guidelines) only in handling their respective yard waste? If yes, why is there still a considerable amount of yard waste sent to landfills instead of being recycled every year?
4. It is stated in the reply ENB089 of last year that the Administration had procured an industrial grade wood shredder and was also procuring two additional wood shredders. What were the expenditures on these shredders and their effectiveness?
5. The Administration will "develop recycling facilities to handle government yard waste" and "explore production of biochar from yard waste" in the coming year. Please provide the work details, expenditures and manpower resources to be involved. Has the recycling policy for yard waste generated by housing estates still not yet been formulated by the Administration? What are the reasons? If not, what are the details?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 35)

Reply:

1. The weights of yard waste (a) collected, (b) recycled and (c) disposed of at landfills by various government departments in the past 5 years are set out in Annex 1.
2. In order to promote recycling of yard waste left over after Christmas and the Lunar New Year, since 2016, the Environmental Protection Department (EPD) has followed the prevailing government procurement procedures to engage qualified contractors with relevant capability to carry out collection, delivery and treatment services for natural Christmas trees (NCTs) and peach blossom trees (PBTs) and subsequent processing into materials suitable for recycling or reuse. The NCTs and PBTs recovered between Christmas in 2016 and the Lunar New Year in 2019 were treated and then converted into compost, bulking agent for composting, mulch for gardening, wood pellets, solid fuel and other useful recycled products with a total weight of about 120 tonnes for use by facilities under the EPD and 21 education, social and charity organisations, as well as landscaping organisations. In addition, for the NCTs and PBTs recovered during Christmas in 2019 and the Lunar New Year in 2020, some of them will be upcycled into wooden decorations for giving to participating organisations and housing estates. Since we have not obtained the consent of the beneficiary organisations concerned, the EPD is not in a position to reveal their names. In the recycling process, the contractors would dispose of materials unsuitable for recycling (such as ropes for tying and damaged decorations, etc.). Such materials accounted for less than 10% of the weight of the NCTs and PBTs recovered.

The quantities of NCTs and PBTs recovered and the expenditures involved are tabulated below.

Recycling programme	Weight (tonnes)	Expenditure (\$m)	Weight (tonnes)	Expenditure (\$m)	Weight (tonnes)	Expenditure (\$m)	Weight (tonnes)	Expenditure (\$m)
NCTs	Year 2016/17	1.22	Year 2017/18	0.82	Year 2018/19	0.56	Year 2019/20	1.3#
	22.7		18.0		33.2		33.7	
PBTs	Year 2017	1.4*	Year 2018	1.08#	Year 2019	1.08#	Year 2020	1.08#
	34.7		31.9		43.6		40.8	

* The expenditure included recovery of bamboo sticks and wooden pallets at Lunar New Year fairs.

The expenditure included recovery of wilted flowers at Lunar New Year fairs.

3. In February 2014, the Environment Bureau (ENB) promulgated *A Food Waste and Yard Waste Plan for Hong Kong 2014-2022* (the Plan), which sets out the Government's strategies on dealing with organic waste. The strategies cover collecting data, promoting waste reduction at source, encouraging waste separation and collection as well as exploring the most suitable means to treat the unavoidable waste.

Various government bureaux and departments have rendered support to the Plan. For example, the Greening, Landscape and Tree Management Section of the Development Bureau (DEVB) published the *Guidelines on Yard Waste Reduction and Treatment* in July 2014 for general reference by government departments regarding measures on yard waste reduction at various stages from landscape design to maintenance. In addition, the Agriculture, Fisheries and Conservation Department treats yard waste on

site as far as possible, including stockpiling on site to provide niches for wildlife and release nutrients to the nature as the waste decomposes. Suitable tree logs are reused for making furniture or decorative items for the recreational facilities in country parks, such as animated features, waymarks and benches, etc. The Leisure and Cultural Services Department (LCSD) is also replacing the planting of annuals by shrubs or perennials with colourful foliage, with a view to reducing yard waste at source. Since 2014, the LCSD has started to produce compost on-site from yard waste using garden composters at suitable venues. In the longer term, the LCSD will specify in the Schedule of Accommodation of suitable new venues the requirement for installation of on-site composting facilities. Part of the yard waste from the LCSD is delivered to the Animal Waste Composting Plant in Ngau Tam Mei for composting. The Civil Engineering and Development Department's greening works relating to infrastructural development, geotechnical works and greening master plan will focus on planting of perennials suitable for local environment, with the right vegetation in the right place and choose native perennials to encourage local ecological growth and reduce plant replacement in order to reduce yard waste. The Government will continue to implement the Plan in full to reduce yard waste on multiple fronts, including reducing the use of decorative plants during festive events, replanting, promoting better landscape design, etc.

On the other hand, the EPD will continue to encourage government departments to adhere to the principle of reduce, reuse and recycle in handling yard waste, and adopt various measures including installation of wood shredders and garden composters, to treat, recycle and reuse yard waste on site as far as practicable. The EPD has been exploring different proposals to utilise yard waste resources effectively as far as practicable. For example, the EPD has made use of an industrial grade wood shredder to conduct a trial on shredding the yard waste collected for various uses, such as solid fuel, bulking agent for composting, mulch for planting purposes and soil cover at landfills, etc. Moreover, the wood material is available to interested parties or members of the public free of charge for suitable recycling or upcycling. In the long run, the EPD will continue to work with the DEVB and relevant government departments in exploring the implementation of more diversified yard waste treatment proposals, including developing a yard waste processing centre, and exploring the introduction of advanced technologies such as production of biochar, with a view to turning yard waste into energy and useful products.

4. In order to promote the recovery and recycling of yard waste, the EPD procured an industrial grade wood shredder and 2 non-industrial grade wood shredders after the attack of super typhoon Mangkhut in 2018, and the expenditure involved was about \$3.6 million. At present, the industrial grade wood shredder is placed in the temporary yard waste recycling site in the EcoPark, and is used to shred the yard waste mainly collected from government departments for recycling. Since its commencement of operation in November 2018 to January 2020, the recycling site has shredded about 1 700 tonnes of yard waste. The other 2 wood shredders also have completed the installation and testing procedures, and are now placed in the landfills as a backup for handling the tree waste generated from emergency circumstances such as attack of typhoon in future.

5. Located on the government land near the T • PARK in Tuen Mun, the yard waste processing centre under planning will initially collect and process yard waste arising mainly from government departments and public works. The facility is expected to commence operation in early 2021. The yard waste collected will be shredded, sterilised and air dried to produce different useful materials to facilitate recycling or upcycling. The facility's treatment capacity is estimated at about 11 000 tonnes in the first year and will gradually increase to an average of about 22 000 tonnes a year subsequently. The Government plans to invest about \$26.9 million in the 2020-21 financial year to develop the processing centre. In addition, the EPD will also study the development of a pilot plant in the EcoPark to convert suitable yard waste into useful materials such as biochar. The estimated expenditure for the study is about \$11 million. The pilot plant is expected to commence operation in early 2022, subject to the results of the study. The relevant work will be absorbed and undertaken by the existing manpower.

At present, apart from promoting the recovery and recycling of yard waste in the community through the collection and recycling of NCTs and PBTs, the Government also appeals to developers, property management companies and landscaping contractors and encourage them to properly sort the yard waste generated from works/maintenance projects of housing estates and then deliver them to the recycling facility in the EcoPark for treatment and recycling. We will continue with the promotional work to encourage different sectors in the community to participate in yard waste recovery and recycling.

The weights of yard waste (a) collected, (b) recycled and (c) disposed of at landfills by various government departments from 2015 to 2019

(a) Weight of yard waste collected (tonnes)					
Department/Year	2015	2016	2017	2018 (Note 1)	2019 (Note 1&2)
Agriculture, Fisheries and Conservation Department	80	72	25	4	83
Architectural Services Department (Note 3)	#	1 757	3 043	4 052	23 449
Civil Engineering and Development Department	#	2 100	3 250	6 420	919
Drainage Services Department	480	450	512	1 173	911
Highways Department	4 770	2 810	3 340	4 820	3 605
Leisure and Cultural Services Department (Note 4)	3 600	3 600	3 600	16 800	4 000
Water Supplies Department	3	4	1 174	2 233	1 020
Lands Department	#	#	#	3 584	2 262
Housing Department (Note 5)	#	#	#	715	0
Total	8 933	10 793	14 944	39 801	36 249

(b) Weight of yard waste recycled (tonnes)					
Department/Year	2015	2016	2017	2018 (Note 1)	2019 (Note 1&2)
Agriculture, Fisheries and Conservation Department	80	32	25	4	0
Architectural Services Department (Note 3)	#	68	60	140	21
Civil Engineering and Development Department	#	0	50	210	56
Drainage Services Department	9	10	24	16	79
Highways Department	60	50	70	190	128
Leisure and Cultural Services Department (Note 4)	147	160	160	163	190
Water Supplies Department	2	2	49	33	18
Lands Department	#	#	#	80	33
Housing Department (Note 5)	#	#	26	117	0
Total	298	322	464	953	525

(c) Weight of yard waste disposed of at landfills (tonnes)					
Department/Year	2015	2016	2017	2018 (Note 1)	2019 (Note 1&2)
Agriculture, Fisheries and Conservation Department	0	40	0	0	83
Architectural Services Department (Note 3)	#	1 689	2 983	3 912	23 428
Civil Engineering and Development Department	#	2 100	3 200	6 210	863
Drainage Services Department	471	440	488	1 157	832
Highways Department	4 710	2 760	3 270	4 630	3 477
Leisure and Cultural Services Department (Note 4)	3 453	3 440	3 440	16 637	3 810
Water Supplies Department	1	2	1 125	2 200	1 002
Lands Department	#	#	#	3 504	2 229
Housing Department (Note 5)	#	#	#	598	0
Total	8 635	10 471	14 506	38 848	35 724

Relevant data has not been recorded.

Note 1: The statistics do not include about 20 450 tonnes of tree waste collected by various departments and private organisations for urgent clearing of roads after the attack of typhoon Mangkhut, and delivered to the temporary collection area in the Kai Tak Development Area before being delivered to the West New Territories Landfill; about 800 pieces of wood log (about 7 tonnes in weight) sorted out from the tree waste and collected by parties and members of the public at the temporary collection area in the Kai Tak Development Area and the Community Green Stations; and about 3 150 tonnes of tree waste delivered to the government land near the T • PARK in Tuen Mun for recycling and reuse, among which about 1 300 tonnes of wood were reused/upcycled or shredded as wood chips for recycling, and some 1 850 tonnes of tree waste were identified as unsuitable for recycling after sorting and were delivered to the landfill for disposal.

Note 2: The temporary yard waste recycling site set up by the EPD has continued to operate after handling the tree waste generated by the attack of typhoon Mangkhut. In 2019, excluding NCTs and PBTs, the recycling site received a total of about 900 tonnes of yard waste mainly from various government departments. Among such yard waste, excluding factors such as natural degradation and air drying, some 250 tonnes were reused or recycled as useful materials while about 500 tonnes of the yard waste were identified as unsuitable for recycling after sorting and were delivered to the landfill for disposal.

Note 3: The statistics collected by the Architectural Services Department (ArchSD) since July 2019 have further included the amount of the yard waste generated during site clearance of new projects, while the statistics collected before the aforesaid

date only include the amount of yard waste generated during vegetation maintenance for slopes by the ArchSD.

Note 4: Most of the yard waste collected by the LCSD in 2018 was generated following the passage of typhoon Mangkhut.

Note 5: Information from the Housing Department's pilot projects.

- End -

CONTROLLING OFFICER'S REPLY

ENB081

(Question Serial No. 1962)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding glass recycling, the relevant questions are as follows:

1. Please advise on the Administration's work details in 2019 and the coming year regarding glass recycling and the producer responsibility scheme on glass beverage containers, including the expenditures involved and manpower arrangements.
2. What are the respective numbers of collection points in the 18 districts at present?
3. Please advise on the quantity of glass cullet submitted by the contractors engaged in different districts each month, as well as the quantity of glass recovered each month since the commencement of the glass recycling service. Please also advise on the quantity of glass cullet required to be submitted by the contractors each month according to the contract requirements.
4. Please provide the quantity of glass collected in each district in each of the past 5 years.
5. Please advise on the whereabouts of the glass collected by the contractors, including the useful substances into which the glass converted and their respective quantity. How much of the recycled glass cullet was used by the Government? What was the expenditure involved?
6. In the movement of opposition to the proposed legislative amendments last year, the Administration has suspended the glass bottle recycling service. What was the quantity of the glass forgone as the result of the suspension of service? How much of such glass was disposed of at landfills?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 36)

Reply:

1. The Environment Protection Department (EPD) is pressing ahead with the implementation of the Producer Responsibility Scheme (PRS) on glass beverage containers. Among other things, the EPD has engaged 2 glass management contractors (GMCs) through open tender to undertake collection and treatment services for waste glass containers in 3 regions, i.e. Hong Kong Island (including Islands District), Kowloon and the New Territories. The contracts for Hong Kong Island and the New Territories

regions commenced in November 2017, and the contract for the Kowloon region commenced in May 2018. In early 2019, the 2 GMCs finished taking over all of the previous voluntary recycling programmes and, in parallel, further expanded their recycling networks. They have also established and commissioned new treatment facilities and are providing free glass container collection and treatment services across the territory. In addition, we have largely completed the drafting of the necessary subsidiary legislation to provide some operational details for the implementation of the scheme and will submit it to the Legislative Council for scrutiny as soon as possible depending on the progress of the Legislative Council.

Under the contracts, the recycling target of the 2 GMCs in the first year of the contract is 15 000 tonnes in total, and the Government's goal is to gradually increase the recovery target to 50 000 tonnes a year. In 2019-20 and 2020-21, the Government has earmarked \$104 million and \$130 million respectively to pay for the glass container collection and treatment services for glass containers under the 3 glass management contracts. The Waste Management Policy Division of the EPD is responsible for handling various waste management policies and projects, such as the implementation of the 3 PRSs on waste electrical and electronic equipment, glass beverage containers and plastic beverage containers. There is no breakdown of the manpower resources involved in the implementation of these schemes.

2. As at October 2019, there were about 4 000 glass container collection points across the territory where containers were collected for treatment by the contractors.
3. From the commencement of glass collection service up to the end of 2019, the quantities of waste glass containers collected and the quantities of glass recyclables delivered under the 3 glass management contracts are as follows:

Glass management contract	Total quantity of glass containers collected (tonnes)	Total quantity of glass recyclables delivered* (tonnes)
Hong Kong Island (including Islands District)	12 051	10 322
New Territories	10 623	9 972
Kowloon	8 115	7 311
Total quantity	30 789	27 605

[*Note: Under the existing contracts, the contractors are required to deliver monthly on average not less than 100 tonnes of glass recyclables that meet the contract requirements or the total quantity of glass containers collected that month, whichever is lower, to the specified storage facilities.]

4. We do not have a breakdown of the total quantity of glass containers collected by district. The respective total quantities of glass containers collected in the past 5 years are tabulated below:

Year	Total quantity of glass containers collected* (tonnes)
2015	9 300
2016	9 300
2017	11 000
2018	15 100
2019	Under compilation

[*Note: The figures include the quantities of glass containers collected under the voluntary recycling programmes and by private recyclers. The glass management contracts for Hong Kong Island (including Islands District) and the New Territories regions commenced in November 2017, and the contract for the Kowloon region commenced in May 2018.]

5. Under the glass management contracts, the GMCs are required to properly treat the waste glass containers for subsequent reuse and recycling. Currently, glass containers recovered and treated locally may be used for producing cement and eco-pavers, while some are exported for recycling. The recycled glass materials are also used as fill materials in different public works projects. Meanwhile, we have also encouraged the GMCs to continue exploring other outlets for recycled glass materials, such as the production of decorative tiles or other building materials. As at the end of 2019, the major recycling outlets for the glass containers collected and treated by the GMCs are as follows:

Recycling Outlets	Quantity(tonnes)
Production of cement	6 495
Production of eco-pavers	4 458
Exported abroad	4 165
Used as fill materials in local works projects	12 487
Total:	27 605

Eco-pavers are mainly absorbed by public works projects and are used in individual works projects. We do not have a breakdown of the relevant expenditure.

6. Glass containers are fragile and may cause danger to the public if they are not handled properly. In view of continued escalation of violent and illegal attacks in society earlier, the Government temporarily suspended waste glass container collection service and recalled the glass container recycling bins from the respective collection points starting from 16 November 2019 to better safeguard public safety. Taking into account the recent social situation, the Government has gradually resumed the waste glass container collection service, mainly starting from the collection points with proper management or relatively low risk of being interfered. In addition, the EPD's Community Green Stations and Community Recycling Centres have already resumed waste glass container

collection service at the facilities. As at the end of February 2020, about 45% of the glass container collection points across the territory have resumed service. We will continue to make suitable arrangement to resume the waste glass container collection service at different locations subject to the social situation. The disposal and recovery quantities of waste glass containers are affected by the overall situation and different factors. We have not analysed the recovery quantity affected by individual causes and do not have an objective basis for assessment.

- End -

CONTROLLING OFFICER'S REPLY

ENB082

(Question Serial No. 1963)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. The Administration mentioned last year that it was preparing for the implementation of a pilot scheme on the application of reverse vending machines (RVMs). Please advise on the following:

(a) What is the current progress of the scheme? What is the incentive provided for each plastic beverage container under the scheme? When will the Administration decide whether to expand the scheme to cover other plastic containers or regularise the scheme?

(b) What are the current number of RVMs in various districts in Hong Kong, the number of waste plastic beverage containers collected each month, and the whereabouts of the containers?

(c) Please provide the expenditures and manpower arrangements for the pilot scheme in the last year and the coming year.

2. Please advise on the work details, expenditures involved and manpower arrangements in the last year and the coming year regarding the producer responsibility scheme on plastic beverage containers.

3. Will the Administration introduce a producer responsibility scheme on beverage cartons to increase the recovery rate of beverage cartons? If yes, what are the details? If no, what are the reasons? What was the recovery rate of beverage cartons last year?

4. It is mentioned in the 2019 Policy Address that the Government would “implement a voluntary scheme for phasing out personal care and cosmetic products containing microbeads, to encourage the trade to stop manufacturing, importing or selling such products and help consumers make choice of microbead-free products”. Why has this initiative not been mentioned in the latest Budget? What is the progress of this initiative since its implementation in October last year? What are the target and the timetable? What are the expenditure and manpower resources involved?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 37)

Reply:

(1) The Environmental Protection Department (EPD) is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs) with a view to assessing the

feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020. The estimated expenditure for the pilot scheme in the 2020-21 financial year is about \$9.5 million, mainly for engaging a contractor to carry out the scheme. As launching the pilot scheme is an integral part of the work of the Waste Management Policy Division under the EPD, there is no separate breakdown of the manpower involved in this work. We will closely monitor the implementation of the pilot scheme first, and will consider the next step after reviewing its effectiveness.

The EPD has installed 10 RVMs at 7 Community Green Stations (CGSs) starting from June 2019 for conducting a technical trial on RVMs with a view to working out the technical details for a pilot scheme to be launched later. As at the end of February 2020, over 477 000 plastic beverage containers (about 14 tonnes) have been collected. The CGS operators would deliver the waste plastic beverage containers collected to suitable recyclers for recycling.

In addition, the EPD also, through the Recycling Fund and the Environment and Conservation Fund, supports the trade and organisations to launch recycling projects related to RVMs for plastic beverage containers. So far, the 2 funds have approved a total of 5 projects involving 31 RVMs, and the recycling target is about 29 tonnes.

- (2) The Government is carefully considering the recommendations of the consultancy study on the producer responsibility scheme on plastic beverage containers for mapping out the way forward, and plans to consult the public in the second half of 2020. As the work is part of the duties of the Waste Management Policy Division of the EPD, there is no separate breakdown of the manpower involved in this work.
- (3) As to whether a producer responsibility scheme on a certain product would be introduced, we have to give full consideration to its need, feasibility and urgency, etc., including: (1) the environmental problems and landfill burden posed by the product concerned; (2) practicability to define clearly the scope of control and draw up specific product definition for regulatory purposes; (3) availability of the necessary technologies and adequate treatment facilities; and (4) availability of outlets for recyclables in local or overseas markets. Beverage cartons are a composite material made from paper, plastics, metallic films, etc. These materials have to be separated by means of special technologies before effective recycling can be achieved. Coupling with high processing cost, there is no sizable and cost-effective treatment facility in Hong Kong at present. A beverage carton recycling plant, set up in the Yuen Long Industrial Estate with the funding support from the Recycling Fund, has commenced trial operation since October 2019. We will keep on monitoring the development of the project and market changes.

According to the report on “Monitoring of Solid Waste in Hong Kong” compiled by the EPD, the recovery rate of paper recyclables (including beverage cartons) in 2018

was 41%. No breakdown of the recovery rates for different types of paper recyclables is compiled by the EPD.

- (4) The study on microbeads has been completed. The Government is in the process of making arrangements for a two-year voluntary scheme for phasing out personal care and cosmetic products (PCCPs) containing microbeads, aiming to encourage the trade to stop the production, importation and sale of these products, and to assist consumers in choosing microbead-free products. Making reference to successful overseas experience, we have an initial plan to establish a “Microbead-free Charter”. Participants, taking due consideration of their operational conditions, can set their own targets and timetables for reducing or ceasing the production, importation and sale of PCCPs containing microbeads and strive to achieve the targets within the set timeframe. In the course of the scheme, we will follow up on the participants’ phase-out progress and launch complementary publicity and education activities to provide the public with appropriate and accurate information, so as to enhance their understanding of microbeads-related subjects. We are drafting the details of the scheme, including the implementation plan, monitoring methodology, timetable and effectiveness assessment, etc.

The estimated expenditure earmarked for the above work in this year is about \$900,000, and the manpower resources will be absorbed by the existing establishment.

- End -

CONTROLLING OFFICER'S REPLY

ENB083

(Question Serial No. 1964)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the problem of disposable plastics (such as tableware, straws and plastic bags):

1. Please advise on the quantities of plastics disposed of at landfills and the quantities of disposable plastic tableware and plastic bags thereof in the past 5 years;
2. Please advise on the details of the Administration's work, expenditures involved and manpower arrangement on reducing the disposal quantity of disposable plastics in 2019 and the forthcoming year, including the progress of the review of the plastic shopping bag charging scheme.
3. Please advise on (a) the latest progress, expenditure involved and manpower arrangement for the study conducted by the Administration on the control of disposable plastic tableware and (b) the details of the Administration's measures to reduce the use of disposable plastic tableware in government venues and schools in the past year and the forthcoming year and the expenditures involved.
4. The Administration has mentioned that it would promote and encourage reduction in the use of plastic packaging materials in collaboration with the retail trade in the forthcoming year. Please advise on the details, expenditure involved and manpower arrangement. Will the Administration consider introducing legislations to regulate excessive packaging by requiring packaging materials of the products on sale in Hong Kong to have a certain ratio of recyclable materials and/or prohibiting the use of packaging materials that are difficult to recycle? If yes, what are the details? If no, what are the reasons?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 38)

Reply:

1. According to the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the Environmental Protection Department (EPD), the statistics on the quantities of plastics, plastic dining wares (including polyfoam dining wares) and plastic bags (including plastic garbage bags, plastic shopping bags (PSBs) and plastic bags for other uses) disposed of at landfills between 2014 and 2018 are shown in the table below. The relevant statistics for 2019 are still under compilation. The EPD does not compile breakdown figures on disposable/non-disposable plastics.

Year	Quantity disposed of at landfills (tonnes per day)		
	Plastics (including dining wares and plastic bags)	Plastic dining wares (including polyfoam dining wares)	Plastic bags
2014	2 015	165	665
2015	2 183	179	649
2016	2 132	193	690
2017	2 124	205	793
2018	2 343	210	851

2. The EPD is reviewing the PSB Charging Scheme to enhance its effectiveness in waste reduction. Among other things, the current minimum charge of 50 cents has not been adjusted since the introduction of the voluntary scheme before 2009, so we are reviewing whether the charge needs to be adjusted. There are also views that the current exemption over PSB used for food hygiene purposes may need to be tightened to further encourage reducing the use of those PSBs. We aim to consult the public on the outcome of the review later this year in order to map out the way forward. The relevant work is an integral part of the EPD's work and the expenditure is absorbed by its existing resources.

The Government is carefully considering the recommendations of the consultancy study on the producer responsibility scheme on plastic beverage containers for mapping out the way forward, and plans to consult the public in the second half of 2020. Moreover, the EPD is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs) with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020. The estimated expenditure for the pilot scheme in the 2020-21 financial year is about \$9.5 million, mainly for engaging a contractor to carry out the scheme.

The EPD is proactively meeting the retail trade to have a better understanding of its operation for exploring practical measures to promote and encourage reduction in the use of plastic packaging materials. We aim at materialising these measures, on a voluntary basis, through collaboration with the trade in the second half of 2020. The relevant work is an integral part of the EPD's work and the expenditure is absorbed by its existing resources.

In addition, the EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled

raw materials or products for export or supply in the local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services provided under the Pilot Scheme in Eastern District have commenced progressively since late January 2020. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020. The Pilot Scheme is undertaken by 17 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and the estimated total expenditure in 2020-21 is about \$50 million.

- 3(a). In April 2019, the Government commenced a study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware. The consultant is currently reviewing the latest international development in controlling or banning disposable plastic tableware as well as the recommendations on the substitutes. Based on the findings of the study and analysis, the consultant will draw up a proposal to the Government that is suitable for implementation in Hong Kong in the long run. The study is scheduled for completion by the end of 2020, involving an expenditure of about \$3 million, which is mainly for the related expenses incurred in the appointment of consultants.
- 3(b). Starting from January 2019, the Government has taken the lead in banning plastic straws and polyfoam food containers in premises and canteens mainly serving government staff. Relevant departments, when awarding new contracts and renewing existing contracts, will stipulate the requirement for restaurant operators in suitable government venues to avoid using disposable plastic tableware.

In addition, the Government launched the “Plastic Free Beach, Tableware First” campaign at public beaches across the territory in the summer of 2019 to encourage members of the public and restaurants in the vicinity of the beaches to go “plastic-free” on beaches by avoiding the use and distribution of disposable plastic tableware. During the campaign, the participating restaurants and kiosks used bamboo sticks, paper straws and paper bags provided by the EPD in place of disposable plastic tableware to promote the “plastic-free” culture to the public. The expenditure of the above campaign in 2019-20 was about \$20,000.

At the school level, to encourage reducing the use of disposable plastic food containers and tableware in school lunch, the EPD, together with the Education Bureau and the Department of Health (DH), have updated the Handbook of Selection of Lunch Suppliers (the Handbook), which includes encouraging schools to incorporate service requirements concerning the use of reusable food containers and tableware in the tender. The DH has also released the updated Handbook in September 2019.

The EPD has commissioned a consultancy study on “plastic-free” school lunch arrangement in March 2020, which includes arranging 15 primary and secondary schools to participate in a trial on on-site portioning of cooked meal (i.e. a school lunch supplier delivers the cooked food to the school and portions the food at school using reusable food containers) so as to avoid the use of disposable lunch boxes, reduce food waste and cultivate an environmentally friendly lifestyle among students. The estimated expenditure of this study is \$2.5 million in 2020-21.

Besides, the EPD will launch a new pilot scheme through the Environment and Conservation Fund which has earmarked \$4.5 million for subsidising about 50 primary and secondary schools to install the necessary equipment, including refrigerators, steam cabinets, dishwashers and disinfection machines, so as to encourage students to bring their own lunches using reusable food containers and tableware.

4. Packaging materials may include different types of materials, such as plastics, paper, metals, glass and even wood, and it is difficult to define clearly the scope of regulation and set out a specific definition for the products concerned for regulation purposes. Moreover, as the majority of the goods sold in Hong Kong are imported, it poses difficulties in regulating the packaging materials used.

Having reviewed the need for and feasibility and priority of introducing Producer Responsibility Schemes (PRS) on other products, and taking into account other relevant factors, plastic beverage containers are identified as the target of the next PRS to be taken forward. Please see part (2) above for the details of the work on reducing the use of plastic packaging materials and introducing the PRS on plastic beverage containers, the expenditure involved and the manpower arrangement.

- End -

CONTROLLING OFFICER'S REPLY

ENB084

(Question Serial No. 1965)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the numbers of prosecutions for offences provided by the Department, the relevant questions are as follows:

1. The number of prosecutions for clinical waste control offences in 2019 was 48, which was 12 times higher than that in 2018. What were the main causes of such an increase?
2. The number of marine dumping offences in 2019 was 4 times less than that in 2018. What are the Department's views on the reasons for this?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 39)

Reply:

1. The numbers of prosecutions for clinical waste offences instituted by the Environmental Protection Department (EPD) in 2017 and 2018 were both 4. The number of prosecutions increased to 48 in 2019 because one of the prosecution cases involved 47 offences.
2. The numbers of prosecutions for illegal marine dumping offences instituted by the EPD in 2017 and 2019 were similar, which were 4 and 3 respectively. There were 12 prosecutions in 2018 because 2 of the prosecution cases involved 4 and 6 offences respectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB085

(Question Serial No. 1966)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Community Green Stations (CGSs), please advise on:

1. the types of waste collected at the CGSs in service and the recovery quantities in each quarter of 2019 (if different types of waste plastics are collected by the CGSs, please specify), as well as the actual whereabouts of various types of waste collected;
2. the latest number of recyclable collection points at the districts where the CGSs are located;
3. the numbers of educational activities organised by the CGSs in service in 2019 and the numbers of visitors; and
4. the latest progress and details of the CGSs in the 18 districts, including the expenditures and manpower resources involved.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 40)

Reply:

The Environmental Protection Department (EPD) continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages. As for the remaining 6 districts (including Kowloon City, Southern District, North District, Central and Western District, Tsuen Wan and Yau Tsim Mong), we are continuing with site search and other associated preparatory work.

Details of the 2019 quarterly operational statistics of the CGSs in service are set out below:

	1 st Quarter of 2019						
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing
Quantity of various types of recyclables handled (tonnes)							
Electrical appliances and computer products	19.1	27.9	12.4	21.1	18.7	26.1	5.2
Glass bottles	102.7	81.3	68.7	68.2	94.3	55.5	57.1
Rechargeable batteries	Less than 0.1	0.8	Less than 0.1	0.3	Less than 0.1	Less than 0.1	Less than 0.1
Compact fluorescent lamps/ fluorescent tubes	1.4	1.2	0.9	0.8	1.3	0.7	0.8
Waste paper	0.5	6.1	2.8	8.5	7.9	1.5	2.6
Waste plastics	0.5	4.7	1.4	3.3	7.8	2.3	3.1
Waste metals	0.2	0.9	0.4	0.7	0.7	0.3	0.2
Number of educational activities and visitors							
Number of activities	52	56	46	53	85	44	65
Number of visitors	8 423	48 972	8 853	6 126	7 090	29 626	3 555

	2 nd Quarter of 2019						
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing
Quantity of various types of recyclables handled (tonnes)							
Electrical appliances and computer products	13.5	25.0	10.4	21.5	13.7	18.6	5.1
Glass bottles	99.0	83.8	73.7	69.0	63.0	66.1	56.3
Rechargeable batteries	Less than 0.1	0.4	Less than 0.1	0.3	0.2	Less than 0.1	0.2
Compact fluorescent lamps/ fluorescent tubes	0.6	0.8	0.6	0.9	0.6	0.9	0.6
Waste paper	1.5	5.0	2.8	10.1	2.0	1.3	4.8
Waste plastics	1.1	5.6	1.4	4.3	8.9	2.7	3.6
Waste metals	0.1	0.8	0.4	0.8	0.4	0.2	0.5
Number of educational activities and visitors							
Number of activities	32	39	47	53	77	57	101
Number of visitors	7 729	55 800	7 981	8 328	8 305	36 872	1 894

	3 rd Quarter of 2019						
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing
Quantity of various types of recyclables handled (tonnes)							
Electrical appliances and computer products	16.2	23.9	12.5	17.3	11.9	20.6	6.2
Glass bottles	104.0	84.4	77.4	68.7	63.5	67.7	60.3
Rechargeable batteries	Less than 0.1	0.6	0.3	0.3	0.1	0.2	Less than 0.1
Compact fluorescent lamps/ fluorescent tubes	0.8	0.8	0.5	0.6	0.6	1.0	0.4
Waste paper	1.7	3.8	3.5	14.7	2.4	1.8	18.3
Waste plastics	1.2	6.6	2.0	4.8	11.2	2.6	8.2
Waste metals	0.2	0.9	0.7	1.1	1.0	0.5	2.3
Number of educational activities and visitors							
Number of activities	40	60	36	30	63	59	78
Number of visitors	10 229	57 426	7 186	6 694	8 029	37 478	2 436

	4 th Quarter of 2019							
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing	Tai Po
Quantity of various types of recyclables handled (tonnes)								
Electrical appliances and computer products	8.6	20.0	13.0	9.6	10.1	15.1	5.0	3.5
Glass bottles	73.7	59.0	50.3	51.0	39.3	44.3	45.3	20.0
Rechargeable batteries	Less than 0.1	0.8	0.2	0.4	0.3	0.2	0.8	Less than 0.1
Compact fluorescent lamps/ fluorescent tubes	1.3	1.2	0.7	1.1	0.4	0.6	1.0	0.1
Waste paper	2.3	3.5	4.5	7.8	2.3	1.6	22.0	1.2
Waste plastics	1.8	7.6	2.5	3.8	9.8	3.7	8.6	0.5
Waste metals	0.5	1.2	0.6	2.0	0.6	0.3	4.0	0.1
Number of educational activities and visitors								
Number of activities	49	41	37	26	63	46	68	11
Number of visitors	11 324	58 211	7 641	6 112	9 109	33 999	1 507	1 565

Note: As the Tai Po CGS commenced operation in mid-October 2019, only the operational statistics for the 4th quarter of 2019 are available.

The arrangements for the various types of recyclables in the above table are as follows:

Electrical appliances and computer products	The electrical appliances and computer products were mainly sent to the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) for refurbishment or dismantling; some of them were sent to the contractors of the Computer and Communication Products Recycling Programme or contractors of the EPD for dismantling and recycling.
Glass bottles	All glass bottles were sent to glass management contractors engaged by the EPD for processing. The glass recyclables after processing were used for production of cement and eco-pavers, or used as fill materials in various public works projects.
Compact fluorescent lamps/fluorescent tubes	All compact fluorescent lamps/fluorescent tubes were sent to the Chemical Waste Treatment Centre for proper handling.
Rechargeable batteries	All rechargeable batteries were sent to the contractor of the Rechargeable Battery Recycling Programme for export to overseas recycling facilities for proper handling.
Waste paper, waste plastics and waste metals	All waste paper, plastics and metals were properly handled by private recyclers engaged through tendering procedure.

The CGSs have set up collection points at residential estates and other suitable sites (such as schools and social service organisations). Operational statistics are published on a quarterly basis. As at the 4th quarter of 2019, the numbers of collection points of the 8 CGSs are tabulated below:

	Number of collection points							
	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing	Tai Po
Electrical appliances and computer products	165	162	88	111	75	76	60	54
Glass bottles	172	188	88	149	108	125	83	77
Compact fluorescent lamps/ fluorescent tubes	112	149	51	104	67	75	64	49
Rechargeable batteries	139	135	85	118	56	89	68	59

The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation was about \$31 million in 2019. At present, a total of 18 posts are tasked with implementing this initiative and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

- End -

CONTROLLING OFFICER'S REPLY

ENB086

(Question Serial No. 1967)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the issue of promoting the use of electric vehicles (EVs), the relevant questions are as follows:

1. Please advise on the numbers of various types of EVs (e.g. private car and light goods vehicle) that were first registered in each of the past 10 years, and their percentages in the total number of various types of vehicles that were first registered in the same year.
2. Please provide the numbers of various types of EVs in each of the past 10 years, and their percentages in the total number of various types of vehicles in the same year.
3. Please provide the Department's expenditures on the enhancement of the charging network, and operating and maintenance costs of chargers in each of the past 5 years. What were the numbers of EV charging facilities provided in government buildings and the expenditures involved?
4. Please set out in tabular form the numbers of quick, medium and slow EV chargers at the following types of car parks in various districts across the territory in each of the past 5 years, and their percentages in the total number of the parking spaces at the respective type of car parks:
 - a. all car parks across the territory
 - b. government car parks
 - c. car parks under the Housing Authority
 - d. private car parks
5. Please advise on the types and numbers of EVs procured by various government bureaux and departments and the expenditures involved in the past 10 years.
6. Please advise on the types and numbers of EVs and non-EVs owned by various government bureaux and departments in the past 10 years. What is the model of the EV mostly owned?
7. As the number of EVs has been increasing over the years, we have to face the problem of disposing of EV batteries eventually. What are the details of the Administration's current efforts in recycling waste batteries?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 41)

Reply:

1. According to the information provided by the Transport Department (TD), the numbers of various classes of electric vehicles (EVs) that were first registered in the past 5 years and their percentages in the total number of the same classes of vehicles are as follows:

Year*	Vehicle class	No. of first registered EVs	No. of first registered vehicles	Percentage
2015	Motorcycle	0	6 037	0%
	Private car	2 607	50 322	5.18%
	Taxi	0	2 340	0%
	Franchised bus	8	874	0.92%
	Non-franchised public bus	3	740	0.41%
	Private bus	1	63	1.59%
	Public light bus	0	164	0%
	Private light bus	0	404	0%
	Light goods vehicle	11	8 717	0.13%
	Medium goods vehicle	0	4 729	0%
	Heavy goods vehicle	0	1 021	0%
	Special purpose vehicle	7	108	6.48%
2016	Motorcycle	2	5 544	0.04%
	Private car	3 020	41 182	7.33%
	Taxi	1	1 822	0.05%
	Franchised bus	5	841	0.59%
	Non-franchised public bus	0	803	0%
	Private bus	0	88	0%
	Public light bus	0	214	0%
	Private light bus	4	323	1.24%
	Light goods vehicle	11	6 737	0.16%
	Medium goods vehicle	0	3 270	0%
	Heavy goods vehicle	0	791	0%
	Special purpose vehicle	4	173	2.31%
2017	Motorcycle	2	5 803	0.03%
	Private car	3 860	43 642	8.84%
	Taxi	0	1 947	0%
	Franchised bus	15	699	2.15%
	Non-franchised public bus	2	650	0.31%
	Private bus	1	70	1.43%
	Public light bus	0	222	0%
	Private light bus	1	270	0.37%
	Light goods vehicle	12	6 619	0.18%
	Medium goods vehicle	0	3 267	0%
	Heavy goods vehicle	0	688	0%
	Special purpose vehicle	11	147	7.48%

2018	Motorcycle	0	5 286	0%
	Private car	471	42 287	1.11%
	Taxi	0	1 770	0%
	Franchised bus	5	653	0.77%
	Non-franchised public bus	0	619	0%
	Private bus	0	50	0%
	Public light bus	0	496	0%
	Private light bus	0	402	0%
	Light goods vehicle	16	6 377	0.25%
	Medium goods vehicle	0	2 936	0%
	Heavy goods vehicle	0	552	0%
	Special purpose vehicle	5	169	2.96%
2019	Motorcycle	0	6 468	0%
	Private car	2 423	38 309	6.32%
	Taxi	0	1 118	0%
	Franchised bus	1	315	0.32%
	Non-franchised public bus	2	447	0.45%
	Private bus	0	64	0%
	Public light bus	0	481	0%
	Private light bus	1	269	0.37%
	Light goods vehicle	42	6 578	0.64%
	Medium goods vehicle	0	2 177	0%
	Heavy goods vehicle	0	236	0%
	Special purpose vehicle	5	146	3.42%

* Figures as at year end

2. According to the information provided by the TD, the numbers of various classes of EVs that were registered in the past 5 years and their percentages in the total number of the same classes of vehicles are as follows:

Year*	Vehicle class	No. of registered EVs	No. of registered vehicles	Percentage
2015	Motorcycle	50	68 368	0.07%
	Private car	3 806	567 886	0.67%
	Taxi	8	18 138	0.04%
	Franchised bus	8	5 927	0.13%
	Non-franchised public bus	7	7 045	0.10%
	Private bus	4	617	0.65%
	Public light bus	0	4 350	0%
	Private light bus	4	3 081	0.13%
	Light goods vehicle	65	71 997	0.09%
	Medium goods vehicle	2	36 712	0.01%
	Heavy goods vehicle	0	5 485	0%
	Special purpose vehicle	113	1 777	6.36%

2016	Motorcycle	45	72 332	0.06%
	Private car	6 829	583 037	1.17%
	Taxi	1	18 163	0.01%
	Franchised bus	13	5 986	0.22%
	Non-franchised public bus	7	7 043	0.10%
	Private bus	4	651	0.61%
	Public light bus	0	4 350	0%
	Private light bus	7	3 122	0.22%
	Light goods vehicle	74	71 856	0.10%
	Medium goods vehicle	2	37 010	0.01%
	Heavy goods vehicle	0	5 891	0%
	Special purpose vehicle	107	1 840	5.82%
2017	Motorcycle	45	76 438	0.06%
	Private car	10 666	600 443	1.78%
	Taxi	1	18 163	0.01%
	Franchised bus	28	6 014	0.47%
	Non-franchised public bus	9	7 038	0.13%
	Private bus	3	680	0.44%
	Public light bus	0	4 350	0%
	Private light bus	7	3 094	0.23%
	Light goods vehicle	84	72 384	0.12%
	Medium goods vehicle	2	36 905	0.01%
	Heavy goods vehicle	0	6 179	0%
	Special purpose vehicle	105	1 883	5.58%
2018	Motorcycle	19	79 920	0.02%
	Private car	11 080	617 683	1.79%
	Taxi	0	18 163	0%
	Franchised bus	33	6 253	0.53%
	Non-franchised public bus	8	7 130	0.11%
	Private bus	2	704	0.28%
	Public light bus	0	4 350	0%
	Private light bus	6	3 385	0.18%
	Light goods vehicle	94	74 772	0.13%
	Medium goods vehicle	1	37 690	Less than 0.01%
	Heavy goods vehicle	0	6 609	0%
	Special purpose vehicle	104	1 970	5.28%
2019	Motorcycle	17	84 426	0.02%
	Private car	13 447	628 230	2.14%
	Taxi	0	18 163	0%
	Franchised bus	34	6 373	0.53%
	Non-franchised public bus	8	7 187	0.11%
	Private bus	2	734	0.27%
	Public light bus	0	4 346	0%
	Private light bus	6	3 489	0.17%

	Light goods vehicle	125	74 146	0.17%
	Medium goods vehicle	0	36 410	0%
	Heavy goods vehicle	0	6 643	0%
	Special purpose vehicle	104	2 009	5.18%

* Figures as at year end

3. The Government allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming 3 years, including installation of additional medium chargers at the car parks managed by the TD, the Government Property Agency (GPA), the Leisure and Cultural Services Department (LCSD) and the Tourism Commission (TC) which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800. Among them, 168 medium chargers whose installation works began in 2019-20 are expected to complete the works progressively by the end of April this year. Moreover, we anticipate that about 570 and 460 medium chargers will be installed in 2020-21 and 2021-22 respectively.

The Government's expenditures on enhancing public charging facilities and paying the electricity and maintenance costs of the charging facilities in the past 5 years are as follows:

Year	Expenditure on enhancing public charging facilities (\$'000)	Electricity costs of charging facilities (\$'000)	Maintenance costs of charging facilities (\$'000)
2015-16	230	429	--
2016-17	2,940	885	54
2017-18	1,320	1,035	61
2018-19	--*	1,007	93
2019-20**	5,330	747	168

* The Government was proceeding with the preparatory work for the above scheme of allocating \$120 million for extending the public EV charging networks at government car parks in this financial year and the installation works were planned to commence in 2019-20.

** As at the end of 2019.

In addition, the estimated expenditure on the operation and maintenance of EV charging facilities in 2020-21 is about \$1.2 million.

4. The numbers of public EV chargers in various districts of Hong Kong are as follows:
- (i) The numbers of public EV chargers provided at government and non-government organisations' car parks which are open for public use with a breakdown by 18 districts of Hong Kong as at the end of 2015 are as follows:

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	164	33	6	203
Eastern	107	19	6	132
Southern	2	4	15	21
Wan Chai	66	17	10	93
Kowloon City	54	1	12	67
Kwun Tong	60	17	9	86
Sham Shui Po	40	8	0	48
Wong Tai Sin	58	9	6	73
Yau Tsim Mong	95	22	12	129
Kwai Tsing	16	11	7	34
Tsuen Wan	46	7	7	60
Sai Kung	29	7	5	41
North	33	10	1	44
Tai Po	3	0	5	8
Sha Tin	64	12	12	88
Yuen Long	39	2	3	44
Tuen Mun	12	9	6	27
Islands	11	6	6	23
Total	899	194	128	1 221
Government car parks*	537	100	0	637
Non-government organisations' car parks	362	94	128	584

*Including the TD, the GPA, the LCSD, the Electrical and Mechanical Services Department (EMSD), the Housing Department (HD), the TC and the Highways Department (HyD)

- (ii) The numbers of public EV chargers provided at government and non-government organisations' car parks which are open for public use with a breakdown by 18 districts of Hong Kong as at the end of 2016 are as follows:

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	164	42	19	225
Eastern	126	34	17	177
Southern	4	7	16	27
Wan Chai	67	30	10	107
Kowloon City	54	2	14	70
Kwun Tong	62	42	23	127
Sham Shui Po	43	20	4	67

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Wong Tai Sin	55	12	9	76
Yau Tsim Mong	100	48	23	171
Kwai Tsing	17	13	7	37
Tsuen Wan	44	12	10	66
Sai Kung	38	11	8	57
North	35	10	3	48
Tai Po	3	3	8	14
Sha Tin	79	12	24	115
Yuen Long	40	11	9	60
Tuen Mun	10	13	9	32
Islands	13	23	6	42
Total	954	345	219	1 518
Government car parks*	559	106	0	665
Non-government organisations' car parks	395	239	219	853

*Including the TD, the GPA, the LCSD, the EMSD, the HD, the TC and the HyD

- (iii) The numbers of public EV chargers provided at government and non-government organisations' car parks which are open for public use with a breakdown by 18 districts of Hong Kong as at the end of 2017 are as follows:

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	93	75	24	192
Eastern	37	68	32	137
Southern	4	17	19	40
Wan Chai	84	91	20	195
Kowloon City	65	2	18	85
Kwun Tong	214	40	41	295
Sham Shui Po	17	46	4	67
Wong Tai Sin	24	46	9	79
Yau Tsim Mong	100	58	28	186
Kwai Tsing	16	9	25	50
Tsuen Wan	16	40	7	63
Sai Kung	38	14	16	68
North	35	16	6	57
Tai Po	28	3	8	39
Sha Tin	90	35	32	157
Yuen Long	46	11	14	71

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Tuen Mun	10	8	14	32
Islands	14	26	9	49
Total	931	605	326	1 862
Government car parks*	401	279	0	680
Non-government organisations' car parks	530	326	326	1 182

*Including the TD, the GPA, the LCSD, the EMSD, the HD, the TC and the HyD

- (iv) The numbers of public EV chargers provided at government and non-government organisations' car parks which are open for public use with a breakdown by 18 districts of Hong Kong as at the end of 2018 are as follows:

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	62	110	36	208
Eastern	28	63	52	143
Southern	4	11	27	42
Wan Chai	67	117	35	219
Kowloon City	64	1	15	80
Kwun Tong	214	81	42	337
Sham Shui Po	15	42	37	94
Wong Tai Sin	24	46	9	79
Yau Tsim Mong	101	42	50	193
Kwai Tsing	25	9	33	67
Tsuen Wan	17	46	9	72
Sai Kung	24	31	25	80
North	24	25	12	61
Tai Po	28	3	7	38
Sha Tin	77	44	47	168
Yuen Long	46	33	18	97
Tuen Mun	10	10	17	37
Islands	14	110	27	151
Total	844	824	498	2 166
Government car parks*	314	464	4	782
Non-government organisations' car parks	530	360	494	1 384

*Including the TD, the GPA, the LCSD, the EMSD, the HD, the TC and the HyD

- (v) The numbers of public EV chargers provided at government and non-government organisations' car parks which are open for public use with a breakdown by 18 districts of Hong Kong as at the end of 2019 are as follows:

District	No. of public chargers			
	Standard	Medium	Quick	Sub-total
Central & Western	62	110	38	210
Eastern	28	67	54	149
Southern	4	12	29	45
Wan Chai	66	121	37	224
Kowloon City	64	7	15	86
Kwun Tong	551	181	62	794
Sham Shui Po	17	104	71	192
Wong Tai Sin	24	46	11	81
Yau Tsim Mong	110	124	68	302
Kwai Tsing	25	13	33	71
Tsuen Wan	17	49	12	78
Sai Kung	24	37	27	88
North	58	25	12	95
Tai Po	28	3	7	38
Sha Tin	75	51	48	174
Yuen Long	50	33	18	101
Tuen Mun	12	10	19	41
Islands	18	115	27	160
Total	1 233	1 108	588	2 929
Government car parks*	386	467	4	857
Non-government organisations' car parks	847	641	584	2 072

*Including the TD, the GPA, the LCSD, the EMSD, the HD and the TC

5. and 6. According to the data provided by the Government Logistics Department, a total of 291 EVs (including motorcycles, cars and vans) were procured by various government bureaux and departments in the past 5 years, involving an expenditure of about \$78.1 million.

The types and numbers of EVs and non-EVs owned by various government bureaux and departments are as follows. The EV model mostly owned by the Government was Renault Fluence ZE, totalling 119 vehicles.

Year	EVs			Non-EVs						
	Motorcycle	Car	Van	Motorcycle	Car	Van	Cross Country Vehicle	Bus	Truck	Specialised Vehicle
2015	76	163	5	256	1 337	1 412	102	654	312	2 125
2016	69	165	15	258	1 353	1 404	101	661	318	2 148
2017	63	174	17	264	1 325	1 388	111	676	315	2 220
2018	62	169	22	243	1 387	1 338	99	691	318	2 233
2019	60	145	22	216	1 419	1 350	104	698	314	2 276

7. Waste EV batteries have to be properly handled under the Waste Disposal Ordinance (Cap. 354) and its subsidiary Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). Most EV manufacturers or agents have currently engaged licensed collectors to collect the waste batteries of their brands' EVs. After proper preliminary treatment (e.g. sorting, discharging and insulating) and packaging, these waste EV batteries are exported to appropriate treatment facilities in Japan, Korea or Belgium for recycling. Although the age of most EVs in Hong Kong remains low and the number of retired EV batteries remains small at this stage, as EVs will become more popular in future, the Environmental Protection Department (EPD) will embark on a study on how to promote recycling of new energy vehicle batteries. Apart from analysing overseas experiences, the EPD will maintain close liaison with the trade and EV suppliers to explore solutions that are applicable to local situation, so as to enhance environmental protection.

- End -

CONTROLLING OFFICER'S REPLY

ENB087

(Question Serial No. 1968)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on:

1. the percentages of vehicle emissions in the overall air pollutants in Hong Kong in the past 5 years (with a breakdown by vehicle type and by air pollutant emitted).
2. the percentages of vessel emissions in the overall air pollutants in Hong Kong in the past 5 years (with a breakdown by type of ocean-going vessels and by air pollutant emitted).

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 42)

Reply:

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major pollution sources in Hong Kong. The Hong Kong Air Pollutant Emission Inventories for 2018 and 2019 are still under compilation.

1. The percentages of emissions of major air pollutants from vehicles in Hong Kong's total emissions from 2013 to 2017* are tabulated below.

* To provide more accurate emission data to facilitate the management of air quality, the EPD will constantly update the methodologies and emission factors to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods or emission factors are updated, and therefore the current data from 2013 to 2016 may be different from the estimates provided in the past.

Year	Vehicle type	Vehicle emissions (tonnes) / Percentage of vehicle emissions in Hong Kong's total emissions (%)											
		Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compounds		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
2017	Motorcycle	<5	<1%	130	<1%	10	<1%	<5	<1%	3 310	13%	3 530	6%
	Private car	10	<1%	440	<1%	20	<1%	20	<1%	700	3%	7 160	13%
	Taxi	<5	<1%	3 220	4%	<5	<1%	<5	<1%	170	<1%	8 430	15%
	Light goods vehicle	<5	<1%	3 040	4%	70	2%	70	2%	100	<1%	970	2%
	Medium and heavy goods vehicle	10	<1%	4 670	5%	160	4%	140	5%	160	<1%	1 690	3%
	Private light bus	<5	<1%	130	<1%	10	<1%	<5	<1%	40	<1%	620	1%
	Public light bus	<5	<1%	660	<1%	30	<1%	30	<1%	310	1%	5 960	10%
	Non-franchised bus	<5	<1%	1 490	2%	40	1%	40	1%	80	<1%	580	1%
	Franchised bus	<5	<1%	3 030	4%	80	2%	70	2%	60	<1%	1 200	2%
	Total emissions	40	<1%	16 820	20%	420	10%	390	12%	4 920	19%	30 150	53%
2016	Motorcycle	<5	<1%	130	<1%	10	<1%	<5	<1%	3 140	12%	3 650	6%
	Private car	10	<1%	500	<1%	20	<1%	20	<1%	730	3%	8 020	14%
	Taxi	<5	<1%	3 960	4%	<5	<1%	<5	<1%	190	<1%	8 750	15%
	Light goods vehicle	<5	<1%	3 190	3%	80	2%	70	2%	120	<1%	990	2%
	Medium and heavy goods vehicle	10	<1%	4 990	5%	170	4%	150	4%	200	<1%	1 770	3%
	Private light bus	<5	<1%	140	<1%	10	<1%	<5	<1%	30	<1%	590	1%
	Public light bus	<5	<1%	730	<1%	40	1%	40	1%	300	1%	5 640	10%
	Non-franchised bus	<5	<1%	1 510	2%	40	1%	40	1%	90	<1%	570	<1%
	Franchised bus	<5	<1%	3 670	4%	80	2%	70	2%	60	<1%	1 110	2%

Year	Vehicle type	Vehicle emissions (tonnes) / Percentage of vehicle emissions in Hong Kong's total emissions (%)											
		Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compounds		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
	Total emissions	40	<1%	18 810	20%	450	10%	410	12%	4 870	18%	31 090	53%
2015	Motorcycle	<5	<1%	130	<1%	10	<1%	<5	<1%	3 070	12%	3 960	7%
	Private car	10	<1%	520	<1%	30	<1%	20	<1%	790	3%	8 500	15%
	Taxi	<5	<1%	4 220	4%	<5	<1%	<5	<1%	200	<1%	7 930	14%
	Light goods vehicle	<5	<1%	3 270	3%	100	2%	90	2%	150	<1%	1 000	2%
	Medium and heavy goods vehicle	10	<1%	5 850	6%	210	4%	200	5%	260	1%	2 110	4%
	Private light bus	<5	<1%	150	<1%	10	<1%	10	<1%	30	<1%	540	<1%
	Public light bus	<5	<1%	780	<1%	50	1%	50	1%	300	1%	5 230	9%
	Non-franchised bus	<5	<1%	1 530	2%	50	<1%	40	1%	90	<1%	560	<1%
	Franchised bus	<5	<1%	4 090	4%	80	2%	70	2%	70	<1%	970	2%
	Total emissions	40	<1%	20 550	21%	530	11%	480	13%	4 950	19%	30 800	54%
2014	Motorcycle	<5	<1%	140	<1%	10	<1%	<5	<1%	2 940	11%	4 270	7%
	Private car	10	<1%	630	<1%	30	<1%	20	<1%	870	3%	7 470	12%
	Taxi	<5	<1%	3 900	4%	<5	<1%	<5	<1%	260	<1%	11 770	19%
	Light goods vehicle	<5	<1%	3 780	3%	140	2%	130	3%	190	<1%	1 130	2%
	Medium and heavy goods vehicle	10	<1%	6 530	6%	320	6%	290	7%	330	1%	2 150	4%
	Private light bus	<5	<1%	190	<1%	10	<1%	10	<1%	40	<1%	650	1%
	Public light bus	<5	<1%	900	<1%	90	2%	80	2%	300	1%	6 080	10%
	Non-franchised bus	<5	<1%	1 650	1%	50	<1%	50	1%	100	<1%	590	<1%
	Franchised bus	<5	<1%	4 860	4%	90	2%	80	2%	70	<1%	910	1%
	Total emissions	40	<1%	22 570	20%	730	13%	670	15%	5 110	19%	35 000	57%

Year	Vehicle type	Vehicle emissions (tonnes) / Percentage of vehicle emissions in Hong Kong's total emissions (%)											
		Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compounds		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
2013	Motorcycle	<5	<1%	140	<1%	10	<1%	10	<1%	2 900	10%	4 700	7%
	Private car	10	<1%	750	<1%	30	<1%	30	<1%	980	3%	7 550	11%
	Taxi	<5	<1%	5 850	5%	<5	<1%	<5	<1%	410	1%	17 610	25%
	Light goods vehicle	<5	<1%	4 140	4%	180	3%	170	4%	230	<1%	1 270	2%
	Medium and heavy goods vehicle	10	<1%	7 600	7%	410	7%	380	8%	430	1%	2 400	3%
	Private light bus	<5	<1%	210	<1%	10	<1%	10	<1%	40	<1%	650	<1%
	Public light bus	<5	<1%	1 100	<1%	100	2%	90	2%	380	1%	7 860	11%
	Non-franchised bus	<5	<1%	1 710	1%	60	<1%	50	1%	110	<1%	610	<1%
	Franchised bus	<5	<1%	5 330	5%	100	2%	90	2%	80	<1%	920	1%
	Total emissions	50	<1%	26 830	23%	890	15%	820	17%	5 550	20%	43 560	63%

Note: The figures for vehicle emissions are rounded to the nearest ten. There may be slight discrepancies between the sums of emissions and percentages of various vehicle types and the total vehicle emissions and percentages shown in the table because of rounding.

2. The percentages of emissions of major air pollutants from ocean-going vessels (OGVs) in Hong Kong's total emissions from 2013 to 2017 are tabulated below.

Year	OGV type	OGV emissions (tonnes) / Percentage of OGV emissions in Hong Kong's total emissions (%)											
		Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compound		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
2017	Cruise ship	230	1%	1 190	1%	40	<1%	40	1%	40	<1%	100	<1%
	Oil tanker	240	1%	410	<1%	30	<1%	30	<1%	20	<1%	40	<1%
	Container vessel	6 690	41%	9 900	12%	760	19%	690	22%	330	1%	890	2%
	General cargo vessel	120	<1%	230	<1%	20	<1%	10	<1%	10	<1%	20	<1%
	Others	710	4%	1 470	2%	90	2%	80	3%	60	<1%	140	<1%
	All OGVs	7 990	49%	13 200	16%	940	23%	850	27%	460	2%	1 190	2%
2016	Cruise ship	390	2%	1 240	1%	80	2%	80	2%	60	<1%	120	<1%
	Oil tanker	330	2%	460	<1%	40	<1%	40	1%	20	<1%	40	<1%
	Container vessel	6 590	38%	10 120	11%	880	20%	810	24%	500	2%	1 120	2%
	General cargo vessel	160	<1%	240	<1%	20	<1%	20	<1%	10	<1%	20	<1%
	Others	700	4%	1 190	1%	90	2%	80	2%	50	<1%	110	<1%
	All OGVs	8 170	47%	13 250	14%	1 120	25%	1 020	30%	640	2%	1 410	2%
2015	Cruise ship	1 020	5%	1 640	2%	150	3%	140	4%	70	<1%	160	<1%
	Oil tanker	400	2%	370	<1%	40	<1%	40	1%	20	<1%	40	<1%
	Container vessel	8 440	43%	10 710	11%	1 050	22%	950	25%	500	2%	1 190	2%
	General cargo vessel	230	1%	250	<1%	30	<1%	20	<1%	10	<1%	20	<1%
	Others	1 010	5%	1 680	2%	120	3%	110	3%	60	<1%	150	<1%
	All OGVs	11 100	57%	14 650	15%	1 390	29%	1 260	33%	660	3%	1 560	3%
2014	Cruise ship	1 130	4%	1 840	2%	180	3%	170	4%	80	<1%	180	<1%
	Oil tanker	490	2%	330	<1%	40	<1%	40	<1%	10	<1%	30	<1%
	Container vessel	9 540	30%	11 570	10%	1 160	20%	1 050	24%	530	2%	1 260	2%
	General cargo vessel	220	<1%	230	<1%	30	<1%	20	<1%	10	<1%	20	<1%
	Others	1 190	4%	2 250	2%	140	2%	130	3%	80	<1%	200	<1%
	All OGVs	12 580	40%	16 210	15%	1 550	27%	1 410	32%	710	3%	1 690	3%

Year	OGV type	Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compound		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
2013	Cruise ship	660	2%	1 380	1%	80	1%	70	1%	50	<1%	120	<1%
	Oil tanker	660	2%	470	<1%	60	<1%	50	1%	20	<1%	40	<1%
	Container vessel	9 670	31%	12 050	11%	1 150	19%	1 040	22%	410	1%	1 000	1%
	General cargo vessel	300	<1%	320	<1%	30	<1%	30	<1%	10	<1%	30	<1%
	Others	1 100	4%	1 350	1%	120	2%	110	2%	50	<1%	120	<1%
	All OGVs	12 400	39%	15 570	14%	1 440	24%	1 310	28%	540	2%	1 300	2%

Note: The figures for OGV emissions are rounded to the nearest ten. There may be slight discrepancies between the sums of emissions and percentages of various OGV types and the total OGV emissions and percentages shown in the table because of rounding.

- End -

CONTROLLING OFFICER'S REPLY**ENB088****(Question Serial No. 1969)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the expenditure and manpower resources involved in operating the dioxin monitoring stations in each of the past 3 years. What are the estimated expenditure and manpower arrangement in the coming year?

As members of the public are very concerned about the concentrations of dioxins and cyanide in districts that are frequently affected by tear gas, will the Administration focus its efforts in measuring the concentrations of dioxins and cyanide residues in areas near hospitals, schools, parks, residential areas, etc. in those districts, and increase the number of dioxin monitoring stations? If yes, what are the details? If no, what are the reasons?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 43)Reply:

The Environmental Protection Department (EPD) has set up Toxic Air Pollutants (TAPs) monitoring stations in Tsuen Wan and Central & Western districts. Contractors are engaged through contracts to collect samples of dioxins and other TAPs in the air in Hong Kong regularly and then send the samples to the Government Laboratory for analysis. The contractors are responsible for the daily management, operation and maintenance of the TAPs monitoring stations. The operating costs of the contract in the past 3 years and in the coming year are set out in the table below.

Year	Operating Costs of the Contract (\$'000)
2017	585.6
2018	643.2
2019	643.2
2020	684

There are no major dioxin emission sources in Hong Kong. The trace amount of dioxins comes mainly from different types of combustion processes, including vehicle engines,

incineration facilities, occasional fires and hill fires, etc. Therefore, the level of dioxins in the air has been very low.

Dioxins have a long life time. If there were large amount of dioxins produced during the social events in the past half year, the background levels as monitored would have increased significantly. However, the monitoring data obtained in the past half year does not show any abnormal increases. The annual average concentration in 2019 was about 0.02 pg/m³ and was close to the lower detection limit. In fact, the dioxin levels in Hong Kong have been decreasing for the past 2 decades. Therefore, the Government is of the view that the setting up of 2 dioxin monitoring points is sufficient.

As for cyanide in air, since it is not a common substance in the atmosphere, even if it is produced occasionally, it will quickly disperse in the air. Therefore, the EPD has not been monitoring this chemical.

- End -

ENB089

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1970)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. It is mentioned in the Matters Requiring Special Attention in the forthcoming year that the Administration will continue to co-operate with the Guangdong authorities on cross-boundary water quality management issues and protection of the marine environment. Please advise on (a) the details of the relevant work, and the expenditure and manpower resources to be involved; and (b) the effectiveness of the work, and the expenditure and manpower resources involved in last year.

2. In addition, please advise on the details of the Administration's work, and the expenditure and manpower resources involved to protect the marine environment within the territory, especially its work to keep the shorelines clean. Please advise on the responsible departments, the number of cleaning operations conducted, the weight of refuse collected each month, as well as the expenditure involved and manpower arrangement.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 45)

Reply:

As part of the work under the Hong Kong-Guangdong Joint Working Group on Environmental Protection and Combating Climate Change (formerly known as Hong Kong-Guangdong Joint Working Group on Sustainable Development and Environmental Protection), the Environmental Protection Department (EPD) and the Department of Ecology and Environment of Guangdong Province (GDDEE) completed a Pearl River Estuary Regional Water Quality Joint Management Planning Advance Study at the end of 2014. The objective of the study is to assess the pollution load carrying capacity of the Pearl River Estuary by using the Pearl River Delta water quality model in order to provide a scientific basis for water quality management of the estuary. Following the recommendations of the study, both sides jointly formulated the Pearl River Estuary Water Quality Management Co-operation Plan (Co-operation Plan) at the end of 2016. Over the past year, Hong Kong and Guangdong continued to work together to take forward measures to reduce pollutant discharge according to the specific work plans of the Co-operation Plan, as well as to communicate and exchange monitoring data on the water quality of the estuary

and coastal waters, so as to achieve the common goal of protecting the water quality of the estuary.

On co-operation with the Shenzhen Municipality, the EPD and the Shenzhen Municipal Ecology and Environment Bureau completed the review of the Deep Bay (Shenzhen Bay) Water Pollution Control Joint Implementation Programme (the JIP) at the end of 2016. Both sides have reviewed the latest development planning and water quality condition in the Deep Bay catchment area and the progress of various water pollution control measures, and have predicted the future water quality of Deep Bay. The results indicated that there had already been a reduction in the amount of pollutants discharged into Deep Bay and a material improvement in water quality. Over the past year, Hong Kong and Shenzhen continued to implement the jointly formulated JIP (2016 revised version) to make continuous improvement to the water quality of Deep Bay.

In addition, Hong Kong and Guangdong set up the Hong Kong-Guangdong Marine Environmental Management Special Panel in 2016 to enhance exchange and communication on various regional marine environmental matters, including formulation of strategies for tackling Hong Kong-Guangdong marine environmental management issues, setting up of a notification and alert system on marine refuse, sharing of experience, etc. Upon the launch of a trial of the Notification and Alert System on Marine Refuse in May 2017, the mechanism has enabled one side to activate the System and immediately notify the other in the event of any significant marine environmental incident or heavy rainstorm, facilitating relevant departments to make timely resource deployment and preparation. In addition, in last year, the two sides jointly organised coastal clean-up activities for the first time to promote the message of keeping shorelines clean and joining hands in protecting the ocean.

In the coming year, the Government will continue to maintain close cooperation with the Guangdong authorities on cross-boundary water quality management and marine environment protection. As the above is part of the routine work of the Environment Bureau and relevant government departments, we do not have a separate breakdown of the expenditure and manpower in this respect.

As for protection of local marine environment, the work of the EPD includes:

- a) formulating and implementing plans to ensure that Hong Kong's sewerage system can operate safely and effectively, and that adequate sewerage infrastructure is provided to meet present and future development needs of the city;
- b) conducting extensive monitoring on water and sediment quality as well as carrying out special investigations to provide a basis for policy development and preventive planning;
- c) assessing the possible impact of strategic and local developments on water quality and requiring this to be taken into account in development plans, so as to protect the quality of marine and inland waters and to ensure their best uses; and
- d) enforcing the law and proposing arrangements for legislation amendments to prevent water pollution.

Regarding publicity and education, the EPD has all along been committed to promoting the message of keeping shorelines clean to the community and interacting closely with the public by organising public engagement sessions on clean shorelines from time to time and

encouraging participation of individuals and organisation in shorelines cleanup activities through the Clean Shorelines Liaison Platform (including the “Clean Shorelines” social platforms, dedicated website, designated hotline and email, etc.), with a view to consolidating community efforts in tackling the marine refuse problem. The EPD also provides funding support through the Environment and Conservation Fund to community publicity activities and education projects on clean shorelines, with a view to raising the environmental awareness of members of the public.

The staffing and total expenditure for the EPD’s work on protecting local marine and river environment in the past year are as follows:

Year	2019-20
Staffing (no. of posts)	445
Total expenditure (\$m)	333.7 (revised estimate)

The above work is mainly undertaken by the Water Policy Division, Environmental Assessment (EA) Division and Environmental Compliance (EC) Division. The EA Division and EC Division are also responsible for work in other aspects of environmental protection.

Regarding keeping shorelines clean within the territory, various departments of the Hong Kong Special Administrative Region Government collect and clean up marine refuse (including floating refuse and shoreline refuse washed ashore) at the respective locations in their charge. The contractor engaged by the Marine Department (MD) deploys about 80 vessels of various types to clean up floating refuse in Hong Kong waters on a daily basis, and provides domestic refuse collection service to vessels in anchorages and typhoon shelters at least once per day. The Agriculture, Fisheries and Conservation Department (AFCD) is responsible for the cleanliness of the marine parks and marine reserve. The cleansing frequency ranges from 4 to 6 times per week for marine parks and once per week for the Cape D’Aguilar Marine Reserve where no recreational activities are allowed. The Leisure and Cultural Services Department (LCSD) is responsible for the regular cleanup of the 41 gazetted beaches under its purview, which is carried out at least twice per day. The Food and Environmental Hygiene Department (FEHD) is responsible for the cleanliness of ungazetted beaches and coastal areas, the cleansing frequency generally ranges from 6 times a week to half-yearly (depending on the cleanliness conditions of the sites and the actual circumstances). Since the MD, LCSD and AFCD outsource the relevant work to cleansing contractors, the collection work does not involve any staffing of the Government. As for the FEHD, apart from outsourcing to cleansing contractors, its routine cleaning service also includes collecting and cleaning up refuse from ungazetted beaches and along shorelines. No separate breakdown on the staffing and expenditure involved is available.

In the past year, the total amount of marine refuse collected by the above departments each month is tabulated below:

2019-20	Total amount of marine refuse collected (tonnes)
April	1 165
May	1 279
June	1 353
July	1 428
August	1 500
September	1 411
October	1 290
November	1 155
December	1 043
January of the following year	1 030
February of the following year	Note
March of the following year	Note

Note: The figures are still under compilation.

- End -

CONTROLLING OFFICER'S REPLY

ENB090

(Question Serial No. 1971)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The provision earmarked for the Nature Conservation Programme in the coming year shows an increase of 157.9% over last year. What are the reasons and details?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 46)

Reply:

The Environmental Protection Department launched the Countryside Conservation Funding Scheme (CCFS) in October 2019 to support non-profit-making organisations to implement countryside conservation and revitalisation projects. The increased estimates under this Programme is mainly earmarked for meeting the cash flow requirements for the CCFS.

- End -

CONTROLLING OFFICER'S REPLY

ENB091

(Question Serial No. 2369)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

1. In 2019, the water quality of 9% and 6% of the sampling points was graded as fair and bad respectively. What were the details of these sampling points?
2. What are the Administration's key measures to improve the water quality of these sampling points in the coming year? Please advise on the estimated expenditure and manpower arrangement to be involved.
3. Please also provide the locations of the sampling points where water quality was graded as fair, bad and very bad in the past 3 years.

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 44)

Reply:

The river sampling points where water quality was graded as "Fair" or "Bad" were mainly situated in areas within the northwestern part of the New Territories that were affected by illegal discharge from livestock farms, expedient connections and discharge from villages with no public sewerage available for connection yet.

Table 1 to Table 3 set out the specific locations of the sampling points where river water quality was graded as "Fair" or below in the past 3 years (i.e. 2017, 2018 and 2019).

Table 1 Sampling points with river water quality graded as “Fair” or below in 2017

Area	River Water Quality Index Grading		
	Fair	Bad	Very Bad
Western and Northern New Territories	Downstream of River Indus Downstream of Fairview Park Nullah Downstream of Tin Shui Wai Nullah Upstream of Yuen Long Creek	Downstream of Kam Tin River Upstream of Tuen Mun River Downstream of Yuen Long Creek	---
Sai Kung District	Upstream of Tseng Lan Shue Stream	---	---

Table 2 Sampling points with river water quality graded as “Fair” or below in 2018

Area	River Water Quality Index Grading		
	Fair	Bad	Very Bad
Western and Northern New Territories	Downstream of River Indus Downstream of Fairview Park Nullah Downstream of Tin Shui Wai Nullah Downstream of River Beas Downstream of Kam Tin River (South) Midstream and downstream of River Ganges	Upstream of Yuen Long Creek Downstream of Kam Tin River (North) Upstream of Tuen Mun River	Downstream of Yuen Long Creek
Sai Kung District	---	Upstream of Tseng Lan Shue Stream	---

Table 3 Sampling points with river water quality graded as “Fair” or below in 2019

Area	River Water Quality Index Grading		
	Fair	Bad	Very Bad
Western and Northern New Territories	Downstream of Fairview Park Nullah Downstream of Tin Shui Wai Nullah Downstream of Kam Tin River (South) Midstream and downstream of River Ganges Upstream of Yuen Long Creek (West)	Upstream (East) and downstream of Yuen Long Creek Downstream of Kam Tin River (North) Upstream of Tuen Mun River	---
Sai Kung District	Upstream of Tseng Lan Shue Stream	---	---

The Government’s main strategies for improving the river water quality in Hong Kong are to enforce the Water Pollution Control Ordinance, to implement the Livestock Waste Control Scheme, and to extend the sewerage network to various villages according to the Sewerage Master Plans so that village houses can be gradually connected to public sewers. In the coming year, the Environmental Protection Department (EPD) will continue to take enforcement actions in accordance with the Water Pollution Control Ordinance and Waste Disposal Ordinance to combat illegal discharge of wastewater and livestock waste. When a misconnection is found in public sewers or internal foul sewers of private buildings during investigation by the EPD, the case will be referred to the Drainage Services Department (DSD) and the Buildings Department respectively for follow-up to rectify the misconnection. The Government will also continue to implement Sewerage Master Plans progressively to cover most of the unsewered villages. With the provision of public sewers, the water quality of these rivers will show gradual improvement. In addition, the EPD, in collaboration with other relevant departments, will continue to promote the avoidance of pollution in storm drains or rivers through publicity and education, so as to improve river water quality.

Regarding the water quality problem of the Yuen Long Creek, there has been gradual improvement at some of its upstream sections. The EPD will continue to collaborate with the DSD to step up efforts in tracking down the sources of wastewater in the district, to rectify the misconnections of foul sewers to storm water drains progressively, to upgrade the treatment capacity, catchment coverage and treatment level of the San Wai Sewage Treatment Works and the Yuen Long Sewage Treatment Works, and to provide public sewerage system for villages in the northwestern part of the New Territories in order to reduce the discharge of pollutants into the Yuen Long Creek and improve its water quality.

As taking enforcement actions, implementing the sewerage schemes, and conducting publicity and education programmes are part of the routine duties of the EPD, there is no separate breakdown of the expenditure and manpower involved. In recent years, the

Government has been implementing a series of sewerage projects in the northwestern part of the New Territories and Sai Kung district, including the upgrading of sewage treatment works, provision of public sewers, rehabilitation of ageing sewers and addition of dry weather flow interception facilities to improve river water quality. The estimated expenditure to be involved in these projects in 2020-21 is about \$920 million.

- End -

ENB092

CONTROLLING OFFICER'S REPLY

(Question Serial No. 0365)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

During 2020-21, the Environmental Protection Department will extend the Cleaner Production Partnership Programme for 5 years to promote the adoption of cleaner production technologies and practices by Hong Kong-owned factories in the region. Will the Administration advise on the following:

- 1) What were the specific achievements of the Cleaner Production Partnership Programme in the past 5 years? Please give concrete examples to illustrate the achievements;
- 2) Please provide the number of organisations funded by the Programme in the past 5 years, with a breakdown by industry;
- 3) What specific measures are in place to ensure value for money and that the funding is properly used?

Asked by: Hon IP LAU Suk-ye, Regina (LegCo internal reference no.: 7)

Reply:

- 1) The Cleaner Production Partnership Programme (the Programme) comprises 4 key initiatives, namely: (a) to assist participating Hong Kong-owned factories to carry out on-site improvement assessments; (b) to support Hong Kong-owned factories to carry out demonstration projects on cleaner production technologies and practices; (c) to support relevant trade and industry associations of Hong Kong to carry out trade-specific promotion and publicity activities; and (d) to organise cross-trade technology promotion activities by the Hong Kong Productivity Council (HKPC), which is the implementation agent of the Programme. In the past 5 years, around 800 funding applications for on-site improvement assessments and demonstration projects were approved. Around 100 promotion and publicity activities carried out by relevant trade and industry associations of Hong Kong were also funded. Furthermore, the HKPC organised more than 170 cross-trade technology promotion activities with over 17 000 participants. The Programme has brought the environmental benefits of emission reductions and energy saving to the region.

The Programme has reduced emissions of over 30 000 tonnes of air pollutants in the region each year, including 11 900 tonnes of volatile organic compounds, 6 100 tonnes of sulphur dioxide and 12 700 tonnes of nitrogen oxides. Nearly 16 million tonnes of carbon dioxide and nearly 18 million tonnes of effluent discharge are also reduced annually. The projects under the Programme can also save around 11 000 terajoules of energy and around \$1.8 billion of production costs each year.

- 2) In the past 5 years, the numbers of funded Hong Kong-owned factories and relevant trade and industry associations of Hong Kong are set out in the table below:

Industry	Hong Kong-owned factories[#] (on-site improvement assessments and demonstration projects)	Hong Kong trade and industry associations[#] (associations that organised promotion and publicity activities)
Metal and Metal Products	271	1
Chemical Products	170	1
Textiles	114	5
Printing and Publishing	47	1
Food and Beverage	26	-
Paper and Paper Products	20	-
Non-metallic Mineral Products	21	-
Furniture	17	-
Others*	9	4
Total	695	12

[#]Each factory or association can apply funding for more than 1 project.

*Other industries include power generation, vehicle repair workshop, umbrella products, stationery products, mechanical ventilation system and dental supplies products.

- 3) A Project Management Committee (PMC) has been set up to oversee the implementation of the Programme. The PMC comprises representatives from 4 major chambers of commerce (i.e. the Chinese General Chamber of Commerce, the Chinese Manufacturers' Association of Hong Kong, the Federation of Hong Kong Industries and the Hong Kong General Chamber of Commerce), an academic, as well as representatives from the Environmental Protection Department, the Trade and Industry Department and the Innovation and Technology Commission. The PMC is responsible for steering the operation of the Programme and scrutinising funding applications lodged by Hong Kong-owned factories and relevant trade and industry associations of Hong Kong. The HKPC conducts quality checks from time to time on environmental technology service providers that provide services for on-site improvement assessments and demonstration projects for Hong Kong-owned factories with a view to ensuring the quality of service rendered by the relevant service providers. In addition, the HKPC conducts quality checks for promotion and publicity activities organised by the associations to ensure that the implementation of the activities was in accordance with the plan specified in the approved applications and of acceptable quality.

- End -

CONTROLLING OFFICER'S REPLY

ENB093

(Question Serial No. 0366)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

During 2020-21, the Environmental Protection Department will set up a \$200 million Green Tech Fund to promote the development of decarbonisation and green technologies, expedite low-carbon transformation and enhance environmental protection. Will the Administration advise on the following:

- 1) Who are the target beneficiaries of the Fund? What are the eligibility criteria of the applicants?
- 2) What are the specific objectives of the Fund in the short, medium and long term?
- 3) What specific measures are in place to ensure value for money and that the funding is properly used?
- 4) Is there a plan for a regular review mechanism?

Asked by: Hon IP LAU Suk-ye, Regina (LegCo internal reference no.: 8)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre

for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB094

(Question Serial No. 0367)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

During 2020-21, the Department will continue to monitor and enhance the operation of the Recycling Fund to provide the recycling industry and other stakeholders with better and more targeted support in practising recycling at different levels. Will the Administration advise on the following:

- 1) Please provide the number of projects approved by the Recycling Fund and the amount of funding in the past 3 years;
- 2) What is the mechanism for vetting the applicants? What are the specific criteria for deciding on the granting of funding and the amount of funding?
- 3) What specific measures are in place to ensure value for money and that the funding is properly used?

Asked by: Hon IP LAU Suk-ye, Regina (LegCo internal reference no.: 9)

Reply:

- 1) In the past 3 years (i.e. the financial years from 2017-18 to 2019-20 (as at 29 February 2020)), the Recycling Fund (the Fund) approved 241 projects. Among them, excluding 19 which have been withdrawn by the applicant organisations, a total of 222 projects have been or will soon be commenced, involving a total funding of about \$220 million.
- 2) The Secretariat of the Fund (i.e. the Hong Kong Productivity Council) has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. The Advisory Committee on Recycling Fund (RFAC) will, based on the Secretariat of the Fund's preliminary assessment of the projects under application, consider the proposed projects having regard to factors like how the projects can achieve the objective of the Fund, the project merits and results and the ability of the

applicants in implementation. The Government will then approve the applications based on the RFAC's recommendations.

- 3) In order to assess the actual effectiveness of the approved projects under the Fund, the applicant of each approved project is required to enter into an agreement with the Environmental Protection Department/Secretariat of the Fund, stating clearly the project's key performance indicators (e.g. the additional quantity of recyclables or recycled products being processed, the reduced amount of waste disposed of at landfills, etc.), and progress indicators like the milestones of deliverables (e.g. installing new equipment, organising activities, etc.). Such information must be recorded in detail in the progress reports, final report and audited accounts, etc. submitted by the applicant. Reimbursements will only be made upon satisfaction of the indicators as stated in the agreement by the applicant.

- End -

CONTROLLING OFFICER'S REPLY

ENB095

(Question Serial No. 0368)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

During 2020-21, the Environmental Protection Department will continue with the development of the network of Community Green Stations (CGSs) across the territory. However, quite a number of members of the public have pointed out that a large quantity of recycling bins originally placed in various districts had disappeared suddenly, resulting in people not being able to recycle plastics, paper and metals by a convenient means. Moreover, the fact that only 8 collection points of the CGSs have been set up since 2015 has greatly dampened the desire of members of the public to take the initiative to practise recycling. Will the Administration advise on the following:

- 1) How can the construction of the collection points of the CGSs be speeded up?
- 2) Will outreaching collection service of the CGSs be expanded and publicity be stepped up so as to inform and encourage the general public to take the initiative to support recycling?
- 3) Will recycling bins be placed back in MTR stations so that the public can support recycling by the most convenient means?

Asked by: Hon IP LAU Suk-ye, Regina (LegCo internal reference no.: 10)

Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages. As for the remaining 6 CGSs (including the Kowloon City CGS, the Southern CGS, the North CGS, the Central and Western CGS, the Tsuen Wan CGS and the Yau Tsim Mong CGS), we are

continuing with site search and the associated preparatory work. Apart from collecting recyclables at the stations and housing estates in the relevant districts, CGS operators often set up mobile collection points in the districts to facilitate residents nearby to participate in recycling and to publicise the message of clean recycling. On the other hand, we will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of Community Recycling Centres to all 18 districts across the territory from 2020-21, so as to strengthen recycling support at the community level, including the provision of outreaching recyclable collection services.

As recycling bins in MTR stations are provided and managed by the MTR Corporation, no government expenditure is involved.

- End -

CONTROLLING OFFICER'S REPLY**ENB096****(Question Serial No. 1296)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the promotion of the use of electric vehicles (EVs), will the Administration advise on the following:

1. What was the number of EV charging facilities in Hong Kong in the past year (with a breakdown by quick/medium/standard charging facility and government land/non-government land)? What were the expenditures on the electricity costs of chargers at car parks and the maintenance costs of chargers?
2. It is mentioned in the Budget that the Administration will launch a \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of private residential buildings. Taking into account the expenditures on maintenance or electricity cost of such charging-enabling infrastructure, will the Administration provide incentives to attract more people to participate in the pilot scheme?
3. What are the number and ages of EVs in Hong Kong at present? What are the estimated service years before retirement of such EVs? Has the Government studied how the waste EV batteries can be properly collected and handled? What are the manpower and expenditures involved in the relevant study?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 21)Reply:

1. The numbers of public chargers provided by the Government and non-government sector as at the end of 2019 are as follows:

	Number of public chargers					
	Standard charger		Medium charger		Quick charger	
	Government	Non-government sector	Government	Non-government sector	Government	Non-government sector
	386	847	467	641	4	584
Total	2 929					

Among the chargers provided by non-government sector as tabulated above, 24 standard chargers, 12 medium chargers and 31 quick chargers are installed at government premises.

In 2019, the electricity cost of charging facilities at government car parks borne by the Government was about \$990,000 while the expenditure on maintenance of charging facilities was about \$180,000.

2. The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower. The scheme will not subsidise the electricity expenditure of vehicle owners for using the charging facilities.

3. The number of electric vehicles (EVs) in Hong Kong is 14 278 (including government vehicles and special purpose vehicles) as at the end of February 2020. As at the end of 2019, the percentages of EVs aged 3 years or below, over 3 years to 5 years and over 5 years were about 50%, 40% and 10% respectively. We do not have data on the estimated service years before retirement of such vehicles.

Waste EV batteries have to be properly handled under the Waste Disposal Ordinance (Cap. 354) and its subsidiary Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). Most EV manufacturers or agents have currently engaged licensed collectors to collect the waste batteries of their brands' EVs. After proper preliminary treatment (e.g. sorting, discharging and insulating) and packaging, these waste EV batteries are exported to appropriate treatment facilities in Japan, Korea or Belgium for recycling. Although the age of most EVs in Hong Kong remains low and the number of retired EV batteries remains small at this stage, as EVs will become more popular in future, the Environmental Protection Department (EPD) will embark on a study on how to promote recycling of new energy vehicles batteries. Apart from analysing overseas experiences, the EPD will maintain close liaison with the trade and EV suppliers to explore solutions that are applicable to local situation, so as to enhance environmental protection. As the above is part of the work of the Waste Reduction and Recycling Division of the EPD, there is no breakdown on the manpower and expenditure involved in this regard.

- End -

CONTROLLING OFFICER'S REPLY

ENB097

(Question Serial No. 1297)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the community recycling project "Community Green Stations (CGSs)", will the Government advise this Committee on the following:

1. What were the total quantities of recyclables collected by the CGSs in the past 2 years? (Please provide a breakdown by waste paper, waste metals, waste plastics, old electrical appliances, rechargeable batteries, compact fluorescent lamps, fluorescent tubes and glass bottles.)
2. How many times did the operators of various CGSs set up mobile collection points and what were the quantities of recyclables collected in the past 2 years? Has the Administration considered setting up recycling sub-stations in various districts for the convenience of the public? As for the districts where CGSs have not yet been set up, will the Administration consider setting up transitional facilities to promote recycling?
3. Please state the recyclers responsible for handling the above recyclables and the whereabouts of these recyclables.

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 22)

Reply:

1. The Environmental Protection Department (EPD) continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages. As for the remaining 6 CGSs (including the Kowloon City CGS, the Southern CGS, the North CGS, the Central and Western CGS, the Tsuen Wan CGS and the Yau Tsim Mong CGS), we are continuing with site search and other associated preparatory work.

In the past 2 years (2018 to 2019), the quantities of various types of recyclables collected by the CGSs already in operation are set out below:

	2018 to 2019 *Note							
CGS	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing	Tai Po
Quantity of various types of recyclables handled (tonnes)								
Electrical appliances and computer products	127.0	173.4	95.5	124.4	101.6	87.6	22.5	3.5
Glass bottles	756.2	623.6	532.9	485.6	537.6	294.7	252.5	20.0
Compact fluorescent lamps/ fluorescent tubes	8.3	8.1	5.0	6.4	4.4	3.6	3.3	0.1
Rechargeable batteries	1.2	4.3	1.0	2.3	1.4	0.6	1.1	0
Waste paper	7.3	28.1	33.2	73.8	39.9	6.6	49.1	1.2
Waste plastics	5.5	34.8	18.1	25.5	63.7	11.9	25.1	0.5
Waste metals	1.4	6.0	3.7	9.1	6.6	1.3	7.1	0.1

*Note: The Tuen Mun CGS, the Kwai Tsing CGS and the Tai Po CGS came into operation in September, November 2018 and October 2019 respectively.

- The CGS operators will set up mobile collection points in suitable locations to facilitate the public to practise recycling. In the past 2 years (2018 to 2019), the number of times that the CGS operators set up mobile collection points and the quantities of recyclables collected are set out below:

	2018 to 2019 #Note							
CGS	Sha Tin	Eastern	Kwun Tong	Yuen Long	Sham Shui Po	Tuen Mun	Kwai Tsing	Tai Po
Service frequency of mobile collection points	841	1 067	785	824	1 070	497	703	10
Total collection quantity of mobile collection points (tonnes)	20.4	71.9	14.3	64.6	68.3	24.0	98.6	0.8

#Note: The Tuen Mun CGS, the Kwai Tsing CGS and the Tai Po CGS came into operation in September, November 2018 and October 2019 respectively.

On the other hand, the EPD has also provided funding support through the Environment and Conservation Fund to the operation of 17 Community Recycling Centres (CRCs) and 2 mobile community recycling (i.e. community recycling vehicles) projects in various districts, including the districts in which CGSs have not yet been set up. The CRCs have established collection outlet networks for recyclable waste and played a constructive role in promoting waste reduction and recycling in the local community. The EPD will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of CRCs to all 18 districts across the territory from 2020-21, so as to strengthen recycling support at the community level, including the provision of outreaching recyclable collection services.

3. The arrangements for the various types of recyclables in the above table are as follows:

Electrical appliances and computer products	The electrical appliances and computer products were mainly sent to the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) for refurbishment or dismantling; some of them were sent to the contractors of the Computer and Communication Products Recycling Programme or the EPD for dismantling and recycling.
Glass bottles	All glass bottles were sent to glass management contractors engaged by the EPD for processing. The glass recyclables after processing were used for production of eco-cement and eco-pavers, or used as fill materials in various public works projects.
Compact fluorescent lamps/fluorescent tubes	All compact fluorescent lamps/fluorescent tubes were sent to the Chemical Waste Treatment Centre for proper handling.
Rechargeable batteries	All rechargeable batteries were sent to the contractor of the Rechargeable Battery Recycling Programme for export to overseas recycling facilities for proper handling.
Waste paper, waste plastics and waste metals	All waste paper, plastics and metals were properly handled by private recyclers engaged through tendering procedure.

- End -

CONTROLLING OFFICER'S REPLY

ENB098

(Question Serial No. 1298)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the application of reverse vending machines to recover waste plastic beverage containers, will the Administration advise this Committee on the following:

1. What are the current number of reverse vending machines that have been set up and their distribution? What factors have been taken into consideration when deciding on such distribution? When did the existing reverse vending machines commence operation? What is the expenditure involved?
2. What is the quantity recovered by these reverse vending machines so far? How will the waste plastic beverage containers be handled after being collected?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 23)

Reply:

The Environmental Protection Department (EPD) has installed 10 reverse vending machines (RVMs) at 7 Community Green Stations (CGSs) starting from June 2019 for conducting a technical trial on RVMs with a view to working out the technical details for a pilot scheme to be launched later. The relevant contractual expenditure is about \$1.3 million. As at the end of February 2020, over 477 000 plastic beverage containers (about 14 tonnes) have been collected. The CGS operators would deliver the waste plastic beverage containers collected to suitable recyclers for recycling.

In addition, the EPD also, through the Recycling Fund and the Environment and Conservation Fund, supports the trade and organisations to launch recycling projects related to RVMs for plastic beverage containers. So far, the 2 funds have approved a total of 5 projects, involving a funding amount of about \$9.54 million and 31 RVMs, and the recycling target is about 29 tonnes.

The distribution of the RVMs under all projects mentioned above is set out in the table below:

District	Number of Reverse Vending Machines			Total
	Community Green Stations	Projects funded by the Recycling Fund	Projects funded by the Environment and Conservation Fund	
Sha Tin	1	10		11
Eastern	1	1		2
Kwun Tong	1			1
Yuen Long	1			1
Sham Shui Po	2	3	1	6
Tuen Mun	1			1
Kwai Tsing	3	6	1	10
Southern		1		1
Tai Po		3		3
Sai Kung		4		4
Wong Tai Sin			1	1
Total	10	28	3	41

- End -

CONTROLLING OFFICER'S REPLY**ENB099****(Question Serial No. 1299)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding combating illegal disposal of waste, will the Administration advise this Committee on the following:

1. What were the numbers of complaints received by the Environmental Protection Department (EPD) about illegal disposal of waste, the numbers of proactive inspections conducted and the numbers of prosecutions against illegal disposal of waste in the past 3 years?
2. What measures or equipment have been adopted by the EPD to help combat illegal disposal of waste over the past 3 years? How could the measures or equipment effectively reduce the occurrence of illegal disposal of waste? What were the expenditure and staffing involved in the above measures?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 24)Reply:

1. The numbers of complaints about illegal disposal of waste handled by the Environmental Protection Department (EPD), as well as the numbers of inspections conducted and the numbers of prosecutions in the past 3 years are as follows:

	Year		
	2017	2018	2019
Number of complaints*	2 962	2 819	2 319
Number of inspections	12 195	12 254	11 793
Number of prosecutions			
(1) Number of summonses issued	198	184	180
(2) Number of Fixed Penalty Notices issued	177	246	173

Note: * Including multiple complaints which may have arisen from a single case.

2. The EPD has been maintaining close liaison with the relevant departments through inter-departmental collaboration, including exchange of intelligence, sharing of information and joint working meetings etc., to monitor the overall illegal waste disposal situation and make concerted efforts to combat illegal disposal activities according to relevant departments' purview and legislation. In order to step up efforts in combating illegal disposal of waste, the EPD will continue to review the enforcement strategy from time to time and increase the installation of surveillance camera systems progressively at blackspots in the territory to facilitate enforcement and enhance the deterrent effect. In the meantime, apart from the manpower arrangement for the daily integrated enforcement duties, the EPD has set up 4 additional dedicated enforcement teams comprising a total of 16 staff members to conduct proactive patrols against waste disposal at various districts and handle the relevant complaints, which help expedite collection of evidence and referrals to relevant departments for waste clearance. The number of complaints relating to illegal waste disposal received by the EPD in 2019 has been reduced by 21% and 18% respectively as compared with 2017 and 2018, while the amount of construction waste illegally disposed of in public places and on government land cleared by the Government in 2019 has been reduced by 57% and 23% respectively as compared with 2017 and 2018. Through the above multi-pronged measures, the overall situation of illegal disposal of construction waste has showed signs of noticeable improvement.

As the relevant enforcement work is part of the integrated enforcement duties of the EPD, there is no separate breakdown of the expenditure on staffing involved.

- End -

CONTROLLING OFFICER'S REPLY

ENB100

(Question Serial No. 1301)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the operation of the Recycling Fund, will the Administration advise on the following:

1. What were the numbers of projects funded by the Recycling Fund, the amount of funding involved and the types of recyclables involved in these projects in the past 3 years?
2. The Administration has conducted a review of the Recycling Fund and introduced enhancement measures. What is the effectiveness of these enhancement measures?
3. What is the estimated operational period of the Recycling Fund? What is the amount of funding expected to be approved in each of the coming years?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 27)

Reply:

1. In the past 3 years (i.e. the financial years from 2017-18 to 2019-20 (as at 29 February 2020)), the Recycling Fund (the Fund) approved 241 projects. Among them, excluding 19 which have been withdrawn by the applicant organisations, a total of 222 projects have been or will soon be commenced, involving a total funding of about \$220 million. The recyclables involved in the approved projects included waste wood, waste metals, food waste, waste cooking oil, waste tyres, waste plastics, waste paper, beverage cartons, waste electrical and electronic equipment and spent lubricating oil, etc.

2. and 3.

The \$1 billion Recycling Fund was launched by the Government in October 2015. The Environmental Protection Department and the Advisory Committee on Recycling Fund have kept under review the operation of the Fund and actively listened and responded to the recycling industry's views and aspirations through various channels such as meetings, seminars, briefing sessions, etc. so as to introduce different facilitation measures timely to meet the needs of the industry in its operation, upgrading and transformation. We completed the mid-term review of the operation of the Recycling Fund in early 2019 and have immediately introduced a number of

enhancement measures. They include expanding the scope of eligible fund applicants, increasing the rental subsidies related to recycling operations, and simplifying the reporting and fund disbursement procedures, etc. Further enhancement measures were introduced in November 2019, which include raising the cumulative maximum funding amount as well as the maximum number of approved projects for each enterprise and extending the duration of projects under the Enterprise Support Programme. In addition, the overall operational period of the Fund, originally from 2015 to 2022, has been extended to 2026. At the present stage, the estimated cash flow of the Fund is as follows:

Financial Year	(\$ million)
2020-21	280
2021-22	170
2022-23	110
2023-24	50
2024-25	40
2025-26	40
2026-27 (as at end September 2026)	20

The new measures were generally welcomed by the recycling industry and the number of applications received by the Fund in the 2019-20 financial year (as at 29 February 2020) was 319, which was 1.2 times higher than the 143 applications received in the 2018-19 financial year.

- End -

CONTROLLING OFFICER'S REPLY

ENB101

(Question Serial No. 1302)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the promotion of waste reduction at source in the community, will the Administration advise this Committee on the following:

1. Please give a brief account of the measures and promotional activities in relation to reducing the use of disposable plastic tableware in the past 3 years;
2. Regarding the above measures and promotional activities, please provide the expenditures involved, their effectiveness and the number of beneficiaries;
3. What are the progress of the Administration's study on the control or ban of disposable plastic tableware and the expenditure involved?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 29)

Reply:

1 & 2.

The Environmental Protection Department (EPD) has been striving to encourage the general public and various sectors to minimise the use of disposable plastic tableware by taking various measures.

On the publicity and education front, we launched the "Plastic Free Beach, Tableware First" campaign at public beaches across the territory in the summer of 2018 and 2019 to encourage members of the public and restaurants in the vicinity of the beaches to go "plastic-free" on beaches by avoiding the use and distribution of disposable plastic tableware. During the campaign, around 50 restaurants and kiosks participated and used bamboo sticks, paper straws and paper bags provided by the EPD in place of disposable plastic tableware to promote the "plastic-free" culture to the public. The expenditures of the above campaign in 2018-19 and 2019-20 were about \$150,000 and \$20,000 respectively.

The Environmental Campaign Committee (ECC) and the EPD collaborated with the Hong Kong Catering Industry Association to jointly launch the first phase of a publicity and education campaign entitled "Plastic-Free Takeaway, Use Reusable

Tableware” at 3 major fast food chains in Hong Kong from 16 November 2018 to 15 January 2019. The campaign encouraged members of the public to bring their own reusable tableware and go “plastic-and-disposable-free” when they ordered takeaways in order to reduce the use of disposable plastic tableware. During the campaign, more than 1.2 million sets of disposable plastic tableware were saved and over 100 000 sets of tableware and complimentary hot drinks were redeemed by the public in total. To further promote the message of “plastic-and-disposable-free” to members of the public, the ECC and the EPD collaborated with the food and beverage sector again to roll out the second phase of the “Plastic-Free Takeaway, Use Reusable Tableware” publicity and education campaign from 10 June 2019 to 9 August 2019. The second phase covered about 700 eateries across the territory, including more than 630 eateries from more than 30 catering businesses, online takeaway platforms, as well as over 50 canteens and restaurants in government venues. During the campaign, about 1.2 million sets of disposable plastic tableware were saved and a total of about 70 000 complimentary offers/gifts were redeemed by the public. The expenditure on the above publicity campaign was about \$3.96 million, among which \$2.85 million was funded by the Environment and Conservation Fund (ECF).

With the funding support from the ECF, the ECC and the EPD set up promotional counters at more than 10 MTR stations to promote the message of plastic-free in June 2019. Moreover, a Plastic-free Fun Fair was held at Tai Kwun in Central to celebrate the World Environment Day and World Oceans Day. Nearly 30 government departments, non-governmental organisations, green groups, tertiary institutes and community groups gathered together for the event on the theme of “Go Plastic-free” to jointly promote the “plastic-and-disposable-free” message to members of the public through various activities, including interactive educational booths, sharing sessions, upcycling workshops and music performances, etc. The event attracted over 12 000 participants and the expenditure involved was about \$1.47 million, including the relevant expenses on publicity.

Furthermore, to encourage large-scale event organisers to go “plastic-and-disposable-free”, the ECC and the EPD, with the funding support from the ECF, have launched the “Reusable Tableware Lending Programme for Large-scale Events” to provide around 5 000 sets of reusable tableware for lending to organisers of large-scale events for free since mid-December 2018. A tableware cleaning and sterilisation service contractor has been engaged to provide the related delivery, collection and cleaning services. As at February 2020, the ECC has provided tableware lending services for 88 large-scale events, saving more than 420 000 pieces of disposable tableware cumulatively. The expenditure involved was about \$500,000.

In addition, starting from January 2019, the Government has taken the lead in banning plastic straws and polyfoam food containers in premises and canteens mainly serving government staff. Relevant departments, when awarding new contracts and renewing existing contracts, will stipulate the requirement for restaurant operators in suitable government venues to avoid using disposable plastic tableware.

3. In April 2019, the Government commenced a study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware. The consultant is

currently reviewing the latest international development in controlling or banning disposable plastic tableware as well as the recommendations on the substitutes. Based on the findings of the study and analysis, the consultant will draw up a proposal to the Government that is suitable for implementation in Hong Kong in the long run. The study is scheduled for completion by the end of 2020 and the expenditure involved is about \$3 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB102

(Question Serial No. 1303)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government commenced a study on microbeads last year and announced a plan to implement a voluntary scheme for phasing out personal care and cosmetic products containing microbeads in this year's Policy Address. In this connection, does the Environmental Protection Department have any measures or publicity programmes in place to encourage the trade to participate? What is the estimated expenditure earmarked for the above work this year?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 30)

Reply:

The study on microbeads has been completed. The Government is preparing to roll out a two-year voluntary scheme for phasing out personal care and cosmetic products (PCCPs) containing microbeads, aiming to encourage the trade to stop the production, importation and sale of these products, and to assist consumers in choosing microbead-free products. By making reference to successful overseas experience, our initial plan is to establish a "Microbead-free Charter". Participants, taking due consideration of their operational conditions, can set their own targets and timetables for reducing or ceasing the production, importation and sale of PCCPs containing microbeads and strive to achieve the targets within the set timeframe.

In the course of the scheme, we will follow up on the participants' phase-out progress and launch complementary publicity and education activities to provide the public with appropriate and accurate information, so as to enhance their understanding of microbeads-related subjects. We are drafting the details of the scheme, including the execution plan, monitoring methodology and effectiveness measurement, etc.

The estimated expenditure earmarked for the above work in this year is \$900,000.

- End -

CONTROLLING OFFICER'S REPLY

ENB103

(Question Serial No. 1867)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Financial Secretary mentioned that the Government was researching into electric public light buses that were suitable for local use and the basic specifications and requirements of the associated charging facilities, and would earmark \$80 million for a pilot scheme under which green public light buses (PLBs) running on fixed routes would pioneer the switch to electric vehicles. In this connection, please advise this Committee on the details and timetable for taking forward the scheme, the staffing, details of the expenditure, anticipated number of participating PLBs and the routes to be involved.

Asked by: Hon LAU Ip-keung, Kenneth (LegCo internal reference no.: 52)

Reply:

The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme for e-PLBs, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the

lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

The overall workload for the pilot scheme will be absorbed by the existing resources of the Environmental Protection Department and undertaken by 3 time-limited non-directorate posts to be created for a period of 7 years.

- End -

CONTROLLING OFFICER'S REPLY

ENB104

(Question Serial No. 1895)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Producer Responsibility Scheme on Waste Electrical and Electronic Equipment (WPRS) covering regulated electrical equipment (REE) has been implemented for almost 2 years. The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE•PARK) at Tuen Mun was developed to underpin the WPRS and is now operated by ALBA Integrated Waste Solutions (Hong Kong) Ltd. which processed a total of nearly 24 000 tonnes of electronic waste last year. The quantity of electronic waste processed by ALBA Integrated Waste Solutions (Hong Kong) Ltd. was nearly 20 times higher than the total quantity of electronic waste processed by the other 11 licensed recyclers, which only amounted to about 1 000 tonnes. According to the figures in September last year, a total of 250 suppliers had been registered successfully with the Environmental Protection Department with a valid registration. In this connection, please advise this Committee on the following:

- (a) Does the Department know well the total quantity of electronic waste processed under the WPRS so far? How much of which was processed by smaller licensed recyclers? Will the Department consider diverting appropriately the recovery quantities of electronic waste to maintain the diversity and fairness of the market?
- (b) According to newspaper reports, REE is found to be disposed of directly at some refuse collection points, and some members of the public have even requested government outsourced cleansing workers to assist them with the disposal. The cleansing workers have not gained a clear understanding of the details of the WPRS so far. Will the Department disseminate relevant guidelines to those outsourced cleansing service providers? In respect of illegal disposal of electronic waste, what are the current monitoring approach adopted and the punishment imposed? If there are prosecutions, what are the details?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 23)

Reply:

- (a) The Producer Responsibility Scheme on Waste Electrical and Electronic Equipment (WPRS) covering the regulated electrical equipment (REE) (i.e. air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) was fully implemented in 2018. The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) also commenced full operation in March 2018. The objective of developing the WEEE•PARK is to ensure that Hong Kong has adequate treatment capacity to properly process the waste REE generated locally, particularly those with lower recycling value or higher processing cost, such as refrigerators and washing machines, in support of the implementation of the WPRS. In 2019, the WEEE • PARK processed a total of about 23 980 tonnes of waste REE, while the other 15 licensed recycling facilities, which have been granted with waste disposal licences for e-waste (e-WDL), processed a total of about 1 570 tonnes.

Meanwhile, recyclers (including so-called “scrap dealers” or second-hand shops) that satisfy the following conditions and undertake simple processes to treat waste REE for resale as second-hand electrical appliances or export abroad, can be exempted from obtaining an e-WDL under the law:

- (1) disposal of waste REE (that is not chemical waste) on land or premises with an area of not more than 100 m²;
- (2) storage of waste REE with a total volume of not more than 50 m³; or
- (3) storage of waste REE on premises located inside a multi-storey building.

The Environmental Protection Department (EPD) does not have the number of exempted recyclers for processing REE.

To enable a more balanced development of the recycling industry and encourage market participation in the recycling of waste electrical and electronic equipment, the EPD launched an open tender exercise in April 2019 to appoint a recycler with an e-WDL to provide treatment and recycling services for washing machines collected outside the removal services required under the WPRS. The contract was awarded in September 2019. Currently, an average of about 150 tonnes of washing machines are processed by the contractor each month. The Government will continue to encourage licensed recyclers to take part in the recycling and treatment of waste REE, with a view to enhancing the development and standard of the recycling industry through competition and promoting the circular economy in Hong Kong.

- (b) The EPD and the Food and Environmental Hygiene Department (FEHD) have put in place arrangements for handling waste REE. If waste REE is found disposed of at refuse collection points or on streets, FEHD officers will keep the waste REE at designated refuse collection points temporarily, and then ask the WEEE • PARK operator to collect and deliver the equipment to the WEEE • PARK for proper treatment and recycling. The EPD and the FEHD also hold regular meetings to review the collection and handling arrangements for the waste REE, and support the FEHD to brief their cleansing workers in different districts on the relevant guidelines of the WPRS. Moreover, the EPD will continue with the publicity work of the

WPRS to remind members of the public to make use of the statutory free removal service under the WPRS and make an appointment with the operator engaged by the Government for a free collection service through the recycling hotline 2676-8888.

- End -

CONTROLLING OFFICER'S REPLY

ENB105

(Question Serial No. 2366)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Will the Bureau advise this Committee on the following:

- (a) Regarding the \$2 billion pilot scheme that subsidises the installation of electric vehicle charging facilities in car parks of private residential buildings, how many parking spaces are expected to be benefited? What are the eligibility criteria for application? Has the Administration assessed the effectiveness of the measure? How much increase in the percentage of electric private cars in the total number of private cars can be made?
- (b) After the electric public light buses and electric ferries under preparation by the Administration are put into use, how much contributions are expected to be made towards reducing the carbon emissions in Hong Kong?

Asked by: Hon LAU Kwok-fan (LegCo internal reference no.: 51)

Reply:

- (a) The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower. We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- (b) Electric ferries and electric public light buses do not have exhaust emissions. They will help improve the air quality near ferry piers and at the roadside, and promote Hong Kong's image as a green city. Under the pilot schemes for electric ferries and electric

public light buses, we will collect data to assess the performance of these green means of transport in terms of operation and environmental effectiveness.

- End -

CONTROLLING OFFICER'S REPLY

ENB106

(Question Serial No. 2636)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the policy on promoting the use of electric vehicles (EVs), will the Administration advise this Committee on the following:

(1) Since the revision of the "One-for-One Replacement" Scheme for EVs on 28 January 2019, how many applications in total have been received so far? Of which, what are the numbers of applications approved and rejected respectively? If there are rejected applications, what are the reasons?

(2) What are the accumulated amount of tax concessions and administrative expenditure respectively since the launching of the "One-for-One Replacement" Scheme for EVs? How does the Administration assess the effectiveness of the scheme?

(3) One of the Environmental Protection Department's measures to promote the use of EVs allows the capital expenditure incurred by businesses in purchasing eligible EVs to be deducted from the profits tax. In this connection, will the Administration advise this Committee on the number of cases in which enterprises applied for 100% deduction of the relevant capital expenditure from their profits tax in the first year after purchasing brand new electric private cars in each of the past 5 years and their percentage in the newly registered EVs of that year?

(4) How does the Administration assess the effectiveness of the measure to encourage the procurement of EVs in enterprises mentioned in question (3) above? Besides such measure, what policies are in place to encourage enterprises to procure EVs to replace petrol vehicles?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 200)

Reply:

"One-for-One Replacement" Scheme (the Scheme)

From 28 January 2019 on which the Government revised the eligibility criteria of the Scheme until the end of February 2020, a total of 2 639 applications were received by the Transport Department, among which 2 468 were approved, 139 were under processing and 32 were rejected for not complying with the eligibility criteria.

Since the introduction of the Scheme in February 2018 until the end of February 2020, over 85% of the first registered electric private cars (e-PCs) have benefitted from the Scheme, and this percentage further increased to 90% in the past half year. Among the 2 835 approved applications, 2 751 have completed first registration and the first registration tax (FRT) concession involved amounted to about \$576 million. The administrative expenditure was about \$960,000.

Profits tax deduction

The numbers of cases in which corporations applied for and earned full profits tax deduction in the first year of procurement of environment-friendly vehicles (including e-PCs) in the past 5 financial years are as follows:

Financial year	No. of cases
2015-16	194
2016-17	125
2017-18	123
2018-19	123
2019-20 (as at 29 February 2020)	69

Regarding the cases of tax deduction for environment-friendly vehicles, the Inland Revenue Department does not have such statistics by the vehicle type involved. Therefore, the Government cannot provide a breakdown of the numbers of tax deduction cases for brand new e-PCs and their percentage in the first registered electric vehicles (EVs) of that year.

Financial incentives play an important role in encouraging enterprises to use EVs. Apart from the above tax deduction, the Government also offers FRT concessions and lower e-PC annual vehicle licence fees. The Government also encourages the transport sectors to test out green innovative transport technologies through the Pilot Green Transport Fund while promoting the establishment and enhancement of charging network. The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of EVs to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs.

- End -

CONTROLLING OFFICER'S REPLY**ENB107****(Question Serial No. 2637)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

On promoting the use of electric vehicles (EVs), will the Government advise this Committee on the following:

(1) Please set out in the following table the numbers of various types of EVs first registered and registered in Hong Kong in each of the past 5 years:

Type of EVs	Number of first registered vehicles				
	2015	2016	2017	2018	2019
Private car					
Goods vehicle					
Bus					
Light bus					
Taxi					
Motorcycle					
Motor tricycle					

Type of EVs	Number of registered vehicles				
	2015	2016	2017	2018	2019
Private car					
Goods vehicle					
Bus					
Light bus					
Taxi					
Motorcycle					
Motor tricycle					

(2) The Administration will update the Clean Air Plan and formulate the first roadmap on the popularisation of EVs. Will this plan set a target for the number of registered EVs and the number of charging stations in the coming 3 years; and draw up a timetable for a total ban on the sale of fuel-driven vehicles? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 201)

Reply:

(1) The numbers of various types of electric vehicles (EVs) first registered and registered in Hong Kong in the past 5 years are as follows:

Type of EVs	No. of first registered vehicles in the year				
	2015	2016	2017	2018	2019
Private car	2 607	3 020	3 860	471	2 423
Goods vehicle	11	11	12	16	42
Bus	12	5	18	5	3
Light bus	0	4	1	0	1
Taxi	0	1	0	0	0
Motorcycle	0	2	2	0	0
Motor tricycle	0	0	0	0	0
Special purpose vehicle	7	4	11	5	5

Type of EVs	No. of registered vehicles as at year end				
	2015	2016	2017	2018	2019
Private car	3 806	6 829	10 666	11 080	13 447
Goods vehicle	67	76	86	95	125
Bus	19	24	40	43	44
Light bus	4	7	7	6	6
Taxi	8	1	1	0	0
Motorcycle	50	45	45	19	17
Motor tricycle	0	0	0	0	0
Special purpose vehicle	113	107	105	104	104

Note: Government vehicles are not included in the numbers as they are not required for registration.

(2) The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of EVs to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs, including the study on formulating the direction and roadmap to ban the sale of fuel-driven vehicles.

- End -

CONTROLLING OFFICER'S REPLY

ENB108

(Question Serial No. 2638)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is proposed in the Budget that a sum of not less than \$300 million will be set aside each year for implementing a scheme to recycle waste paper, under which a number of service contractors will be engaged through open tender to collect waste paper across the territory. In this connection, will the Government advise this Committee on the following:

(1) The Administration claimed that several groups of tonnage of waste paper would be set in the tender so that contractors of different scales could participate in the scheme according to their own capabilities. What are the groups of tonnage of waste paper and the respective recovery prices? What are the determining criteria?

(2) How does the Administration assess the capability of contractors bidding for the tender? How does the Administration avoid wastage of time and public money caused by unsatisfactory performance of the successful contractors?

(3) Will a punishment mechanism be established to take actions against contractors who fail to meet the performance standards? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 202)

Reply:

When formulating the scheme on waste paper recycling service, the Environmental Protection Department (EPD) has considered the current situation of the waste paper recycling market and the opinions of the trade. 3 groups of tonnage of waste paper (tonnage groups) have been set in the tender to attract contractors of different scales in the market to participate in the scheme. The 3 tonnage groups are 1 000 to 3 000 tonnes, 3 000 to 5 000 tonnes and 5 000 to 9 000 tonnes respectively. Tenderers can opt for 1 of the above tonnage groups with due regard to various factors including their own scale of business and processing capacity. The designated recovery price of waste paper for the above groups will not be lower than 70 cents per kilogram in the first 6 months, and from then on the price will be adjusted every 3 months according to the actual export price of waste paper in the market.

Tender evaluation includes 2 parts, namely technical assessment and price assessment, and the weightings of technical and price assessments are 60% and 40% of the total score respectively. In the course of assessing the tenders, besides the tender price, the EPD will also consider factors such as the tenderers' past experience in collection and export of waste paper, capacity of processing waste paper and even innovative suggestions raised by the tenderers regarding the operation of waste paper recycling. The practice of awarding the contract to the lowest bidder will not be adopted.

The monthly minimum and maximum tonnage of waste paper to be collected and exported by contractors for each tonnage group have been specified, and the monthly service fee payable to the contractors is calculated according to the quantity of waste paper successfully exported and sold. There is a punishment mechanism in the tender. The contractors have to provide services as required in the contracts. For example, the quantity of waste paper collected and exported cannot be lower than the monthly minimum tonnage of the relevant tonnage group, local waste paper has to be purchased with the designated recovery price, the waste paper must meet the quality standard, etc. If the contractors cannot comply with the requirements of the contracts, the EPD will take action according to the terms and conditions of the contracts, including deduction of the service fee from the contractors and even termination of the contracts in the case of serious breach of the contracts.

- End -

CONTROLLING OFFICER'S REPLY

ENB109

(Question Serial No. 2639)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: Not Specified

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the operational expenses of the Environmental Protection Department (EPD), will the Government advise this Committee on the following:

- (1) As stated in the operational expenses of the EPD, there is a substantial increase in the operational expenses of about \$1.086 billion (47.8%) for 2020-21 over the revised estimate for 2019-20, and there will be an increase of 61 posts. In this connection, please advise on the details of the rank and work of the relevant posts, as well as the expenditure involved in these posts;
- (2) For the recurrent expenditure, the estimated expenditure on “promotion of green lifestyle” has increased substantially from \$5 million in 2019-20 to \$45 million in 2020-21. Will the Administration advise on the details of the use of the expenditure?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 203)

Reply:

- (1) There will be a net increase of 61 posts in the Environmental Protection Department in 2020-21 and the notional annual salary cost at mid-point is about \$43 million. This is mainly for taking forward the relevant work on the implementation of waste paper recycling, vehicle emission control measures and the Land Sharing Pilot Scheme; promotion of green transportation; and strengthening of the promotion of the territory-wide waste reduction and recycling publicity campaign. Details of the rank of these posts are as follows:

Post	Pay Scale	Net Increase of Posts
Senior Environmental Protection Officer	Master Pay Scale Point 45 - 49	+5
Environmental Protection Officer/ Assistant Environmental Protection Officer	Master Pay Scale Point 27 - 44 (Environmental Protection Officer)	+19
	Master Pay Scale Point 16 - 21 (Assistant Environmental Protection Officer)	

Post	Pay Scale	Net Increase of Posts
Senior Environmental Protection Inspector	Master Pay Scale Point 22 - 28	+9
Environmental Protection Inspector	Master Pay Scale Point 8 - 21	+13
Electrical and Mechanical Engineer/ Assistant Electrical and Mechanical Engineer	Master Pay Scale Point 32 - 44 (Electrical and Mechanical Engineer) Master Pay Scale Point 18 - 27 (Assistant Electrical and Mechanical Engineer)	+2
Assistant Electrical Inspector	Master Pay Scale Point 13 - 23	+1
Senior Administrative Officer	Master Pay Scale Point 45 - 49	+1
Senior Executive Officer	Master Pay Scale Point 34 - 44	+2
Executive Officer I	Master Pay Scale Point 28 - 33	+1
Executive Officer II	Master Pay Scale Point 15 - 27	+1
Assistant Clerical Officer	Master Pay Scale Point 3 - 15	+4
Personal Secretary II	Master Pay Scale Point 4 - 15	+1
Chief Information Officer	Master Pay Scale Point 45 - 49	+1
Principal Information Officer	Master Pay Scale Point 40 - 44	+1
Information Officer	Master Pay Scale Point 28 - 33	+1
Deletion of a time-limited Motor Vehicle Examiner II post	Master Pay Scale Point 24 - 33	-1
Total		+61

- (2) The estimated expenditure on “promotion of green lifestyle” for 2019-20 and 2020-21 is for the Green Lifestyle Local Tour Incentive Scheme jointly launched by the Government and the Travel Industry Council of Hong Kong on 20 January 2020. The estimated expenditures for the above periods are preliminary estimates based on the implementation timetable of the Scheme. In view of the severe impact of the COVID-19 epidemic on the travel industry, the Secretary for Commerce and Economic Development announced on 28 February 2020 that the deadline of the Scheme will be extended from end of July 2020 to end of December 2020, so as to allow more time for the trade to better utilise the resources under the Scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB110

(Question Serial No. 2641)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the \$2 billion earmarked in the Budget this year to subsidise the installation of charging-enabling infrastructure in car parks of existing private residential buildings, will the Government advise this Committee on the following:

- (1) As the subsidy is not open to application by individuals, will the Administration formulate corresponding measures to help electric vehicle owners to rally the support of the owners' corporation of housing estates for the alteration works? If yes, what are the details? If no, what are the reasons?
- (2) Will the subsidy be paid in fixed amount or on a pro rata basis according to the project cost? What are the reasons for the arrangement?
- (3) What are the anticipated staffing establishment and expenditure for the scheme?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 205)

Reply:

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

We will organise briefing sessions for owners' corporations, property management companies and the general public to introduce the details of the pilot scheme and explain technical issues such as electricity supply and installation works, so as to encourage them to

support and participate in the scheme. We will also promote the scheme through various channels, including setting up a website, social media and publicity leaflets, etc.

As regards manpower, the Environmental Protection Department will establish a new team to prepare and manage the pilot scheme. The team comprises of 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB111

(Question Serial No. 2642)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the pilot schemes for electric public light buses and electric ferries, will the Government advise this Committee on the following:

- (1) The Government has launched pilot schemes for electric taxis and buses previously but the results were unsatisfactory, mainly because of the poor driving range of the electric vehicles. What measures will be adopted by the Administration to improve the above problem?
- (2) What criteria will be adopted by the Administration when inviting tenders for the relevant electric vehicles to be introduced in such pilot schemes?
- (3) What are the staffing establishments and expenditures for implementing the pilot schemes for electric public light buses and electric ferries?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 206)

Reply:

Pilot scheme for electric public light buses

The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial of 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic technical requirements and specifications for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade

about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

The overall workload for the pilot scheme will be absorbed with existing resources of the Environmental Protection Department and undertaken by 3 time-limited non-directorate posts to be created for a period of 7 years.

Pilot scheme for electric ferries

The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions. The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric ferries, we will engage an independent consultant to advise on the design of electric ferries and assist the ferry operators to prepare an open tender for the construction of electric ferries and the associated charging facilities.

Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million. The actual expenditure will depend on the results of the open tender for the electric ferries. The Government will create 9 time-limited non-directorate posts for a period of 7 years to cope with the additional workload of the pilot scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB112

(Question Serial No. 2643)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is proposed in the Budget Speech that a \$200 million Green Tech Fund (the Fund) will be set up to support research and development and application of decarbonisation and green technologies. Funding support for large projects may be as high as \$30 million. In this connection, will the Government advise this Committee on the following:

- (1) Please provide some specific examples of the projects that are eligible for application;
- (2) How will the Administration assess the applicants to ensure the feasibility and environmental performance of the funded projects?
- (3) Will Key Performance Indicators be set for the funded projects in order to review their effectiveness regularly? If yes, what are the details? If no, what are the reasons?
- (4) What are the estimated staffing and expenditure for operating the Fund?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 207)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre

for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB113

(Question Serial No. 2644)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the task to “support bureaux and departments in enhancing carbon management by carrying out carbon audits on major government buildings so as to identify room for carbon reduction” mentioned in the Programme, will the Government advise this Committee on:

- (1) the results of the carbon audits carried out by various policy bureaux or departments on government buildings and public facilities, including energy consumption and carbon emission, in each of the past 3 years;
- (2) the measures adopted by the Administration to improve the energy consumption and carbon emission performances of government buildings and public facilities, as well as their effectiveness;
- (3) the estimated expenditure and manpower resources to be incurred for supporting various bureaux and departments in carrying out carbon audits on major government buildings in 2020-21.

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 208)

Reply:

- (1) Starting from 2017-18, bureaux and departments are required to conduct carbon audits on major government buildings under their management. The carbon auditing work involves 34 bureaux and departments and over 300 major government buildings of different sizes and uses. The relevant bureaux and departments will disclose the carbon audit findings to the public through their respective annual environmental performance reports or by other means.
- (2) The Government has set a target to reduce electricity consumption in government buildings by 5% in 5 years from 2015-16 to 2019-20, using comparable operating conditions in 2013-14 as the base. We have conducted energy audits on about 340 major government buildings and spent about \$900 million to implement energy saving projects, such as retrofitting energy-efficient air-conditioning and management systems, energy-efficient lighting and control systems, as well as light emitting diode

lighting and floodlights, etc. We have already achieved the target in 2018-19 and are confident that the final saving will surpass the 5% target.

Apart from energy saving, individual bureaux and departments have also taken other appropriate carbon reduction measures concerning waste management, use of water and behavioural changes, etc. based on their needs and operating circumstances.

- (3) The promotion of carbon audits, including the work to support bureaux and departments in carrying out carbon audits on major government buildings, is an integral part of the Environmental Protection Department (EPD)'s work on addressing climate change. The manpower and expenditure involved are met by the recurrent expenditure of EPD, and there is no separate breakdown.

- End -

CONTROLLING OFFICER'S REPLY

ENB114

(Question Serial No. 2645)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2020-21 under this Programme that the Environmental Protection Department will launch a pilot scheme on the application of reverse vending machines (RVMs). In this connection, will the Government advise this Committee on the following:

- (1) What are the estimated cost and maintenance expenditure for introducing each RVM?
- (2) Some organisations in the market have already introduced RVMs for plastic bottles. It is generally found that the frequency of mechanical breakdown of these machines is high. What measures will the Administration adopt to tackle the aforesaid problem?
- (3) Will the Administration increase staffing to address the situation that the provision of RVMs has reached saturation? If yes, what is the related expenditure? If no, will other corresponding measures be adopted and what are the details?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 209)

Reply:

The price of reverse vending machines (RVMs) in the market ranges from several ten thousand to several hundred thousand dollars per unit, depending on factors such as their capacity, functions, technical support and places of manufacture. The Environmental Protection Department (EPD) is preparing for the implementation of a pilot scheme on RVMs. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

Making reference to the experience of different organisations in applying RVMs, the EPD has set out in the tender documents of the pilot scheme the requirements relating to maintenance of RVMs and collection of plastic beverage containers in the RVMs, etc, with a view to ensuring the quality of service. If the successful contractor fails to meet these requirements in future, the EPD may deduct part of the operating expenses payable to the contractor in accordance with the contract terms. To this end, the EPD will closely

monitor the performance of the contractor to ensure that the contractor has sufficient manpower and technical support to implement the pilot scheme.

The estimated expenditure for the pilot scheme in the 2020-21 financial year is about \$9.5 million, mainly for engaging a contractor to carry out the scheme. As launching the pilot scheme is an integral part of the work of the Waste Management Policy Division under the EPD, there is no separate breakdown of the manpower and expenditure involved in this work.

- End -

CONTROLLING OFFICER'S REPLY

ENB115

(Question Serial No. 2646)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Matters Requiring Special Attention in 2020-21 under this Programme that the Government will continue to install more water dispensers with a view to promoting a “plastic-free” culture. In this connection, will the Government advise this Committee on the following:

- (1) What are the total number of water dispensers installed by the Administration so far and the number of damaged water dispensers?
- (2) What are the average life span, installation cost and maintenance expenditure of each water dispenser?
- (3) Has an evaluation been conducted regarding the effectiveness of the installation of water dispensers in reducing the use of plastic bottles by members of the public? If yes, what are the results? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 210)

Reply:

(1) & (2)

To inculcate a living culture of “bring your own bottle” in the public, the Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2022 for public use in government venues. The Government has earmarked some \$82 million and \$32 million respectively for the costs of installing 500 new water dispensers and procuring the five-year maintenance service. We do not have the statistics on the average life span of each water dispenser.

- (3) The Government is installing more water dispensers in the hope of fostering a social atmosphere which encourages public organisations and private enterprises to install more water dispensers in their venues for public use, thereby encouraging the public to bring their own bottles and promoting the “plastic-free” culture. We have noticed that the public is generally more aware of bringing their own bottles, and many organisers of large scale events also support the Government’s appeal and provide

water dispensers instead of plastic bottled water when organising the events to further enhance the effectiveness of waste reduction at source.

- End -

CONTROLLING OFFICER'S REPLY

ENB116

(Question Serial No. 2647)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the arrangement of extending the Cleaner Production Partnership Programme (the Programme), will the Government advise this Committee on the following:

(1) This year's Budget plans to extend the Programme for 5 years. Please advise on the following in the past 5 years: (i) the number of applications which funding was granted each year; (ii) the types and numbers of projects involved; (iii) the funding amount allocated and (iv) specific environmental performance (including quantity of air pollutants reduced, quantity of carbon emissions reduced, quantity of energy saved and quantity of organic pollutants reduced).

(2) How does the Administration evaluate the effectiveness of the Programme?

(3) What were the staffing and administrative expenditure for the implementation of the Programme in the past 5 years?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 211)

Reply:

The Cleaner Production Partnership Programme (the Programme) comprises 4 key initiatives, namely: (a) to assist participating Hong Kong-owned factories to carry out on-site improvement assessments; (b) to support Hong Kong-owned factories to carry out demonstration projects on cleaner production technologies and practices; (c) to support relevant trade and industry associations of Hong Kong to carry out trade-specific promotion and publicity activities; and (d) to organise cross-trade technology promotion activities by the Hong Kong Productivity Council (HKPC), which is the implementation agent of the Programme. In the past 5 years, around 800 funding applications for on-site improvement assessments and demonstration projects were approved. Around 100 promotion and publicity activities carried out by relevant trade and industry associations of Hong Kong were also funded. Furthermore, the HKPC organised more than 170 cross-trade technology promotion activities with over 17 000 participants. The Programme has brought the environmental benefits of emission reductions and energy saving to the region.

The type, number and funding amount of the approved applications each year are tabulated below:

Type of funding applications	Number of approved applications				
	2015-16 (June 2015 -March 2016)	2016-17	2017-18	2018-19	2019-20
On-site improvement assessments	93	114	112	124	111
Demonstration projects	30	43	63	107	10
Trade-specific promotion and publicity activities organised by relevant trade and industry associations of Hong Kong	17	25	25	34	0
Total funding amount (\$ million)	13.0	18.0	23.4	38.1	6.2

The Programme has reduced emissions of over 30 000 tonnes of air pollutants in the region each year, including 11 900 tonnes of volatile organic compounds, 6 100 tonnes of sulphur dioxide and 12 700 tonnes of nitrogen oxides. Nearly 16 million tonnes of carbon dioxide and nearly 18 million tonnes of effluent discharge are reduced annually. The projects under the Programme can also save around 11 000 terajoules of energy and around \$1.8 billion of production costs each year.

As the implementation of the Programme is part of the routine work of the Environmental Protection Department, there is no separate breakdown of the manpower resources and expenditure involved in this Programme.

- End -

CONTROLLING OFFICER'S REPLY**ENB117****(Question Serial No. 2648)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

It is mentioned in this Programme that the Department will continue to enhance the charging network for electric vehicles (EVs). In this connection, will the Government advise this Committee on the following:

(1) Please set out in the following table the number of chargers at various locations with public charging facilities (by charging speed), the share of EV parking spaces in all parking spaces, the utilisation rate of chargers, car park operators, and measures on priority or exclusive use by EVs and carpark operators (if any), with a breakdown by district.

Location (by 18 districts)	Number of chargers			Share of EV parking spaces in all parking spaces	Utilisation rate of chargers	Car park operators
	Standard	Medium	Quick			

(2) What was the Administration's expenditure on enhancing the charging network, covering operational and maintenance costs of chargers in each of the past 5 years? What are the Administration's estimated expenditure on EV charging facilities and the details in 2020-21?

(3) The Government proposed the installation of 1 000 medium chargers in last year's Budget. What was the number of additional medium chargers installed by the Administration from the announcement of Budget last year till the end of February this year? Will the Administration set out the locations where the additional medium chargers were installed during this period?

(4) Currently, only 4 quick chargers are provided by the Government in Hong Kong, representing less than 1% of all quick chargers in Hong Kong. Will the Administration provide more quick chargers? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 212)

Reply:

- (1) The numbers of public electric vehicle (EV) chargers with a breakdown by 18 districts of Hong Kong as at the end of 2019 are as follows:

District	No. of public chargers			Sub-total
	Standard	Medium	Quick	
Central & Western	62	110	38	210
Eastern	28	67	54	149
Southern	4	12	29	45
Wan Chai	66	121	37	224
Kowloon City	64	7	15	86
Kwun Tong	551	181	62	794
Sham Shui Po	17	104	71	192
Wong Tai Sin	24	46	11	81
Yau Tsim Mong	110	124	68	302
Kwai Tsing	25	13	33	71
Tsuen Wan	17	49	12	78
Sai Kung	24	37	27	88
North	58	25	12	95
Tai Po	28	3	7	38
Sha Tin	75	51	48	174
Yuen Long	50	33	18	101
Tuen Mun	12	10	19	41
Islands	18	115	27	160
Total	1 233	1 108	588	2 929

The average utilisation rate of the chargers at the government car parks managed by the Transport Department (TD) and the Government Property Agency (GPA) which are open for public use was about 15 times per month per charger. The Environmental Protection Department does not have the utilisation figures for other public chargers.

- (2) and (3)

The Government allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming 3 years, including installation of additional medium chargers at the car parks managed by the TD, the GPA, the Leisure and Cultural Services Department (LCSD) and the Tourism Commission (TC) which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800. Among them, 168 medium chargers whose installation works began in 2019-20 are expected to

complete the works progressively by the end of April this year. Moreover, we anticipate that about 570 and 460 medium chargers will be installed respectively in 2020-21 and 2021-22. Please refer to the Annex for the selected sites for these chargers.

The Government's expenditure on enhancing public charging facilities, electricity costs and maintenance costs of charging facilities in the past 5 years are as follows:

Year	Expenditure on enhancing public charging facilities (\$ million)	Electricity costs of charging facilities (\$ million)	Maintenance costs of charging facilities (\$ million)
2015-16	0.23	0.429	--
2016-17	2.94	0.885	0.054
2017-18	1.32	1.035	0.061
2018-19	--*	1.007	0.093
2019-20**	5.33	0.747	0.168

* The Government was proceeding with the preparatory work for the above scheme of allocating \$120 million for extending the public EV charging networks at government car parks in this financial year and the installation works were planned to commence in 2019-20.

** As at the end of 2019.

In addition, the estimated expenditure for the operation and maintenance of EV charging facilities in 2020-21 is about \$1.2 million.

- (4) The Government commissioned a consultancy study in October 2019 to look for suitable sites in 18 districts of Hong Kong to set up public quick charging stations for trial. Upon completion of the study, we will explore suitable options for developing quick charging stations.

**The number and distribution of EV chargers planned to be installed
by the Government**

Department	District		Location	No. of EV chargers to be installed
TD	Southern	1.	Aberdeen Car Park	About 650 in total
	Central & Western	2.	Kennedy Town Car Park	
	Kwai Tsing	3.	Kwai Fong Car Park	
	Eastern	4.	Shau Kei Wan Car Park	
	Wong Tai Sin	5.	Sheung Fung Street Car Park	
	Wan Chai	6.	Tin Hau Car Park	
	Tsuen Wan	7.	Tsuen Wan Car Park	
	Sheung Wan	8.	Rumsey Street Car Park	
GPA	Eastern	9.	North Point Government Offices	About 200 in total
	Central & Western	10.	Queensway Government Offices	
	Sha Tin	11.	Sha Tin Government Offices	
	North	12.	North District Government Offices	
	Tuen Mun	13.	Tuen Mun Government Offices	
	Sai Kung	14.	Sai Kung Government Offices	
	Sham Shui Po	15.	Cheung Sha Wan Government Offices	
	Kowloon City	16.	Trade and Industry Tower	
LCSD	Central & Western	17.	Sun Yat Sen Memorial Park	About 310 in total
		18.	Sun Yat Sen Memorial Park Sports Centre	
	Eastern	19.	Siu Sai Wan Sports Ground	
		20.	Island East Sports Centre	
	Southern	21.	Deep Water Bay Beach	
		22.	Ap Lei Chau Waterfront Promenade	
	Wan Chai	23.	Wong Nai Chung Gap Children's Playground	
	Kwun Tong	24.	Kowloon Bay Park	
		25.	Ping Shek Playground	
		26.	Shun Lee Tsuen Park	
		27.	Lei Yue Mun Municipal Services Building	
	Sham Shui Po	28.	Lai Chi Kok Park	
		29.	Sham Shui Po Sports Ground	
		30.	Cornwall Street Park	
		31.	Lung Cheung Road Lookout	

Department	District		Location	No. of EV chargers to be installed
	Wong Tai Sin	32.	Hammer Hill Road Sports Ground	
		33.	Po Kong Village Road Park	
	Yau Tsim Mong	34.	Kowloon Park	
		Islands	35.	
	Kwai Tsing	36.	Tsing Yi Southwest Leisure Building	
		37.	Tsing Yi Northeast Park	
		38.	Tsing Yi Sports Ground and Tsing Yi Swimming Pool	
		39.	Kwai Chung Sports Ground	
		40.	Hing Fong Road Playground	
	North	41.	Sheung Shui Swimming Pool	
		42.	North District Sports Ground	
		43.	Wo Hing Sports Centre	
		44.	Po Wing Road Sports Centre	
		45.	Fanling Swimming Pool	
	Sai Kung	46.	Tseung Kwan O Swimming Pool	
		47.	Tseung Kwan O Sports Ground	
		48.	Tiu Keng Leng Sports Centre	
	Sha Tin	49.	Siu Lek Yuen Road Playground	
		50.	Sha Tin Sports Ground and Yuen Wo Playground	
		51.	Sha Tin Jockey Club Swimming Pool and Yuen Wo Road Sports Centre	
		52.	Sha Tin Town Hall	
		53.	Hong Kong Heritage Museum	
		54.	Ma On Shan Swimming Pool	
		55.	Ma On Shan Sports Ground	
		56.	Yuen Chau Kok Complex	
	Tai Po	57.	Tai Po Sports Ground	
		58.	Tai Po Complex	
		59.	Kwong Fuk Park	
	Tsuen Wan	60.	Shing Mun Valley Swimming Pool	
		61.	Shing Mun Valley Sports Ground	
	Tuen Mun	62.	Tuen Mun North West Swimming Pool	
		63.	Tuen Mun Swimming Pool	

Department	District		Location	No. of EV chargers to be installed
	Yuen Long	64.	Yau Oi Sports Centre	
		65.	Yuen Long Swimming Pool	
		66.	Tin Shui Wai Swimming Pool & Tin Shui Wai Sports Centre	
		67.	Tin Shui Wai Sports Ground	
		68.	Tin Yip Road Park	
		69.	Fung Kam Street Sports Centre	
TC	Kowloon City	70.	Kai Tak Cruise Terminal	About 40 in total

Remark: The number of EV chargers listed in the table is a preliminary estimate and the actual number will be affected by factors such as available electricity at venues, availability of venues and other restrictions.

- End -

CONTROLLING OFFICER'S REPLY

ENB118

(Question Serial No. 2651)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in this Programme that the Government will continue to promote and encourage reduction in the use of plastic packaging materials in collaboration with the retail trade. Will the Government advise this Committee on the following:

- (1) What is the latest progress? What are the details of the relevant work in 2020-21?
- (2) For some types of packaging materials that are difficult to be recycled, such as cling films and plastic food containers, does the Government have the statistics on their disposal quantity at landfills? Will it require retailers to disclose the relevant usage regularly? If not, what are the reasons?
- (3) Regarding the review of the plastic bag charging scheme originally scheduled to commence in the middle of last year, what are the latest details and timetable of the review?

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 215)

Reply:

- (1) The Environmental Protection Department (EPD) is proactively meeting the retail trade to have a better understanding of its operation for exploring practical measures to promote and encourage reduction in the use of plastic packaging materials. We aim at materialising these measures, on a voluntary basis, through collaboration with the trade in the second half of 2020.
- (2) The EPD does not compile statistics on individual disposal quantity of packaging materials, cling film and plastic food containers, etc.

Plastic food container is a type of plastic dining wares/polyfoam dining wares. From the reports on "Monitoring of Solid Waste in Hong Kong" compiled by the EPD, the statistics on the disposal quantities of plastic dining wares and polyfoam dining wares between 2014 and 2018 are shown in the table below. The relevant statistics for 2019 are still under compilation.

Disposal quantity (tonnes per day)	2014	2015	2016	2017	2018
Plastic dining wares	122	131	154	166	169
Polyfoam dining wares	43	48	39	39	41

The EPD does not collect the data on the use of relevant packaging materials from the retailers at present.

- (3) The EPD is reviewing the Plastic Shopping Bag (PSB) Charging Scheme to enhance its effectiveness in waste reduction. Among other things, the current minimum charge of 50 cents has not been adjusted since the voluntary scheme introduced before 2009, we are reviewing whether the charge is needed to be adjusted. There are also views that the current exemption over PSB used for food hygiene purposes may need to be tightened to further encourage reducing the use of those PSB. We aim to consult the public on the outcome of the review later this year in order to map out the way forward.

- End -

CONTROLLING OFFICER'S REPLY

ENB119

(Question Serial No. 2149)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

- 1) Please advise on the annual overall water quality of Victoria Harbour over the past 3 years, as well as the overall water quality target for the coming year.
- 2) Please advise on the expenditures and manpower involved in the territory-wide routine water monitoring over the past 3 years and in the coming year.
- 3) Please give an account of the Government's work to (i) enhance and improve the marine water quality, in particular the water quality of the Victoria Harbour Water Control Zone, and (ii) promote water-friendly culture over the past 3 years and in the coming year, as well as the expenditures involved.

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 24)

Reply:

In 2017, 2018 and 2019, the overall Water Quality Objective compliance rate of Victoria Harbour was 83%, 97% and 97% respectively. It is anticipated that the figure for the coming year will remain at a similarly high level.

In the past 3 years (i.e. the 2017-18, 2018-19 and 2019-20 financial years), the Environmental Protection Department implemented a water quality monitoring programme through a total of 291 monitoring stations to monitor regularly inland water quality in 30 rivers, marine water quality and sediment in 10 water control zones, as well as water quality in 41 gazetted beaches and 3 non-gazetted beaches. The relevant work was undertaken by 2 teams each led by a Senior Environmental Protection Officer, and supported by an environmental microbiology laboratory conducting *E. coli* tests for water samples. The staff establishment was about 45, and the expenditure of the territory-wide routine water quality monitoring programme in the past 3 years was about \$17 million in total. It is anticipated that the staff establishment and expenditure to be involved will be similar in the coming year.

Since 2017, the Finance Committee has already approved a total of about \$28.5 billion for the Government to conduct 18 major sewerage infrastructure projects, including the

upgrading of existing sewage treatment works, extension of public sewer network, construction of dry weather flow interceptors and rehabilitation of ageing sewers, etc.. Among them, 8 projects are related to the Victoria Harbour Water Control Zone. In the coming year, the Government will continue to apply for \$8.7 billion from the Finance Committee to launch another 11 sewerage infrastructure projects, 4 of which are related to the Victoria Harbour Water Control Zone.

- End -

CONTROLLING OFFICER'S REPLY

ENB120

(Question Serial No. 2904)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget Speech that enhancement in climate resilience is necessary, and paragraph 131 indicates that \$350 million has been earmarked for launching a pilot scheme for electric ferries serving ferry routes in Victoria Harbour to reduce emissions from ferries. In this connection, please advise this Committee on the following:

1. What are the details and implementation timetable of the pilot scheme, as well as the details of using the sum of \$350 million?
2. What is the estimated quantity of emissions from local ferries reduced by the implementation of the scheme? What actions will be taken in response to the trend in achieving emission reduction or even zero carbon emission from international maritime transport to combat climate change?
3. Under this Programme, the Environmental Protection Department (EPD) will carry out a lot of work in the coming year in seeking to achieve and maintain satisfactory air quality. Apart from "preparing to launch a pilot scheme for electric ferries", other new initiatives include preparing for the implementation of a pilot scheme for electric public light buses, phasing out Euro IV diesel commercial vehicles, launching a pilot subsidy scheme to promote installation of electric vehicle charging-enabling infrastructure in car parks of private residential buildings and establishing the Green Tech Fund. However, the estimate for 2020-21 is lower than the revised estimate and original estimate for 2019-20 by 3.7% and 11.1% respectively. What are the reasons?

Asked by: Hon LIAO Cheung-kong, Martin (LegCo internal reference no.: 49)

Reply:

1. The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme

will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric ferries, we will engage an independent consultant to advise on the design of electric ferries and assist the ferry operators to prepare an open tender for the construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million, including about \$240 million for the construction of 4 new electric ferries, about \$60 million for the construction and installation of charging facilities and about \$50 million for the operating and maintenance costs of the electric ferries during the trial operation. The actual expenditure will depend on the results of the open tenders for the electric ferries.

2. Electric ferries do not have exhaust emissions. This will help improve the air quality around ferries and enhance Hong Kong's image as a green city. Under the pilot scheme for electric ferries, we will collect data to assess the performance of electric ferries in terms of operation and environmental effectiveness (including carbon reduction).
3. Under Programme "Air", the estimate for 2020-21 is lower than the revised estimate and original estimate for 2019-20 by 3.7% and 11.1% respectively. This is mainly due to the decrease in cash flow requirement for some non-recurrent projects, which mainly include ex-gratia payment for phasing out pre-Euro IV diesel commercial vehicles and subsidies for franchised bus companies to trial electric buses.

- End -

CONTROLLING OFFICER'S REPLY

ENB121

(Question Serial No. 2927)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is proposed in paragraph 126 of the Budget Speech that a \$200 million Green Tech Fund (the Fund) will be set up to support research and development (R&D) and application of decarbonisation and green technologies, and the sharing of R&D findings, with a view to promoting the development of decarbonisation and green technologies, expediting low-carbon transformation and enhancing environmental protection. In this connection, please advise this Committee on:

1. What are the reasons for setting the provision for the Fund at \$200 million and the details of the Fund?
2. The scope of green technologies is very wide. What are the specific objectives, directions or scope of the Fund to support R&D and application of decarbonisation and green technologies?
3. The Government's Innovation and Technology Fund provides funding for research projects that are related to environmental technology at present, and green technology is also one of the 5 particular areas of focus of the Hong Kong Science Park. What is the role of the newly established Green Tech Fund in the local ecosystem of green technology development?

Asked by: Hon LIAO Cheung-kong, Martin (LegCo internal reference no.: 50)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities,

self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

Unlike other funds (such as the Innovation and Technology Fund), the Fund is specifically tailored for R&D and application projects of decarbonisation and green technologies. As such, it will have a more focused funding scope and clearer priorities. The procedures in processing applications, monitoring project progress and disbursing funding, etc. will also be kept as simple and flexible as practicable to meet the needs of local green research. We believe that the Fund will be attractive to applicants.

- End -

CONTROLLING OFFICER'S REPLY

ENB122

(Question Serial No. 0197)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government stated that 1 non-profit-making organisation (NPO) had been selected by the Environmental Protection Department to develop a camp site at Tseung Kwan O Stage I Landfill. In this connection, will the Administration advise on the following:

1. It is learnt that the NPO has carried out site investigation and design work. Does the Administration know the details? What is the current progress?
2. Has the Administration reviewed the operational and implementation experience of Batch 1 of the Funding Scheme, which covered whether the infrastructure or public utilities at individual restored landfills met the requirements of the public, the roles of the Government and NPOs in constructing and managing the facilities, and application and assessment procedures? If yes, what are the details?
3. What enhanced measures will be introduced by the Administration for Batch 2 of the Funding Scheme? Will diverse modes of collaboration or operation be considered?
4. Regarding the interim uses at restored landfills, what feasible measures are available to better utilise land resources?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 2)

Reply:

1. The Environmental Protection Department (EPD) is providing the non-profit-making organisations (NPOs) with funding support for the development of recreational facilities at restored landfills via the "Restored Landfill Revitalisation Funding Scheme" (the Funding Scheme), with a view to providing a practical alternative for the effective use of restored landfills. Under Batch 1 of the Funding Scheme, approval-in-principle has been granted to the proposal submitted by the Tung Wah Group of Hospitals (TWGHs). The project proposes to revitalise approximately 2 hectares of flat area in the Tseung Kwan O Stage I Landfill into a "camp site-cum-green education ground", so as to provide facilities for organising camping, green education, outdoor recreation, adventure training and gardening activities, etc. A technical feasibility study was completed by the TWGHs in 2018. The EPD is providing the TWGHs with funding support for the pre-construction activities for

the project, including site investigation, detailed design and preparation of tender document, etc. On completion of the pre-construction activities, the EPD will follow the established procedures to seek funding approval for the capital works of the project from the Legislative Council. It is expected that the construction works will take about 14 months to complete.

2, 3 & 4. During the implementation of Batch 1 of the Funding Scheme, we have found that many NPOs might encounter various technical constraints, difficulties and challenges when developing large-scale recreational facilities at restored landfills, such as the restrictions on the loading capacity of landfills, the needs for land formation and infrastructure, proper vehicular access, effective feeder transport, ecology of the surrounding environment and planning requirements, etc. As the development and continuous implementation of the projects will be affected by these issues in varying degrees, the Steering Committee on the Funding Scheme proposes that the Government should actively consider providing suitable guidelines and infrastructure for developing the restored landfills, and adopt a more proactive approach to expedite the development of restored landfills.

The EPD is considering and developing suitable long-term beneficial uses and the necessary infrastructure, as well as exploring the feasible interim uses, having regard to the surrounding environment and site constraints of restored landfills. The EPD is also preparing to commence a consultancy study in 2020, with a view to formulating implementation plans for the necessary infrastructure and facilities having regard to the actual circumstances of restored landfills, for more effective development of suitable beneficial uses on restored landfills in future. In the meantime, the EPD will continue to consider proposals from NPOs for development of various recreational and sports facilities on restored landfills on a self-financing basis.

- End -

CONTROLLING OFFICER'S REPLY

ENB123

(Question Serial No. 0199)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Victoria Harbour is an important tourism resource, and given that numerous offshore housing estates have been completed for intake in recent years, the water quality of Victoria Harbour has a direct impact on people's livelihood and the economy of Hong Kong. While the Government has taken many measures to improve the water quality of Hong Kong, such as plans are being made to construct additional dry weather flow interceptors (DWFIs) in other coastal areas of Victoria Harbour as mentioned in this year's Policy Address, the water quality of Victoria Harbour has yet to improve and long-term commitments are required. In this connection, will the Government advise this Committee on the following:

1. What were the overall compliance rates of the water of Victoria Harbour with the water quality objectives in the past 2 years?
2. What is the progress of the construction works of the DWFIs? What are the manpower and expenditure involved? In what districts has the Administration carried out such works? Does it know how much the total pollution load can be reduced by such works for the drainage system?
3. It is learnt that the Government is now progressively implementing targeted pollution control measures and works, including follow-up work on and rectification of misconnections of sewers, upgrading of sewage treatment works, provision of public sewers, and rehabilitation of ageing underground sewers, etc., so as to further enhance the quality of coastal waters of Victoria Harbour. What is the current progress in this respect? What is the estimated expenditure on such works in 2020-21?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 4)

Reply:

In 2018 and 2019, the overall Water Quality Objectives (WQO) compliance rates of Victoria Harbour were both 97%.

The Drainage Services Department (DSD) is now conducting 3 projects related to dry weather flow interceptors, the manpower and expenditures involved in the 3 projects are tabulated below:

Project title	District of project	Approved project (Estimate) (\$ million)	2020-21 (Estimate) (\$ million)	Staff involved in the project (Number)
Construction of Dry Weather Flow Interceptor at Cherry Street box culvert	New Yau Ma Tei typhoon shelter	664.6	94.39	About 100
Sewerage to Lei Yue Mun Village	Lei Yue Mun	260.2	37.34	About 50
Upgrading of West Kowloon and Tsuen Wan Sewerage – Phase 1	West Kowloon including Mong Kok, Sham Shui Po and Tsuen Wan Town Centre, etc.	277.4	28.00	About 60

These facilities can remove about 70% of the total pollution load from respective stormwater systems.

At the same time, the Government will continue to carry out projects to upgrade sewage treatment works, install public sewers and rehabilitate ageing sewers for further improving the quality of coastal waters of Victoria Harbour. The estimated expenditures for 2020-21 for the sewerage works being implemented and those pending funding approval by the Finance Committee are tabulated below:

Project title of sewerage works being implemented	Expected completion year	2020-21 (Estimate) (\$ million)
Construction of Dry Weather Flow Interceptor at Cherry Street box culvert	2022	94.39
Upgrading of West Kowloon and Tsuen Wan Sewerage – Phase 1	2022	28.00
Rehabilitation of Trunk Sewers in Kowloon, Shatin and Sai Kung	2022	79.00
Upgrading of Kwun Tong Preliminary Treatment Works	2022	65.00
Enhancement Works for Kwun Tong Sewage Pumping Station	2022	176.63
Sewerage to Lei Yue Mun Village	2023	37.34
Rehabilitation of Underground Sewers Stage 1	2022	38.72
Upgrading of Central and East Kowloon Sewerage – Phase 3	2024	80.83

Project title of sewerage works pending funding approval by the Finance Committee	Expected completion year	2020-21 (Estimate) (\$ million)
Upgrading of West Kowloon and Tsuen Wan Sewerage – Phase 2	2027	97.30
West Kowloon and Tsuen Wan Village Sewerage – Phase 1	2024	16.76
Rehabilitation of Underground Sewers Stage 2	2025	20.26
Sewerage for Ma Yau Tong Village, Tseung Kwan O	2024	19.24

As for misconnections of foul sewers, the Environmental Protection Department (EPD) is continuing with the inspection work relating to water pollution control. When following up on each case, the investigation staff will trace the effluent discharge routing to confirm the pollution source(s). If there is sufficient evidence, the EPD shall instigate prosecution against the suspected illegal discharger(s). When a misconnection is found in public sewers or internal foul sewers of private buildings during investigation, the case will be referred to the DSD and the Buildings Department respectively for follow-up to rectify the misconnection. As the inspection work relating to water pollution control is part of the routine duties of the EPD, there is no separate breakdown of the related expenditure.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 0537)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Financial Secretary mentioned in paragraph 126 of the Budget: "I propose setting up a \$200 million Green Tech Fund to support R&D and application of decarbonisation and green technologies". In this connection, please advise on the following:

1. What are the estimated resources and manpower allocated in this regard in 2020/21?
2. Will the Administration further consider complementing the Regional Cooperation Plan on Building a Quality Living Area announced by Guangdong, Hong Kong and Macao by setting up a "centre for industrialisation and development of environmental protection technologies" with the support of the Fund, providing services to the Guangdong-Hong Kong-Macao Greater Bay Area to support R&D, application and collaboration regarding the decarbonisation and green technologies in the region? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 31)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong

Kong Applied Science and Technology Research Institute, designated as the R&D Centre for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

The main objective of the Fund is to support local R&D projects on decarbonisation and green technologies, and only local organisations can apply. However, we understand that sharing local R&D results may also contribute to the global efforts in environmental protection. We will therefore actively consider whether the Fund should also be used to encourage projects with R&D results that are applicable to the neighbouring regions and can bring environmental benefits.

- End -

CONTROLLING OFFICER'S REPLY

ENB125

(Question Serial No. 2014)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government will take forward the legislative proposal of municipal solid waste (MSW) charging and undertake the preparatory work for its implementation, hoping that the MSW charging will be implemented by the end of 2020. It also indicated that the “dedicated-fund-for-dedicated-use” approach would be adopted, under which the revenue generated from the MSW charging would be used for enhancing waste reduction and recycling work. In this connection, will the Government advise this Committee on the following:

1. Will the Government consider allocating more resources to implement measures that encourage domestic waste recovery, such as providing more and enhancing waste separation facilities? If yes, what are the details?
2. Will the Government provide more economic incentives to encourage the public to recycle food waste and plastic bottles, etc.? If yes, what are the details?
3. Will the Government allocate more resources to replace the filters of all water dispensers in public sport facilities and public places, and deploy additional manpower for inspection and monitoring to make sure the water dispensers are safe and hygienic, so that the public will have a higher incentive to bring their own bottles?
4. How many additional resources will be allocated on media publicity in 2020-21 to enhance public understanding of clean recycling and source separation of waste?

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 26)

Reply:

1. The Environmental Protection Department (EPD) has been encouraging the public to practise source separation for recyclables at home or at workplace through continuous promotion of the Source Separation of Waste Programme (the Programme). As at early 2020, over 2 200 housing estates, some 700 rural villages and over 1 000 commercial and industrial (C&I) buildings have participated in the Programme. We have now placed about 17 000 sets of recycling bins at housing estates and C&I buildings which have participated in the Programme, government office buildings,

schools, country parks, and other public places, covering over 80% of the places where Hong Kong people live and work.

As single block buildings in older districts usually do not have property management company for implementing and managing waste recycling programmes or even lack of space for setting up waste recovery facilities, the EPD has provided funding support through the Environment and Conservation Fund (ECF) to non-government organisations (NGOs) to set up Community Recycling Centres (CRCs) in various districts to facilitate residents living in these buildings to separate waste for recovery and to promote waste reduction and recycling activities at the community level. The ECF currently provides funding support to 17 CRCs and 2 mobile community recycling projects (community recycling vehicles). Moreover, there are 50 recyclable collection points operated by NGOs in the community to provide recycling services to the public. To further strengthen community recycling support, the EPD will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of CRCs to all 18 districts across the territory from 2020-21, and for maintaining their sustained development. The estimated expenditure for the 2020-21 financial year is about \$100 million.

To strengthen on-site recycling support, the EPD started to establish outreaching teams in late 2018 to collaborate closely with community partners to educate members of the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. The outreaching teams have kick-started pilot outreaching services in 3 pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin). We will extend the outreaching service to the whole territory in phases starting from 2020 according to our outreaching experience in the pilot districts and future manpower arrangements. The estimated expenditure on salaries in 2020-21 is about \$110 million.

2. To encourage the C&I sectors to recycle food waste properly and achieve the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection on 1 July 2018 to separate and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the Organic Resources Recovery Centre Phase 1 (O • PARK1) for recovery. In addition, the EPD has been collecting food waste generated from lunch suppliers for primary and secondary schools and food left uneaten by students after lunch, and delivering such food waste to the O • PARK1 since February 2019.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases starting from the second half of 2020, which will extend the service to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale markets under the Agriculture, Fisheries and Conservation Department, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have participated in the Food Waste Recycling

Projects in Housing Estates funded by the ECF or with experience in food waste separation at source.

The Government is carefully considering the recommendations of the consultancy study on the producer responsibility scheme on plastic beverage containers for mapping out the way forward, and plans to consult the public in the second half of 2020. Besides, the EPD is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs), with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

In addition, the EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-C&I waste plastics (e.g. plastic bottles) from public and private housing estates, schools and public institutions, CRCs and Community Green Stations in the districts for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since late January 2020. We are assessing the tenders for the pilot schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020.

3. To inculcate a living culture of “bring your own bottle” in the public, the Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2022 for public use in government venues. The Government has earmarked some \$82 million and \$32 million respectively for the costs of installing 500 new water dispensers and procuring five-year maintenance service. Water dispensers and plumbing installations in government venues have been installed in accordance with the guidelines issued by the Water Supplies Department (WSD) and relevant legislative requirements, including the Practice Guide on Carrying Out Plumbing Works and the Waterworks Ordinance etc., and prior approvals from the WSD have been obtained before installing and using. These water dispensers are generally equipped with filter cartridges/UV sterilisers to ensure that the water is hygienic. Government departments that manage government venues will undertake regular maintenance, such as inspections and replacement of filter cartridges and UV sterilisers, and clean the water dispensers regularly in accordance with the Centre for Health Protection’s recommendations and the manufacturers’ guidelines so as to ensure water supplied from water dispensers is hygienic.
4. The EPD and the Environmental Campaign Committee (ECC) will launch a major publicity campaign on waste reduction and recycling through the ECF for 2 years starting from 2020. The campaign will thoroughly educate the public on how to

reduce waste as well as classify and recycle different wastes, in order to drive behavioural and cultural changes at community level to achieve waste reduction at source and adopt a green lifestyle. The ECC plans to reserve about \$21 million in 2020-21 for taking forward the publicity campaign.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2274)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2020-21 that the Environmental Protection Department will continue to implement the Restored Landfill Revitalisation Funding Scheme (the Funding Scheme) to expedite the development of beneficial facilities at restored landfills. In this connection, please advise this Committee on the following:

- (a) What was the expenditure for the implementation of the Funding Scheme over the past year? What is the balance of the Funding Scheme so far?
- (b) What is the progress of the approved application under Batch 1 of the Funding Scheme?
- (c) The Administration has indicated that the review of the arrangements of Batch 1 of the Funding Scheme would be completed in 2019. What was the outcome of the review? What measures will the Administration put forward to encourage and facilitate different organisations to apply for the Funding Scheme?
- (d) What is the anticipated time for launching Batch 2 of the Funding Scheme?

Asked by: Hon MA Fung-kwok (LegCo internal reference no.: 77)

Reply:

- (a)&(b) The Environmental Protection Department (EPD) is providing the non-profit-making organisations (NPOs) with funding support for the development of recreational facilities at restored landfills via the "Restored Landfill Revitalisation Funding Scheme" (the Funding Scheme), with a view to providing a practical alternative for the effective use of restored landfills. Under Batch 1 of the Funding Scheme, approval-in-principle has been granted to the proposal submitted by the Tung Wah Group of Hospitals (TWGHs). The project proposes to revitalise approximately 2 hectares of flat area in the Tseung Kwan O Stage I Landfill into a "camp site-cum-green education ground", so as to provide facilities for organising camping, green education,

outdoor recreation, adventure training and gardening activities, etc. A technical feasibility study was completed by the TWGHs in 2018. The EPD is providing the TWGHs with funding support for the pre-construction activities for the project, including site investigation, detailed design and tender documentation, etc. On completion of the pre-construction activities, the EPD will follow the established procedures to seek funding approval for the capital works of the project from the Legislative Council. It is expected that the construction works will take about 14 months to complete. The Government has earmarked \$1 billion for the Funding Scheme under the Capital Works Reserve Fund, and the funding support for the capital works of each project is capped at \$100 million. The expenditure incurred for the above project in 2019-20 was about \$1 million.

- (c)&(d) During the implementation of Batch 1 of the Funding Scheme, we have found that many NPOs might encounter various technical constraints, difficulties and challenges when developing large-scale recreational facilities at restored landfills, such as the restrictions on the loading capacity of landfills, the needs for land formation and infrastructure, proper vehicular access, effective feeder transport, ecology of the surrounding environment and planning requirements, etc. As the development and continuous implementation of the projects will be affected by these issues in varying degrees, the Steering Committee on the Funding Scheme proposes that the Government should actively consider providing suitable guidelines and infrastructure for developing the restored landfills, and adopt a more proactive approach to expedite the development of restored landfills.

The EPD is considering and developing suitable long-term beneficial uses and the necessary infrastructure, as well as exploring the feasible interim uses, having regard to the surrounding environment and site constraints of restored landfills. The EPD is also preparing to commence a consultancy study in 2020, with a view to formulating implementation plans for the necessary infrastructure and facilities having regard to the actual circumstances of restored landfills, for more effective development of suitable beneficial uses on restored landfills in future. In the meantime, the EPD will continue to consider proposals from NPOs for development of various recreational and sports facilities on restored landfills on a self-financing basis.

- End -

CONTROLLING OFFICER'S REPLY

ENB127

(Question Serial No. 2226)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Department has pointed out that it would continue to encourage the transport trade to make use of the Pilot Green Transport Fund (PGTF) to try out green innovative transport technologies, and take forward the outcome of the PGTF review with a view to further facilitating wider use of green innovative transport technologies by the transport sectors. Please advise this Committee on the following:

- a. What were the numbers of eligible in-service franchised buses retrofitted with selective catalytic reduction devices, the expenditures and relevant details in the past 3 years? What is the relevant estimated expenditure for this year?
- b. What were the numbers of hybrid buses and electric buses on trial, the expenditures and relevant details in the past 3 years? What is the relevant estimated expenditure for this year?
- c. How did the hybrid buses and electric buses on trial performed in the past 3 years?

Please reply in the tables below:

Brand of hybrid bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of battery-electric bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of supercapacitor bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of diesel bus	Number of maintenance days	Operation downtime	Utilisation rate	Average fuel economy	Average fuel cost	Average total operating cost

Asked by: Hon MO Claudia (LegCo internal reference no.: 55)

Reply:

Retrofitting of selective catalytic reduction (SCR) devices

To improve roadside air quality, the Government has fully subsidised the franchised bus companies (FBCs) to retrofit eligible Euro II and III franchised buses with SCR devices for upgrading their emission performance to Euro IV or above level. The retrofit programme was completed at the end of 2017. A total of 1 030 Euro II and III franchised buses have been retrofitted with SCR devices under the programme with the total expenditure of about \$197 million.

To further reduce the emissions of franchised buses, the Government plans to allocate about \$38 million to fully subsidise FBCs to conduct a trial on retrofitting Euro IV and V double-deck franchised buses of the dominant bus models with enhanced SCR systems (the Trial), so as to establish the technical feasibility of the retrofitting work in Hong Kong, and to confirm the emission reduction performance of the enhanced SCR systems from different suppliers under the local driving and operation conditions. The Trial is expected to commence in 2020.

Hybrid buses

The Government launched a trial in 2014 to fully subsidise the FBCs to purchase 6 double-deck hybrid buses for trial with the total expenditure of \$33 million. The distribution of these buses is as follows:

FBC	Number of double-deck hybrid buses
The Kowloon Motor Bus Company (1933) Limited (KMB)	3 (running 3 routes during the trial)
Citybus Limited (CTB)	2 (running 2 routes during the trial)
New World First Bus Services Limited (NWFB)	1 (running 1 route during the trial)

The two-year trial was completed by the end of 2016 and we reported the trial findings to the Panel on Environmental Affairs of the Legislative Council on 22 May 2017. The trial findings revealed that the emission performance of hybrid buses over Euro VI conventional buses was not substantial and their fuel economy performance fell far short of expectation. The relevant data is summarised as follows:

Monitoring Parameter	Hybrid Bus	Control Diesel Bus
Relative Fuel Consumption	1.004	1
Urea Consumption Rate (% of fuel consumption)	4.5%	5.1%
Bus Availability (%) ^[1]	84.1%	93.6%
Average Number of Breakdowns Per Month ^[2]	0.22	0.06

Note:

- [1] Excluding outage unrelated to malfunctions of the buses (such as monthly inspections, routine maintenance/checking, cleaning, etc.)
- [2] Number of breakdowns includes only failure of a passenger-carrying bus that necessitates passenger evacuation.

Electric buses

As regards electric buses, the Government has allocated \$180 million to fully subsidise the FBCs to purchase a total of 36 single-deck electric buses for conducting a two-year trial to test out their operational performance, reliability and economic feasibility in local conditions.

At present, 33 electric buses have commenced operation. The remaining 3 electric buses are expected to commence operation in 2020. Details of the trial on electric buses are as follows:

FBC	No. of Single-deck Electric Buses	Manufacturer and Model	Trial Route	Current Status
KMB	8 supercapacitor buses	China Youngman Automobile Group Company Limited Model : JNP6122UC	284 [Sha Tin Central – Ravana Garden (Circular)] 5M [Kai Tak (Tak Long Estate) – Kowloon Bay Station (Circular)]	4 supercapacitor buses completed the trial in November 2019. The trial for the other 3 supercapacitor buses commenced progressively in February and July 2019 respectively. The trial for the remaining 1 supercapacitor bus is expected to commence in 2020.
KMB	10 battery-electric buses	BYD Auto Industry Company Limited (BYD) Model : K9R	203C [Tai Hang Tung – Tsim Sha Tsui East (Mody Road)] 43M [Kwai Fong Station – Cheung Ching (Circular)] 7M [Lok Fu – Chuk Yuen Estate (Circular)] 11D [Lok Fu – Kwun Tong Ferry]	The trial for 10 battery-electric buses progressively commenced from July 2017 to January 2018. ^{[3][4]}
Long Win Bus Company Limited (LWB)	4 battery-electric buses	BYD Model : K9R	E31 [Tung Chung (Yat Tung Estate Public Transport Terminus) – Tsuen Wan (Discovery Park Bus Terminus)] S64 [Tung Chung (Yat Tung Estate Public Transport Terminus) – Airport (Passenger Terminal Building) (Circular)]	The trial for 4 battery-electric buses commenced progressively in July 2017 and February 2018 respectively. ^[4]

FBC	No. of Single-deck Electric Buses	Manufacturer and Model	Trial Route	Current Status
CTB	6 battery-electric buses	BYD Model : K9R Great Dragon International Corporation Limited (Great Dragon) Model : LS-130-116 3 for each model	11 [Central (Central Ferry Piers) – Jardine’s Lookout (Circular)] 12 [Central (Central Ferry Piers) – Robinson Road (Circular)] 25A [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) – Braemar Hill (Circular)]	3 battery-electric buses from BYD and 3 battery-electric buses from Great Dragon completed the trial in May 2018 and May 2019 respectively.
NWFB	4 battery-electric buses	BYD Model : K9R Great Dragon Model : LS-130-116 2 for each model	78 [Wong Chuk Hang Station – Wah Kwai Estate (Circular)] 81 [Lai Tak Tsuen – Chai Wan (Hing Wah Estate)]	2 battery-electric buses from BYD and 2 battery-electric buses from Great Dragon completed the trial in May 2018 and May 2019 respectively.
New Lantao Bus Company (1973) Limited (NLB)	4 battery-electric buses	BYD Model : K9R BYD Model : K9RB 2 for each model	38 [Tung Chung (Yat Tung Estate Public Transport Terminus) – Tung Chung Station Bus Terminus (Circular)] B2 [Yuen Long Station – Shenzhen Bay Port]	The trial for 2 battery-electric buses commenced in July 2018. The trial for the remaining 2 battery-electric buses is expected to commence in 2020.

Note:

- [3] The original trial routes were 5C [Star Ferry – Tsz Wan Shan (Central)], 6C [Mei Foo – Kowloon City Ferry], 35A [Tsim Sha Tsui East – On Yam], 42A [Jordan (To Wah Road) – Cheung Hang] and 603 [Ping Tin – Central (Central Ferry Piers)]. These 4 routes have been changed since 28 September 2018.
- [4] As the performance of some of the electric buses have to be further evaluated, the Government has extended their trial period after assessment.

We will continue to monitor the performance of the electric buses under the trial and collect and analyse the trial data. Upon completion of all the trials, we will report the trial findings to the Panel on Environmental Affairs of the Legislative Council.

- End -

CONTROLLING OFFICER'S REPLY

ENB128

(Question Serial No. 2837)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

According to the Budget Speech, the Government will update the Clean Air Plan to, among other things, examine the policy of further promoting the use of electric vehicles (EVs), and will also formulate Hong Kong's first roadmap on the popularisation of EVs. In this connection, when will the roadmap be completed? What are the manpower and expenditure to be involved? The Government has set a target previously that by 2020, 30% of private cars would be EVs or hybrid cars. Will plans be drawn up in the roadmap to achieve the target as soon as possible? If not, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (LegCo internal reference no.: 34)

Reply:

The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of electric vehicles (EVs) to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs. Based on the preliminary estimation, the relevant work will be completed in the first half of 2021. The expenditure and manpower required will be absorbed by the existing resources of the Environmental Protection Department.

In view of the rapid development of EV technology, and that governments of various countries are promoting new energy vehicles, it is highly possible that electric private cars will become the mainstream vehicle supply in future. We are conducting a review of the global development, including the plan and development trend of vehicle manufacturers, with a view to drawing up the roadmap on the popularisation of EVs.

- End -

CONTROLLING OFFICER'S REPLY

ENB129

(Question Serial No. 2838)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

According to the Budget Speech, the Government will launch a \$2 billion pilot scheme this year to subsidise the installation of charging-enabling infrastructure in car parks of private residential buildings. What is the manpower involved in the scheme? How many additional electric vehicle charging facilities will be installed through this measure? If the performance of the scheme is satisfactory, will the Administration turn it into a regular subsidy scheme? If yes, what are the details? If no, what are the reasons?

Asked by: Hon NG Wing-ka, Jimmy (LegCo internal reference no.: 35)

Reply:

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As regards manpower, the Environmental Protection Department will establish a new team to prepare and manage the pilot scheme. The team comprises of 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020. We will conduct timely reviews on the effectiveness of the pilot scheme after its implementation in order to set the future direction.

- End -

CONTROLLING OFFICER'S REPLY**ENB130****(Question Serial No. 2038)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the “provision of air quality information and Air Quality Health Index (AQHI) to the public” mentioned in the Estimates, please advise on the following:

What was the number of days on which AQHI in Hong Kong attained “Low (1-3)” level in each of the past 5 years?

What is the expenditure earmarked by the Government this year for the maintenance or improvement of air quality?

Asked by: Hon OR Chong-shing, Wilson (LegCo internal reference no.: 13)Reply:

The numbers of days on which the Air Quality Health Index recorded at the general and roadside air quality monitoring stations (AQMSs) of the Environmental Protection Department fell under the “Low (1-3)” health risk category throughout the day in the past 5 years (2015 to 2019) are set out respectively in the following table:

Year	General AQMSs	Roadside AQMSs
2015	51	7
2016	70	31
2017	89	23
2018	81	27
2019	72	39

In 2020-21, the total estimated expenditure under the Air Programme is \$1.902 billion. Most of the estimated expenditure will be used for implementing various air quality improvement measures, including launching of a pilot subsidy scheme to promote installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings, providing ex-gratia payments to progressively phase out Euro

IV diesel commercial vehicles, subsidising the transport sectors to test and make more use of green transport technologies through the New Energy Transport Fund, implementing a pilot scheme for electric public light buses, conducting a trial of retrofitting Euro IV and Euro V double-deck franchised buses with enhanced selective catalytic reduction systems, subsidising franchised bus companies in full to conduct trials on electric buses, installing medium chargers at government car parks, launching a pilot scheme for electric ferries and extending the Cleaner Production Partnership Programme, etc. In addition, the estimated expenditure will also be used for monitoring the air quality and implementing measures to control emissions from various air pollution sources, so as to improve the air quality. This includes expenditure for the operation and maintenance of AQMSs, deploying roadside remote sensing equipment to detect the emissions of petrol and liquefied petroleum gas vehicles, mandating vessels to use compliant fuel within Hong Kong waters, and the continuous collaboration with the Guangdong Provincial Government on the implementation of the Pearl River Delta Regional Air Quality Management Plan.

- End -

CONTROLLING OFFICER'S REPLY**ENB131****(Question Serial No. 2065)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the work to “promote the use of electric vehicles (EVs) in Hong Kong”, please set out the respective numbers of cases in which the First Registration Tax was waived for buying EVs in the past 5 years. Please provide the data in the table below.

Vehicle Type	Electric private car		Electric commercial vehicle		Electric motor cycle		Electric motor tricycle	
	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived	Quantity	Total amount of tax waived
2015								
2016								
2017								
2018								
2019								

Asked by: Hon OR Chong-shing, Wilson (LegCo internal reference no.: 40)Reply:

The numbers of first registered electric vehicles by vehicle type and the total amounts of first registration tax waived in the past 5 years are as follows:

Year	Vehicle Type							
	Electric private car		Electric commercial vehicle		Electric motor cycle		Electric motor tricycle	
	Quantity	Total amount of tax waived (\$m)	Quantity	Total amount of tax waived (\$m)	Quantity	Total amount of tax waived (\$m)	Quantity	Total amount of tax waived (\$m)
2015	2 607	1,743.45	30	1.65	0	0	0	0
2016	3 020	1,975.37	25	1.07	2	0.09	0	0
2017	3 860	3,149.41	42	1.37	2	0.11	0	0
2018	471	79.85	26	1.07	0	0	0	0
2019	2 423	477.96	51	3.15	0	0	0	0

Note: Government vehicles are not included as they are not required to pay first registration tax.

- End -

CONTROLLING OFFICER'S REPLY

ENB132

(Question Serial No. 2963)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Matters Requiring Special Attention in 2020-21 that the Department will continue with the development of the network of Community Green Stations (CGSs) across the territory. In this connection, will the Administration advise this Committee on the following:

Please provide the latest progress of the implementation of the network of CGSs in the 18 districts across the territory. How many CGSs have been in service so far and how many CGSs are expected to be in service this year?

What were the number of visitors, the quantities of various types of waste recovered, the frequency of conducting the work on environmental education, as well as the manpower and expenditure involved in each of the past years for the CGSs in service?

What indicators the Administration has in place to examine the effectiveness of CGSs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 42)

Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages. As for the remaining 6 districts (including Kowloon City, Southern District, North District, Central and Western District, Tsuen Wan and Yau Tsim Mong), we are continuing with site search and other associated preparatory work.

From 2015 to 2019, the quantities of various types of recyclables collected, the numbers of visitors, the numbers of educational activities organised and the operating expenditures in respect of the CGSs already in operation are set out below:

	2015	2016	2017	2018	2019
Quantity of various types of recyclables collected (tonnes)					
Electrical appliances and computer products	51.7	97.1	213.5	303.8	431.7
Glass bottles	103.2	483.6	1 042.5	1 555.7	1 947.4
Rechargeable batteries	0.3	1.7	4.9	5.0	7.0
Compact fluorescent lamps/fluorescent tubes	1.3	6.9	14.0	16.2	23.0
Waste paper	0.9	3.6	39.5	90.4	148.8
Waste plastics	0.2	2.3	16.0	59.1	125.9
Waste metals	0.1	0.9	7.1	12.9	22.5
Number of visitors, number of educational activities organised and operating expenditure					
Number of visitors	31 387	159 459	287 910	320 192	498 500
Number of educational activities	719	1 155	1 354	1 202	1 514
Operating expenditure [Note] (\$m)	5.73	6.04	17.49	23.97	About 31

Note: The total expenditure in 2019 is being validated.

Since their inception, the CGSs have been running smoothly. They have generally been well received by the local community and have been making good progress in providing support for community recycling. For the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS and the Yuen Long CGS which were the first to commence operation, all of them exceeded the designated requirements in the respective service contracts of the quantity of recyclables to be recovered and those relating to the organisation of educational activities during the period of their first service contracts, while the 4 follow-on contracts also commenced smoothly. As for the Sham Shui Po CGS, the Tuen Mun CGS, the Kwai Tsing CGS and the Tai Po CGS, which are still operating in the period of their first service contracts, we will continue to monitor compliance of their operation performance with the contractual requirements. Moreover, we will take into account views from various stakeholders and make suitable adjustments to the work of the CGSs on environmental education and recycling support as and when necessary. At present, a total of 18 posts are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

- End -

CONTROLLING OFFICER'S REPLY

ENB133

(Question Serial No. 2964)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Financial Secretary mentioned in paragraph 126 under “Building A Liveable City” of the Budget Speech that he proposed setting up a \$200 million Green Tech Fund (the Fund) to promote the development of decarbonisation and green technologies. Will the Administration advise on the details of the Fund, the staffing and expenditure to be involved and the eligibility criteria for applying for the Fund?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 44)

Reply:

It is proposed in the 2020-21 Budget that \$200 million be allocated for setting up a new Green Tech Fund (the Fund) to provide better and more focused funding support to meet the needs of the research and development (R&D) projects, so as to expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority R&D themes include decarbonisation and energy saving, green transport, waste management as well as air and water quality improvement. Features of the Fund include: clear and focused project scope; high funding ceiling (up to \$30 million) and long duration for projects (up to 5 years); streamlined administration procedures, as well as strong publicity and provision of a platform to share project results. The target beneficiaries of the Fund are designated local public research institutes and R&D centres, i.e. local universities, self-financing degree-awarding institutions registered under the Post Secondary Colleges Ordinance (Cap. 320), the Hong Kong Productivity Council, the Vocational Training Council, the Clothing Industry Training Authority and the Hong Kong Institute of Biotechnology, as well as 5 R&D centres designated by the Innovation and Technology Fund, namely (1) Automotive Platforms and Application Systems R&D Centre; (2) Hong Kong Applied Science and Technology Research Institute, designated as the R&D Centre for Information and Communications Technologies; (3) Hong Kong Research Institute of Textiles and Apparel; (4) Logistics and Supply Chain MultiTech R&D Centre; and (5) Nano and Advanced Materials Institute. We will also actively explore the feasibility of covering the local private sector in order to encourage practical application of project results. In this

connection, we will consider appropriate arrangements to ensure that funding allocated to the private sector is value for money and well spent.

We are actively proceeding with the preparatory work and aim to invite applications by the end of this year. In the course of formulating the operational details of the Fund, we will consider stakeholders' views and draw on the experience of other relevant funds. The Hong Kong SAR Government has earmarked \$200 million for setting up the Fund. The initial preparatory work will be undertaken by the existing staff establishment of the Environmental Protection Department. As for the implementation stage, additional resources will be sought in accordance with the established mechanism as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB134

(Question Serial No. 2965)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in paragraph 128 of the section "Building A Liveable City" of the Budget Speech that regarding the charging facilities, the Administration will launch a \$2 billion pilot scheme to subsidise the installation of charging-enabling infrastructure in eligible car parks of private residential buildings. Will the Administration advise this Committee on the following:

What is the current number of electric vehicles in Hong Kong? What is the percentage of electric private cars in such number of electric vehicles?

What are the details of the pilot scheme? What is the number of infrastructure expected to be installed? How many people are expected to be benefited? What is the expected effect? What specific measures are in place? What are the manpower and expenditure involved?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 45)

Reply:

As at the end of February 2020, the number of electric vehicles (EVs) in Hong Kong is 14 278 (including government vehicles and special purpose vehicles), while the number of electric private cars is 13 890 (including government electric private cars), representing about 97.3% of the number of EVs.

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential

development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As regards manpower, the Environmental Protection Department will establish a new team to prepare and manage the pilot scheme. The team comprises 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY**ENB135****(Question Serial No. 2971)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

How many projects were funded by the Recycling Fund in each of the past 5 years? Please set out in detail the name, person-in-charge, amount of funding, content, types of recyclables involved and current progress (quantities processed) of various projects according to different funding programmes, namely the Enterprise Support Programme, the Industry Support Programme and Standard Project, etc. Moreover, what are the number of applications still being processed at present and the reasons for rejecting the projects?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 41)Reply:

In the past 5 years (i.e. the financial years from 2015-16 to 2019-20 (as at 29 February 2020)), the Recycling Fund (the Fund) approved 341 projects. Among them, excluding 54 which have been withdrawn by the applicant organisations, a total of 287 funded projects have been or will soon be commenced, involving a total funding of about \$280 million. The numbers of funded projects under different funding programmes each year are as follows:

Financial year	Enterprise Support Programme	Industry Support Programme	Standard Project
2015 - 16	9	3	9
2016 - 17	7	3	34
2017 - 18	6	3	70
2018 - 19	8	4	46
2019 - 20 (As at 29 February 2020)	45	8	32
Total	75	21	191

All applications were considered by the Advisory Committee on Recycling Fund with reference to a set of published vetting criteria. The Fund is still processing about 180 applications at present while a total of 82 applications are not approved since its establishment and the reasons include:

- The project or company information submitted by the applicant was incomplete;
- The project content was not within the coverage of the Fund;
- The project did not show that it could reduce disposal at landfills;
- The applicant did not meet the application eligibility;
- The project was not practicable;
- The applicant failed to prove his/her ability in implementing the project;
- The project was not financially viable or sustainable;
- The project was not cost-effective, etc.

As for the projects funded by the Fund, please refer to the annex for details.

Projects Funded by the Recycling Fund

Enterprise Support Programme

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
1.	Champway Technology Limited	To recover organic oil from concentrated fat produced by grease trap waste facility.	\$670,000	Waste cooking oil	In progress [9 400]
2.	Champway Technology Limited	To recover organic oil from concentrated fat produced by grease trap waste facility.	\$2,100,000	Waste cooking oil	In progress [7 500]
3.	Cornerstone Renewable Energy Limited	To enhance waste plastic bottles collection capability and efficiency by procuring reverse vending machines.	\$970,000	Waste plastics	Under planning [<100]
4.	Dunwell Industrial (Holdings) Limited	To enhance the collection and treatment of spent lubrication oil for producing recycled lubrication oil.	\$2,070,000	Spent lubrication oil	In progress [900]
5.	E Farm Biotech Limited	To enhance the collection and food waste treatment by black soldier fly, and purchase equipment to automate the food waste treatment process.	\$2,170,000	Food waste	Under planning [300]
6.	ECO Oil Company Limited	To enhance the collection and treatment of used cooking oil for producing feedstock of biodiesel which will then be sold and exported to biodiesel producers.	\$2,500,000	Waste cooking oil	Completed [4 600]
7.	Forest Hill Co.	To enhance the collection and recycling of waste paper, metals, plastics and waste electrical appliances.	\$5,000,000	Waste paper, waste metals, waste plastics, waste electrical and electronic equipment	In progress [6 000]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
8.	Good For Environment & Recycle Limited	To enhance the collection and treatment of mixed construction waste into sorted recyclables.	\$1,460,000	Construction waste	Under planning [4 000]
9.	Green Intellect Company Limited	To recycle waste wood into biomass pellets.	\$2,730,000	Waste wood	Under planning [7 500]
10.	Green Strength Technology Limited	To enhance the collection and treatment of used cooking oil for producing feedstock of biodiesel which will then be sold and exported to biodiesel producers.	\$2,400,000	Waste cooking oil	In progress [700]
11.	Greenway Building Materials Limited	To enhance the collection, transportation and recycling of waste wood.	\$1,430,000	Waste wood	Under planning [1 600]
12.	He Tai Steel Co., Limited	To enhance the collection and processing of steel scraps from construction sites and community.	\$3,510,000	Waste metals	Under planning [32 300]
13.	Hip Wa Environmental Recycling Company	To enhance the collection of waste paper and metals from community for recycling.	\$830,000	Waste paper, waste metals	Completed [700]
14.	HM Environmental Technologies Limited	To enhance the collection and recycling of waste wood for producing wood plastic composites as outdoor flooring materials which will then be sold to renovation/construction companies.	\$3,710,000	Waste wood	In progress [900]
15.	Hong Kong Biomass (Wood) Collect and Recycle Company Limited	To purchase equipment for setting up a mobile waste wood processing station.	\$3,810,000	Waste wood	Under planning [46 400]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
16.	K Wah Construction Products Ltd	To enhance the collection and treatment of construction waste into sorted recyclables and recycled aggregates which will be used to produce eco-pavers.	\$5,000,000	Construction waste	In progress [20 300]
17.	Kim's Recycling Metal Limited	To enhance the collection of aluminium (Al) scraps dismantled from kitchenware, household appliances and furniture for recycling.	\$1,200,000	Used furniture, waste plastics, waste metals	Completed [900]
18.	Lau Choi Kee Papers Company Limited	To collect and treat waste plastic bags to produce Polyethylene (PE) pellets.	\$2,400,000	Waste plastics	Completed [2 400]
19.	Luen Hop Environment Protection Development Limited	To enhance the collection of waste plastic bottles from commercial and domestic sources for recycling.	\$1,800,000	Waste plastics	Completed [1 800]
20.	M. Y. Hong International Limited	To enhance the collection and treatment of waste truck tyres for producing retreaded rubber tyres for sale.	\$1,270,000	Waste rubber tyres	In progress [300]
21.	On Fat Lung Innovative Resources Limited	To enhance the collection and treatment of waste truck tyres to produce rubber powder, metal wires, rubber sheets and pads.	\$4,950,000	Waste rubber tyres, waste metals	In progress [2 500]
22.	Rainbow Ecoactivist Engineering Service Co.	To enhance the collection and treatment of small waste electrical and kitchen appliances and furniture from community.	\$2,000,000	Waste electrical and electronic equipment, used furniture	Completed [2 500]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
23.	Recycle Cycle (HK) Company Limited	To enhance the collection of various recyclables including waste paper, waste plastics, used clothes, compact discs, small household electrical appliances, etc. from housing estates through publicity and outreaching programmes.	\$2,220,000	Waste paper, waste metals, waste plastics, used clothes, compact discs, waste electrical and electronic equipment	In progress [1 600]
24.	Secure Information Disposal Services Limited	To enhance the collection and treatment of beverage cartons, food contaminated paper and thermal paper to produce recycled pulp and PE/Al composites.	\$3,500,000	Beverage cartons, food contaminated paper, thermal paper	In progress [1 300]
25.	South China Reborn Resources (Hong Kong) Company Limited	To collect and deliver more food waste to the O • PARK1 by enhancing food waste collection capability.	\$3,320,000	Food waste	Under planning [15 000]
26.	Superb Logistics Company Limited	To enhance the capacity for delivery of waste televisions to recyclers with an e-waste disposal licence.	\$960,000	Waste electrical and electronic equipment	Under planning [400]
27.	Tin Lee Reclamation Company	To enhance the collection and treatment of small waste electrical and kitchen appliances and furniture from community.	\$2,400,000	Waste electrical and electronic equipment, used furniture	Completed [2 700]
28.	Top Step Development Limited	To enhance the collection and treatment of starch food waste to produce animal feed.	\$1,600,000	Food waste	Completed [5 700]
29.	Verdant Industrial Limited	To enhance the collection and recycling of waste plastics from commercial and industrial sectors.	\$1,130,000	Waste plastics	Under planning [200]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
30.	Waylung Waste Services Limited	To collect and deliver more food waste to the O • PARK1 by enhancing food waste collection capability.	\$880,000	Food waste	Under planning [1 400]
31.	Wing On Metal Recycling Limited	To enhance the recovery of waste metals and paper from mixed waste.	\$2,700,000	Waste metals, waste paper	Completed [1 600]

Moreover, there are also Relocation Rental Support Project, Projects from New and Start-up Enterprises and One-off Rental Support Scheme under the Enterprise Support Programme of the Fund; as at 29 February 2020, the Fund has approved 3, 9 and 32 applications for the above projects/scheme respectively.

Industry Support Programme

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
1.	Conservation E3 Foundation Limited	To conduct pilot study for beverage cartons smart recycling by reverse vending machines (RVMs).	\$3,370,000	Beverage cartons	In progress [<100]
2.	Environmental Association Limited	To conduct a trial programme to collect community recyclables (including waste plastic bottles and aluminium cans) with the adoption of RVMs and point redemption scheme with a view to analysing the business viability and collection efficiency of such collection model.	\$2,500,000	Waste plastics, waste metals	In progress [<100]
3.	Food For Good Limited	To set up a transfer station to handle food waste and surplus food collected from food waste generators.	\$12,440,000	Food waste	In progress [400]
4.	Green Power Limited	To establish a waste beverage carton collection network among recyclers and waste pickers through an economic incentive scheme which could in turn enhance the recycling rate of waste beverage cartons.	\$2,790,000	Beverage cartons	In progress [300]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
5.	Greeners Action Company Limited	To conduct a trial programme to educate and promote users of commercial and industrial buildings to sort and clean waste plastics with recycling codes 1, 4 & 5. The waste plastics collected will be delivered to a central collection point for compression to reduce their volume and for temporary storage and then collected by recyclers at their own cost for the purpose of reducing the transportation cost. The business viability and collection efficiency of such collection model will be analysed.	\$7,180,000	Waste plastics	In progress [<100]
6.	Hong Kong Environmental Protection and Recycle Industry Sustainable Development Association Limited	To set up an economic incentive scheme to support street corner shop recyclers' operating cost which could in turn stabilise the waste paper prices for frontline recyclers.	\$15,000,000	Waste paper	In progress [Not applicable]
7.	Hong Kong Environmental Protection and Recycle Industry Sustainable Development Association Limited	To set up an economic incentive scheme to support mobile recyclers' operating cost which could in turn stabilise the waste paper prices for frontline recyclers.	\$15,000,000	Waste paper	In progress [Not applicable]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
8.	Hong Kong Environmental Protection and Recycle Industry Sustainable Development Association Limited	To set up an economic incentive scheme to support street corner shop recyclers' operating cost which could in turn stabilise the waste paper prices for frontline recyclers.	\$15,000,000	Waste paper	In progress [Not applicable]
9.	Hong Kong Environmental Protection and Recycle Industry Sustainable Development Association Limited	To set up an economic incentive scheme to support mobile recyclers' operating cost which could in turn stabilise the waste paper prices for frontline recyclers.	\$15,000,000	Waste paper	Under planning [Not applicable]
10.	Hong Kong Quality Assurance Agency	To develop the practice note for recycling of food waste, waste cooking oil, waste textiles, waste rubber tyres and waste wood and to provide training to local recycling industry.	\$2,200,000	Food waste, waste cooking oil, used clothes, waste rubber tyres, waste wood	Completed [Not applicable]
11.	Hong Kong Quality Assurance Agency	To develop and implement a registration scheme to enhance the operation of food waste recycling.	\$1,730,000	Food waste	Completed [Not applicable]
12.	Hong Kong Quality Assurance Agency	To develop and implement a charter scheme and coaching programme to encourage and support local waste paper exporters to meet waste paper import requirements of the Mainland.	\$1,940,000	Waste paper	Completed [Not applicable]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
13.	Hong Kong Waste Association Limited	To conduct a pilot study for food waste collection and delivery with track record system.	\$5,840,000	Food waste	In progress [1 000]
14.	Occupational Safety and Health Council	To develop and implement a scheme to improve Occupational Safety and Health (OSH) standard of the recycling industry.	\$14,000,000	--	In progress [Not applicable]
15.	Occupational Safety and Health Council	To develop and implement a scheme to improve OSH standard of the recycling industry. A new initiative includes providing rebate on Employee Compensation (EC) Insurance Premium.	\$14,990,000	--	Under planning [Not applicable]
16.	Shatin Inhabitants Association Limited	To conduct a pilot programme to demonstrate the practicability of waste separation at the source as implemented at one of the largest housing estates in Hong Kong, <u>City One Shatin</u> , for the smart recycling of food waste, plastic bottles and beverage cartons.	\$5,440,000	Food waste, waste plastics, beverage cartons	In progress [400]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
17.	Sino-forest Applied Research Centre for Pearl River Delta Environment, Hong Kong Baptist University	<p>Phase 1: To develop operational guidelines for recycling of waste paper, waste glass, waste plastics and waste metals, organise recyclers' forum, etc.</p> <p>Phase 2: To develop tips for recycling of waste paper and plastics, conduct outreaching training, upgrade the operation of 5 recycling shops of different types, organise study mission to the Mainland and recyclers' forum in order to promote clean recycling of waste paper and plastics and support recyclers to cope with the Mainland's more stringent requirements on recyclable import.</p>	\$5,520,000	Waste paper, waste glass, waste plastics, waste metals	Completed [Not applicable]
18.	Smart City Consortium Limited	To conduct a pilot study for smart routing and weighing system to enhance the collection efficiency of waste paper, plastic bottles and aluminium cans.	\$3,880,000	Waste paper, waste plastics, waste metals	In progress [Not applicable]

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved	Current progress [Target quantity processed⁽¹⁾ (tonnes)⁽²⁾]
19.	The ADM Capital Foundation Limited	To establish a waste beverage plastic bottle collection network among recyclers and waste pickers through an economic incentive scheme which could in turn enhance the recycling rate of waste beverage plastic bottles.	\$5,600,000	Waste plastics	Under planning [500]
20.	The Hong Kong Polytechnic University	To conduct a pilot project on an automatic system for the collection of food waste from caterers with a view to testing the technology of the system and enhancing the practicability of the mode of operation of the industry.	\$2,760,000	Food waste	In progress [200]
21.	Vocational Training Council	To develop and conduct an accredited training course for the practitioners in the recycling industry.	\$410,000	--	Completed [Not applicable]

Notes: (1) Target quantity processed refers to the quantity of recyclables expected to be collected for the whole project.

(2) The figures are rounded to the nearest hundred.

(3) Some Industry Support Programmes aim to enhance the overall capability and productivity of the recycling industry, including providing training courses to enhance the skills of recycling practitioners, enhancing safety and health standards and certification/registration schemes, developing guidelines and setting up economic incentive schemes, etc., and therefore no target quantity processed was set.

Standard Project (mainly for applicants to purchase equipment, machinery or services to enhance operational efficiency and capability through simplified application procedures, and does not require applicants to submit progress of recycling and target quantity processed.)

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
1.	ASB Biodiesel (Hong Kong) Limited	To obtain the certification in quality management for its testing and calibration laboratory for its recycling operations.	\$120,000	Waste cooking oil, grease trap waste, waste animal fats
2.	B Kee Trading Company	To purchase equipment and machinery: baler, metal cages and pallet truck with scale.	\$26,000	Waste paper, waste metals
3.	Camy Trading Company	To purchase equipment and machinery: forklift truck.	\$80,000	Waste electrical and electronic equipment, waste rubber tyres
4.	Chan So Kee Metal Trading	To purchase equipment and machinery: baler.	\$150,000	Waste electrical and electronic equipment, waste paper, waste metals, used clothes
5.	Cheuk Kit Environmental Recycle Limited	To purchase equipment and machinery: metal cages and pallet truck with scale.	\$127,000	Waste plastics
6.	Cheuk Kit Environmental Recycle Limited	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics
7.	Cheung Chun Kee	To purchase equipment and machinery: automatic baler.	\$150,000	Waste paper, waste plastics
8.	Chi Ho Recycle	To purchase equipment and machinery: metal cages and trolleys.	\$13,000	Waste paper, waste plastics, waste metals
9.	Chung Shing Environmental Service Company	To purchase equipment and machinery: metal cages; and conduct prescribed promotional and image-building activities: produce banner.	\$9,000	Waste paper, waste metals
10.	Chung Shing Environmental Service Company	To purchase equipment and machinery: metal cages and pallet truck with scale.	\$21,000	Waste paper, waste metals

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
11.	CNA E-Cycling Limited	To purchase equipment and machinery: industrial crusher and electric pallet truck; and conduct prescribed promotional and image-building activities: develop a website and join certification schemes in recycling operation.	\$100,000	Waste electrical and electronic equipment, waste metals
12.	Dunwell Industrial (Holdings) Limited	To purchase equipment and machinery: forklift truck.	\$89,000	Spent lubrication oil, waste batteries
13.	E. Tech Management (HK) Limited	To purchase equipment and machinery: crusher.	\$148,000	Waste electrical and electronic equipment
14.	Eco Enrich Company Limited	To purchase equipment and machinery: forklift trucks and metal cages.	\$150,000	Waste paper, waste plastics, waste metals
15.	Eco Enrich Company Limited	To purchase equipment and machinery: forklift truck, metal cages and trolleys.	\$150,000	Waste paper, waste plastics, waste metals
16.	Fat Kee Environmental Recycling Company Limited	To purchase equipment and machinery: metal cages, pallet truck with scale and forklift truck.	\$144,000	Waste paper, waste metals
17.	Fat Kee Environmental Recycling Company Limited	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics
18.	Fat Kee Environmental Recycling Company Limited	To purchase equipment and machinery: automatic baler.	\$150,000	Waste paper
19.	Foo Shing Metal Dealer	To purchase equipment and machinery: metal cages, pallet truck with scale and pallet truck.	\$10,000	Waste metals
20.	Geba Environment Recycle Limited	To purchase equipment and machinery: metal cages and trolleys.	\$18,000	Waste paper, waste metals
21.	Global Gem International Trading Limited	To purchase equipment and machinery: forklift truck.	\$108,000	Waste plastics
22.	Goldmali International Limited	To purchase equipment and machinery: metal cages.	\$50,000	Waste paper, waste plastics, waste metals
23.	Great North-West Recycle Industry	To purchase equipment and machinery: forklift truck and electric pallet trucks.	\$106,000	Waste plastics, waste electrical and electronic equipment

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
24.	Greengrowth Company Limited	To purchase equipment and machinery: forklift truck, electric pallet truck and reusable nylon bags.	\$123,000	Waste paper, waste metals
25.	H.K. Three P. International Investment Development Limited	To purchase equipment and machinery: personal protective equipment, forklift truck and pallet trucks.	\$87,000	Waste rubber tyres, waste rubber
26.	H2O & Au Environmental Recycling Company Limited	To purchase equipment and machinery: forklift trucks.	\$150,000	Waste electrical and electronic equipment
27.	Hau Tak Wasted Paper Company	To purchase equipment and machinery for recycling waste plastic bottles.	\$113,000	Waste plastics
28.	HCPECT International Recycling Company Limited	To obtain certification in environmental management and occupational health and safety management for its recycling operations.	\$99,000	Waste electrical and electronic equipment
29.	Hing Lee Waste Paper	To purchase equipment and machinery: metal cages.	\$29,000	Waste paper, waste metals
30.	Hoi Kee Metal Waste Paper	To purchase equipment and machinery: baler.	\$150,000	Waste paper, waste metals, waste electrical and electronic equipment
31.	Hoi Kee Plastic Material Company Limited	To purchase equipment and machinery: forklift truck.	\$104,000	Waste paper, waste plastics, waste metals
32.	Hoi Kee Plastic Material Company Limited	To purchase equipment and machinery: forklift truck.	\$80,000	Waste plastics
33.	Hon Kee Metal Shop	To purchase equipment and machinery: crane.	\$120,000	Waste metals
34.	Hop Lee	To purchase equipment and machinery: forklift truck.	\$18,000	Waste paper, waste plastics, waste metals, waste electrical and electronic equipment
35.	Hop Lee	To purchase equipment and machinery: electric pallet truck.	\$8,000	Waste paper, waste plastics, waste metals, waste electrical and electronic equipment

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
36.	Hop Lee Lung Environmental Recycle Company	To purchase equipment and machinery: forklift truck and metal cages.	\$115,000	Waste paper
37.	Hop Shing Environmental Recycling Limited	To purchase equipment and machinery: forklift truck.	\$150,000	Waste paper
38.	HP Metal Recycling (HK) Limited	To purchase equipment and machinery: crusher.	\$97,000	Waste metals
39.	HP Metal Recycling (HK) Limited	To purchase equipment and machinery: baler.	\$150,000	Waste metals
40.	HP Metal Recycling (HK) Limited	To purchase equipment and machinery: hydraulic goods loaders on trucks and conduct truck body work to install additional devices related to OSH.	\$96,000	Waste metals
41.	Hung Tai Trading Company Limited	To purchase equipment and machinery: forklift truck.	\$87,000	Waste electronic components, waste metals
42.	IWS Waste Management Company Limited	To purchase equipment and machinery: forklift truck.	\$141,000	Waste paper
43.	IWS Waste Management Company Limited	To purchase equipment and machinery: forklift truck.	\$139,000	Waste paper
44.	K&S Enterprise Company Limited	To purchase equipment and machinery: metal cages and pallet truck with scale.	\$69,000	Waste plastics
45.	Kwong Fat Metal Waste-paper Co	To purchase equipment and machinery: hand tools.	\$9,000	Waste paper
46.	Kwong Hing Recycle Company Limited	To purchase equipment and machinery: forklift truck.	\$148,000	Waste plastics
47.	Kwong Ming Waste Paper & Metal	To purchase equipment and machinery: metal cages and weight scales with ramp.	\$13,000	Waste paper, waste metals
48.	Lau Wai Kee	To purchase equipment and machinery: forklift truck and metal cages.	\$146,000	Waste paper, waste plastics, waste metals
49.	Lau Wai Kee	To purchase equipment and machinery: forklift truck.	\$124,000	Waste paper, waste plastics, waste metals
50.	Leung Fai Kee Waste Paper Co	To purchase equipment and machinery: electric pallet truck.	\$10,000	Waste paper, waste metals
51.	Leung Fai Kee Waste Paper Co	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
52.	Leung Fai Kee Waste Paper Co	To purchase equipment and machinery: baler and metal cages.	\$31,000	Waste paper, waste plastics, waste metals
53.	Lok Sze Recycling Co	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics
54.	Lok Sze Recycling Co	To purchase equipment and machinery: trolleys, electric pallet trucks, pallet trucks with scale, wire debarkers, hand tools, metal cages and related parts.	\$135,000	Waste paper, waste plastics, waste metals
55.	Luen Hing Metal	To purchase equipment and machinery: forklift truck.	\$100,000	Waste metals
56.	Luen Hing Recycling Company Limited	To purchase equipment and machinery: metal cages, pallet truck and hand tools.	\$19,000	Waste electrical and electronic equipment, waste paper, waste plastics, waste metals
57.	Lung Hing Waste Paper Company Limited	To purchase equipment and machinery: baler.	\$150,000	Waste paper, waste plastics, waste metals
58.	Made by Mao (MBM) Limited	To purchase equipment and machinery: weight scale and forklift trucks.	\$108,000	Waste wood
59.	Man Hing Industrial Co.	To purchase equipment and machinery: electric pallet truck.	\$17,000	Waste paper, waste metals
60.	Man Wah (Environmental Recycling) Holdings Limited	To purchase equipment and machinery: forklift truck.	\$141,000	Waste paper
61.	Man Wah (Environmental Recycling) Holdings Limited	To purchase equipment and machinery: forklift truck.	\$139,000	Waste paper
62.	Ming Kee	To purchase equipment and machinery: electric pallet truck.	\$6,000	Waste paper, waste plastics, waste metals
63.	Ming Kee (Ho Cheong) Company	To purchase equipment and machinery: forklift truck.	\$100,000	Waste paper, waste plastics, waste metals
64.	Nan Sing Warehouse Limited	To enhance the collection and treatment of waste plastic films to produce plastic pellets.	\$150,000	Waste plastics
65.	New Glory Environmental Recycling Services Co	To purchase equipment and machinery: metal cages.	\$150,000	Waste paper

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
66.	Ngau Kee	To purchase equipment and machinery: metal cages.	\$6,000	Waste paper, waste metals
67.	Ngau Kee	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics
68.	On Kee (HK) Environmental Recycling Limited	To purchase equipment and machinery: metal cages, pallet truck with scale and pallet truck.	\$89,000	Waste plastics, waste wood, waste glass
69.	OPAC International Limited	To enhance the collection of empty toner cartridges for recycling and handling through a collection platform co-organised with green organisations.	\$123,000	Waste toner cartridges
70.	P L Environmental Limited	To purchase equipment and machinery: forklift trucks.	\$150,000	Waste paper, waste plastics, waste metals, waste electrical and electronic equipment
71.	P L Environmental Limited	To join certification schemes in recycling operation and OSH management, as well as to conduct OSH audits.	\$122,000	Waste paper, waste plastics, waste metals, waste electrical and electronic equipment
72.	Ping Kee Waste-Paper Fty	To purchase equipment and machinery: metal cages and forklift truck.	\$150,000	Waste paper
73.	Ping Kee Waste-Paper Fty	To purchase equipment and machinery: baler.	\$150,000	Waste paper
74.	Professional Recycle Service Limited	To purchase equipment and machinery: forklift truck, metal cages and related parts.	\$150,000	Waste paper, waste metals
75.	Secure Information Disposal Services Limited	To obtain certification in quality, environmental management and management systems for its recycling operations.	\$141,000	Waste paper
76.	Shek Lun Waste Paper	To purchase equipment and machinery: metal cages and pallet truck with scale.	\$19,000	Waste plastics
77.	Shing Cheong Waste Paper Co	To purchase equipment and machinery: forklift truck and electric pallet truck.	\$29,000	Waste paper, waste metals
78.	Shuen Woo Waste Paper Co	To purchase equipment and machinery: forklift truck.	\$136,000	Waste paper

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
79.	Success Trading (HK) Company Limited	To obtain certification in environmental management, occupational health and safety management, and responsible recycling for its recycling operations; and to purchase equipment and machinery: hard disk erasers and degausser.	\$150,000	Waste electrical and electronic equipment
80.	Sun Ngai International Enterprise Limited	To purchase equipment and machinery: forklift truck.	\$81,000	Waste electrical and electronic equipment, waste paper, waste plastics, waste metals, waste textiles
81.	Sun Sang Waste Paper	To purchase equipment and machinery: forklift trucks.	\$130,000	Waste paper
82.	Sun Sang Waste Paper	To purchase equipment and machinery: conveying belt.	\$80,000	Waste paper
83.	Sun Sang Waste Paper	To purchase equipment and machinery: baler.	\$150,000	Waste paper
84.	Tak Lee Metal & Paper Co	To purchase equipment and machinery: forklift trucks.	\$150,000	Waste paper
85.	Tes-Amm (H.K.) Limited	To purchase equipment and machinery: degausser.	\$38,000	Waste electrical and electronic equipment
86.	The Salvation Army	To purchase equipment and machinery: metal cages.	\$147,000	Waste electrical and electronic equipment, waste textiles
87.	TioStone Environmental Limited	To obtain the certification in environmental management system for its recycling operations.	\$37,000	Waste glass
88.	Tong Shing Technology Company	To purchase equipment and machinery: forklift truck.	\$86,000	Waste electrical and electronic equipment
89.	Top Plus Telecom International Limited	To obtain certification in responsible recycling for its recycling operations.	\$99,000	Waste electrical and electronic equipment
90.	Treeland Services Company Limited	To purchase equipment and machinery: crusher and degausser.	\$150,000	Waste electrical and electronic equipment
91.	TS Recycle Limited	To purchase equipment and machinery: loader.	\$128,000	Construction waste

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
92.	Tungkee Recycling Company	To purchase equipment and machinery: shredder, electric pallet truck and pallet truck with scale.	\$64,000	Waste computer products, waste paper
93.	Vannex International Limited	To purchase equipment and machinery: forklift truck and electric pallet trucks.	\$150,000	Waste electrical and electronic equipment, waste paper, waste plastics, waste metals, used clothes, waste wood, waste glass
94.	Vannex International Limited	To purchase equipment and machinery: forklift truck, pallet truck and conduct truck body work with installation of additional devices related to OSH.	\$140,000	Waste electrical and electronic equipment, waste paper, waste plastics, waste metals, used clothes, waste wood, waste glass
95.	Wah Cheong Waste Paper Co	To purchase equipment and machinery: metal cages and trolleys.	\$18,000	Waste paper, waste metals
96.	Wah On Tyres Retreading Company Limited	To purchase equipment and machinery: chain lifts, hydraulic goods loaders on trucks, forklift trucks and electric pallet trucks, and conduct truck body work to install additional devices related to OSH.	\$150,000	Waste rubber tyres
97.	Wah On Tyres Retreading Company Limited	To purchase equipment and machinery: hydraulic goods loaders on trucks, electric forklift truck, trolleys and electric pallet truck and conduct truck body work to install additional devices related to OSH.	\$150,000	Waste rubber tyres
98.	Wah Wai Logistics Limited	To purchase equipment and machinery: reusable nylon bags, recyclable collection bins, metal cages, electric pallet trucks and degausser.	\$149,000	Waste paper, waste plastics, waste metals, waste electrical and electronic equipment

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
99.	Wai Sang Waste Paper & Metal Company Limited	To purchase equipment and machinery: forklift truck and conduct truck body work to install additional devices related to OSH.	\$71,000	Waste paper, waste plastics, waste metals, waste rubber tyres
100.	Wai Sang Waste Paper & Metal Company Limited	To purchase equipment and machinery: equipment installed on the trucks (fixed cargo compartment and crane)	\$150,000	Waste paper, waste plastics, waste metals, waste rubber tyres
101.	Wang Chun Environmental Protection Development Company	To purchase equipment and machinery: forklift truck.	\$150,000	Construction waste
102.	Wellcome Company	To purchase equipment and machinery: metal cages and electric pallet truck and to conduct prescribed promotional and image-building activities: producing promotional leaflets and developing a website.	\$16,000	Waste electrical and electronic equipment
103.	Wing Fung Gather Metal Waste Paper	To purchase equipment and machinery: metal cages, equipment installed on the trucks and hand tools.	\$134,000	Waste paper, waste metals
104.	Wing Fung Gather Metal Waste Paper	To conduct prescribed promotional and image-building activities: advertisement on truck; and to purchase equipment and machinery: baler and pallet truck with scale.	\$31,000	Waste paper
105.	Wing Hing Gather Metal Waste Paper	To purchase equipment and machinery: metal cages and pallet truck with scale.	\$34,000	Waste paper, waste metals, waste plastics, waste glass, waste electrical and electronic equipment

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
106.	Wing Hing Gather Metal Waste Paper	To purchase equipment and machinery: hydraulic goods loaders on trucks and conduct truck body work to install additional devices related to OSH.	\$72,000	Waste paper, waste metals, waste plastics, waste glass, waste electrical and electronic equipment
107.	Wing Hing Gather Metal Waste Paper	To purchase equipment and machinery: metal cage wheels, truck cargo compartments and accessories, electric pallet truck and pallet trucks with scale.	\$126,000	Waste paper, waste metals, waste plastics, waste glass, waste electrical and electronic equipment
108.	Wong Fat Recycling Company Limited	To purchase equipment and machinery: baler.	\$150,000	Waste paper, waste metals
109.	Woodrite Company Limited	To conduct laboratory tests for reclaimed wood furniture products.	\$14,000	Waste wood
110.	World Power Creation Limited	To purchase equipment and machinery: forklift truck.	\$122,000	Waste paper
111.	Yee Hop Environmental Protection Limited	To purchase equipment and machinery: forklift truck and electric pallet trucks.	\$97,000	Waste paper, waste metals, waste plastics
112.	Yee Hop Environmental Protection Limited	To purchase equipment and machinery: forklift truck.	\$82,000	Waste paper, waste metals, waste plastics
113.	Yuen Cheong Hoo	To purchase equipment and machinery: baler and pallet truck.	\$29,000	Waste paper, waste metals
114.	Yick Hing Metal Waste Paper Co	To purchase equipment and machinery: metal cages.	\$35,000	Waste paper, waste metals, waste plastics, used clothes
115.	創溢回收 (No English name provided)	To purchase equipment and machinery: hydraulic baler and conduct truck body work to install mechanical truck cover.	\$60,000	Waste paper, waste metals

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
116.	進昇廢紙五金回收 (No English name provided)	To purchase equipment and machinery: balers, pallet truck with scale, metal cages and related parts.	\$47,000	Waste paper, waste metals
117.	廣進廢紙五金公司 (No English name provided)	To purchase equipment and machinery: metal cages, weight scale, trolleys and pallet truck with scale.	\$18,000	Waste paper, waste metals, waste plastics
118.	龍記五金貿易 (No English name provided)	To purchase equipment and machinery for recycling waste plastic bottles.	\$91,000	Waste plastics
119.	順發回收公司 (No English name provided)	To purchase equipment and machinery: metal cages.	\$15,000	Waste paper, waste metals, waste plastics
120.	Chiho Eco Protection Limited	To purchase equipment and machinery: personal protective equipment, reusable nylon bags and crushers.	\$900,000	Waste electrical and electronic equipment
121.	Chun Yang International (HK) Company Limited	To purchase equipment and machinery: a forklift truck, sorter, pelletiser system and deodorisation unit to process HDPE waste plastics.	\$1,000,000	Waste plastics
122.	Chung's Container S&T Company Limited	To purchase equipment and machinery: forklift trucks.	\$580,000	Waste plastics
123.	CW Metal Limited	To purchase a crushing and separation line to process radiators and condensers in the air conditioners. The processing line is consisted of the following equipment: sorter(s), crusher(s), dust collector(s), etc.	\$690,000	Waste electrical and electronic equipment
124.	E. Tech Management (HK) Limited	To purchase a copper and plastic separator and a briquetting furnace for enhancing waste copper handling efficiency.	\$980,000	Waste electrical and electronic equipment
125.	E. Tech Management (HK) Limited	To purchase equipment and machinery: racks, scissor lift, conduct truck body work with installation of additional devices related to OSH, crushers with separator, forklift trucks, pallet trucks with scale, push up wheels and battery recovery systems.	\$920,000	Waste electrical and electronic equipment

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
126.	Eastern Material Waste Recycle Company	To purchase a crusher and a pelletiser for producing recycled plastic pellets from waste HDPE piping materials and waste PE plastics.	\$480,000	Waste plastics
127.	Eastern Material Waste Recycle Company	To purchase hand tools and crushers with conveyor belt to process plastic waste (HDPE, PS and PP).	\$123,000	Waste paper, waste metals, waste plastics
128.	EcoSage Limited	To purchase equipment and machinery: hard disk crusher, electric pallet truck, collection bins for recyclables and hard drive & disk eraser software; and conduct prescribed promotional and image-building activities: website search engine optimisation and social media promotion.	\$170,000	Waste electrical and electronic equipment
129.	Foo Shing Metal Dealer	To purchase equipment and machinery: tail lift with safety devices for trucks.	\$6,000	Waste metals
130.	Golden Fair Environment Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$590,000	Waste paper
131.	Golden Globe Environmental Trading Limited	To purchase equipment and machinery: metal cages and pallet truck for enhancing its collection of waste metals.	\$7,000	Waste metals, waste paper
132.	Goldmali International Limited	To purchase a compactor truck and accessories for enhancing its collection of waste paper.	\$150,000	Waste paper
133.	Green Environmental Kitchen Residue Recycle Limited	To purchase equipment and machinery: forklift truck.	\$120,000	Food waste
134.	H2O & Au Environmental Recycling Company Limited	To purchase equipment and machinery: hard disk shredder, hard disk degausser, hard disk eraser, and electric pallet truck.	\$120,000	Waste electrical and electronic equipment
135.	Hankang Recycling Limited	To purchase and install a PET yarn production line, including a PET yarn machine and related machinery, for producing recycled plastic packaging bands from PET bottles.	\$1,000,000	Waste plastics

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
136.	Hankang Recycling Limited	To purchase and install a PET yarn production line, including a PET yarn machine and other related machinery, for producing recycled plastic packaging bands from PET bottles.	\$1,000,000	Waste plastics
137.	Hing Shing Trade Group Limited	To purchase equipment and machinery: loader and forklift trucks with clamps.	\$480,000	Waste paper
138.	HK Bouteille Resources Recycling Business Company Limited	To purchase equipment and machinery: to install 2 exhaust systems and acoustic treatment systems on-site to abate noise and odour nuisance.	\$510,000	Waste plastics
139.	HM Environmental Technologies Limited	To purchase and install 2 shredders, a grinder and particulate removal equipment for enhancing its recycling of waste wood.	\$590,000	Waste wood
140.	Hong Kong Organic Goat Dairy Limited	To design, produce and distribute a promotional video; and purchase forklift truck and collection bins for recyclables.	\$110,000	Food waste
141.	Hop Lee Lung Environmental Recycle Company	To purchase a compactor truck for enhancing its collection of waste paper.	\$550,000	Waste paper
142.	Hop Shing Environmental Recycling Limited	To purchase 3 paper shredders and relevant auxiliary equipment for enhancing waste paper handling efficiency	\$920,000	Waste paper
143.	Hop Shing Waste Paper and Material Company	To purchase a compactor truck for enhancing its collection of waste paper and plastics.	\$500,000	Waste paper
144.	Jumbo City International Limited	To purchase equipment and machinery: crusher and acoustic screens.	\$400,000	Waste plastics
145.	Kan Kee Cleaning Services Company Limited	To purchase a tanker for enhancing its collection of food waste.	\$430,000	Food waste
146.	Kingway Development HK Limited	To purchase equipment and machinery: forklift trucks, washer, waste water treatment system and pelletiser to process PET and HDPE waste plastics.	\$1,000,000	Waste plastics
147.	Kwong Fat Metal Waste-Paper Co	To purchase a compactor truck for enhancing its collection of waste paper.	\$620,000	Waste paper

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
148.	Kwong Hing Recycle Company Limited	To purchase equipment and machinery: a forklift truck with bale clamp and a forklift truck.	\$490,000	Waste plastics
149.	Lau Choi Kee Papers Company Limited	To purchase the equipment and machinery for a plastic bag production line.	\$1,000,000	Waste plastics
150.	Luen Hop Environment Protection Development Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$620,000	Waste paper
151.	Macy's Food and Services Limited	To purchase food waste collection bins and electrical warmer trolleys to implement food waste collection and recycling by school lunch suppliers.	\$30,000	Food waste
152.	Man Cheong Lung Metal And Waste Paper Recycle Co.	To purchase equipment and machinery: hand trucks, pallet truck with scale and platform trolleys.	\$28,000	Waste paper, waste metals
153.	Man Hing Environmental Services Limited	To purchase equipment and machinery: baler, forklift trucks and metal cages.	\$970,000	Waste paper
154.	Man Hing Industrial Co	To purchase equipment and machinery: equipment installed on the trucks (tail lift with safety devices).	\$50,000	Waste paper, waste metals
155.	May Luen Cleaning & Recycle Limited	To purchase equipment and machinery: metal cages, electric forklift truck and equipment installed on the trucks (tail lift and fixed cargo compartment).	\$200,000	Waste paper
156.	May Luen Cleaning & Recycle Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$610,000	Waste paper
157.	Ming Kee Recycling Company	To purchase equipment and machinery: baler and equipment installed on the trucks (crane).	\$160,000	Waste paper
158.	Mountain and Water Recycle Company	To purchase a compactor truck for enhancing its collection of waste paper.	\$550,000	Waste paper
159.	New Glory Environmental Recycling Services Co	To purchase 2 compactor trucks for enhancing its collection of waste paper.	\$990,000	Waste paper
160.	Ocean Environmental Recycle Company Limited	To purchase lifting equipment installed on trucks: crane and grab.	\$270,000	Waste metals

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
161.	P L Environmental Limited	To purchase an item of PET processing equipment, shredder, PE & PET pelletiser and air filter equipment.	\$1,000,000	Waste plastics
162.	Ping Kee Waste-Paper Fty	To purchase equipment and machinery: hydraulic loader , electric plastic canvas cover and truck body work to install additional devices related to OSH on a 10.4-tonne truck; truck body work to install additional devices related to OSH on a 14-tonne truck; an electric pallet truck.	\$140,000	Waste paper
163.	Professional Recycle Service Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$530,000	Waste paper
164.	Pro-Ten Trading Company	To purchase equipment and machinery: washer to process PET waste plastics for food-grade recycled product.	\$1,000,000	Waste plastics
165.	Pui Kee Environmental Protection Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$570,000	Waste paper
166.	Sciotech Company Limited	To conduct prescribed promotional and image-building activities: to design and produce staff uniforms; to purchase equipment and machinery: racks, equipment installed on trucks, pallet trucks, reusable nylon bags; and to purchase a compactor truck for enhancing its collection of waste paper.	\$660,000	Waste paper
167.	Scrapsupermart Investment Limited	To purchase a handheld alloy analyser for enhancing its capability of handling waste metals.	\$130,000	Waste metals
168.	Sea Power Recycle Company Limited	To purchase a compactor truck for enhancing its collection of waste paper.	\$590,000	Waste paper, waste plastics, waste metals
169.	Shing Cheong Tai Logistic & Recycle Co.	To purchase equipment and machinery: metal cages, pallet truck with scale, electric pallet truck, nylon bags; and to purchase a cable granulator for enhancing its throughput of waste metals.	\$552,000	Waste paper, waste metals, waste plastics

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
170.	Shing Hing Recycling Limited	To purchase equipment and machinery: electric forklift truck (stacker), electric pallet truck and equipment installed on the truck (tail lift with safety devices).	\$50,000	Waste metals
171.	Shing Kee Metal	To purchase a compactor truck for enhancing its collection of waste paper.	\$580,000	Waste paper, waste plastics
172.	Shing Kee Metal	To purchase equipment and machinery: equipment installed on truck, pallet trucks, metal cages, chain lifts, weight scales, equipment for manual handling, electric wire debarkers, reusable nylon bags, and hand tools.	\$500,000	Waste paper, waste plastics, waste metals
173.	Shuen Woo Waste Paper Co	To purchase a sorter with automatic baling function for enhancing its collection of waste paper.	\$480,000	Waste paper
174.	Success Grand Environmental Limited	To purchase a plastic washing line and a PE/PP pelletiser.	\$1,000,000	Waste plastics
175.	Tak Kee Environmental Cleaning Service Limited	To purchase a tanker and electronic vehicle weighting systems for enhancing its collection of food waste.	\$630,000	Food waste
176.	Tat Long Environmental Company Limited	To purchase a compactor truck for enhancing its collection of waste paper and plastics.	\$630,000	Waste plastics, waste paper
177.	Tat Long Environmental Company Limited	To purchase a compactor truck for enhancing its collection of waste paper and plastics.	\$700,000	Waste plastics, waste paper
178.	Telford Environmental Development Limited	To purchase equipment and machinery: forklift truck.	\$100,000	Waste plastics
179.	Tin Lee Reclamation Company	To purchase a compactor truck for enhancing its collection of waste paper.	\$580,000	Waste paper
180.	TS Recycle Limited	To purchase equipment and machinery: forklift trucks and electric pallet trucks.	\$280,000	Construction waste, waste metals, waste wood
181.	Tung Kee Recycling Limited	To obtain certification in environmental and quality management systems for its recycling operations; and to purchase equipment and machinery: paper shredder.	\$170,000	Waste paper

	Applicant/ Person-in-charge	Name/Details of project	Approximate amount of funding approved (HK\$)	Type(s) of recyclables involved
182.	Urban Workshop Limited	To purchase equipment and machinery: collection bins for recyclables.	\$670,000	Waste electrical and electronic equipment
183.	Wai Sang Waste Paper & Metal Company Limited	To purchase equipment and machinery: automatic baler.	\$360,000	Waste paper, waste metals
184.	Wang Lee Building Materials Construction Co., Limited	To purchase equipment and machinery: loader.	\$76,000	Construction waste
185.	Waylung Waste Services Limited	To purchase compactors for enhancing its collection of food waste.	\$450,000	Food waste
186.	Yee Hop Environmental Protection Limited	To purchase a LDPE pelletiser and a HDPE/ABS pelletiser.	\$990,000	Waste plastics
187.	Yick Hing Metal Waste Paper Co	To purchase equipment and machinery: baler.	\$190,000	Waste paper, waste metals, waste plastics
188.	Yongtai Trading (Hong Kong) Company Limited	To purchase equipment and machinery: forklift truck.	\$90,000	Waste electrical and electronic equipment, waste plastics
189.	呂記五金廢紙回收 (No English name provided)	To purchase a compactor truck for enhancing its collection of waste paper.	\$490,000	Waste paper
190.	惠利廢紙五金 (No English name provided)	To purchase a compactor truck for enhancing its collection of waste paper.	\$620,000	Waste paper
191.	廣進廢紙五金公司 (No English name provided)	To purchase equipment and machinery: equipment installed on the trucks (tail lift and fixed cargo compartment).	\$35,000	Waste metals, waste paper

- End -

CONTROLLING OFFICER'S REPLY

ENB136

(Question Serial No. 0823)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget Speech that the Government is preparing for the launch of a scheme in the second half of this year to phase out about 40 000 Euro IV diesel commercial vehicles and has set aside \$7.1 billion for ex-gratia payment to the vehicle owners concerned. Will the Government advise on the relevant details and the implementation timetable for the scheme?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 7)

Reply:

To continuously improve roadside air quality, the Environmental Protection Department plans, by making reference to the scheme of phasing out pre-Euro IV diesel commercial vehicles (DCVs), to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue licences of the relevant vehicles after the specified deadlines.

We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia of 15% of the average vehicle body price for goods vehicles assembled with additions.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that this scheme will be launched in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB137

(Question Serial No. 2376)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget Speech that the Government will launch a \$2 billion pilot scheme this year to subsidise the installation of charging-enabling infrastructure in eligible car parks of existing private residential buildings, with a view to facilitating the installation of chargers by owners of individual parking spaces. Will the Government advise on:

- 1) the details of the above subsidy scheme; and
- 2) whether there is any plan to promote concurrently the installation of charging facilities in the car parks of the Government, the Housing Authority, the Housing Society, the LINK and other private properties? If yes, what are the relevant details and estimated expenditure? If no, what are the reasons?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 6)

Reply:

- 1) The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower. We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- 2) A total of 857 government public chargers (mostly medium chargers) are currently provided at government car parks. The Government allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming

3 years, including installation of additional medium chargers at the car parks managed by the Transport Department, the Government Property Agency, the Leisure and Cultural Services Department and the Tourism Commission which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800. To tie in with the Government's measures to further promote the use of EVs, the Hong Kong Housing Authority (HA) and the Hong Kong Housing Society (HS) will, if technically feasible and electricity loading permits, also install additional EV medium chargers progressively at existing car parks according to the demand. As recommended by the Hong Kong Planning Standards and Guidelines (HKPSG), the HA will continue to provide EV charging facilities, including installation of chargers, at 30% of private car parking spaces in indoor car parks of newly built public housing developments. The remaining 70% of private car parking spaces will also be equipped with EV charging-enabling infrastructure (including distribution boxes, cables, conduits and trunkings) and spaces will be reserved for the installation of EV charging socket outlets in future. The HA will even go beyond the HKPSG's recommendations to reserve sufficient power supply and underground ducts at outdoor parking spaces for future use.

The Government not only takes the lead in providing and enhancing its public charging facilities at government car parks, but also supports other organisations, including the HS and the LINK, to set up and enhance public charging facilities at their car parks. As at the end of 2019, non-government sector has provided 2 072 public chargers which are open for public use.

- End -

CONTROLLING OFFICER'S REPLY

ENB138

(Question Serial No. 2379)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The quantity of waste electrical and electronic equipment processed at the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) was 23 980 tonnes in 2019. Please advise on the reasons for the reduction in the quantity to 22 200 tonnes in 2020 and whether there will be any changes in the relevant commitments.

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 24)

Reply:

The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK), which commenced full operation in March 2018, processed a total of about 23 980 tonnes of waste regulated electrical equipment (REE) (i.e. air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) in 2019. To enable a more balanced development of the recycling industry and encourage market participation in the recycling of waste electrical and electronic equipment (WEEE), we launched an open tender exercise in April 2019 to appoint a recycler with a waste disposal licence for e-waste to provide treatment and recycling services for washing machines collected outside the removal services required under the Producer Responsibility Scheme on Waste Electrical and Electronic Equipment. The relevant service contract was awarded in September 2019. Currently, an average of about 150 tonnes of washing machines are processed by the contractor each month. Therefore, based on the quantity of WEEE treated at the WEEE • PARK last year, it is estimated that 22 200 tonnes of WEEE will be treated in 2020.

Notwithstanding the above, the estimate for the operating cost of the WEEE • PARK for 2020-21 is about \$240 million, which is higher than the revised estimate of about \$229 million for 2019-20. The increase is mainly for allowing sufficient provision to cope with the possible increase in the demand for treating particular types of waste REE, and also the potential upward adjustment on the price factors.

- End -

CONTROLLING OFFICER'S REPLY

ENB139

(Question Serial No. 2380)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned by the Environmental Protection Department that it will continue to implement the producer responsibility scheme (PRS) on waste electrical and electronic equipment and to roll out the PRS on glass beverage containers progressively during 2020-21. Will the Administration advise on the details of the relevant work, a breakdown of the expenditures and the timetable of the schemes?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 25)

Reply:

The Producer Responsibility Scheme on Waste Electrical and Electronic Equipment (WPRS) covering the regulated electrical equipment (REE) (i.e. air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) was fully implemented in 2018. Under the WPRS, suppliers who distribute REE are required to pay a recycling levy for REE distributed in Hong Kong, whilst sellers of REE are required to arrange free statutory removal service for consumers to dispose of an equipment of the same class that they intend to abandon. The disposal licensing control, import and export permit control and landfill disposal ban in respect of e-waste have also come into effect. The Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) commenced full operation in March 2018. The WEEE • PARK processed a total of about 23 980 tonnes of waste REE in 2019 and is expected to process 22 200 tonnes in 2020. The estimate for the operating cost of the WEEE • PARK for 2020-21 is about \$240 million.

Meanwhile, the Environment Protection Department (EPD) is pressing ahead with the implementation of the Producer Responsibility Scheme (PRS) on glass beverage containers. Among other things, the EPD has engaged 2 glass management contractors (GMCs) through open tender to undertake collection and treatment services for waste glass containers in 3 regions, i.e. Hong Kong Island (including Islands District), Kowloon and the New Territories. The contracts for Hong Kong Island and the New Territories regions commenced in November 2017, and the contract for the Kowloon region commenced in

May 2018. In early 2019, the 2 GMCs finished taking over all of the previous voluntary recycling programmes and, in parallel, further expanded their recycling networks. They have also established and commissioned new treatment facilities and are providing free glass container collection and treatment services across the territory. Under the contracts, the recovery target of the 2 GMCs in the first year of the contract is 15 000 tonnes in total, and the Government's goal is to gradually attain the recovery target of 50 000 tonnes a year. In 2020-21, the Government has earmarked \$130 million to pay for the collection and treatment services for glass containers provided under the 3 glass management contracts. In addition, we have largely completed the drafting of the necessary subsidiary legislation to provide some operational details for the implementation of the scheme, and will submit it to the Legislative Council for scrutiny as soon as possible depending on the progress of the Legislative Council.

The Waste Management Policy Division of the EPD is responsible for handling various waste management policies and projects, such as the 3 PRSs on waste electrical and electronic equipment, glass beverage containers and plastic beverage containers. There is no breakdown of the manpower resources involved in taking forward these schemes.

- End -

CONTROLLING OFFICER'S REPLY

ENB140

(Question Serial No. 2381)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department has mentioned that it would consult the public on the way forward for the producer responsibility scheme on plastic beverage containers, and launch a pilot scheme on the application of reverse vending machines in 2020-21. Will the Administration advise on the details, breakdown of the expenditure involved and timetable of the relevant work?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 26)

Reply:

The Government is carefully considering the recommendations of the consultancy study on the producer responsibility scheme on plastic beverage containers for mapping out the way forward, and plans to consult the public in the second half of 2020. Besides, the Environmental Protection Department is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs) with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

The estimated expenditure for the pilot scheme in the 2020-21 financial year is about \$9.5 million, mainly for engaging a contractor to carry out the scheme.

- End -

CONTROLLING OFFICER'S REPLY

ENB141

(Question Serial No. 2382)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Department stated that it would consult the public on the outcome of the review on the plastic shopping bag charging scheme during 2020-21. Will the Administration advise on the details and timetable of the relevant work?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 27)

Reply:

The Environmental Protection Department is reviewing the Plastic Shopping Bag (PSB) Charging Scheme to enhance its effectiveness in waste reduction. Among other things, the current minimum charge of 50 cents has not been adjusted since the voluntary scheme was introduced before 2009, we are reviewing whether the charge needs to be adjusted. There are also views that the current exemption over PSB used for food hygiene purposes may need to be tightened to further encourage reduction in the use of PSB. We aim to consult the public on the outcome of the review later this year in order to map out the way forward.

- End -

CONTROLLING OFFICER'S REPLY

ENB142

(Question Serial No. 2383)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department mentioned that it would continue to promote and encourage reduction in the use of plastic packaging materials in collaboration with the retail trade during 2020-21. Will the Administration advise on the details of the relevant work (including how the retail trade is engaged in consultation, communication and collaboration), the expenditure to be involved and the timetable drew up?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 28)

Reply:

The Environmental Protection Department (EPD) is proactively meeting the retail trade to have a better understanding of its operation for exploring practical measures to promote and encourage reduction in the use of plastic packaging materials. We aim at materialising these measures, on a voluntary basis, through collaboration with the trade in the second half of 2020. As the relevant work is an integral part of the EPD's work, the expenditure will be absorbed by its existing resources.

- End -

CONTROLLING OFFICER'S REPLY

ENB143

(Question Serial No. 2384)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

As stated by the Environmental Protection Department, the provision for 2020-21 is \$1,182.3 million (32.3%) higher than the revised estimate for 2019-20. This is mainly due to increased provision for waste management initiatives, increased contract payments for the operation of waste management facilities and increased cash flow requirement for non-recurrent projects. In addition, there will be a net increase of 32 posts in 2020-21. Will the Administration advise on the relevant breakdown of the estimated expenditure and the scope of duties of the new posts?

Asked by: Hon SHIU Ka-fai (LegCo internal reference no.: 29)

Reply:

Under Programme "Waste", the provision for 2020-21 is \$1,182.3 million (32.3%) higher than the revised estimate for 2019-20. This is mainly due to:

- (1) Increased provision for waste management initiatives, including implementing waste paper recycling; expanding and enhancing the services of the community recycling centres; continuing with the implementation of various producer responsibility schemes (PRSs), such as to roll out the PRS on glass beverage containers progressively, to launch a pilot scheme on the application of reverse vending machines, and to consult the public on the way forward for the Plastic Shopping Bag Charging Scheme and the PRS on plastic beverage containers; setting up outreaching teams; strengthening the on-site support to waste reduction and recycling at community level and implementing other waste reduction measures;
- (2) Increased provision for fees for operation of waste management facilities;
- (3) Increased cash flow requirement for the Recycling Fund, which is a non-recurrent item; and

- (4) Increased provision for the net increase of 32 posts and filling the vacancies. The 32 new posts are mainly tasked with implementing waste paper recycling and enhancing the promotion of territory-wide publicity campaign for waste reduction and recycling.

- End -

CONTROLLING OFFICER'S REPLY

ENB144

(Question Serial No. 1781)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the “One-for-One Replacement” Scheme for electric vehicles (EVs):

(a) Since the launching of the “One-for-One Replacement” Scheme by the Administration, what is the total number of newly registered electric private cars (e-PCs) in Hong Kong? How many of them were registered through the “One-for-One Replacement” Scheme?

(b) What are the numbers of tax concession applications received and approved respectively by the Administration (i) on a monthly basis so far and (ii) since the launching of the “One-for-One Replacement” Scheme?

(c) What was the number of registered private cars (PCs) that met the two requirements (i.e. “having been first registered for 6 years or more” and “its owner having owned the private car for 18 months or more without interruption”) as at 1 October 2019? As at 28 February 2020, what is the number of PCs that are still eligible to participate in the “One-for-One Replacement” Scheme before 31 March 2021?

(d) From the launching of the “One-for-One Replacement” Scheme to the end of February this year, what were the monthly numbers of e-PCs that were newly registered through this Scheme by name of manufacturer and model respectively?

(e) Among the cars that were scrapped for participating in this Scheme, how many had been registered for 6 years, 7 years, 8 years, 9 years and over 10 years respectively?

(f) Will another “One-for-One Replacement” Scheme be set up by the Government for enterprises that procure EVs to fulfill their social responsibility so that these enterprises can enjoy more tax concessions when procuring EVs to replace petrol vehicles? If yes, what are the details? If no, what are the reasons?

Asked by: Hon TAM Man-ho, Jeremy (LegCo internal reference no.: 41)

Reply:

The Government introduced the “One-for-One Replacement” Scheme (the Scheme) on 28 February 2018 to encourage car owners to choose electric vehicles (EVs) when they need to replace their cars. Purchasers of electric private cars (e-PCs) who scrap and de-register their eligible old private cars (PCs) and then first register a new e-PC can enjoy a higher first registration tax (FRT) concession of up to \$250,000.

(a) & (b)

Since the introduction of the Scheme until the end of February 2020, a total of 3 009 applications were received by the Transport Department (TD), among which 2 835 were approved, 139 were under processing and 35 were rejected for not complying with the eligibility criteria. Among the approved applications, 2 751 have completed first registration. During the same period, there were 3 184 first registered e-PCs in Hong Kong. The numbers of applications received and approved by the TD under the Scheme are as follows:

Month	No. of applications received	No. of applications approved
February 2018	0	0
March 2018	11	11
April 2018	28	27
May 2018	13	14
June 2018	28	24
July 2018	12	13
August 2018	41	33
September 2018	44	47
October 2018	48 ^{Note}	49 ^{Note}
November 2018	49	50
December 2018	55	55
January 2019	47	44
February 2019	22	22
March 2019	54	56
April 2019	66	42
May 2019	129	147
June 2019	85	78
July 2019	99	109
August 2019	146	126
September 2019	545	524
October 2019	322	314
November 2019	416	369
December 2019	292	355
January 2020	74	75
February 2020	383	251
Total	3 009	2 835

Note: Including 1 application that had previously been approved but was withdrawn by the applicant in December 2018.

(c) The numbers of registered PCs that met the two requirements of the Scheme (i.e. “having been first registered for 6 years or more” and “its owner having owned the PC for 18 months or more without interruption”) as at 1 October 2019 and 29 February 2020 were 275 692 and 289 633 respectively.

- (d) The numbers, brands and models of the e-PCs first registered under the Scheme since the introduction of the Scheme until the end of February 2020 are tabulated at the Annex.
- (e) As at the end of February 2020, the period of registration of scrapped vehicles at the time of de-registration among the 3 009 applications received by the TD under the Scheme is as follows:

Scrapped Vehicles	
Vehicle's period of registration^{Note}	No. of vehicle
Less than 6 years	17
6 years	232
7 years	283
8 years	262
9 years	246
10 years or above	1 969

Note: The period between the first registration date and the de-registration date of the vehicle (both days inclusive).

- (f) Currently the FRT for electric commercial vehicles can be waived in full. As for e-PCs, since both the FRT concession of \$97,500 and the Scheme apply to enterprises, we have no plan to introduce another scheme for enterprises to procure EVs.

Name of manufacturer^	Model^	2018											
		No. of first registered e-PCs under the "One-for-One Replacement" Scheme											
		February	March	April	May	June	July	August	September	October	November	December	
AUDI	E-TRON 55 QUATTRO	0	0	0	0	0	0	0	0	0	0	0	0
BMW	I3 94AH (I01)	0	1	7	3	0	0	4	16	3	4	1	
	I3 120AH (I01)	0	0	0	0	0	0	0	0	0	0	0	
	I3S 94AH (I01)	0	0	0	0	0	0	0	3	4	5	1	
	I3S 120AH (I01)	0	0	0	0	0	0	0	0	0	0	0	
BYD	E6	0	1	0	0	0	0	0	1	1	0	0	
HYUNDAI	IONIQ ELECTRIC	0	0	0	0	1	4	3	2	8	11	27	
	IONIQ ELECTRIC (URBAN)	0	0	0	0	0	0	6	0	5	11	8	
	KONA ELECTRIC	0	0	0	0	0	0	0	0	0	0	0	
	KONA ELECTRIC (URBAN)	0	0	0	0	0	0	0	0	0	0	0	
	KONA ELECTRIC RANGE+	0	0	0	0	0	0	0	0	0	0	0	
JAGUAR	I-PACE EV400 HSE	0	0	0	0	0	0	0	0	0	0	0	
	I-PACE EV400 S	0	0	0	0	0	0	0	0	0	0	0	
	I-PACE EV400 SE	0	0	0	0	0	0	0	0	0	0	0	
KIA	NIRO EV	0	0	0	0	0	0	0	0	0	0	0	
	NIRO EV+	0	0	0	0	0	0	0	0	0	0	0	
	NIRO EV+ DELUXE	0	0	0	0	0	0	0	0	0	0	0	
NISSAN	E-NV200 EVALIA 5-SEATER	0	0	0	0	0	0	0	1	0	1	4	

Name of manufacturer^	Model^	2018											
		No. of first registered e-PCs under the "One-for-One Replacement" Scheme											
		February	March	April	May	June	July	August	September	October	November	December	
NISSAN	E-NV200 EVALIA 7-SEATER	0	0	0	0	0	0	0	8	8	12	10	
	LEAF	0	0	0	0	0	0	0	0	0	0	0	
	LEAF LUX	0	0	0	0	0	0	0	0	0	0	0	
RENAULT	ZOE ZE40	0	0	5	1	4	5	5	4	4	8	3	
	ZOE ZE40 (BOSE)	0	0	1	1	1	0	0	1	0	0	0	
SMART	SMART FORFOUR ELECTRIC DRIVE (W453)	0	0	0	0	0	0	0	0	0	0	0	
TESLA	MODEL 3 LONG RANGE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	0	0	0	0	0	0	0	
	MODEL 3 PERFORMANCE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	0	0	0	0	0	0	0	
	MODEL 3 STANDARD RANGE PLUS REAR WHEEL DRIVE	0	0	0	0	0	0	0	0	0	0	0	
	MODEL S 75 KWH DUAL MOTOR	0	0	0	0	1	0	2	1	0	1	1	
	MODEL S 100 KWH DUAL MOTOR	0	0	0	0	0	0	0	0	0	0	1	

Name of manufacturer^	Model^	2018											
		No. of first registered e-PCs under the “One-for-One Replacement” Scheme											
		February	March	April	May	June	July	August	September	October	November	December	
TESLA	MODEL S LONG RANGE	0	0	0	0	0	0	0	0	0	0	0	0
	MODEL X 75 KWH DUAL MOTOR	0	0	0	0	2	0	2	2	0	2	0	
	MODEL X 90 KWH DUAL MOTOR	0	2	11	6	10	2	3	3	2	2	0	
	MODEL X 100 KWH DUAL MOTOR	0	0	0	0	0	0	0	1	0	0	0	
	MODEL X LONG RANGE	0	0	0	0	0	0	0	0	0	0	0	
	NEW E-GOLF	0	2	8	3	5	1	1	11	1	3	0	
VOLKSWAGEN	NEW E-GOLF LIFE	0	0	0	0	0	0	1	0	0	0	0	

Name of manufacturer^	Model^	2019											
		No. of first registered e-PCs through the “One-for-One Replacement” Scheme											
		January	February	March	April	May	June	July	August	September	October	November	December
AUDI	E-TRON 55 QUATTRO	0	0	0	0	0	0	0	0	0	0	0	0
BMW	I3 94AH (I01)	1	1	0	0	0	0	0	0	0	0	0	0
	I3 120AH (I01)	0	0	0	0	0	8	4	3	4	3	1	0
BMW	I3S 94AH (I01)	1	0	0	0	0	0	0	0	0	0	0	0
	I3S 120AH (I01)	0	0	0	0	0	7	2	3	0	1	2	1
BYD	E6	0	0	0	0	0	0	0	0	0	0	0	0
HYUNDAI	IONIQ ELECTRIC	27	15	18	12	13	4	8	2	2	2	1	1
	IONIQ ELECTRIC (URBAN)	1	0	17	5	5	5	4	5	0	1	0	0
	KONA ELECTRIC	0	0	0	0	6	21	17	20	6	12	12	10
	KONA ELECTRIC (URBAN)	0	0	0	0	0	0	0	0	0	0	0	1
	KONA ELECTRIC RANGE+	0	0	0	0	2	3	6	11	7	3	5	6
JAGUAR	I-PACE EV400 HSE	0	0	0	0	0	0	0	0	1	0	1	1
	I-PACE EV400 S	0	0	0	0	0	0	0	0	0	1	1	0
	I-PACE EV400 SE	0	0	0	0	0	0	0	0	0	2	2	1
KIA	NIRO EV	0	0	0	0	0	0	0	0	0	6	1	3
	NIRO EV+	0	0	0	0	0	0	0	8	3	4	0	1
	NIRO EV+ DELUXE	0	0	0	0	0	0	0	47	54	27	13	8
NISSAN	E-NV200 EVALIA 5-SEATER	2	1	0	0	0	0	0	0	0	0	0	0
	E-NV200 EVALIA 7-SEATER	5	3	7	3	4	11	7	7	3	7	3	6
	LEAF	0	0	0	0	2	3	1	2	1	0	3	6

Name of manufacturer^	Model^	2019											
		No. of first registered e-PCs through the “One-for-One Replacement” Scheme											
		January	February	March	April	May	June	July	August	September	October	November	December
	LEAF LUX	0	0	0	0	99	20	46	27	11	14	11	10
RENAULT	ZOE ZE40	2	2	3	1	1	1	1	1	1	2	1	0
	ZOE ZE40 (BOSE)	0	0	0	0	0	0	0	0	0	0	0	0
SMART	SMART FORFOUR ELECTRIC DRIVE (W453)	0	0	0	0	0	0	0	0	0	1	0	0
TESLA	MODEL 3 LONG RANGE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	0	0	0	0	0	0	0	7
	MODEL 3 PERFORMANCE DUAL MOTOR ALL WHEEL DRIVE	0	0	0	0	0	0	0	1	54	93	63	108
	MODEL 3 STANDARD RANGE PLUS REAR WHEEL DRIVE	0	0	0	0	0	0	0	0	365	94	267	184
	MODEL S 75 KWH DUAL MOTOR	0	0	2	0	0	0	0	0	0	0	0	0
	MODEL S 100 KWH DUAL MOTOR	0	0	0	0	0	1	0	0	0	0	0	0
	MODEL S LONG RANGE	0	0	0	0	0	0	0	0	0	0	0	0

Name of manufacturer^	Model^	2019											
		No. of first registered e-PCs through the “One-for-One Replacement” Scheme											
		January	February	March	April	May	June	July	August	September	October	November	December
TESLA	MODEL X 75 KWH DUAL MOTOR	0	1	3	2	0	0	0	0	0	0	0	0
	MODEL X 90 KWH DUAL MOTOR	0	0	0	0	0	0	0	0	0	0	0	0
	MODEL X 100 KWH DUAL MOTOR	0	0	1	0	2	0	1	0	0	0	0	0
	MODEL X LONG RANGE	0	0	0	0	0	0	0	0	0	0	1	2
VOLKSWAGEN	NEW E-GOLF	1	0	6	12	10	2	2	4	1	3	0	1
	NEW E-GOLF LIFE	0	0	0	0	0	0	0	0	0	0	0	0

Name of manufacturer^	Model^	2020	
		No. of first registered e-PCs under the “One-for-One Replacement” Scheme	
		January	February
AUDI	E-TRON 55 QUATTRO	13	1
BMW	I3 94AH (I01)	0	0
	I3 120AH (I01)	0	0
	I3S 94AH (I01)	0	0
	I3S 120AH (I01)	0	0
BYD	E6	0	0
HYUNDAI	IONIQ ELECTRIC	0	0
	IONIQ ELECTRIC (URBAN)	0	1
	KONA ELECTRIC	3	12
	KONA ELECTRIC (URBAN)	2	0
	KONA ELECTRIC RANGE+	3	4
JAGUAR	I-PACE EV400 HSE	0	0
	I-PACE EV400 S	0	0
	I-PACE EV400 SE	1	0
KIA	NIRO EV	0	0
	NIRO EV+	1	3
	NIRO EV+ DELUXE	6	3
NISSAN	E-NV200 EVALIA 5-SEATER	0	0
	E-NV200 EVALIA 7-SEATER	6	4
	LEAF	7	14
	LEAF LUX	10	6
RENAULT	ZOE ZE40	3	4
	ZOE ZE40 (BOSE)	0	0
SMART	SMART FORFOUR ELECTRIC DRIVE (W453)	0	0
TESLA	MODEL 3 LONG RANGE DUAL MOTOR ALL WHEEL DRIVE	1	58
	MODEL 3 PERFORMANCE DUAL MOTOR ALL WHEEL DRIVE	14	4
	MODEL 3 STANDARD RANGE PLUS REAR WHEEL DRIVE	22	63
	MODEL S 75 KWH DUAL MOTOR	0	0
	MODEL S 100 KWH DUAL MOTOR	0	0

Name of manufacturer^	Model^	2020	
		No. of first registered e-PCs under the “One-for-One Replacement” Scheme	
		January	February
	MODEL S LONG RANGE	2	0
	MODEL X 75 KWH DUAL MOTOR	0	0
	MODEL X 90 KWH DUAL MOTOR	0	0
	MODEL X 100 KWH DUAL MOTOR	0	0
	MODEL X LONG RANGE	0	0
VOLKSWAGEN	NEW E-GOLF	0	0
	NEW E-GOLF LIFE	0	0

^ Only English names are provided.

- End -

ENB145

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1237)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Budget that the Government is researching into electric public light buses that are suitable for local use and the basic specifications and requirements of the associated charging facilities. Relevant guidelines will be formulated. The Government will earmark \$80 million for a pilot scheme under which green public light buses (PLBs) running on fixed routes will pioneer the switch to electric vehicles (EVs). In this connection, please advise this Committee on the following:

- a) What are the staffing, the estimated expenditure involved in such work, and the detailed work schedule?
- b) Based on the preliminary estimation, on which fixed routes are the green PLBs that are going to pioneer the switch to EVs running?

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 28)

Reply:

The Government has earmarked \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme for e-PLBs, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be

completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

The overall workload for the pilot scheme will be absorbed by the existing resources of the Environmental Protection Department and undertaken by 3 time-limited non-directorate posts to be created for a period of 7 years.

- End -

CONTROLLING OFFICER'S REPLY

ENB146

(Question Serial No. 1238)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget that the Government will update the Clean Air Plan to, among other things, examine the policy of further promoting the use of electric vehicles (EVs), and will also formulate Hong Kong's first roadmap on the popularisation of EVs. In this connection, please advise this Committee on the following:

- a) What are the staffing and estimated expenditure involved in such work, and the detailed work schedule?
- b) Based on the preliminary estimation, when will the roadmap be finalised?
- c) Based on the preliminary estimation, what is the effectiveness of such work?

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 29)

Reply:

The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of electric vehicles (EVs) to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs. Based on the preliminary estimation, the relevant work will be completed in the first half of 2021. The expenditure and manpower required will be absorbed by the existing resources of the Environmental Protection Department.

- End -

CONTROLLING OFFICER'S REPLY

ENB147

(Question Serial No. 1239)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget that a \$2 billion pilot scheme will be launched this year. The scheme aims to subsidise the installation of charging-enabling infrastructure in eligible car parks of private residential buildings, with a view to facilitating the installation of chargers by owners of individual parking spaces. In this connection, please advise this Committee on the following:

- a) What are the staffing involved in such work, the estimated expenditure and the detailed work schedule?
- b) Based on the current estimation, how many car parks of private residential buildings will install such infrastructure?
- c) Please set out in tabular form the specific locations of the car parks of private residential buildings, the number of infrastructure to be installed and in which of the 18 districts these car parks are located.

Asked by: Hon TIEN Puk-sun, Michael (LegCo internal reference no.: 30)

Reply:

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces. As the scheme will be launched in the second half of this year, we do not have such information on the locations of the car parks to be subsidised and their distribution at present.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As regards manpower, the Environmental Protection Department will establish a new team to prepare and manage the pilot scheme. The team comprises of 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

- End -

CONTROLLING OFFICER'S REPLY

ENB148

(Question Serial No. 1347)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in Programme (1) that the Department will develop recycling facilities to handle government yard waste with a view to turning yard waste into energy and useful products. In this connection, please advise on the following: a) What is the expected commencement date of operation of the recycling facilities? What is the planned percentage share of the amount of yard waste that can be handled each year in the total quantity of yard waste in Hong Kong? What is the ultimate target? b) How much funding will be allocated by the Government to handle yard waste in the 2020-21 financial year?

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 6)

Reply:

- a) To promote recycling of yard waste with a view to reducing disposal at landfills, the Environmental Protection Department plans to develop a recycling facility which will initially collect and process yard waste arising mainly from government departments and public works. The facility is expected to commence operation in early 2021. The yard waste collected will be sterilised and air dried to produce different useful materials to facilitate recycling or upcycling. The facility's treatment capacity is estimated at an average of 30 tonnes per day in the first year and will gradually increase to an average of 60 tonnes per day subsequently, accounting for about 35% of the current disposal quantity of the yard waste in municipal solid waste.
- b) The Government will invest about \$26.9 million in the 2020-21 financial year for the development of the yard waste recycling facility.

- End -

CONTROLLING OFFICER'S REPLY

ENB149

(Question Serial No. 1348)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in Programme (1) that the Department will continue to implement the Restored Landfill Revitalisation Funding Scheme to expedite the development of beneficial facilities at restored landfills. In this connection, please advise on the following: a) the areas and locations of restored and unrestored landfills in the territory as at the end of 2019, and among the restored landfills, the number of landfills which have undergone revitalisation and the relevant expenditure; b) the amount of resources to be allocated by the Administration for implementing the revitalisation of restored landfills and the areas involved in the 2020-21 financial year; c) for unrestored landfills, the amount of funding to be allocated by the Government in the new financial year for carrying out the relevant restoration works, the areas involved and the dates of completion.

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 7)

Reply:

- a) As at the end of 2019, there were a total of 13 restored landfills and 3 operating/unrestored landfills in Hong Kong. The locations, areas, afteruse and relevant expenditures of these landfills are detailed at Annex 1.
- b) The Environmental Protection Department (EPD) is providing the non-profit-making organisations (NPOs) with funding support for the development of recreational facilities at restored landfills via the "Restored Landfill Revitalisation Funding Scheme" (the Funding Scheme), with a view to providing a practical alternative for the effective use of restored landfills. Under Batch 1 of the Funding Scheme, approval-in-principle has been granted to the proposal submitted by the Tung Wah Group of Hospitals (TWGHs). The project proposes to revitalise approximately 2 hectares of flat area in the Tseung Kwan O Stage I Landfill into a "camp site-cum-green education ground", so as to provide facilities for organising camping, green education, outdoor recreation, adventure training and gardening activities etc. A technical feasibility study was completed by the TWGHs in 2018. The EPD is providing the TWGHs with funding support for the pre-construction activities for the

project, including site investigation, detailed design and tender documentation, etc. The EPD has earmarked \$1.62 million under the Capital Works Reserve Fund for the pre-construction activities for the project in 2020-21.

During the implementation of Batch 1 of the Funding Scheme, we have found that many NPOs might encounter various technical constraints, difficulties and challenges when developing large-scale recreational facilities at restored landfills, such as the restrictions on the loading capacity of landfills, the needs for land formation and infrastructure, proper vehicular access, effective feeder transport, ecology of the surrounding environment and planning requirements, etc. As the development and continuous implementation of the projects will be affected by these issues in varying degrees, the Steering Committee on the Funding Scheme proposes that the Government should actively consider providing suitable guidelines and infrastructure for developing the restored landfills, and adopt a more proactive approach to expedite the development of restored landfills.

The EPD is considering and developing suitable long-term beneficial uses and the necessary infrastructure, as well as exploring the feasible interim uses, having regard to the surrounding environment and site constraints of restored landfills. The EPD is also preparing to commence a consultancy study in 2020, with a view to formulating implementation plans for the necessary infrastructure and facilities having regard to the actual circumstances of restored landfills, for more effective development of suitable beneficial uses on restored landfills in future. The estimated expenditure for this consultancy study in the 2020-21 financial year is \$2 million. In the meantime, the EPD will continue to consider proposals from NPOs for development of various recreational and sports facilities on restored landfills on a self-financing basis.

- c) Regarding the 3 operating/unrestored landfills, the EPD will arrange to carry out restoration works for parts of the sites. The estimated expenditure for the restoration works in the 2020-21 financial year is about \$38 million, and the area involved is about 8.4 hectares. The works are expected to be completed in early 2021.

Areas, locations, revitalisation projects and relevant expenditures of 13 restored landfills

Restored landfills	Location	Area (ha)	Current use	Expenditure of revitalisation project (\$million)
1. Tseung Kwan O (TKO) Stage I	TKO Development Area 77, Sai Kung	68	(i) Football training centre	Not applicable (Note 1)
			(ii) Wan Po Road Pet Garden and car park	25.6
2. Pillar Point Valley	Mong Fat Street, Tuen Mun	65	Part of the site is developed into a temporary shooting range	Not applicable (Note 1)
3. Shuen Wan	Ting Kok Road, Tai Po	55	Temporary golf driving range	Not applicable (Note 1)
4. Tseung Kwan O Stage II/III	TKO Development Area 105, Sai Kung	42	Part of the site is used by government departments as a training field for drones	Nil
5. Gin Drinkers Bay	Kwai Hei Street, Kwai Chung	29	(i) Temporary cricket grounds	Not applicable (Note 1)
			(ii) Bicycle Moto Cross (BMX) Park	Not applicable (Note 1)
6. Siu Lang Shui	<i>Siu Lang Shui Road, Tuen Mun</i>	12	Mainly used for conservation of and overwintering for butterflies, and part of the Siu Lang Shui Landfill has been classified as "Site of Special Scientific Interest"	Nil
7. Jordan Valley	New Clear Water Bay Road, Jordan Valley	11	Jordan Valley Park	192.1
8. Ma Yau Tong Central	Lin Tak Road, Lam Tin	11	Part of the site is developed into a sitting-out area	4.6
9. Sai Tso Wan	Sin Fat Road, Lam Tin	9	Sai Tso Wan Recreation Ground, including a grass pitch for football and baseball activities	46.4
10. Ngau Chi Wan	Fung Shing Street, Ngau Chi Wan	8	Ngau Chi Wan Park	169.5

Restored landfills	Location	Area (ha)	Current use	Expenditure of revitalisation project (\$million)
11. Ma Yau Tong West	Tseung Kwan O Road, Lam Tin	6	Part of the site is developed into a sitting-out area	5.1
12. Ma Tso Lung	Pak Shek Au, North District	2	Stargazing campsite	Not applicable (Note 1)
13. Ngau Tam Mei	Ngau Tam Mei, Yuen Long	2	Village green area	Nil

Note 1 : The costs are borne by non-governmental organisations, and the EPD does not have the relevant figures.

Locations and areas of 3 operating/unrestored landfills

Operating landfills	Location	Area (ha)
Southeast New Territories Landfill	Tai Chik Sha, Tseung Kwan O, Sai Kung	100
Northeast New Territories Landfill	Ta Kwu Ling, North District	61
West New Territories Landfill	Nim Wan, Tuen Mun	110

- End -

CONTROLLING OFFICER'S REPLY

ENB150

(Question Serial No. 0901)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

To improve roadside air quality, the Environmental Protection Department (EPD) will tighten the vehicle emission standards from time to time. The EPD is now preparing to tighten the emission standards for first registered light buses with a design weight of more than 3.5 tonnes to Euro VI in the second half of 2020. What are the progress of the relevant preparatory work and the resources involved? A vehicle manufacturer indicated that it would cease the production of liquefied petroleum gas light buses as its vehicles could not meet the new emission standards. Once the production is ceased, there will be fewer choices for light buses in the market. In this connection, will the EPD defer the tightening of the emission standards for light buses? If yes, what are the details? If no, how will it assist the light bus industry in introducing suitable new light buses?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 19)

Reply:

To continuously improve roadside air quality, the Government will tighten the emission standards of local motor vehicles, with reference to the international developments in vehicle emission standards and the supply of compliant vehicles to Hong Kong. The European Union has implemented Euro VI emission standards in phases since 2013, and the Legislative Council (LegCo) also passed the regulation to tighten the emission standards of first registered heavy duty vehicles to Euro VI in April 2017. However, as there were not enough Euro VI models for light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) while making the legislation, their emission standards have been maintained at Euro V up till now.

The Government has been closely monitoring the supply of the aforesaid 2 vehicle classes. The major suppliers of the relevant vehicles have advised that Euro VI compliant diesel light bus (design weight of more than 3.5 tonnes) and bus (design weight of not more than 9 tonnes) models would be available to Hong Kong by early 2021, and other vehicle suppliers have also advised that they have plans to introduce Euro VI compliant models for these 2

diesel vehicle classes to Hong Kong. Hence, we anticipate that there will be adequate supply of Euro VI compliant diesel light bus and bus models by early 2021.

As for liquefied petroleum gas (LPG) light buses, the LPG light buses in the local market come from the same brand. The supplier indicated earlier that, based on commercial considerations, its manufacturer would cease the production of LPG light buses by the end of 2020, and Euro VI compliant diesel light buses under the same brand will be supplied by then.

In view of the estimated supply of the aforesaid Euro VI compliant light buses and buses, we propose tightening the emission standards of first registered light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) to Euro VI starting from early 2021. We consulted the light bus and bus trades and relevant vehicle suppliers in November 2018 and consulted the Advisory Council on the Environment and the Panel on Environmental Affairs of the LegCo on 3 December and 19 December 2018 respectively.

The Government is now carrying out the work for the amendment of the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J), with a target of implementing Euro VI emission standards on first registered light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) starting from 1 March 2021. The amendment work will be undertaken by existing manpower and resources of the Environmental Protection Department.

In parallel with the tightening of emission standards of local vehicles, the Government will continue to encourage light bus suppliers to introduce light bus models that are suitable for local use so that the light bus trade can have more choices.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 0906)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the various landfill extension projects, will the Government advise this Committee on the expenditures required, and the latest planning and development?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 24)

Reply:

We are implementing the extension schemes of the 3 strategic landfills (i.e. the South East New Territories (SENT) Landfill, the North East New Territories (NENT) Landfill and the West New Territories (WENT) Landfill). The work progress is as follows:

The SENT Landfill Extension Scheme

- (i) The site involved was handed over to the contractor in 2018; and
- (ii) The basic extension works is expected to be completed in 2021 and the landfill will then start receiving construction waste.

The NENT Landfill Extension Scheme

- (i) The interfacing issues between the extended works and the existing landfill are being taken forward and implemented progressively; and
- (ii) The tendering exercise is expected to be conducted within this year.

The design and site investigation consultancy study of the WENT Landfill Extension Scheme

- (i) The review of the outline design of the project has been substantially completed;
- (ii) The study on the interfacing issues of the extension scheme with the neighbouring projects and facilities (such as the existing power plant, the WENT Landfill, the T • PARK and other government facilities under planning) is ongoing; and
- (iii) The preparatory work for the planning of the associated works is ongoing.

The estimated total expenditure on the design, studies and works of all the extension schemes above in 2020-21 is \$683 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB152

(Question Serial No. 0911)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

On 28 January 2019, the Government revised the “One-for-One Replacement” Scheme, under which the first registration tax (FRT) concession offered is capped at \$250,000. Will the Government advise this Committee on the number of applications for the “One-for-One Replacement” Scheme and the average amount of FRT concession offered to the applicants between 28 January 2019 and 31 December 2019?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 30)

Reply:

To strike a balance between promoting the use of electric private cars (e-PCs) and not increasing the overall number of private cars (PCs), the Government introduced the “One-for-One Replacement” Scheme (the Scheme) on 28 February 2018 to encourage PC owners to choose electric vehicles when they need to replace their cars. Purchasers of e-PCs who scrap and de-register their eligible old PCs and then first register a new e-PC can enjoy a higher first registration tax (FRT) concession of up to \$250,000.

From 28 January 2019 on which the Government revised the eligibility criteria of the Scheme till 31 December 2019, a total of 2 182 applications were received by the Transport Department, among which 2 154 were approved and the remaining 28 were rejected for not complying with the eligibility criteria. As at 29 February 2020, among the above approved applications, 2 150 have completed first registration and the average amount of FRT concession offered to the applicants was about \$210,000.

- End -

CONTROLLING OFFICER'S REPLY

ENB153

(Question Serial No. 0923)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

On promoting the development of electric vehicles, will the Government install additional quick chargers at car parks? If yes, what are the number of chargers, their distribution and estimated expenditure? If no, what are the reasons?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 44)

Reply:

A total of 857 government public chargers (mostly medium chargers) are currently provided at government car parks. The Government allocated \$120 million last year for extending the public electric vehicle charging networks at government car parks in the coming 3 years, including installation of additional medium chargers at the car parks managed by the Transport Department, the Government Property Agency, the Leisure and Cultural Services Department and the Tourism Commission which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800.

In addition, the Government commissioned a consultancy study in October 2019 to look for suitable sites in 18 districts of Hong Kong to set up public quick charging stations for trial. Upon completion of the study, we will explore suitable options for developing quick charging stations.

- End -

CONTROLLING OFFICER'S REPLY**ENB154****(Question Serial No. 0926)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the development of a network of Community Green Stations (CGSs), will the Government advise this Committee on the following:

- (a) What were the respective numbers of environmental education activities organised by the CGSs in various districts across the territory in the past 3 years?
 (b) What are the latest developments of and the estimates for the CGSs?

Asked by: Hon YICK Chi-ming, Frankie (LegCo internal reference no.: 47)Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works of all CGSs is estimated to be about \$400 million. The operating expenditure of individual CGS may vary, depending on the financial proposals submitted by operators in their open tender submissions. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. The latest development and the organisation of environmental education activities of individual CGSs are tabulated below:

CGS	Site	Latest Development and Activities
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015. During the period from 2017 to 2019, a total of 767 environmental education activities were organised.

CGS	Site	Latest Development and Activities
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015. During the period from 2017 to 2019, a total of 794 environmental education activities were organised.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017. During the period from 2017 to 2019, a total of 603 environmental education activities were organised.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017. During the period from 2017 to 2019, a total of 529 environmental education activities were organised.
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017. During the period from 2017 to 2019, a total of 779 environmental education activities were organised.
Tuen Mun CGS	9 Tuen Yee Street	The CGS commenced operation in September 2018. During the period from 2018 to 2019, a total of 247 environmental education activities were organised.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	The CGS commenced operation in November 2018. During the period from 2018 to 2019, a total of 342 environmental education activities were organised.
Tai Po CGS	25 Dai Wah Street	The CGS commenced operation in October 2019. As at the end of 2019, a total of 11 environmental education activities were organised.
Islands CGS	1 Chung Mun Road, Tung Chung, Lantau	The CGS is expected to commence operation in 2020.
Sai Kung CGS	3 Po Lam Lane	Design and construction works are in progress.

CGS	Site	Latest Development and Activities
Wan Chai CGS	Wan Shing Street, near Hung Hing Road	Design and construction works are in progress.
Wong Tai Sin CGS	Po Kong Village Road, near Tsz Wan Shan Road	The site has been confirmed and the application procedure for temporary government land allocation is in progress.
Tsuen Wan CGS, Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site yet to be confirmed	We are continuing with site search and associated preparatory work.

- End -

CONTROLLING OFFICER'S REPLY

ENB155

(Question Serial No. 1489)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in paragraph 128 of the Budget Speech by the Financial Secretary that the Administration will launch a \$2 billion pilot scheme this year. The scheme aims to subsidise the installation of charging-enabling infrastructure in eligible car parks of private residential buildings, with a view to facilitating the installation of chargers by owners of individual parking spaces.

1. Regarding the pilot scheme on subsidising the installation of charging-enabling infrastructure in eligible car parks of private residential buildings, please provide the details of the scheme, timetable and the staffing responsible for the above work.
2. What financial incentives and technical support are currently provided by the Administration to encourage private residential car parks to install chargers?

Asked by: Hon YUNG Hoi-yan (LegCo internal reference no.: 18)

Reply:

The Environmental Protection Department (EPD) established in 2011 a dedicated team and a hotline to provide relevant information and technical support in setting up electric vehicle (EV) chargers, and has appealed to owners' corporations and property managers to provide support to owners in installing EV chargers at the car parks of their premises through seminars and workshops.

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential

development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As regards manpower, the EPD will establish a new team to prepare and manage the pilot scheme. The team comprises of 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB156

(Question Serial No. 1490)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in paragraph 127 of the Budget Speech by the Financial Secretary that the Government will update the Clean Air Plan to, among other things, examine the policy of further promoting the use of electric vehicles (EVs), and will also formulate Hong Kong's first roadmap on the popularisation of EVs. Will the Government inform this Committee of:

1. the details of the roadmap on the popularisation of EVs and the estimated expenditure;
2. the existing number of EVs in Hong Kong and its percentage in the total number of vehicles in Hong Kong;
3. the existing number of EV parking spaces at government car parks in various districts and its percentage share.

Asked by: Hon YUNG Hoi-yan (LegCo internal reference no.: 19)

Reply:

The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of electric vehicles (EVs) to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs. Based on the preliminary estimation, the relevant work will be completed in the first half of 2021. The expenditure and manpower required will be absorbed by the existing resources of the Environmental Protection Department.

As at the end of February 2020, the number of electric private cars in Hong Kong is 13 890, representing about 2.2% of the total number of private cars in Hong Kong, while the total number of EVs is 14 278, representing about 1.6% of the total number of vehicles.

A total of 857 government public chargers (mostly medium chargers) are currently provided at government car parks. The Government allocated \$120 million last year for extending the public electric vehicle charging networks at government car parks in the coming 3 years, including installation of additional medium chargers at the car parks managed by the Transport Department, the Government Property Agency, the Leisure and Cultural Services

Department and the Tourism Commission which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800.

- End -

CONTROLLING OFFICER'S REPLY**ENB157****(Question Serial No. 3279)**

Head: (48) Government Laboratory
Subhead (No. & title): (000) Operational expenses
Programme: (2) Advisory and Investigative Services
Controlling Officer: Government Chemist (Dr SIN Wai-mei)
Director of Bureau: Secretary for the Environment

Question:

In addition to the samples collected from the monitoring stations of the Environmental Protection Department, has the Government Laboratory conducted any testing for dioxins in the environment since last June? If yes, please complete the table below:

	Type of sample		
	Air	Water	Environmental Waste
Number of samples			
Number of samples containing dioxins at an abnormal level			
Number of samples containing dioxins exceeding the standard			
Average level of dioxins			

Asked by: Hon TAM Man-ho, Jeremy (LegCo internal reference no.: 105)

Reply:

In addition to the samples collected from the monitoring stations of the Environmental Protection Department, the Government Laboratory has also conducted tests for dioxins in environmental samples since last June and the information is as follows:

	Type of sample		
	Air	Water	Environmental Waste
Number of samples	0	0	4 ⁽¹⁾
Number of samples containing dioxins at an abnormal level	Not applicable	Not applicable	0
Number of samples containing dioxins exceeding the standard	Not applicable	Not applicable	0
Average level of dioxins	Not applicable	Not applicable	Not detected ⁽²⁾

Note (1): The samples were taken from treated leachate from landfills.

(2): Limit of detection: 0.05 nanogram/litre (in terms of content of 2,3,7,8-tetrachlorodibenzo-para-dioxin)

- End -

CONTROLLING OFFICER'S REPLY

ENB158

(Question Serial No. 0679)

Head: (100) Marine Department
Subhead (No. & title): (-) Not Specified
Programme: (2) Port Services, (3) Local Services
Controlling Officer: Director of Marine (Agnes WONG)
Director of Bureau: Secretary for the Environment

Question:

Regarding the collection of refuse from locally-licensed vessels and river trade vessels, please advise on:

- (a) the staffing, expenditure and number of vessels involved in collecting refuse from fishing vessels, locally-licensed vessels and river trade vessels, either by staff of the Marine Department (MD) or the contractor it engaged, in the past 3 years (2017-18 to 2019-20); and the staffing, expenditure and number of vessels involved in collecting refuse in various typhoon shelters;
- (b) the mechanism adopted by the MD for collecting refuse in various typhoon shelters, and the daily collection schedules;
- (c) whether the MD will consider providing additional notification channels or establishing a mechanism in addition to the 24-hour hotline replied by officers on duty so as to improve the service for collecting refuse for fishing vessels in typhoon shelters;
- (e) the total quantities of marine refuse collected by the MD in the past 3 years (2017-18 to 2019-20) and the total quantities of refuse collected in typhoon shelters (please provide the information by month); and
- (f) the number of notifications issued by the notification and alert system on marine refuse since its setting up under the Hong Kong-Guangdong Marine Environmental Management Special Panel, with the extent of its effectiveness; and the way to an enhanced cross-border collaboration between Guangdong and Hong Kong.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 85)

Reply:

- (a) MD signed the existing contract for marine refuse cleansing services with the contractor for a term of five years commencing 1 October 2017 and ending 30 September 2022, involving a contract expenditure of about \$447 million. This represents an increase of about \$258 million, or about 136% in the contract expenditure when compared with the previous five-year contract. Under the new contract, the contractor provides a fleet of about 80 vessels for marine refuse cleansing. This represents an increase of 10 vessels, or 14%, when compared with the previous contract. Among them, eight are new vessels, including six fast response boats, one catamaran equipped with mechanical refuse cage and one vessel fitted with motor scooper. These vessels help enhance the efficiency and effectiveness in cleaning up marine refuse.

Currently, the contractor is providing a fleet of vessels of various types to clean up marine refuse in Hong Kong waters on a daily basis (including Sundays and public holidays), which includes offering domestic refuse collection service to vessels berthed in typhoon shelters, anchorages and small boat anchorage areas. The contract for the marine refuse cleansing services includes cleaning up floating refuse, collecting domestic refuse from vessels, managing refuse collection points and transporting refuse to landfills for disposal, etc. Since the overall contract cost includes the staffing, expenditure and number of vessels involved in collecting refuse from fishing vessels, locally-licensed vessels and river trade vessels in typhoon shelters, there is no separate breakdown for such items.

As for the staffing of MD, there are 10 Marine Inspector IIs and four patrol launches responsible for the inspection of cleanliness at sea across the territory and for monitoring of the performance of the contractor, as well as allocating resources in accordance with the actual needs to address the floating refuse problems in various districts.

- (b) Currently, the marine refuse cleansing contractor of MD has refuse collection boats stationed in major typhoon shelters such as Sam Ka Tsuen, Shau Kei Wan, Causeway Bay, To Kwa Wan, New Yau Ma Tei, Tuen Mun, Sai Kung, Cheung Chau and Shuen Wan for collecting refuse from vessels at those typhoon shelters at least once a day. The refuse collection boats of the contractor generally sail through the typhoon shelters in the morning period to collect refuse from vessels. Vessels berthed in the typhoon shelters may also make calls to MD or the contractor for arranging refuse collection service. Since the end of 2015, the frequency of collecting refuse from vessels in Aberdeen Typhoon Shelter has been increased to twice a day, i.e. once in the morning and once in the afternoon.
- (c) Apart from the 24-hour hotlines (2385 2791 or 2385 2792) manned by duty officers, MD's contractor has set up a hotline (3527 3929) to facilitate the arrangements for refuse collection service. At meetings during fishing moratorium and before Chinese New Year, MD officers will also inform those in need, via the attending representatives of various organisations, of the available channels to provide information by email (admpcu@mardep.gov.hk) or by fax (2543 6877) for arranging refuse collection service. MD will continuously monitor the use of the various existing notification channels.

- (e) The quantities of marine refuse (including floating refuse, refuse collected from ships, and refuse collected from locally-licensed vessels and river trade vessels) collected in the past three years are as follows:

2017

Month	Floating refuse (in tonnes)	Refuse collected from ships (in tonnes)	Refuse collected from locally-licensed vessels and river trade vessels (in tonnes)
January	801.2	209.8	168.9
February	775.6	189.9	147.9
March	813.7	210.8	152.0
April	835.5	202.8	151.3
May	943.3	210.4	179.8
June	1 053.2	196.2	186.9
July	1 122.9	210.6	193.3
August	1 406.1	195.8	175.8
September	1 140.8	199.8	160.6
October	993.3	202.0	151.9
November	937.5	203.2	143.3
December	819.2	213.5	145.8
Full year	11 642.3	2 444.8	1 957.5

2018

Month	Floating refuse (in tonnes)	Refuse collected from ships (in tonnes)	Refuse collected from locally-licensed vessels and river trade vessels (in tonnes)
January	830.0	209.9	151.9
February	786.4	198.0	168.8
March	831.4	209.7	161.0
April	862.9	201.6	160.4
May	895.9	219.0	189.1
June	1 008.2	194.1	195.9
July	1 050.7	206.9	201.5
August	1 055.0	203.2	186.6
September	1 469.1	188.3	175.3
October	1 077.4	209.8	178.7
November	889.0	199.7	162.3
December	778.3	208.7	169.1
Full year	11 534.3	2 448.9	2 100.6

2019

Month	Floating refuse (in tonnes)	Refuse collected from ships (in tonnes)	Refuse collected from locally-licensed vessels and river trade vessels (in tonnes)
January	803.3	208.8	179.5
February	756.0	188.6	165.8
March	815.1	207.4	175.6
April	855.6	202.3	173.5
May	930.2	209.2	196.4
June	1 000.7	201.5	192.9
July	1 061.9	202.3	190.8
August	1 114.4	202.5	186.1
September	1 055.1	201.4	165.9
October	963.0	209.3	170.3
November	876.0	202.1	164.1
December	775.1	208.2	167.5
Full year	11 006.4	2 443.6	2 128.4

The refuse from locally-licensed vessels and river trade vessels is mainly collected in typhoon shelters, with only a small quantity collected in small boat anchorage areas. MD does not maintain separate statistics on the quantities of refuse collected in individual typhoon shelters and small boat anchorage areas. The quantities of refuse collected in typhoon shelters are therefore not separately accounted for.

- (f) Under the framework of the “Hong Kong-Guangdong Marine Environmental Management Special Panel”, the Government has been maintaining close liaison with Guangdong to jointly explore ways to handle marine refuse and marine environmental incidents, and review on a regular basis arrangements for relevant cross-border collaboration with a view to further enhancing the incident notification mechanism. Since the trial run of the “Notification and alert system on marine refuse” in May 2017, Hong Kong and Guangdong have activated the system and issued notifications in a timely manner in response to major marine environmental incidents or heavy rainfall so that both parties can suitably deploy resources and make corresponding preparation. The Environmental Protection Department (EPD) issued a total of 18 notifications to Guangdong due to inclement weather and environmental incidents. Furthermore, Hong Kong and Guangdong cooperated to organise coastal clean-up activities for the first time last year to jointly promote the messages of keeping the shoreline clean and protecting the ocean together.

- End -

CONTROLLING OFFICER'S REPLY

ENB159

(Question Serial No. 1727)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (000) Operational expenses
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Regarding the promotion of the local use of solar energy, will the Government advise this Committee on the following:

- a. What is the current percentage of electricity generated locally by solar energy? Will a target be set for that percentage?
- b. How many solar panels are there in government buildings? What are their respective locations and annual power generation?
- c. What were the projects of installation of solar panels subsidised by the Environment and Conservation Fund in the past 3 years?
- d. The Government has set aside \$1 billion for departments to install renewable energy facilities. What are the details and progress? What are the new selected sites for installation of additional solar panels?
- e. To promote the development of renewable energy and the use of energy-efficient building installations in buildings, tax incentives are provided for capital expenditures spent on the related installations. In this connection, what were the number of applications, the amounts of expenditure involved and the details in the past 3 years?
- f. What measures (e.g. providing subsidies to members of the relevant recycling industry) are in place to dispose of waste solar panels, so as to prevent such waste from polluting the environment?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 40)

Reply:

- (a) According to the "Hong Kong Energy End-use Data", renewable energy (RE) currently accounts for roughly 0.1% of "electricity" consumption. This includes the solar energy used to heat water, and electricity generated by photovoltaic panels, wind and hydro power systems and waste-to-energy facilities. We do not have the breakdowns.

Generally speaking, the generation of RE relies on natural resources, such as solar, wind and hydro power. However, the physical environment of Hong Kong has imposed a relatively large number of constraints on the wide application of such RE. As set out in the Hong Kong's Climate Action Plan 2030+, based on currently mature

and commercially available technologies, our estimate is that Hong Kong has a realisable RE potential of about 3%-4% (as a percentage of Hong Kong's total electricity consumption) arising from wind, solar and waste-to-energy that can be exploited between now and 2030, with solar accounting for about 1%-1.5%. However, we still face many technical and financial challenges in fully exploiting such RE potential, and there would also be impact on tariffs. Given that there are many uncertainties in the early stage of development and there is only about one year's local experience in feed-in tariff, it is not yet appropriate to set a target for RE (including that for solar energy) in the fuel mix for electricity generation at this stage.

- (b) The solar panel projects completed by the Architectural Services Department (ArchSD) in the past 5 years (from 2015-16 to 2019-20) are tabulated below:

Name of government buildings/ public facilities	Completion date	Annual power generation (kWh)*
Construction of Trade and Industry Tower in Kai Tak Development Area	April 2015	28 000
Redevelopment of Victoria Park Swimming Pool Complex	July 2015	39 000
Redevelopment of Fire Services Training School	October 2015	36 000
West Kowloon Law Courts Building	November 2015	49 000
Po Leung Kuk Stanley Ho Sau Nan Primary School	December 2015	6 000
Public library and indoor recreation centre in Area 3, Yuen Long	March 2016	9 000
Sports centre, community hall and district library in Area 14B, Sha Tin	March 2016	11 000
Reprovisioning of Yaumatei Specialist Clinic at Queen Elizabeth Hospital	June 2016	16 000
Redevelopment of Tai Lam Centre for Women	November 2016	25 000
Tung Wah Group of Hospitals Ma Kam Chan Memorial Primary School (in Area 36, Fanling)	July 2017	5 000
A school for social development for girls at Choi Hing Road, Kwun Tong, Kowloon	August 2017	3 000
Hong Kong Children's Hospital	September 2017	5 000
Two special schools at Sung On Street, To Kwa Wan	December 2017	3 000
Relocation of New Territories West Regional Office and Water Resources Education Centre of Water Supplies Department to Tin Shui Wai	February 2018	24 800
Staff quarters for Immigration Department at Heng Lam Street, Kowloon	September 2018	4 300

Name of government buildings/ public facilities	Completion date	Annual power generation (kWh)*
Pun U Association Wah Yan Primary School/North Point Methodist Primary School on Pak Fuk Road	September 2018	7 900
A special school near Hoi Lai Estate, Sham Shui Po	September 2018	5 000
Rank and file quarters for Customs and Excise Department at Yau Yue Wan Village Road, Tseung Kwan O	October 2018	19 700
Reprovisioning of Pak Tin community hall and special child care centre-cum-early education and training centre in Pak Tin Estate redevelopment site, Sham Shui Po	January 2019	4 600
Government Complex in Area 14 (Siu Lun), Tuen Mun	February 2019	6 300
West Kowloon Government Offices	March 2019	11 000
Renovation works for the West Wing of the former Central Government Offices for office use by the Department of Justice and law-related organisations	April 2019	13 000
Redevelopment of Kwun Tong Staff Quarters at Tseung Kwan O Road, Kowloon	April 2019	5 000
A 30-classroom primary school at Site KT2b, Development at Anderson Road, Kwun Tong	May 2019	7 200
A 30-classroom secondary school at Site 1A-2, Kai Tak Development	May 2019	8 300
Sports Centre in Area 24D, Sha Tin	June 2019	11 800
Staff quarters for Correctional Services Department at Tin Wan, Aberdeen	September 2019	600
A special school for students with mild, moderate and severe intellectual disabilities in Area 108, Tung Chung	September 2019	7 200
Construction of Liantang/Heung Yuen Wai Boundary Control Point (BCP) – BCP Buildings and Associated Facilities	October 2019	15 000

* The figure denotes the estimation of annual power generation made during the design stage of the solar panel projects.

- (c) The information on the solar panel projects subsidised by the Environment and Conservation Fund (ECF) in the past 3 years (i.e. 2017-18, 2018-19 and 2019-20) is set out below:

	2017-18	2018-19	2019-20 (As at the end of December 2019)
Number of projects approved	17	3	1 [#]
Amount of subsidies (HK\$)	\$3,132,000	\$619,900	\$50,000

[#] To implement the policy of promoting the use of RE announced by the Chief Executive in the 2018 Policy Address, the Electrical and Mechanical Services Department (EMSD) has launched Solar Harvest since 2019-20 to provide eligible schools and welfare non-governmental organisations with one-stop service by installing small-scale solar systems for them free of charge. This initiative provides an alternative for ECF applicants.

- (d) The Government has set aside \$2 billion since the 2017-18 financial year for installation of small-scale RE facilities in existing government buildings, venues and facilities. 81 projects (including 71 solar energy projects) have been approved so far with a total power generation capacity of about 4 800 kW and an expected annual power output of about 7.65 million kWh (including about 2.15 million kWh from solar energy projects). The EMSD and ArchSD will continue to encourage departments to submit plans for RE projects in accordance with the established practice.
- (e) The number of applications received by the Inland Revenue Department (IRD) for concessionary tax deductions in relation to environmental protection installations and the total deductions granted in the past 3 years are set out in the table below:

Year of assessment	Number of cases in which applications were made for deductions	Total deductions (\$million)
2015/16	9	25.1
2016/17	7	32.2
2017/18	8	8.7

The enhanced tax incentive proposed in the 2018-19 Budget has been implemented since the 2018/19 year of assessment. The IRD does not have the yearly statistics for the 2018/19 year of assessment as the assessment period has not yet ended.

- (f) Solar photovoltaic panels do not have moving parts, and normally can be used for more than 25 years. Although there is no imminent need to handle or recycle large quantities of solar photovoltaic panels in Hong Kong at present, the Government will make reference to international trends and practices, including the technologies for and experiences in recycling solar photovoltaic panels, and will continue to closely

monitor the local usage of solar photovoltaic panels, so as to formulate a suitable solution for Hong Kong in a timely manner.

- End -

CONTROLLING OFFICER'S REPLY**ENB160****(Question Serial No. 1107)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (001) Salaries

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the salaries, allowances, job-related allowances and related expenses to be incurred by the Office of the Secretary for the Environment in 2020-21, please tabulate the following information –

(1) the estimated expenditures on the (i) salaries; (ii) benefits and allowances; (iii) job-related allowances; (iv) Mandatory Provident Fund (MPF) contribution; and (v) other allowances and contribution (please specify) of (a) the Secretary for the Environment (SEN); (b) the Under Secretary for the Environment (USEN); and (c) the Political Assistant (PA) to SEN in this financial year. If the above estimated expenditures of the 3 politically appointed officials are not included in their personal emoluments but are part of the estimated operating expenditure of the Bureau, please provide (d) the estimated expenditure of the Bureau on the items above;

	(i) Salaries	(ii) Benefits and allowances	(iii) Job-related allowances	(iv) MPF contribution	(v) Other allowances and contribution (please specify)
(a) SEN					
(b) USEN					
(c) PA/SEN					
(d) Total estimated expenditure of the Bureau					

(2) the estimated expenditures on the benefits and allowances for (a) SEN; (b) USEN; and (c) PA/SEN in this financial year, including the following 4 categories of expenditures: (i) their medical and dental benefits; (ii) the medical and dental benefits of their spouses; (iii) their leave passage allowances and (iv) the leave passage allowances of their spouses. If the above estimated expenditures of the 3 politically appointed officials are not included in their personal emoluments but are part of the estimated operating expenditure of the Bureau, please provide (d) the estimated expenditure of the Bureau on the items above;

	(i) Medical and dental benefits	(ii) Medical and dental benefits of spouses	(iii) Leave passage allowances	(iv) Leave passage allowances of spouses
(a) SEN				
(b) USEN				
(c) PA/SEN				
(d) Total estimated expenditure of the Bureau				

(3) the estimated expenditures on the (i) government vehicle services and (ii) security arrangements for (a) SEN; (b) USEN; and (c) PA/SEN in this financial year. If the above estimated expenditures of the 3 politically appointed officials are not included in their personal emoluments but are part of the estimated operating expenditure of the Bureau, please provide (d) the estimated expenditure of the Bureau on the items above;

	(i) Cars and chauffeur services	(ii) Security arrangements
(a) SEN		
(b) USEN		
(c) PA/SEN		
(d) Total estimated expenditure of the Bureau		

(4) the estimated expenditures on the job-related allowances for (a) SEN; (b) USEN; and (c) PA/SEN in this financial year, including the following 2 categories of expenditures: (i) official entertainment and (ii) passage for duty visits. If the above estimated expenditures of the 3 politically appointed officials are not included in their personal emoluments but are part of the estimated operating expenditure of the Bureau, please provide (d) the estimated expenditure of the Bureau on the items above; and

	(i) Official entertainment	(ii) Passage for duty visits
(a) SEN		
(b) USEN		
(c) PA/SEN		
(d) Total estimated expenditure of the Bureau		

(5) the estimated expenditures on the end-of-contract gratuity for (a) SEN; (b) USEN; and (c) PA/SEN upon the completion of their term of office, including the following 2 categories of expenditures: (i) end-of-contract gratuity and (ii) related allowances. If the above estimated expenditures of the 3 politically appointed officials are not included in their personal emoluments but are part of the estimated operating expenditure of the Bureau, please provide (d) the estimated expenditure of the Bureau on the items above.

	(i)	(ii)

	End-of-contract gratuity	Related allowances
(a) SEN		
(b) USEN		
(c) PA/SEN		
(d) Total estimated expenditure of the Bureau		

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 2)

Reply:

For budgetary purposes, we have reserved \$4.18 million, \$3.13 million and \$1.46 million respectively for the salaries of the Secretary for the Environment (SEN), the Under Secretary for the Environment (USEN) and the Political Assistant (PA) to SEN, as well as \$18,000 for Mandatory Provident Fund (MPF) contribution for each of them in 2020-21.

In 2020-21, we have earmarked about \$200,000 and \$600,000 respectively for expenditures on official entertainment and overseas duty visits for the Director of Bureau's Office. There is no separate breakdown for staff of different posts. SEN, USEN and PA/SEN and their dependants are entitled to the medical and dental benefits applicable to civil servants and their dependants. As such benefits are not provided by this Bureau, these items are not included in the estimated expenditure of this Bureau. SEN is provided with the free use at his discretion of a car and driver in Hong Kong, while the use of government cars by USEN and PA/SEN is governed by rules and regulations applicable to civil servants at comparable levels. No security arrangements have been provided to the staff of the Director of Bureau's Office, and no provisions have been earmarked for other allowances or end-of-contract gratuity mentioned in the question for SEN, USEN and PA/SEN and their spouses.

- End -

CONTROLLING OFFICER'S REPLY

ENB161

(Question Serial No. 3167)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (-) Not Specified
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Please provide:

1. the estimates of salary, benefits and allowances for the Secretary for the Environment in the coming year; and
2. the estimates of salary, benefits and allowances for each of the other politically appointed officials in the coming year.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 9008)

Reply:

For budgetary purposes, we have reserved \$4.18 million, \$3.13 million and \$1.46 million respectively for the salaries of the Secretary for the Environment (SEN), the Under Secretary for the Environment (USEN) and the Political Assistant (PA) to SEN (PA/SEN), as well as \$18,000 for Mandatory Provident Fund (MPF) contribution for each of them in 2020-21.

SEN, USEN and PA/SEN are eligible for an annual leave of 22 days per annum as well as medical and dental benefits. According to the existing arrangements, any accumulated leave during the term of employment of the politically appointed officials will be forfeited upon leaving office, and cannot be converted into cash. As for the medical and dental benefits, they are on the same basis as those provided to civil servants, and are not provided by this Bureau. As such, these items are not included in the estimated expenditure of this Bureau. SEN is provided with the free use at his discretion of a car and driver in Hong Kong. Other than the provision of subsistence allowance for overseas duty visits comparable to that for civil servants of equivalent rank, we do not have any estimated expenditure on other allowances payable to politically appointed officials in 2020-21.

- End -

CONTROLLING OFFICER'S REPLY**ENB162****(Question Serial No. 0586)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The HKSAR Government will continue to implement the previous relief measure by subsidising eligible non-domestic household accounts for 4 extra months to cover 75% of their monthly billed electricity charges, subject to a cap of \$5,000. In this connection, please set out in tabular form:

1. the amount of electricity subsidy involved and the cumulative expenditure in each measure that the Government has implemented over the years;
2. the numbers of domestic and non-domestic accounts benefitted from each of the measures.

Asked by: Hon CHOW Ho-ding, Holden (LegCo internal reference no.: 8)

Reply:

1&2. The 3 electricity subsidy and relief schemes provided by the Government over the years are the Electricity Charges Subsidy Scheme and Electricity Charges Relief Scheme for Residential Customers, and the Electricity Charges Subsidy Scheme for Non-residential Customers. As at 29 February 2020, the commitments, cumulative expenditures and numbers of accounts benefitted from these Schemes are as follows:

	Commitments (\$ billion)	Cumulative expenditures (\$ billion)	Numbers of accounts benefitted
Electricity Charges Subsidy Scheme ^(Note 1)	27.87	22.16	Over 2.7 million
Electricity Charges Relief Scheme	8.70	1.74	Over 2.7 million
Electricity Charges Subsidy Scheme for Non-residential Customers	5.20	^(Note 2)	About 430 000

Note 1: This Scheme is included under Head 147 “Government Secretariat: Financial Services and the Treasury Bureau (The Treasury Branch)”.

Note 2: As the Electricity Charges Subsidy Scheme for Non-residential Customers is only implemented on 1 March 2020, no expenditure has been incurred as at 29 February 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB163

(Question Serial No. 0453)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (3) Sustainable Development
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Under this programme, one of the responsibilities of the Environment Bureau (ENB) is to promote sustainable development in Hong Kong. In this connection, please inform this Committee of the amount of expenditure used in carrying out the related work in 2019-20 and its effectiveness. Please provide a breakdown of the programmes and the outcomes. What are the work plans and timetable of the ENB for promoting sustainable development in Hong Kong in 2020-21? What is the estimated expenditure?

Asked by: Hon CHUNG Kwok-pan (LegCo internal reference no.: 50)

Reply:

To promote public awareness of sustainable development, the Environment Bureau (ENB) has been assisting the Council for Sustainable Development (SDC) in carrying out various public education and publicity activities. The major programmes in progress are as follows:

(1) Sustainable Development School Outreach Programme

This programme aims at promoting the concepts and practices of sustainable development among secondary school students through organising seminars, workshops and drama performances in schools. In the 2019/20 school year, a total of 86 schools enrolled for 18 seminars, 11 workshops and 81 drama performances, with an estimated participation of 26 000 teachers and students (the actual number will be affected by the COVID-19 epidemic). The expenditure involved in the 2019-20 financial year was about \$740,000.

(2) Sustainable Development School Award Programme

This programme is a biennial school year programme which aims at encouraging schools to participate in and organise sustainable development related activities so that students can put sustainable development concepts into practice in schools and in the community. A total of 60 schools have enrolled for the current round (2018/19 and 2019/20 school years) of the programme, with an estimated participation of 100 000 teachers, students and

members of the community. The expenditure involved in the 2019-20 financial year was about \$35,000.

(3) Sustainable Development Fund

Projects funded by the Sustainable Development Fund (the Fund) aim at enhancing public awareness of the principles of sustainable development and encouraging sustainable practices among members of the public. The ENB is responsible for monitoring the operation of the Fund. A total of 50 applications were received in the thirteenth round of applications for the Fund, among which 7 projects have been approved with a total grant of about \$6.5 million. The revised estimated expenditure in the 2019-20 financial year for the Fund was about \$2.9 million. We will continue to monitor the implementation of the approved projects, and conduct the preparatory work for the fourteenth round of applications for the Fund in the 2020-21 financial year.

The ENB has organised Sustainable Development workshops and Computer-Aided Sustainability Evaluation Tool (CASET) training courses internally within the Government, so as to enhance the awareness of government employees about the concept of sustainable development and their ability in applying the sustainability evaluation tool. About 270 participants participated in 6 workshops and 6 training courses in 2019 and the expenditure involved was \$30,000.

The above education, publicity and training work on sustainable development will continue to be implemented in the 2020-21 financial year. The ENB and the Fund have earmarked \$1.06 million and \$3.4 million respectively for such work and the specific allocations will be subject to the actual needs of each programme.

- End -

CONTROLLING OFFICER'S REPLY**ENB164****(Question Serial No. 1954)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please advise on the following:

1. What were the expenditures on the salaries and allowances payable to the Secretary for the Environment, the Under Secretary for the Environment and the Political Assistant in the past 3 years? What are the estimated expenditures in this regard in the coming year?
2. What is the staffing of the Director of Bureau's Office in the coming year? What is the percentage of the expenditure on salaries in the total estimated expenditure under this Programme?
3. Given that the work of the Director of Bureau's Office includes "the planning, co-ordination and implementation of all arrangements for the Secretary's public, media and community functions", what were the numbers of (a) District Council meetings and other (b) district activities attended by the Secretary in the past financial year? What is the estimated number of District Council meetings to be attended by the Secretary in 2020-21?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 28)

Reply:

The expenditures on the salaries of the Secretary for the Environment (SEN), the Under Secretary for the Environment (USEN) and the Political Assistant to SEN (PA/SEN) in the past 3 years are as follows:

	2017-18	2018-19	2019-20
SEN	\$3.90 million	\$4.06 million	\$4.15 million
USEN	\$2.67 million	\$3.05 million	\$3.12 million
PA/SEN	\$1.25 million	\$1.42 million	\$1.45 million

For budgetary purposes, we have reserved \$4.18 million, \$3.13 million and \$1.46 million respectively for the salaries of SEN, USEN and PA/SEN in 2020-21.

Other than the provision of subsistence allowance for overseas duty visits comparable to that for civil servants of equivalent rank, we do not have any expenditure or estimated expenditure on other allowances payable to politically appointed officials.

In 2020-21, apart from SEN, USEN and PA/SEN, 8 civil servants (1 Administrative Officer Staff Grade C, 1 Senior Executive Officer, 1 Personal Assistant, 1 Senior Personal Secretary, 1 Personal Secretary I, 1 Personal Secretary II, 1 Assistant Clerical Officer and 1 Personal Chauffeur) are also included in the establishment of the Director of Bureau's Office under Programme (1). The estimated expenditure on the salaries (including salaries, allowances, job-related allowances) of these staff members is about \$7.09 million which, together with the salaries of politically appointed officials, represent 72% of the estimate for the entire Programme (1). Moreover, there is 1 Chief Information Officer seconded from the Information Services Department to the Director of Bureau's Office to assist in handling matters related to news and publicity.

SEN has visited 18 District Councils (DCs) in the period between August 2017 and March 2019. During 2019-20, SEN has, as always, reached out extensively to various sectors of the community and exchanged views with them, and has also participated in various district activities and visits. In 2020-21, SEN will attend DC meetings or district activities according to actual circumstances and needs.

- End -

CONTROLLING OFFICER'S REPLY**ENB165****(Question Serial No. 1955)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding external lighting installations, the relevant questions are as follows:

1. Last year, the Administration mentioned that the Working Group on External Lighting (WGEL) was expected to complete the review and submit its recommendations to the Government in the first half of 2020. Please advise on the progress of the review conducted by the WGEL and the details of the follow-up actions of the Government;
2. Please advise on the relevant details, the estimated expenditures and manpower resources to be involved in the Administration's work to continue to promote the Guidelines on Industry Best Practices for External Lighting Installations (the Guidelines) and the Charter on External Lighting (the Charter) in the coming year;
3. How has the Administration promoted the Charter and the Guidelines to target at owners and responsible persons of external lighting installations? What were their reactions? What incentives has the Administration provided to them to follow the Charter and the Guidelines?
4. Is there any improvement to the nuisance and energy wastage problems caused by external lighting upon the implementation of the above measures? What other measures the Administration has in place to improve the energy wastage problem caused by external lighting installations?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 29)

Reply:

The numbers of complaint cases against external lighting received by the Environmental Protection Department (EPD) in the past 3 years are as follows. Over 30% of these cases were related to lighting installations for safety, security and operational purposes, and the remaining ones are related to installations for decorative, promotional and advertising purposes.

Year	2017	2018	2019
Number of complaint cases	355	477	436

Upon receipt of complaints against light nuisance caused by external lighting, the EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and if applicable, advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations and take appropriate measures to minimise the impact of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable.

Since the Charter on External Lighting (the Charter) took effect in April 2016, about 5 000 participants from different sectors have signed the Charter, only a minority of participants withdrew from the Charter. For instance, approximately 5% of the participants withdrew from the Charter in 2019, mostly because their businesses had been closed or relocated. Although the Charter is a voluntary document, most of the participants take their pledge seriously. Our on-site compliance checks conducted in the past 3 years show that nearly 99% of the participants have been able to follow the switch-off requirement.

The Environment Bureau (ENB) has been liaising with the various trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign the Charter and to encourage other business partners to sign the Charter. In addition, the ENB has published a list of participants on the Charter's website and has distributed labels and certificates to participants for display at their properties/shops to raise public awareness of the Charter. We hold award ceremonies from time to time to commend participants who have fulfilled the switch-off pledge.

To review the effectiveness of the Charter, the Working Group on External Lighting (WGEL) appointed by the Government is now engaging consultancies through the ENB to conduct an opinion survey, to measure the changes of illumination level in different districts in Hong Kong, and to look into regulatory arrangements adopted by other cities for external lighting installations. The WGEL plans to report their work progress to the Panel on Environmental Affairs of the Legislative Council and listen to the views of the panel members shortly.

The publicity work for the Charter is undertaken by the existing staff of the ENB. As the staff members concerned are also responsible for other duties, we do not have a separate breakdown for the various duties. In 2020-21, the estimated expenditure for implementing and promoting the Charter is about \$1.7 million, and the estimated expenditure for reviewing the effectiveness of the Charter is about \$1.5 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB166

(Question Serial No. 1956)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

1. How is the implementation of renewable energy (RE) projects in government buildings and facilities currently? Please set out by type of RE the total number of government buildings and facilities in which RE is used, the total electricity generation capacity provided by that type of RE every year and the estimated energy cost savings;
2. What are the RE projects to be implemented in government buildings and facilities in the coming year? Please set out the names of those government buildings/public facilities, the names of the RE installations, the work progress, the annual electricity generation, the estimated energy cost savings and expenditure on the works involved;
3. Did the Administration achieve the target of reducing electricity consumption by 5% in government buildings from 2015-16 to 2019-20? If yes, what were the total expenditure involved and the details? If no, what are the reasons?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 30)

Reply:

(1) and (2)

Currently, the types of renewable energy (RE) adopted in government buildings and facilities include photovoltaic (PV) systems, solar water heating systems, wind power systems, waste-to-energy systems, biogas and hydropower systems, etc.

The numbers of RE projects installed in newly-built government buildings by the Architectural Services Department (ArchSD) and in government facilities by the Environmental Protection Department (EPD), the Water Supplies Department, the Highways Department (HyD), the Drainage Services Department (DSD) and the Civil Engineering and Development Department (CEDD), their annual power generation and estimated energy cost savings in the past 5 years are tabulated below:

Project completion year	Number of projects	Annual power generation (kWh)*	Annual energy cost savings (\$) ^
<u>PV system</u> ⁺			
2015	11	239 700	287,640
2016	8	1 171 000	1,405,200
2017	10	311 900	374,280
2018	10	249 600	299,520
2019	16	471 800	566,160
<u>Solar water heating system</u>			
2015	4	434 000	520,800
2016	5	190 000	228,000
2017	4	580 000	696,000
2018	2	232 000	278,400
2019	6	218 000	261,600
<u>Wind power system</u> ⁺			
2015	3	5 000	6,000
<u>Waste-to-energy system</u>			
2015	1	46 208 000 [#]	48,092,000 [@]
2017	1	18 080 000 ^{&}	21,696,000
2018	1	7 000 000 ^{**}	7,488,000 [@]
<u>Biogas</u>			
2016	1	770 000	924,000
2019	2	1 217 000 ^{^^}	1,460,400
<u>Hydropower system</u>			
2017	1	2 500 000	3,000,000
2018	1	120 000	144,000
2019	1	300 000	360,000

+ Excluding small-scale RE installations such as lighting systems used in open spaces and public parks.

* The figure denotes the estimation of annual power generation made during the design stage of the RE installations.

^ Calculated based on the average net tariff rate of the two power companies in 2019 (i.e. about \$1.2 per kWh of electricity) (unless specified).

The figure is the actual power generation of the T-PARK in 2019, of which about 43.72 million kWh of the power generated was used for operating the T-PARK facilities, and about 2.49 million kWh was exported to the public power grid.

& The “Landfill Gas Utilisation Project” turned landfill gas into synthetic natural gas for utilisation and was not actually generating power. The annual power generation figure listed in the table is the potential power generation of the project in 2019. The projection method made reference to the technical information of other landfill gas power generation projects.

** The figure is the actual power generation of the O-PARK1 in 2019, of which 6.24 million kWh of the power generated was used for operating the O-PARK1 facilities, and about 0.76 million kWh was exported to the public power grid.

@ Projected on the basis of CLP’s Bulk Tariff.

^^ The figure is the power generated by the second combined heat and power generation system of the Sha Tin Sewage Treatment Works from June to December 2019 and by the Food Waste/Sewage Sludge Anaerobic Co-digestion Trial Scheme of the Tai Po Sewage Treatment Works from September to December 2019.

The names of the government buildings and facilities where RE projects were installed by the ArchSD in government buildings and facilities under Category A works projects and by the EPD, the HyD and the CEDD in government facilities, the types of the RE installations, the work progress, the annual power generation, the estimated energy cost savings and the works expenditure involved in 2020 are tabulated below:

Government department	Name of government buildings/facilities+	Work progress	Type of RE installations	Annual power generation (kWh)*	Annual energy cost savings^ (\$)	Expenditure of projects (\$'000)
ArchSD	Kowloon East Regional Headquarters and Operational Base-cum-Ngau Tau Kok Divisional Police Station	Scheduled for completion in 2020	PV system	21 600	25,920	1,579
	Development of a Bathing Beach at Lung Mei, Tai Po	Scheduled for completion in 2020	PV system	1 600	1,920	869
	Improvement of Hoi Bun Road Park and adjacent area	Scheduled for completion in 2020	PV system and solar water heating system	9 200	11,040	857
	Open space in Area 47 and 48, North District	Scheduled for completion in 2020	PV system	3 300	3,960	420
	Sports centre, 5-a-side soccer pitch and public library facilities at Northwest Kowloon Reclamation Site 6, Sham Shui Po	Scheduled for completion in 2020	PV system and solar water heating system	61 000	73,200	3,260
	Reprovisioning of Food and Environmental Hygiene Department Sai Yee Street Environmental Hygiene offices-cum-vehicle depot at Yen Ming Road, West Kowloon Reclamation Area	Scheduled for completed in 2020	PV system and solar water heating system	157 300	188,760	12,428
	Reprovisioning of Tsun Yip Street Playground facilities to Hong Ning Road Park and Ngau Tau Kok Fresh Water Service Reservoir	Scheduled for completion in 2020	PV system	10 100	12,120	2,300
	Avenue Park at Kai Tak	Scheduled for completion in 2020	PV system	1 400	1,680	320
	Sports centre, community hall and football pitches in Area 1, Tai Po	Scheduled for completion in 2020	PV system and solar water heating system	66 200	79,440	2,205

Government department	Name of government buildings/facilities+	Work progress	Type of RE installations	Annual power generation (kWh)*	Annual energy cost savings^ (\$)	Expenditure of projects (\$'000)
EPD	West New Territories Landfill	Scheduled for completion in 2020	Waste-to-energy system	57 960 000	69,552,000	Not applicable#
HyD	Pok Fu Lam Road Pedestrian Subway HS21	Scheduled for completion in 2020	PV system	3 400	4,080	400
CEDD	Tsuen Wan Ferry Pier (West Rail)	Scheduled for completion in 2020	PV system	5 800	6,960	760
	Shek Pik Pier	Scheduled for completion in 2020	PV system	2 900	3,480	510

+ Excluding buildings and facilities installed with small-scale RE projects (such as projects in open spaces and lighting systems in public parks).

* The figure denotes the estimation of annual power generation made during the design stage of the RE installations.

^ Calculated based on the average net tariff rate of the two power companies in 2020 (i.e. about \$1.2 per kWh of electricity).

The project was launched after an agreement had been signed by Castle Peak Power Company Limited and the contractor of the West New Territories Landfill and approval had been given by the EPD. The expenditure of the project includes the construction of landfill gas utilisation facilities and an upgrade of the West New Territories Landfill's facilities to meet the need of the project, which are borne by the two organisations.

The estimation of energy cost savings in parts (1) and (2) of the reply has not taken into account certain factors, such as the possible increase/decrease in size or service hours of the government buildings or public facilities, the adjustments of tariffs, the actual weather conditions (e.g. cloudiness may affect the performance of the PV systems), etc. in the periods. The above limitations should be noted when making any comparison.

In addition, the Government has set aside a total of \$2 billion since the financial year 2017-18 to set up small-scale RE systems in existing government buildings, venues and facilities. Up to now, 81 projects have been approved with an estimated annual power output of about 7.65 million kWh. The Electrical and Mechanical Services Department and the ArchSD will continue to invite departments to submit plans for their RE projects according to the established procedure.

(3)

The Government has set a target to reduce electricity consumption in government buildings by 5% in the 5 years from 2015-16 to 2019-20, using comparable operating conditions in 2013-14 as the base. In this connection, we have completed energy audits for about 340 major government buildings and spent some \$900 million to implement the energy saving projects, including the retrofitting of energy-efficient air-conditioning and management systems, energy-efficient lighting and control systems, as well as light emitting diode lighting and floodlights, etc. We have already achieved the target in 2018-19 and are confident that the final saving will surpass the 5% target.

- End -

CONTROLLING OFFICER'S REPLY**ENB167****(Question Serial No. 1300)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the problem of light pollution, will the Administration advise on the following:

1. What were the numbers of complaint cases relating to light pollution received by the Administration in the past 3 years? How did the Administration follow up upon receipt of the complaints? Out of these complaint cases, how many of them have been resolved?
2. How many stakeholders have participated in the Charter on External Lighting so far? What is the Administration's estimated expenditure for promoting the Charter on External Lighting in 2020-21?
3. What is the progress of the review of the effectiveness of the Charter on External Lighting conducted by the Working Group on External Lighting?

Asked by: Hon KWOK Wai-keung (LegCo internal reference no.: 25)

Reply:

The numbers of complaint cases against external lighting received by the Environmental Protection Department (EPD) in the past 3 years are as follows. Over 30% of these cases were related to lighting installations for safety, security and operational purposes, and the remaining ones are related to installations for decorative, promotional and advertising purposes.

Year	2017	2018	2019
Number of complaint cases	355	477	436

Upon receipt of complaints against light nuisance caused by external lighting, the EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and if applicable, advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations and take appropriate measures to minimise the impact of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable.

Since the Charter on External Lighting (the Charter) took effect in April 2016, about 5 000 participants from different sectors have signed the Charter, only a minority of participants withdrew from the Charter. For instance, approximately 5% of the participants withdrew from the Charter in 2019, mostly because their businesses had been closed or relocated. Although the Charter is a voluntary document, most of the participants take their pledge seriously. Our on-site compliance checks conducted in the past 3 years show that nearly 99% of the participants have been able to follow the switch-off requirement.

The Environment Bureau (ENB) has been liaising with the various trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign the Charter and to encourage other business partners to sign the Charter. In addition, the ENB has published a list of participants on the Charter's website and has distributed labels and certificates to participants for display at their properties/shops to raise public awareness of the Charter. We hold award ceremonies from time to time to commend participants who have fulfilled the switch-off pledge.

To review the effectiveness of the Charter, the Working Group on External Lighting (WGEL) appointed by the Government is now engaging consultancies through the ENB to conduct an opinion survey, to measure the changes of illumination level in different districts in Hong Kong, and to look into regulatory arrangements adopted by other cities for external lighting installations. The WGEL plans to report their work progress to the Panel on Environmental Affairs of the Legislative Council and listen to the views of the panel members shortly.

The publicity work for the Charter is undertaken by the existing staff of the ENB. As the staff members concerned are also responsible for other duties, we do not have a separate breakdown for the various duties. In 2020-21, the estimated expenditure for implementing and promoting the Charter is about \$1.7 million, and the estimated expenditure for reviewing the effectiveness of the Charter is about \$1.5 million.

- End -

CONTROLLING OFFICER'S REPLY**ENB168****(Question Serial No. 2650)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Government has previously committed to reserving \$1 billion for application by government bureaux and departments to reinforce its drive to install renewable energy installations at government buildings, venues and community facilities, and the total annual electricity generated was estimated to be over 6 million kilowatt-hours upon completion of all the renewable energy projects. In this connection, will the Administration advise on the following:

- (1) What are the number of government bureaux or departments that have applied for the funding and the number of projects involved?
- (2) What is the total amount of expenditure involved in the projects that have been approved for funding?
- (3) What were the number of projects completed with the approved funding and their total power output in 2019?
- (4) Please set out the details of all the approved projects in the table below:

	Project 1	Project 2 (and so on)
Government bureau or department		
Location of installing renewable energy system		
System installed capacity		
Amount of expenditure approved		
Date of commencement of installation (year, month)		
Date of commissioning (year, month)		
Annual power generation from commissioning to end of 2019 if the project is completed		
Estimated payback period		

Asked by: Hon LEUNG Kenneth (LegCo internal reference no.: 214)

Reply:

The Government has set aside a total of \$2 billion since the 2017-18 financial year for installation of small-scale renewable energy (RE) systems at existing government buildings, venues and facilities. A total of 81 projects have been coordinated by the Electrical and Mechanical Services Department (EMSD) or approved by the Architectural Services Department (ArchSD) so far, with an expected annual power output of about 7.65 million kWh and a total capital expenditure of about \$490 million. As the design and installation works for most of these projects are in progress, there is no record of the actual power output in 2019.

Details of the projects coordinated by the EMSD in the 2017-18 and 2018-19 financial years are as follows:

Project	Policy bureau or department	Location of installing RE system	System installed capacity (kW)	Amount of reserved funding approved (\$m)	Date of commencement of installation	Date of commissioning
Projects approved in the 2017-18 financial year						
1. Installation of an additional combined heat and power generation system and re-installation of an electricity distribution network at Tai Po Sewage Treatment Works	Drainage Services Department (DSD)	Tai Po Sewage Treatment Works	635	22.1	2019-20	2020-21 (estimated)
2. Installation of an additional mini-turbine at Yuen Long Sewage Treatment Works	DSD	Yuen Long Sewage Treatment Works	65	6.5	2018-19	2019-20 (estimated)
3. Provision of a grid-connected solar energy system at Stonecutters Island Sewage Treatment Works	DSD	Stonecutters Island Sewage Treatment Works	100	10.0	2018-19	2019-20 to 2021-22 (estimated)

Project	Policy bureau or department	Location of installing RE system	System installed capacity (kW)	Amount of reserved funding approved (\$m)	Date of commencement of installation	Date of commissioning
4.Provision of solar energy systems at some rainwater and sewage treatment facilities	DSD	Rainwater and sewage treatment facilities under the DSD	300	19.6	2019-20	2020-21 to 2021-22 (estimated)
Projects approved in the 2018-19 financial year						
1.Supply and installation of floating photovoltaic system at Tai Lam Chung Reservoir	Water Supplies Department	Tai Lam Chung Reservoir	100	7.0	2019-20	2020-21 (estimated)
2.Provision of feedstock treatment facilities for co-digestion of food waste and sewage sludge at Shatin Sewage Treatment Works	DSD	Shatin Sewage Treatment Works	84	30.0	2020-21	2022-23 (estimated)
3.Upgrading of existing anaerobic sludge digestion and associated facilities at Shatin Sewage Treatment Works for enhancing biogas production	DSD	Shatin Sewage Treatment Works	76	30.0	2020-21	2022-23 (estimated)

Project	Policy bureau or department	Location of installing RE system	System installed capacity (kW)	Amount of reserved funding approved (\$m)	Date of commencement of installation	Date of commissioning
4. Upgrading of sludge dewatering and pumping systems at Shatin Sewage Treatment Works for enhancing renewable energy recovery from dewatered sludge	DSD	Shatin Sewage Treatment Works	34	28.0	2019-20	2020-21 to 2022-23 (estimated)
5. Upgrading of biogas utilisation facilities at Shatin Sewage Treatment Works for the increase in biogas production	DSD	Shatin Sewage Treatment Works	1 400	25.0	2020-21	2021-22 (estimated)
6. Upgrading of sludge dewatering facilities at Tai Po Sewage Treatment Works for dewatering of digestate of food waste and sewage sludge for enhancing renewable energy recovery from biomass	DSD	Tai Po Sewage Treatment Works	57	20.0	2020-21	2021-22 (estimated)

Project	Policy bureau or department	Location of installing RE system	System installed capacity (kW)	Amount of reserved funding approved (\$m)	Date of commencement of installation	Date of commissioning
7.Provision of a second unit of hydro turbine at Stonecutters Island Sewage Treatment Works	DSD	Stonecutters Island Sewage Treatment Works	23	10.0	2019-20	2021-22 (estimated)
8.Provision of flexible thin film solar panels at Stonecutters Island Sewage Treatment Works	DSD	Stonecutters Island Sewage Treatment Works	548	20.0	2020-21	2022-23 (estimated)
9.Provision of a Photovoltaic System at the Primary Sedimentation Tanks of Tai Po Sewage Treatment Works	DSD	Tai Po Sewage Treatment Works	150	9.0	2021-22	2023-24 (estimated)

In the 2019-20 financial year, the EMSD coordinated 6 projects with funding of about \$79 million reserved, including provision of RE installations at sewage treatment works, pumping stations and pedestrian access. The relevant departments are conducting technical assessment to ascertain the feasibility, costs, installed capacities and expected annual power generation, etc. of individual projects.

In addition, the ArchSD approved 62 minor projects in the 2018-19 and 2019-20 financial years for installation of small-scale solar lighting or photovoltaic (PV) RE systems at existing buildings or facilities such as government schools, government offices and leisure, cultural and recreation venues.

The EMSD and ArchSD will continue to invite departments to submit plans for their RE projects in accordance with the established procedure.

As regards the estimated payback period, we would like to point out that payback period is not the only criterion for evaluating the effectiveness of RE systems. Some unquantifiable values (such as the reduced reliance on the use of fossil fuels for power generation and less pollution caused to the environment, and the demonstration effects of the systems to the

public, etc.) have not been taken into account. Therefore, the duration of the payback period may not fully and accurately reflect the actual effectiveness of the systems. Moreover, the actual power generated by RE systems such as solar PV systems may vary with the weather and duration of sunlight in the district, as well as the specific installation details such as the tilting angle of PV panels. As a result, there will be variations in estimation of the payback period.

- End -

CONTROLLING OFFICER'S REPLY

ENB169

(Question Serial No. 0198)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

From 2009 to 2012, the Environment and Conservation Fund provided funding support to various energy-cum-carbon audit projects, energy efficiency projects and energy conservation projects for non-governmental organisations. However, these projects have ended and there was no continuation. Will the Administration consider:

1. setting up an "Environmental Protection Installation Loan Guarantee Fund" to support enterprises in installing energy efficient and more environmental friendly equipment, and to continue to promote carbon audits?
2. following the existing tax deduction measures for research and development expenses by providing triple tax deduction concession to enterprises which have newly installed energy efficient and more environmental friendly equipment, so as to encourage enterprises to switch to using such equipment? If yes, please provide the details, implementation timetable and resources to be allocated.

Asked by: Hon LO Wai-kwok (LegCo internal reference no.: 3)

Reply:

The Government has been adopting various measures to encourage the private sector to conserve energy and reduce carbon emissions.

Regarding tax measures, capital expenditure on environmental protection machinery and equipment has been fully deductible in the first year of assessment since 2008-09. Starting from 2018-19, capital expenditure incurred in purchasing building energy efficiency installations that outperform the statutory energy efficiency requirements and achieve the relevant ratings under BEAM Plus, as well as renewable energy installations, can enjoy further tax incentive with a full deduction in the first year of purchase instead of 5 years as previously stipulated.

In addition, the two power companies have each set up an energy efficiency fund to support the carrying out of retrofitting and retro-commissioning, as well as the implementation of building-based smart/IT technologies, etc. in private buildings (including commercial and industrial buildings) to enhance energy efficiency. The power companies have also

provided subsidies to commercial and industrial customers to replace or upgrade their electrical equipment to more energy-efficient models.

Regarding carbon audits, the Government has provided technical guidelines on carbon audit to the private sector, and launched a carbon footprint repository in December 2014 to facilitate disclosure of carbon audit findings by listed companies, and sharing of their carbon management experience and practices. So far, over 80 listed companies have disclosed their carbon audit findings through the carbon footprint repository. The Government has also co-organised a number of Carbon Audit Seminars for Listed Companies with the Hong Kong Exchanges and Clearing Limited to share good practices in carbon management, and is planning to organise another Carbon Audit Seminar at the coming Eco Expo Asia.

- End -

CONTROLLING OFFICER'S REPLY

ENB170

(Question Serial No. 0540)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Regarding “continuing to grant and oversee the distribution of electricity charges relief to eligible residential electricity accounts to alleviate the increase in electricity charges during the transitional period in moving to a lower carbon future”, the Government has been granting a monthly relief of \$50 to each residential electricity account for a period of 60 months since 2019. Starting from January 2020, the Government will also inject a subsidy of \$2,000 into each residential electricity account in phases:

1. What are the staff establishment and expenditure of the Environment Bureau for monitoring the two power companies at present?
2. How has the government electricity charges subsidy been used from 2019 up till now? For instance, how many accounts were not required to pay electricity charges due to the government subsidy? And how many accounts have monthly electricity charges higher than the subsidy amount?
3. On “alleviating the increase in electricity charges during the transitional period in moving to a lower carbon future”, apart from providing the electricity charges relief, does the Government have other measures for alleviating the increase in electricity charges?
4. As the “floating liquefied natural gas receiving terminal” jointly constructed by the two power companies is expected to be completed this year, has the Environment Bureau assessed the impact of this facility on the electricity tariff?

Asked by: Hon WU Chi-wai (LegCo internal reference no.: 18)

Reply:

1. As the work regarding the monitoring of the two power companies is part of the duties of the Financial Monitoring Division (FMD) of the Environment Bureau (ENB) and the Electricity Team of the Electrical and Mechanical Services Department (EMSD), we do not have a separate breakdown of the manpower and actual expenditure for such

work. Since the posts of the Electricity Team are created under Head 42 – Electrical and Mechanical Services Department, the staff concerned are not under the establishment of the ENB. The existing staff establishment of FMD of this Bureau is as follows:

Rank	Number
Assistant Director of Accounting Services	1
Senior Treasury Accountant	2
Treasury Accountant	2
Accounting Officer I	2
Personal Secretary I	1
Personal Secretary II	1
Total	9

2. Benefitted from the Electricity Charges Relief Scheme, in 2019, about 4% and 7% of the residential electricity bills of the CLP Power Hong Kong Limited (CLP) and The Hongkong Electric Company, Limited (HKE) were zero dollar respectively. After the implementation of the Electricity Charges Subsidy Scheme in 2020, about 37% and 47% of their residential electricity bills were zero dollar in the first two months of 2020 respectively.
3. The Government has been achieving the objective of stabilising electricity tariff through the various mechanisms under the Scheme of Control Agreements. In the long run, we hope the public will learn to change their electricity consumption habits during the transitional period, particularly by means of the energy-saving measures implemented by the two power companies and with the use of smart grid which provides instant power consumption information to facilitate energy-saving, thereby reducing their spending on electricity.
4. The two power companies anticipate that the offshore liquefied natural gas terminal project will be completed by the end of 2021. It is expected that the highest tariff impact of the project's capital investment on the two power companies during the 2018-23 Development Plan period will be about 1%-2%. However, at the same time, the terminal can increase the choices and bargaining power of the two companies in procuring natural gas, thus helping to lower the cost of electricity generation and electricity tariff.

- End -

CONTROLLING OFFICER'S REPLY

ENB171

(Question Serial No. 3844)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Under this Programme, the Government stated that provision for 2020-21 is \$178.7 million (22.1%) higher than the revised estimate for 2019-20. This is mainly due to increase in expenditure for tackling the increasing nuisance of wild pigs, monkeys and other wildlife, the management and promotion of country parks, cash flow requirement for a one-off allowance to fishermen affected by new fisheries management strategy in marine parks in 2020-21 and a full-year provision for vacancies filled in 2019-20. There will be an increase of 53 posts in 2020-21. Would the Government inform this Committee of the following:

- (a) What was the number of cases relating to wild pig nuisance in 2019-20? What was the number of cases relating to wild pig nuisance in 2018-19? Please set out the respective numbers of cases relating to wild pig nuisance in 2019-20 and 2018-19, with a breakdown by District Council districts.
- (b) What was the number of cases relating to wild monkey nuisance in 2019-20? What was the number of cases relating to wild monkey nuisance in 2018-19? Please set out the respective numbers of cases relating to wild monkey nuisance in 2019-20 and 2018-19, with a breakdown by District Council districts.
- (c) What were the staff establishment, salary expenditure and recurrent expenditure involved in tackling cases relating to wild pig and wild monkey nuisances in 2019-20? What are the staff establishment, estimated salary expenditure and operational expenses involved in tackling cases relating to wild pig and wild monkey nuisances in 2020-21?
- (d) What are the respective post titles, responsibilities and estimated salary expenditure of the 53 new posts in 2020-21?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 141)

Reply:

- (a) The number of cases about wild pig sighting or nuisance received by the Agriculture, Fisheries and Conservation Department (AFCD) over the past 2 years is tabulated by district as follows:

District	Year / Number of cases about wild pig sighting or nuisance	
	2018-19	2019-20 (as of January 2020)
Central and Western	102	97
Wan Chai	93	65
Eastern	60	45
Southern	249	190
Yau Tsim Mong	0	0
Sham Shui Po	4	22
Kowloon City	12	10
Wong Tai Sin	25	15
Kwun Tong	12	17
Kwai Tsing	18	27
Tsuen Wan	32	66
Tuen Mun	51	45
Yuen Long	20	23
North	31	20
Tai Po	75	68
Sha Tin	87	97
Sai Kung	127	137
Islands	10	6
Total	1 008	950

- (b) The number of cases about monkey nuisance received by AFCD over the past 2 years is tabulated by district as follows:

District	Year / Number of monkey nuisance cases	
	2018-19	2019-20 (as of January 2020)
Kwai Tsing	58	24
Tai Po	23	20
Yuen Long	5	20
Tuen Mun	38	20
North	1	0
Sai Kung	13	3
Sha Tin	167	116
Tsuen Wan	15	8
Kowloon City	5	0
Sham Shui Po	43	41
Wong Tai Sin	37	26
Kwun Tong	4	0
Total	409	278

Note: There were no cases involving monkey sighting or nuisance on Hong Kong Island.

- (c) In 2019-20, AFCD's dedicated team for the management of wild pigs comprised 26 members. The expenditure on salaries (revised estimate) in this respect was about \$4.9 million and the total expenditure (revised estimate) was about \$13.8 million. In 2020-21, the number of AFCD's staff involved in the management of wild pigs will be increased to 31. The estimated expenditure on salaries is about \$7.2 million and the estimated total expenditure is about \$23.7 million.

In 2019-20, AFCD's team for the management of monkey nuisance comprised 12 members. The expenditure on salaries (revised estimate) in this respect was \$3.2 million and the total expenditure (revised estimate) was about \$5.2 million. In 2020-21, the number of AFCD's staff involved in the management of monkeys will be increased to 17. The estimated expenditure on salaries is about \$4.7 million and the estimated total expenditure is about \$9.2 million.

In 2020-21, AFCD will create 27 additional civil service posts to strengthen wildlife management as a whole (see (d) below for details).

- (d) AFCD will create 53 additional civil service posts in 2020-21 and the requested information is tabulated as follows:

Area of Work	Rank	Number of posts	Annual salary provision in 2020-21 (\$ million)
To plan and manage the development of the Long Valley Nature Park and the visitor centre located in the Kwu Tung North and Fanling North New Development Areas	Senior Forestry Officer	1	9.5
	Forestry Officer	3	
	Senior Field Officer	1	
	Field Officer I	3	
	Field Officer II	4	
	Senior Field Assistant	2	
	Field Assistant	2	
	Executive Officer II	1	
	Assistant Clerical Officer	1	
To provide professional inputs from the conservation perspective in the planning process of the artificial islands in the Central Waters	Fisheries Officer	1	1.0
	Fisheries Technical Officer II	1	

Area of Work	Rank	Number of posts	Annual salary provision in 2020-21 (\$ million)
To enhance the management and operation of marine parks and implement new fisheries management strategies in marine parks	Fisheries Supervisor I	1	1.5
	Fisheries Supervisor II	1	
	Field Assistant	2	
To implement education and publicity programmes of the Ting Kok Coastal Conservation Plan	Fisheries Officer	1	1.0
	Fisheries Technical Officer II	1	
To strengthen the handling of nuisance caused by wild pigs, monkeys and other wild animals	Field Officer I	2	8.8
	Field Officer II	6	
	Senior Field Assistant	9	
	Field Assistant	10	
Total		53	21.8

- End -

CONTROLLING OFFICER'S REPLY

ENB172

(Question Serial No. 3892)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Would the Government advise of the respective numbers of plastic refuse bags used by the Government and contractors in managing country parks and the related expenditure in 2019-20, as well as the respective estimated numbers of refuse bags to be used and the related expenditure in 2020-21? What was the volume of leaf and tree litter collected within country parks and disposed of at landfills over the past year?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 194)

Reply:

The refuse collected in country parks is mostly dirty wastes such as tissues, containers or packaging bags containing leftovers or drink, and food residue, etc. The Agriculture, Fisheries and Conservation Department (AFCD) or its contractors normally lay litter containers with plastic refuse bags to facilitate the collection and transportation of wastes to the appropriate location for handling.

In managing country parks, the number of plastic refuse bags used by AFCD in 2019-20 was about 115 000, while the number of plastic refuse bags used by AFCD's contractors was about 245 000. It is estimated that the number of plastic refuse bags used by AFCD and its contractors for country park management in 2020-21 will be similar to that of 2019-20. AFCD's estimated expenditure on plastic refuse bags in both 2019-20 and 2020-21 are about \$130,000. Since the contractors are responsible for the provision of plastic refuse bags for their litter collection and related duties in country parks, AFCD does not have any information on their cost of refuse bags.

Most of the yard wastes (e.g. tree branches, leaves, etc.) generated from vegetation maintenance in country parks are stockpiled in nearby natural habitats to provide niches for wildlife. When they decompose, nutrients will be released back to the nature. Some tree

logs are recycled to make furniture or decorative materials for the recreational facilities in country parks such as animated features, waymarks and benches, etc., and some are used for construction of hiking trails. In 2019, about 83 tonnes of yard wastes which have been infested with pests/diseases or mixed with invasive species were unavoidably disposed of at landfill sites because they are not suitable to be stockpiled on site in country parks for natural decomposition.

- End -

CONTROLLING OFFICER'S REPLY**ENB173****(Question Serial No. 3648)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the issue of local wild pigs over the past 3 years, would the Government inform this Committee of the following:

- (a) What were the numbers of complaints about the sighting or nuisance of wild pigs each year?
- (b) Was there any report of damages to property or injury to people caused by wild pigs?
- (c) What were the numbers and expenditures involved in the neutering treatment under the contraception and relocation pilot programme?
- (d) What were the numbers of prosecutions instituted against feeding of wild pigs by members of the public?
- (e) What measures are currently put in place to control wild pigs?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 173)

Reply:

- (a) and (b) The number of complaints and injury reports related to wild pigs received by the Agriculture, Fisheries and Conservation Department (AFCD) over the past 3 years is tabulated as follows:

Year	Number of reports on wild pig sighting or nuisance (number of injury reports)
2017-18	787 (4)
2018-19	1 008 (9)
2019-20	950 (6)

(as of January 2020)	
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AFCD does not have records of public facilities damaged by wild pigs.

- (c) AFCD has tried implementing the pilot Capture and Contraception/Relocation Programme (CCRP) to handle nuisance caused by wild pigs in urban areas since late 2017. To enable a more effective control of the number of wild pigs causing nuisance to urban areas, AFCD has regularised CCRP in phases since 2019-20 to vaccinate or sterilise wild pigs caught or rescued where the condition permits. Figures related to the pilot CCRP over the past 3 years are tabulated as follows:

Year/ number of wild pigs (heads)	Captured	Administered with contraceptive vaccine	Surgically sterilised	Relocated to remote countryside
2017-18 (from October 2017)	51	14	0	40
2018-19	115	46	18	81
2019-20* (as of February 2020)	261	54	38	202

* The figures include the number of wild pigs saved in rescue operations.

AFCD's expenditure on the pilot CCRP over the past 3 years is tabulated as follows:

Year	Expenditure (\$ million)
2017-18	3.8
2018-19	6.2
2019-20 (revised estimate)	6.8

- (d) Kam Shan, Lion Rock and Shing Mun Country Parks, part of Tai Mo Shan Country Park, Tai Po Kau Nature Reserve, a section of Tai Po Road along Caldecott Road and Piper's Hill section of Tai Po Road are specified places under the Wild Animals Protection Ordinance (Cap. 170) at which the feeding of any wild animals is prohibited (feeding ban area). The number of prosecutions against illegal feeding of wild animals (including wild pigs) by members of the public over the past 3 years is tabulated as follows:

Year	2017-18	2018-19	2019-20 (as of February 2020)
Number of prosecutions against illegal feeding of wild animals (including wild pigs)	40	32	26

- (e) Currently, AFCD adopts a multi-pronged approach to control wild pig nuisance to residential areas, including managing wild pig nuisance, reducing food attraction for wild pigs, educating the public to stop feeding wild animals as well

as enhancing public awareness towards wild pigs. AFCD has also set up an advisory group comprising experts from various fields to advise on the management of wild pigs. In 2020-21, AFCD will continue to implement the said measures. Apart from conducting contraception/sterilisation for wild pigs and relocating them to the remote countryside areas to alleviate the nuisance, AFCD will also step up educational activities to promote the message of “stop feeding wild pigs” in different ways. In addition, AFCD will continue to explore how to improve the design of the refuse collection facilities so as to reduce food attraction for wild pigs in urban areas.

- End -

CONTROLLING OFFICER'S REPLY

ENB174

(Question Serial No. 4099)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Please advise of the expenditure of the Agriculture, Fisheries and Conservation Department (AFCD) involved in the promotion of public education and publicity on nature conservation over the past 5 years, as well as the estimated expenditure in this respect in 2020-21.
- (b) Please advise of AFCD's expenditure involved in the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserve over the past 5 years, as well as the estimated expenditure in this respect in 2020-21?
- (c) Over the past 5 years, what was the expenditure incurred by AFCD on collecting refuse in country parks? What was the total volume of refuse collected by AFCD? What was the number of prosecutions initiated by AFCD against littering in country parks? What is AFCD's estimated expenditure on education and publicity on protection of country parks in 2020-21 and its details?

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 59)

Reply:

- (a) The expenditure of the Agriculture, Fisheries and Conservation Department (AFCD) involved in the promotion of public education and publicity on nature conservation over the past 5 years, as well as the estimated expenditure in this respect in 2020-21 are tabulated as follows:

Year	Expenditure (\$ million)
2015-16	41
2016-17	50
2017-18	68
2018-19	68
2019-20 (revised estimate)	70
2020-21 (estimate)	77

- (b) AFCD's expenditure involved in the management, maintenance and improvement of facilities in country parks, special areas, marine parks and marine reserve over the past 5 years, as well as the estimated expenditure in this respect in 2020-21 are tabulated as follows:

Year	Expenditure (\$ million)
2015-16	178
2016-17	194
2017-18	185
2018-19	207
2019-20 (revised estimate)	242
2020-21 (estimate)	270

- (c) AFCD's expenditure on keeping country parks clean and the volume of refuse collected in country parks over the past 5 years are tabulated as follows:

Year	Expenditure (\$ million)	Volume of refuse collected in country parks (tonne)
2015-16	54	3 600
2016-17	48	3 500
2017-18	48	3 200
2018-19	52	3 000
2019-20 (revised estimate)	60	2 600

The number of prosecutions instituted by AFCD against littering under the Country Parks and Special Areas Regulations (Cap. 208A) over the past 5 years is tabulated as follows:

Year	Number of prosecutions
2015	135
2016	61
2017	62
2018	165
2019	92

In 2020-21, AFCD has earmarked \$26 million for conducting a series of education and publicity programmes on protection and promotion of country parks for students and the general public. These include school visits, eco-tours, guided tours at visitor centres and education centres, thematic exhibitions, educational workshops, trail maintenance workshops, tree planting days, public lectures and volunteer scheme.

- End -

CONTROLLING OFFICER'S REPLY**ENB175****(Question Serial No. 4133)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

- (a) Please set out the numbers of ordinary litter containers in country parks over the past 3 years (2017-2019).

Country Park	2017	2018	2019
Shing Mun			
Kam Shan			
Lion Rock			
Aberdeen			
Tai Tam			
Sai Kung East			
Sai Kung West			
Plover Cove			
Lantau South			
Lantau North			
Pat Sin Leng			
Tai Lam			
Tai Mo Shan			
Lam Tsuen			
Ma On Shan			
Kiu Tsui			
Plover Cove (Extension)			
Shek O			
Pok Fu Lam			
Tai Tam (Quarry Bay Extension)			
Clear Water Bay			
Sai Kung West (Wan Tsai Extension)			
Lung Fu Shan			
Lantau North (Extension)			

- (b) Please set out the numbers of plastic recycling bins in country parks over the past 3 years (2017-2019).

Country Park	2017	2018	2019
Shing Mun			
Kam Shan			
Lion Rock			
Aberdeen			
Tai Tam			
Sai Kung East			
Sai Kung West			
Plover Cove			
Lantau South			
Lantau North			
Pat Sin Leng			
Tai Lam			
Tai Mo Shan			
Lam Tsuen			
Ma On Shan			
Kiu Tsui			
Plover Cove (Extension)			
Shek O			
Pok Fu Lam			
Tai Tam (Quarry Bay Extension)			
Clear Water Bay			
Sai Kung West (Wan Tsai Extension)			
Lung Fu Shan			
Lantau North (Extension)			

- (c) Please set out the numbers of waste paper recycling bins in country parks over the past 3 years (2017-2019).

Country Park	2017	2018	2019
Shing Mun			
Kam Shan			
Lion Rock			
Aberdeen			
Tai Tam			
Sai Kung East			
Sai Kung West			
Plover Cove			
Lantau South			
Lantau North			
Pat Sin Leng			
Tai Lam			
Tai Mo Shan			
Lam Tsuen			
Ma On Shan			

Country Park	2017	2018	2019
Kiu Tsui			
Plover Cover (Extension)			
Shek O			
Pok Fu Lam			
Tai Tam (Quarry Bay Extension)			
Clear Water Bay			
Sai Kung West (Wan Tsai Extension)			
Lung Fu Shan			
Lantau North (Extension)			

- (d) Please set out the numbers of metal recycling bins in country parks over the past 3 years (2017-2019).

Country Park	2017	2018	2019
Shing Mun			
Kam Shan			
Lion Rock			
Aberdeen			
Tai Tam			
Sai Kung East			
Sai Kung West			
Plover Cove			
Lantau South			
Lantau North			
Pat Sin Leng			
Tai Lam			
Tai Mo Shan			
Lam Tsuen			
Ma On Shan			
Kiu Tsui			
Plover Cove (Extension)			
Shek O			
Pok Fu Lam			
Tai Tam (Quarry Bay Extension)			
Clear Water Bay			
Sai Kung West (Wan Tsai Extension)			
Lung Fu Shan			
Lantau North (Extension)			

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 96)

Reply:

- (a) to (d) The Agriculture, Fisheries and Conservation Department (AFCD) places ordinary litter containers and combined waste recycling bins at barbecue sites, campsites, picnic sites, etc. in country parks. The combined waste recycling bins have compartments for collecting plastic bottles, aluminium cans and ordinary litter. Among the refuse generated from activities carried out in country parks such as hiking, barbecues and camping, there is rarely waste paper suitable for recycling and thus no recycling bin has been placed for paper in country parks.

The number of waste collection facilities (including ordinary litter containers and combined waste recycling bins) placed in the 6 country park districts under AFCD's management over the past 3 years is tabulated as follows:

Country park districts¹ / Year	2017	2018	2019
Central New Territories ²	421	334	270
North New Territories ³	487	445	373
West New Territories ⁴	254	242	242
Lantau ⁵	274	192	176
Sai Kung ⁶	557	496	449
Hong Kong ⁷	176	163	154
Total	2 169	1 872	1 664

The number of combined waste recycling bins placed in the 6 country park districts under AFCD's management for collection of plastic bottles and aluminium cans over the past 3 years is tabulated as follows:

Country park districts¹ / Year	2017	2018	2019
Central New Territories ²	309	256	203
North New Territories ³	202	198	189
West New Territories ⁴	183	175	176
Lantau ⁵	73	64	67
Sai Kung ⁶	433	393	373
Hong Kong ⁷	173	160	151
Total	1 373	1 246	1 159

Note:

1. AFCD keeps records and statistics on the number of ordinary litter containers and combined waste recycling bins in the 6 country park districts under its management.
2. The Central New Territories District consists of the Kam Shan Country Park, the Lion Rock Country Park, the Ma On Shan Country Park, the Shing Mun Country Park, the Tai Mo Shan Country Park and the Clear Water Bay Country Park.

3. The North New Territories District consists of the Lam Tsuen Country Park, the Pat Sin Leng Country Park, the Plover Cove Country Park, the Plover Cove (Extension) Country Park, the Yan Chau Tong Special Area, the Ma Shi Chau Special Area, the Lai Chi Wo Special Area as well as the Tai Po Kau Nature Reserve.
4. The West New Territories District consists of the Tai Lam Country Park.
5. The Lantau District consists of the Lantau North Country Park, the Lantau North (Extension) Country Park and the Lantau South Country Park.
6. The Sai Kung District consists of the Kiu Tsui Country Park, the Sai Kung East Country Park, the Sai Kung West Country Park, the Sai Kung West (Wan Tsai Extension) Country Park, the Ninepin Group Special Area, the Sharp Island Special Area, the High Island Special Area, the Tsiu Hang Special Area and the Ung Kong Group Special Area.
7. The Hong Kong District consists of the Aberdeen Country Park, the Lung Fu Shan Country Park, the Pok Fu Lam Country Park, the Shek O Country Park, the Tai Tam Country Park, the Tai Tam (Quarry Bay Extension) Country Park as well as the Tung Lung Fort Special Area.

- End -

CONTROLLING OFFICER'S REPLY**ENB176****(Question Serial No. 4134)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out the number of hill fires that took place in country parks each month over the past 5 years (2015-2019).

	2015	2016	2017	2018	2019
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

Please set out the area of land damaged by hill fires and number of trees destroyed in country parks over the past 5 years (2015-2019).

	2015	2016	2017	2018	2019
Land area of country parks damaged by hill fires (hectares)					
Number of trees destroyed by hill fires					

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 97)

Reply:

The number of hill fires that took place in country parks from 2015 to 2019 is tabulated as follows:

Month/Year	2015	2016	2017	2018	2019
January	4	2	4	1	1
February	0	2	5	1	1
March	0	1	3	6	0
April	4	1	8	14	2
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	1
October	3	4	3	0	3
November	2	0	1	0	6
December	0	3	5	1	3
Total	13	13	29	23	17

The land area of country parks and number of trees affected by hill fires from 2015 to 2019 are tabulated as follows:

Item/Year	2015	2016	2017	2018	2019
Land area of country parks affected by hill fires (hectares)	90.8	210.2	299.3	138.6	218.8
Number of trees affected by hill fires	1 905	10 615	1 650	7 135	2 760

- End -

CONTROLLING OFFICER'S REPLY

ENB177

(Question Serial No. 5594)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (700) General non-recurrent

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding Item 802 “One-off allowance to fishermen affected by new fisheries management strategy in marine parks”,

What are the estimated expenditure and work plan for this new item? Why is the funding bid submitted to the Legislative Council (LegCo) for approval in the context of the Appropriation Bill? Even though it is a usual practice, why is the funding not being separately submitted to the LegCo Finance Committee for funding approval?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 801)

Reply:

The new fisheries management strategy in marine parks (the new strategy) has come into effect on 1 April 2020. Under the new strategy, the Agriculture, Fisheries and Conservation Department will not grant new fishing permits for commercial fishing for the Hoi Ha Wan Marine Park, Yan Chau Tong Marine Park, Tung Ping Chau Marine Park, and Sha Chau and Lung Kwu Chau Marine Park. Existing fishing permits of the 4 marine parks already granted will remain valid for the remainder of their terms, and can be renewed in accordance with the established mechanism. However, the validity period will not be extended beyond the two-year transitional period, viz. 31 March 2022.

Given that the fishermen with relevant fishing permits will no longer be able to conduct operations in the waters around the abovementioned 4 marine parks as a result of the commercial fishing ban in these marine parks, an ex-gratia allowance (EGA) will be granted to about 360 affected permit holders. The Government plans to set up an Inter-departmental Working Group (IWG) in the second quarter of 2020 to handle EGA applications from the affected permit holders and all other related matters. Once the IWG has determined the amount of EGA to be provided, permit holders may receive EGA when

they surrender their permits. They may also opt to continue fishing in those areas and receive EGA upon the expiry of the permits. The total amount involved in releasing EGA to affected permit holders is about \$125 million.

The arrangement to include in the draft Estimates funding proposals for creating commitments or increasing expenditure ceilings for approved commitment items under the General Revenue Account for scrutiny and approval by the Legislative Council (LegCo) in the context of the Appropriation Bill is in line with the requirements under sections 5 and 6 of the Public Finance Ordinance. The Government explained the relevant arrangements to the Finance Committee in early 2015. In this particular case, before the above funding proposal was included in the draft Estimates, we had briefed the LegCo Panel on Environmental Affairs on the new strategy, EGA and transitional arrangements on 25 November 2019. We have also included the necessary provision for these proposals under the respective head and sub-head of expenditure, as well as provided appropriate information in the Controlling Officer's Report to facilitate Members' consideration. Such arrangements allow the Government to expedite the processing and release of EGA to the permit holders concerned so that their livelihood will not be affected.

- End -

CONTROLLING OFFICER'S REPLY

ENB178

(Question Serial No. 5702)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

In view of the frequent illegal felling of Incense Trees in Hong Kong in recent years,

- (a) Does the Agriculture, Fisheries and Conservation Department (AFCD) have any plan to conduct a territory-wide survey on Incense Trees?
- (b) What measures will AFCD take to prevent the illegal tree-felling from deteriorating?
- (c) What is the estimated expenditure in this respect in the coming year?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 529)

Reply:

- (a) Incense Tree is a native tree species commonly found in mature woodlands behind rural villages and lowland forests in Hong Kong. The Agriculture, Fisheries and Conservation Department (AFCD) has been conducting surveys and studies over the past years to gather information on the distribution of local plant species, including Incense Trees. However, there is practical difficulty in conducting a specific territory-wide population survey on this species due to its widespread distribution and difficult access.
- (b) To strengthen the protection of Incense Trees against illegal felling, AFCD has implemented a species action plan for Incense Trees which covers a series of measures, including:
 - (i) establishment of a special task force to conduct targeted patrol of sites with important populations of Incense Trees, in addition to regular patrols in country parks and special areas;
 - (ii) working closely with the Hong Kong Police Force (the Police) in gathering and exchanging intelligence; conducting joint law enforcement operations at black

spots and investigation of illegal tree felling cases; and enhancing the awareness and vigilance of the public about such offences through social media as well as various education and publicity programmes;

- (iii) enhancing liaison and cooperation with concern groups and villagers living near Incense Trees for intelligence gathering and reporting of any illegal felling activities;
- (iv) conducting a pilot scheme using infrared sensor camera traps to monitor illegal felling of Incense Trees at several strategic locations;
- (v) installing tree guards to prevent felling or vandalism of important individuals of Incense Trees;
- (vi) dressing the wounds of damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting;
- (vii) organising training sessions to help frontline staff of the Police and the Customs and Excise Department to identify Incense Trees/agarwood and detect illegal activities;
- (viii) deploying sniffer dogs to facilitate detection of agarwood smuggling at land boundary control points;
- (ix) stepping up the extensive planting of Incense Trees in country parks. Since 2009, about 10 000 seedlings of Incense Trees have been produced and planted every year to assist in the re-stocking of this species in Hong Kong; and
- (x) supporting various research studies and activities to conserve this native species and enhance public awareness in this aspect.

In addition, long-term monitoring of important populations of Incense Trees is in place to monitor its conservation status and check on the effectiveness of the protection measures.

- (c) The resources involved in implementing the above measures were absorbed in the allocation for nature conservation and management of country parks, hence no separate breakdown on the expenditure involved is available. However, starting from 2020-21, AFCD will allocate an additional provision of \$8.5 million to enhance the support for the above measures.

- End -

CONTROLLING OFFICER'S REPLY

ENB179

(Question Serial No. 5703)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

At present, it is very difficult for persons with disabilities to use the country park facilities as most of the paths and facilities are not disabled-friendly. Please provide the following information:

- (a) Please set out in detail the existing barrier-free status of country parks, including the names of the country parks, the districts in which they are located, the barrier-free facilities available, country trails, and names of the dams.
- (b) Please set out in detail the country parks where barrier-free facilities are not yet available.
- (c) Is there any government policy to facilitate the development of barrier-free country parks for persons with disabilities and those in need?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 530)

Reply:

- (a) Barrier-free facilities in the country parks and their respective locations are listed in the **Annex**.
- (b) Barrier-free facilities are not yet available in the Lam Tsuen Country Park, Plover Cove (Extension) Country Park, Lantau North Country Park, Lantau North (Extension) Country Park, Kiu Tsui Country Park and Shek O Country Park.
- (c) In order to enhance the accessibility of county park facilities and services for persons with disabilities, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented various measures including upgrading or providing barrier-free facilities in existing or new premises, as well as undertaking retrofitting programmes (such as construction of ramps and installation of handrails along footpaths to accessible toilets). Officers in charge of the country park venues and facilities are also

appointed as Access Officers by AFCD to facilitate the implementation of accessibility measures and provision of services for persons with disabilities. In addition, AFCD is in collaboration with relevant organisations to explore the improvement of certain trails and the supporting facilities to facilitate wheelchair users to visit country parks. AFCD will also continue to renovate and improve existing physically handicapped and able-bodied sites and the supporting facilities.

Barrier free facilities/Facilities with barrier free design	Country parks/Other areas	Site/Venue/Location
Barbecue sites	Sai Kung West Country Park	Pak Tam Chung Physically Handicapped and Able-Bodied Site
		Tai Mong Tsai No. 4 Barbecue Site
	Sai Kung East Country Park	Wong Shek No. 1 Barbecue Site
	Clear Water Bay Country Park	Tai Hang Tun Barbecue Site
	Ma On Shan Country Park	Ma On Shan Barbecue Site
		Nai Chung Barbecue Site
	Shing Mun Country Park	Shing Mun No. 4 Barbecue Site
		Shing Mun No. 5 Barbecue Site
	Tai Mo Shan Country Park	Rotary Barbecue Site
	Tai Lam Country Park	Shek Kong No. 2 Barbecue Site
		Shek Kong No. 3 Barbecue Site
		Shek Kong No. 6 Barbecue Site
		Shek Kong No. 10 Barbecue Site
		Shek Kong No. 11 Barbecue Site
		Chuen Lung No. 2 Barbecue Site
		Tai Tong No. 1 Barbecue Site
		Tai Tong No. 5 Barbecue Site
Pat Sin Leng Country Park	Hok Tau No. 6 Barbecue Site	
Aberdeen Country Park	Aberdeen Physically Handicapped and Able-Bodied Site	
Tai Tam Country Park	Tai Tam No. 2 Barbecue Site	
	Tai Tam Tuk No. 3 Barbecue Site	
	Tai Tam Tuk No. 4 Barbecue Site	
Picnic sites	Tsiu Hang Special Area	Lions Nature Education Centre
	Shing Mun Country Park	Shing Mun No. 6 Picnic Site
		Shing Mun No. 10 Picnic Site
Visitor centres	Sai Kung West Country Park	Sai Kung Country Park Visitor Centre
	Clear Water Bay Country Park	Clear Water Bay Country Park Visitor Centre
	Tai Mo Shan Country Park	Tai Mo Shan Country Park Visitor Centre
	Aberdeen Country Park	Aberdeen Tree Centre
	Tsiu Hang Special Area	Lions Nature Education Centre
	Hong Kong Wetland Park	Hong Kong Wetland Park Visitor Centre
	Other Areas Outside Country Park	Woodside Biodiversity Education Centre
		Ngong Ping Nature Centre
Hong Kong Global Geopark Volcano Discovery Centre		

Barrier free facilities/Facilities with barrier free design	Country parks/Other areas	Site/Venue/Location
Toilets	A total of 52 at various locations within Country Parks and Special Areas	Hong Kong Wetland Park Other locations of the toilets could be downloaded from AFCD's website: https://www.afcd.gov.hk/english/country/cou_vis/cou_vis_rec/cou_vis_dis.html

- End -

CONTROLLING OFFICER'S REPLY

ENB180

(Question Serial No. 5704)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What policy does the Government have in place to facilitate drivers with disabilities to access the country park areas with a view to resolving the problem of lack of public transport for them to access the park areas? Please set out the application procedures for permits to access country parks for drivers with disabilities.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 531)

Reply:

In order to enhance the accessibility of country park facilities and services for persons with disabilities, the Agriculture, Fisheries and Conservation Department (AFCD) has implemented various measures including upgrading or providing barrier-free facilities in existing or new premises, as well as undertaking retrofitting programmes (such as construction of ramps and installation of hand railings along footpaths to accessible toilets). Most of the barrier-free facilities in country parks, including country park visitor centres, physically handicapped and able-bodied sites, barbeque sites with barrier-free design, etc., are accessible by taxi and point-to-point rebus or connected to nearby car parks by accessible ramps with hand railings. In some places (such as the Lions Nature Education Centre in the Tsiu Hang Special Area and the Hong Kong Wetland Park), designated parking spaces for persons with disabilities are provided.

According to the Country Parks and Special Areas Regulations (Cap. 208A), it is required to apply for a permit in advance for bringing a vehicle into a country park or special area. The relevant application procedures and guidelines are published on AFCD's website (www.afcd.gov.hk). Applications will be assessed against the established guidelines and considered on their individual merits.

- End -

CONTROLLING OFFICER'S REPLY**ENB181****(Question Serial No. 5705)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the number of toilets in various country parks over the territory and the total number, as well as the number and proportion of barrier-free toilets installed.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 532)Reply:

There are 64 flushing toilets in country parks and special areas of which 52 of them (i.e. 81%) are provided with barrier-free cubicles. The distribution of flushing toilets in various country parks and special areas is tabulated as follows:

Country Parks / Special Areas	Number of flushing toilets	Number of flushing toilets with barrier-free cubicles
Aberdeen Country Park	1	1
Clear Water Bay Country Park	2	2
Kam Shan Country Park	1	1
Lantau North Country Park	1	1
Lantau South Country Park	1	1
Lion Rock Country Park	1	0
Lung Fu Shan Country Park	1	0
Ma On Shan Country Park	3	3
Pat Sin Leng Country Park	7	6
Plover Cove Country Park	2	2
Pok Fu Lam Country Park	1	0
Sai Kung East Country Park	5	2
Sai Kung West Country Park	8	7
Sai Kung West (Wan Tsai Extension)	2	2

Country Parks / Special Areas	Number of flushing toilets	Number of flushing toilets with barrier-free cubicles
Country Park		
Shing Mun Country Park	4	4
Tai Lam Country Park	5	5
Tai Mo Shan Country Park	2	2
Tai Tam Country Park	3	2
Tai Tam (Quarry Bay Extension) Country Park	2	2
Hong Kong Wetland Park (Special Areas)	8	6
Tai Po Kau Nature Reserve (Special Areas)	1	0
Tsiu Hang (Special Areas)	3	3
Total	64	52

Besides flushing toilets, the Agriculture, Fisheries and Conservation Department also provides 123 hired portable toilets (of which 7 are barrier-free portable toilets) and 44 dry toilet pits at remote locations lacking supplies of water and electricity to meet the needs of country park visitors.

- End -

CONTROLLING OFFICER'S REPLY**ENB182****(Question Serial No. 5706)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please set out the following information over the past 5 years with a breakdown by country park and special area in Hong Kong:

- (a) The respective numbers of litter containers and recycling bins;
- (b) The volume of refuse and recyclables (with a breakdown by 4 types of recyclables, namely paper, aluminium cans, plastic bottles and glass bottles);
- (c) The handling of the recyclables; and
- (d) The manning scale of staff responsible for clearing litter containers and recycling bins, and the clearing methods adopted.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 533)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) places ordinary litter containers (litter containers) and combined waste recycling bins at barbecue sites, campsites, picnic sites, etc. in country parks. The combined waste recycling bins have separate compartments for collecting plastic bottles, aluminium cans and ordinary litter. During 2015-2019, the respective numbers of litter containers and combined waste recycling bins placed in country parks are tabulated as follows:

Year	Number of litter container	Number of combined waste recycling bin
2015	1 657	1 688
2016	1 243	1 546
2017	796	1 373
2018	626	1 246

2019	505	1 159
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- (b) The refuse collected in country parks is mainly plastic bottles, aluminium cans and ordinary litter in general. Among the refuse generated from activities in country parks such as hiking, barbecue and camping, there are rarely waste paper and glass bottles suitable for recycling and thus no recycling bins for paper and glass bottles have been placed in country parks. During 2015-2019, the volume of refuse collected and the quantity of aluminium cans and plastic bottles recovered in country parks are tabulated as follows:

Year	Ordinary litter (tonne)	Aluminium can (tonne)	Plastic bottle (tonne)
2015	3 700	1.92	7.24
2016	3 400	4.29	11.30
2017	3 400	4.00	14.08
2018	3 000	3.01	11.06
2019	2 600	1.66	6.52

- (c) Ordinary clean recyclables are collected in transparent plastic bags and handed over to recycling contractors for transport to suitable recycling yards upon record of weight.
- (d) AFCD staff and cleansing service contractors clean both litter containers and combined waste recycling bins in country park areas under their charge. There is no separate manpower for handling ordinary litter and recyclable waste. The cleansing staff in general use transparent plastic bags for collection of recyclable waste and biodegradable refuse bags for ordinary litter.

- End -

CONTROLLING OFFICER'S REPLY

ENB183

(Question Serial No. 6612)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Department's management and protection of country parks, special areas, marine parks and marine reserves under the Country Parks Ordinance (Cap. 208) and the Marine Parks Ordinance (Cap. 476) for the purpose of nature conservation, recreation, nature-based tourism and education, I have the following questions:

- (a) What are the details of the Government's management of country parks, special areas, marine parks and marine reserves?
- (b) The marine reserve on Lantau Island has suffered different levels of damage, with a large amount of debris dumped there. How does the Government conserve the marine reserve? Has it taken records of the marine reserve regularly?
- (c) Will the Government regularly conduct patrols and take records of the country parks, special areas, marine parks and marine reserves? If yes, what are the details? If not, what are the reasons?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 104)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) is responsible for the management and protection of country parks, special areas, marine parks and the marine reserve, among which mainly cover the construction and maintenance of recreational facilities (such as hiking trails and barbecue sites), routine cleaning, flora and fauna conservation, ecological surveys, patrols and law enforcement, as well as vetting and monitoring of activities and development, etc. in these areas. Besides, planting of trees, hill fire prevention and fighting in country parks and special areas, as well as implementation of zonal management measures (such as management of fishing and anchoring activities) etc. in marine parks also form part of the regular work of AFCD. On education and publicity, AFCD has organised a series of programmes

on protection and promotion of country parks and marine parks for the general public. These programmes include school visits, eco-tours, guided tours at visitor centres and education centres, thematic exhibitions, educational workshops, trail maintenance workshops, tree planting days, public lectures and volunteer scheme.

- (b) There is no marine reserve designated under the Marine Parks Ordinance (Cap. 476) on Lantau Island. Any landfilling and development must comply with relevant applicable legislation and other terms. The Environmental Protection Department and other relevant bureaux/departments will continue to enforce the law and monitor the situation in accordance with prevailing legislation.
- (c) AFCD staff conduct patrols in country parks and special areas in various districts to enforce the Country Parks Ordinance (Cap. 208) and other relevant legislations and to monitor the situation of country parks, etc. During patrols, they also provide assistance and services to country park visitors in need as well as carry out work on publicity and education. In addition, AFCD conducts regular patrols by sea and on land in marine parks and the marine reserve to enforce the Marine Parks Ordinance, manage and monitor the marine environment and promote marine conservation to the general public. The number of patrols conducted in country parks, special areas, marine parks and the marine reserve by AFCD in 2019-20 (as of February 2020) is tabulated as follows:

Areas managed / Year	2019-20 (as of February 2020) (number of patrols)
Country parks and special areas*	12 961
Marine parks	2 473
Marine reserve	424

* As some of the patrols cover both country parks and special areas, AFCD does not have a breakdown on the number of patrols in these managed areas.

- End -

CONTROLLING OFFICER'S REPLY

ENB184

(Question Serial No. 6613)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) The Government conserves biodiversity and promotes the compatible use of country and marine parks. What about its conservation of the marine ecology?
- (b) What are the current details of the sites recognised by the Government as sites of high scientific interest as well as those listed as Sites of Special Scientific Interest (SSSI) (including the locations, areas and the dates on which the sites were listed as SSSIs)?
- (c) Will the Government regularly conduct patrols and take records of the sites of high scientific interest in various districts? If yes, what are the details, including the manpower, dates and locations concerned? If not, what are the reasons?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 105)

Reply:

- (a) Apart from designating important marine habitats as marine parks for proper conservation and management, the Agriculture, Fisheries and Conservation Department (AFCD) is also committed to implementing measures to conserve the marine ecology, which include:
 - (i) studying and monitoring the biodiversity of Hong Kong's marine environment and promoting the conservation of important marine species (such as Chinese white dolphins, corals and sea turtles);
 - (ii) banning destructive fishing practices (including trawling) in Hong Kong waters to protect the marine environment from damages;
 - (iii) introducing a registration system for local fishing vessels to limit the entry of new fishing vessels with a view to maintaining an appropriate level of fishing

effort as well as prohibiting fishing activities of non-local fishing vessels in Hong Kong waters;

- (iv) examining the environmental impact assessment of coastal development projects to ensure that the potential impacts to the marine ecology are properly addressed;
 - (v) organising education and publicity programmes to raise public awareness of marine conservation; and
 - (vi) strengthening cross-border liaison and close collaboration with Mainland authorities to jointly conserve the precious marine ecology and resources in Mainland and Hong Kong waters.
- (b) There are 67 Sites of Special Scientific Interest (SSSIs) in Hong Kong at present. Their names, areas and dates on which they were listed as SSSIs are tabulated as follows:

	SSSI	Area (hectares)	Date listed as an SSSI
1	Shing Mun Fung Shui Woodland	6.00	25 February 1975
2	Tai Mo Shan Montane Scrub Forest	130.00	15 September 1975
3	She Shan Fung Shui Woodland	5.70	15 September 1975
4	Tai Tam Harbour (Inner Bay)	16.00	24 October 1975
5	D'Aguilar Peninsula	5.00	24 October 1975
6	Ma On Shan	118.00	23 June 1976
7	Sunset Peak	331.00	23 June 1976
8	Mai Po Marshes	393.00	15 September 1976
9	Bluff Island & Basalt Island	147.00	16 February 1979
10	Port Island	47.00	16 February 1979
11	Ninepin Group	45.00	16 February 1979
12	Ping Chau	111.00	16 February 1979
13	Mai Po Village	5.30	16 February 1979
14	Mau Ping	3.70	16 February 1979
15	Lai Chi Wo Beach	11.00	16 February 1979
16	Ng Tung Chai	226.00	16 February 1979
17	Pak Tai To Yan	32.00	20 September 1979
18	Chiu Keng Tam	3.10	20 September 1979
19	Tai Long Bay	2.30	20 September 1979
20	Pok Fu Lam Reservoir Catchment Area	217.30	20 September 1979
21	Tai Tam Reservoir Catchment Area	1 243.20	20 September 1979
22	Beacon Hill	53.20	20 September 1979
23	Ho Chung Valley	395.0	20 September 1979
24	Lung Kwu Chau, Tree Island & Sha Chau	54.40	20 September 1979
25	Castle Peak	73.70	5 February 1980
26	Tai Mo Shan	95.00	5 February 1980
27	Pak Nai	15.50	5 February 1980
28	Man Cheung Po	29.20	5 February 1980

	SSSI	Area (hectares)	Date listed as an SSSI
29	Lantau Peak	116.00	5 February 1980
30	Pat Sin Range	128.00	5 February 1980
31	Fung Yuen Valley	42.80	5 February 1980
32	South Lamma Island	345.00	5 February 1980
33	Yim Tin Tsai & Ma Shi Chau	54.40	24 September 1982
34	Tolo Channel (Northern Coast)	1 287.00	24 September 1982
35	Centre Island	3.10	24 September 1982
36	Nai Chung Coast	2.20	24 September 1982
37	Tsim Bei Tsui	2.10	10 January 1985
38	Ting Kok	37.50	1 March 1985
39	Sham Chung Coast	26.00	25 March 1985
40	A Chau	4.40	9 April 1985
41	Lai Chi Chong	5.00	26 April 1985
42	Inner Deep Bay	1 036.00	18 March 1986
43	Tsim Bei Tsui Egretty	4.80	5 January 1989
44	Hoi Ha Wan	278.00	5 January 1989
45	Hok Tsui (Cape D'Aguilar)	31.50	19 July 1990
46	Nam Fung Road Woodland	8.00	22 June 1993
47	Shuen Wan Egretty	2.10	13 August 1994
48	Tai Po Egretty	1.20	13 August 1994
49	Lin Ma Hang Lead Mines	10.00	13 August 1994
50	Tseng Tau Coast	4.30	13 August 1994
51	Kei Ling Ha Mangal	48.40	13 August 1994
52	Pok To Yan & Por Kai Shan	76.40	13 August 1994
53	San Tau Beach	2.70	19 October 1994
54	Sha Lo Tung	22.05	16 January 1997
55	Shek O Headland	0.66	3 February 1998
56	San Chau	36.00	4 May 1999
57	Ngong Ping	14.00	4 May 1999
58	Tai Ho Stream	5.00	5 May 1999
59	Sham Wan	4.00	3 June 1999
60	South Tsing Yi	1.10	13 April 2005
61	Tai Om Fung Shui Woodland	2.70	30 December 2005
62	Shek Ngau Chau	0.92	30 December 2005
63	Lin Ma Hang Stream	0.64	6 July 2007
64	Siu Lang Shui	2.30	8 January 2008
65	Deep Water Bay Valley	4.20	18 February 2008
66	Lung Kwu Tan Valley	6.72	3 April 2012
67	Sunshine Island	54.00	27 February 2015

- (c) The listing of SSSI is primarily an administrative measure to alert government departments about the scientific importance of such sites, and that due consideration should be given to environmental protection when developments at or close to these sites are proposed. AFCD arranges patrols according to the characteristics and conditions of various SSSIs. Currently, 4 AFCD staff are involved in the coordination and patrols at the SSSIs.

- End -

CONTROLLING OFFICER'S REPLY

ENB185

(Question Serial No. 6614)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Department provides nature conservation advice on development proposals, planning studies and environmental impact assessments. Regarding the reclamation project under the Lantau Tomorrow Vision, has the Department provided any advice to the Government? If yes, what are the details? If not, what are the reasons?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 106)

Reply:

Regarding the Lantau Tomorrow Vision, the Agriculture, Fisheries and Conservation Department has been providing advice from the nature conservation perspective, including the potential impact arising from the proposed projects on important habitats and species, as well as advice on various conservation or mitigation measures, for example, avoiding or minimising potential ecological impact through planning, design, construction method, etc. of the proposed artificial island and ancillary facilities.

- End -

CONTROLLING OFFICER'S REPLY

ENB186

(Question Serial No. 6615)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Department conducts monitoring and auditing of ecological mitigation measures for development projects approved under the Environmental Impact Assessment Ordinance (Cap. 499). What were the details of the ecological mitigation measures for development projects approved in each of the past 3 years?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 107)

Reply:

The ecological mitigation measures required for development projects approved under the Environmental Impact Assessment Ordinance (Cap. 499) over the past 3 years included avoidance of construction works in ecologically sensitive areas, restoration and improvement of disturbed habitats, habitat compensation (such as river revitalisation, eco-shoreline, etc.), translocation of rare species, compensatory planting, etc. The Agriculture, Fisheries and Conservation Department is responsible for monitoring and auditing these ecological mitigation measures.

- End -

CONTROLLING OFFICER'S REPLY

ENB187

(Question Serial No. 6616)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Department's promotion of public awareness of nature conservation and enforcement of nature conservation legislation, has the Department found any cases in breach of such legislation over the past 3 years? If yes, what are the details?

Secondly, please provide a detailed account of the Hong Kong UNESCO Global Geopark. How does the Government promote and conserve the geological and cultural heritage?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 108)

Reply:

The total number of prosecutions instituted by the Agriculture, Fisheries and Conservation Department (AFCD) under legislation relevant to nature conservation, including the Forests and Countryside Ordinance (Cap. 96), the Wild Animals Protection Ordinance (Cap. 170), the Country Parks and Special Areas Regulations (Cap. 208A) and the Marine Parks and Marine Reserves Regulation (Cap. 476A) in 2017-18, 2018-19 and 2019-20 (as of February 2020) is 840, 728 and 500 respectively. The offences involved mainly include bringing vehicles or bicycles into country parks without authorisation, littering, illegal camping, illegal plucking or damaging of plant and illegal feeding of wild animals.

Hong Kong Geopark, which was first accepted as a National Geopark of China in 2009 and later accepted as a member of the Global Geoparks Network (GGN) in September 2011, was renamed Hong Kong UNESCO Global Geopark (HKUGG) on 17 November 2015. HKUGG is managed with a holistic concept of conservation, education and sustainable development. It consists of the following 2 regions:

- (a) The Sai Kung Volcanic Rock Region consists of High Island, Sharp Island, Ninepin Group and Ung Kong Group. This region mainly showcases the magnificent

hexagonal volcanic rock columns which are rare in the world in terms of their rock composition, size and coverage. The Sai Kung Volcanic Rock Region also covers rural communities such as Kau Sai Chau, High Island and Yim Tin Tsai; and

- (b) The Northeast New Territories Sedimentary Rock Region consists of Tung Ping Chau, Double Haven, Tolo Channel and Bluff Head / Port Island. This region consists of the most comprehensive stratigraphy of sedimentary rocks in Hong Kong, including 400 million-year-old Devonian sandstone and conglomerate as well as 55 million-year-old Paleogene siltstone. This region also covers rural communities such as Lai Chi Wo, Kat O and Ap Chau.

To facilitate public understanding of HKUGG, the following facilities are provided:

- (a) The Sai Kung Volcano Discovery Centre was set up at the Sai Kung Waterfront Park in July 2014 for the purpose of science popularisation and visitor services. In addition, following the setting up of 2 geoheritage centres at Lai Chi Wo and Sam Mun Tsai of Tai Po, HKUGG also set up 3 story rooms in Ap Chau, Kat O and Kau Sai Chau in order to exhibit the culture and history of local communities; and
- (b) The Hong Kong Geopark Visitor Centre within the Lions Nature Education Centre at Tsiu Hang, Sai Kung includes an indoor exhibition hall, the Rock Academy outdoor exhibition and the Rock Classroom for small group activities. Apart from enabling better understanding of the geological history of Hong Kong, it is also an ideal venue for teachers to conduct education on geology outside the classroom.

AFCD has planned 9 land-based and 3 sea-based tour routes to facilitate visits by the public and visitors to various geosites and facilities. Information of HKUGG is set out in detail at the dedicated website: <https://www.geopark.gov.hk/>.

In addition, AFCD will continue to strengthen the promotion and conservation of geological and cultural heritages through a variety of publicity and education activities. Major activities include (a) production of multilingual promotion materials for local and overseas visitors; (b) overseas promotion through the internet and international platform of GGN; (c) upgrade of skills of geopark guides through the Geopark Guide System in collaboration with non-governmental organisations; (d) provision of training for tour operators, local communities and other stakeholders of HKUGG; (e) organisation of science popularisation programmes for students through the Geopark School Programme; and (f) collaboration with local communities in conserving and promoting the local history, tradition, culture and intangible cultural heritage through story rooms and other means.

- End -

CONTROLLING OFFICER'S REPLY

ENB188

(Question Serial No. 6617)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What are the details of the Department's effort in exploring the feasibility of the incorporation of selected country park enclaves into country parks?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 109)

Reply:

Subsequent to the incorporation of 3 enclaves into country parks in 2017, the Agriculture, Fisheries and Conservation Department (AFCD) continues to assess whether the remaining enclaves not yet covered by any statutory plans are suitable for incorporation into country parks in accordance with the established principles and criteria, and will propose to incorporate suitable enclaves into country parks in accordance with the statutory procedures stipulated in the Country Parks Ordinance (Cap. 208).

AFCD is conducting an assessment of whether the enclave on Yi Tung Shan, Lantau Island is suitable for incorporation into the respective country park. A decision on whether to incorporate the enclave into the country park will be made after careful consideration of all factors and views of relevant stakeholders.

- End -

CONTROLLING OFFICER'S REPLY

ENB189

(Question Serial No. 6618)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the implementation of the first Biodiversity Strategy and Action Plan for Hong Kong by the Agriculture, Fisheries and Conservation Department, what are the specific details and the provision involved? What are the details of Biodiversity Education?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 110)

Reply:

The Hong Kong Biodiversity Strategy and Action Plan 2016-2021 (BSAP) is a five-year plan which sets out strategies and action plans to conserve biodiversity and support sustainable development in Hong Kong. The 67 specific actions under BSAP are grouped under 4 major areas as follows:

- (1) enhancing the existing conservation measures, which includes carrying out the Plantation Enrichment Project in country parks, formulating species action plans and stepping up enforcement against wildlife crimes;
- (2) mainstreaming biodiversity to facilitate the public and private sectors to take biodiversity into consideration in relevant policies, programmes, works and projects;
- (3) improving knowledge on biodiversity, such as monitoring and studying important habitats and species as well as developing a biodiversity information hub; and
- (4) enhancing public awareness and participation in biodiversity through publicity and education activities to encourage the public to practise conservation.

In 2020-21, the Agriculture, Fisheries and Conservation Department (AFCD) has earmarked a provision of \$50 million for implementing BSAP.

Publicity and education is one of the main areas of action under BSAP. They include education activities on country parks and nature conservation, as well as a series of biodiversity education programmes organised by the Government in collaboration with non-governmental organisations, institutions and other organisations. AFCD has established the Subventions for Biodiversity Education since 2016 to encourage local non-profit-making organisations to conduct education programmes that promote biodiversity to the public. In 2020-21, a provision of \$1.4 million has been earmarked for supporting biodiversity education projects.

- End -

CONTROLLING OFFICER'S REPLY

ENB190

(Question Serial No. 6619)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

What are the specific details and provision involved in the designation of the proposed South Lantau Marine Park by the Department?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 111)

Reply:

The Agriculture, Fisheries and Conservation Department (AFCD) is preparing for the designation of the proposed South Lantau Marine Park (SLMP) and plans to take forward the statutory procedures in 2020, which include preparing a draft map of the proposed SLMP under the Marine Parks Ordinance (Cap. 476) and consulting the Country and Marine Parks Board on the draft map. As the manpower and administrative expenditure involved in the preparation work will be absorbed by the existing resources of AFCD, there is no separate breakdown in this aspect.

- End -

CONTROLLING OFFICER'S REPLY

ENB191

(Question Serial No. 6620)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

The Department is preparing for the expansion of the Sham Wan Restricted Area to strengthen the protection of green turtles. What are the specific details and provision involved in this aspect?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 112)

Reply:

In order to minimise disturbance to green turtles, including their nests and eggs, the sandy beach at Sham Wan was gazetted as a Restricted Area under the Wild Animals Protection Ordinance (Cap. 170) in 1999. Access to the area is restricted during the period from 1 June to 31 October each year. To strengthen the protection of green turtles, the Government has started preparation work for the expansion of the Sham Wan Restricted Area from the sandy beach at Sham Wan to include the adjacent Sham Wan waters, and the extension of the restricted period, with a view to minimising the disturbances of human activities to breeding green turtles. The Government plans to seek the views of stakeholders on details of legislative amendments and draft the amendments this coming year. As the relevant work is still under preparation, figures of the estimated provision are not available at present.

- End -

CONTROLLING OFFICER'S REPLY**ENB192****(Question Serial No. 6665)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the implementation progress of the Hong Kong Biodiversity Strategy and Action Plan 2016 (BSAP), please set out the manpower and resources allocated by the Department to the 4 major areas of BSAP (i.e. enhancing conservation measures, mainstreaming biodiversity, improving knowledge and promoting community involvement) and its specific actions in 2016-2019. Will the Department conduct any interim and long-term assessments on the implementation progress and effectiveness of BSAP? If yes, what are the specific details and timetable? If such assessment has been conducted, will it be disclosed for public information?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 2058)Reply:

The Hong Kong Biodiversity Strategy and Action Plan 2016-2021 (BSAP) is a five-year plan which sets out strategies and action plans to conserve biodiversity and support sustainable development in Hong Kong. The expenditure and manpower involved in the implementation of BSAP by the Agriculture, Fisheries and Conservation Department (AFCD) from 2016-17 to 2019-20 are tabulated as follows:

Year	2016-17	2017-18	2018-19	2019-20 (revised estimate)
Expenditure on the 4 major areas (\$ million)				
1. Enhancing conservation measures	7.1	17.9	12.3	9.8
2. Mainstreaming biodiversity	1.2	7.4	2.1	2.1
3. Improving knowledge	1.2	7.1	7.9	9.0
4. Promoting community involvement	13.1	29.1	29.2	25.0
Total	22.6	61.5	51.5	45.9
Manpower (number of staff)	15	39	39	33

To ensure an effective implementation of BSAP, an inter-departmental working group chaired by the Secretary for the Environment has been set up to coordinate the efforts of various departments in implementing the actions, set out clear and feasible objectives and timeframe of BSAP and regularly review the progress and effectiveness of actions. Since the launch of BSAP, progress has been made under the 4 major areas of action, and the progress was generally in line with the timeframe set out.

The Government has been reporting the progress and effectiveness of the implementation of BSAP to the Advisory Council on the Environment (ACE) on an annual basis since 2017. Annual progress reports on BSAP were submitted to ACE in February 2018 and March 2019 respectively. The relevant documents have been uploaded to ACE's website:

https://www.epd.gov.hk/epd/english/boards/advisory_council/maincontent.html

More information on the major projects of BSAP is available on AFCD's website:

https://www.afcd.gov.hk/english/conservation/Con_hkbsap/con_hkbsap.html

- End -

CONTROLLING OFFICER'S REPLY**ENB193****(Question Serial No. 6666)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

How many minor improvement works did the Government carry out in country parks, marine parks and marine reserve in 2018-2019? What are the names of the works, the country parks/marine parks/marine reserve involved, and the expenditure in this regard?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 2059)Reply:

In 2018-19 and 2019-20, the minor improvement works carried out by the Agriculture, Fisheries and Conservation Department (AFCD) in country parks and the expenditure involved are tabulated as follows. AFCD did not carry out any minor improvement works in marine parks and marine reserve during the same period.

Projects	Country park	Expenditure in 2018-19 (\$ million)	Expenditure in 2019-20 (revised estimate) (\$ million)
Construction of mountain bike trails	Tai Lam, Clear Water Bay, Shek O Country Park	1.3	1.2
Reconstruction of forest tracks	Tai Lam, Ma On Shan Country Park	1.9	3.2
Improvement of visitor centres and interpretation panels	Country parks in different districts	1.3	2.2

Projects	Country park	Expenditure in 2018-19 (\$ million)	Expenditure in 2019-20 (revised estimate) (\$ million)
Reconstruction of rain shelters	Aberdeen, Sai Kung East, Sai Kung West, Lantau South, Tai Tam, Tai Lam, Lion Rock, Pat Sin Leng, Ma On Shan, Shing Mun Country Park	2.3	4.7
Construction of a star gazing site	Sai Kung East Country Park	2.9	1.2
Provision of water dispensers	Country parks in different districts	0.3	2.0
Reconstruction and construction of water pipelines to public toilets	Tai Mo Shan, Pat Sin Leng Country Park	2.2	1.1
Minor slope works	Country parks in different districts	0.9	1.0
Others: improvement of hiking trails, minor structures, outdoor furniture, fencing, waymarks, etc.	Country parks in different districts	6.6	5.8
Total		19.7	22.4

- End -

CONTROLLING OFFICER'S REPLY**ENB194****(Question Serial No. 6667)**Head: (22) Agriculture, Fisheries and Conservation DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) Nature Conservation and Country ParksControlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out the amount of resources allocated by the Department to the monitoring and conservation of the Sites of Special Scientific Interest (SSSI) and the number of patrols conducted at various SSSIs over the past 5 years as well as the planned targets and estimated expenditure in 2020.

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 2060)Reply:

The listing of Sites of Special Scientific Interest (SSSI) is primarily an administrative measure to alert government departments about the scientific importance of such sites, and that due consideration should be given to environmental protection when developments at or close to these sites are proposed. The Agriculture, Fisheries and Conservation Department (AFCD) arranges patrols and habitat management work according to the characteristics and conditions of various SSSIs. To step up patrols, AFCD set up an SSSI patrol team (patrol team) in 2017-18. Currently, 4 staff members are involved in the coordination and patrols at SSSIs.

The manpower and expenditure of AFCD involved in the SSSI work over the past 5 years are tabulated as follows:

Year	2015-16	2016-17	2017-18	2018-19	2019-20 (revised estimate)
Manpower (number of staff)	1	1	4	4	4
Expenditure (\$ million)	0.7	0.7	1.8	1.2	1.5

The number of patrols conducted by the patrol team in 2017-18, 2018-19 and 2019-20 (as at February) was 73, 120 and 95 respectively.

In 2020-21, AFCD will continue to conduct patrols and habitat management work at SSSIs, which include vegetation management, habitat enhancement and ecological monitoring. The manpower and estimated expenditure involved are 4 staff members and \$1.5 million respectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB195

(Question Serial No. 4548)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding venues under the management of the Agriculture, Fisheries and Conservation Department (AFCD), please provide the following information:

- (a) Please set out by the 18 districts and in tabular form the number of automated external defibrillators (AEDs) available in each district.
- (b) Please set out by the 18 districts and in tabular form the venues managed by AFCD without installation of AEDs and the reasons for that.
- (c) Please set out by the 18 districts and in tabular form the venues managed by AFCD with installation of AEDs and the number of staff working at such venues who have received training on the use of AEDs.
- (d) Please provide the number and location of new AEDs added to the venues under the management of AFCD over the past year.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 129)

Reply:

- (a) to (c) At present, 6 country park visitor centres and the Hong Kong Wetland Park are equipped with Automated External Defibrillators (AEDs). The number of AEDs installed in the said venues, and the number of staff who work in the said venues and have received training on the use of AEDs are tabulated as follows:

District	Venues with AEDs	Number of AEDs equipped	Number of staff with relevant training

District	Venues with AEDs	Number of AEDs equipped	Number of staff with relevant training
Sai Kung	Sai Kung Country Park Visitor Centre, Lions Nature Education Centre, and Clear Water Bay Country Park Visitor Centre	3	9
Tsuen Wan	Tai Mo Shan Country Park Visitor Centre	1	5
Eastern	Woodside Biodiversity Education Centre	1	8
Southern	Aberdeen Tree Centre	1	6
Yuen Long	Hong Kong Wetland Park	2	4

Country park visitor centres which are not equipped with AEDs are tabulated as follows:

District	Venues not equipped with AEDs
Tsuen Wan	Shing Mun Country Park Visitor Centre
Islands	Ngong Ping Nature Centre

As most of the recreation sites in country parks are located in the countryside with no offices and shelters, there is practical difficulty in providing AEDs at these venues. The Auxiliary Medical Service (AMS) deploys personnel for first aid coverage and ambulance services at some popular locations in country parks on all Sundays and public holidays. The first aid stations and ambulance services provided by AMS are equipped with AEDs and will provide assistance to visitors when necessary. The Agriculture, Fisheries and Conservation Department (AFCD) will closely monitor the usage of the recreation sites in country parks and review the need to enhance the facilities to meet visitors' needs from time to time.

- (d) AFCD has installed an AED in the Woodside Biodiversity Education Centre and the Aberdeen Tree Centre respectively over the past year.

- End -

CONTROLLING OFFICER'S REPLY

ENB196

(Question Serial No. 4743)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Regarding the public toilets managed by the Department in 18 districts; please provide in tabular form by district:

- (a) The names and addresses of the public toilets;
- (b) The years of construction;
- (c) The years of last refurbishment;
- (d) The construction cost;
- (e) The utilisation rate;
- (f) The cleansing frequency (daily and weekly);
- (g) The numbers of cleansing staff; and
- (h) The quantity of toilet paper and liquid soap per week.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 352)

Reply:

The replies to questions (a) to (f) are tabulated as follows:

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
North District					
Hok Tau Campsite (PSL/C/301) Flushing Toilet (PB942)	1986	2009	Information not available (N/A)	Moderate	4/28
Hok Tau Barbecue Site (PSL/B/308) Flushing Toilet (PB992)	1988	2009	N/A	Moderate	4/28
Lau Shui Heung (PSL/R/302) Flushing Toilet (PB997)	1989	2009	N/A	Moderate	4/28
Nam Chung (PSL/R/50B) Flushing Toilet (PB1084)	1997	N/A	1.2	Low	1/7
Bride's Pool Road Barbecue Site (PC/B/601) Flushing Toilet (PB938)	1986	2017	N/A	High	4/28
Bride's Pool Road Barbecue Site (PC/B/002) Flushing Toilet (PB998)	1989	2016	N/A	High	4/28
Tai Po District					
Tai Mei Tuk Barbecue Site (PC/B/001) Flushing Toilet (PB711)	1979	2014	N/A	High	4/28
Chung Pui Barbecue Site (PSL/B/012) Flushing Toilet (PB870)	1982	2016	N/A	High	4/28
Tai Mei Tuk Ranger Office Flushing Toilet (PB653)	1976	N/A	N/A	Low	2/14
Tai Po Kau Nature Reserve Flushing Toilet (PB940)	1986	Renovation work in progress	N/A	High	4/28
Nai Chung Barbecue Site (MOS/B105) Flushing Toilet (PB1076)	1996	N/A	1.0	Moderate	4/28
Sai Sha Road Barbecue Site (SKW/B/010) Flushing Toilet (PB979)	1987	N/A	N/A	High	4/28

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
Wan Tsai South Campsite (SKW/C/309) Flushing Toilet (PB1114)	1999	N/A	N/A	High	4/28
Wan Tsai West Campsite (SKW/C/308) Flushing Toilet (PB1110)	1999	N/A	N/A	High	4/28
Hau Tong Kai Campsite (SKW/C/307) Flushing Toilet (PB1034)	1982	N/A	N/A	Moderate	2/14
Tai Tan Barbecue Site (SKW/B/304) Flushing Toilet (PB1020)	1992	N/A	N/A	High	4/28
Wong Shek Barbecue Site (SKW/B/301) Flushing Toilet (PB980)	1987	N/A	N/A	High	4/28
Pak Tam Au Flushing Toilet (PB1334)	2004	N/A	2.0	High	4/28
Shing Mun Lead Mine Pass Picnic Site (SM/P/010) Flushing Toilet (PB993)	1988	2019	N/A	Moderate	4/28
Yuen Long District					
Tai Tong Barbecue Site (TL/B/101) Flushing Toilet (PB999)	1989	N/A	N/A	Low to High (Seasonal)	4/28
Tai Tong Barbecue Site (TL/B/106) Flushing Toilet (PB1118)	1998	N/A	2.0	Low to High (Seasonal)	4/28
Tai Tong Barbecue Site (TL/B/103) Flushing Toilet (PB1276)	2005	N/A	2.5	Low to High (Seasonal)	4/28
Kap Lung Catch Water Road Barbecue Site (TL/B/406) Flushing Toilet (PB725)	1979	N/A	N/A	Low to High (Seasonal)	4/28
Tai Mo Shan Country Park Visitor Centre Flushing Toilet	1991	N/A	N/A	Moderate	4/28

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
(PB1011)					
Wetland Park Flushing Toilet (8 Units)	2006	N/A	No separate breakdown as it was included in the total construction cost of the Wetland Park.	High	4/28
Tsuen Wan District					
Sham Tseng BBQ site (ST/B/002), Tsing Lung Tau Flushing Toilet (PB1335)	2003	N/A	2.0	Moderate to high	4/28
Shing Mun Country Park Kiosk Flushing Toilet (PB680)	1978	2017	N/A	High	4/28
Tai Mo Shan Country Park Kiosk Flushing Toilet (PB856)	1982	N/A	N/A	High	4/28
Kwai Tsing District					
Shing Mun Picnic Site (SM/P/006) Flushing Toilet (PB871)	1982	2017	N/A	Moderate	4/28
Shing Mun Barbecue Site (SM/B/008) Flushing Toilet (PB977)	1987	N/A	N/A	Moderate	4/28
Sha Tin District					
Cheung Yuen Road Flushing Toilet (PB978)	1987	Renovation work in progress	N/A	High	4/28
Hung Mui Kuk Barbecue Site (LR/B/102) Flushing Toilet (PB1003)	1990	2017	N/A	High	4/28
Ma On Shan Barbecue Site (MOS/B/103) Flushing Toilet (PB1000)	1989	2010	N/A	Moderate	4/28
Wong Tai Sin District					
Jat's Incline Morning Walkers Garden Flushing Toilet	2006	N/A	3.0	High	4/28

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
(PB1260)					
Sai Kung District					
Pak Tam Chung Car Park Flushing Toilet (PB849)	1982	N/A	N/A	High	4/28
Pak Tam Chung Picnic Garden Flushing Toilet (PB923)	1984	N/A	N/A	High	4/28
Pak Tam Chung Picnic Garden Flushing Toilet (PB1316)	2011	N/A	4.8	Moderate	4/28
Pak Tam Chung Barbecue Site (SKW/B/206) Flushing Toilet (PB1130)	2002	N/A	1.5	High	4/28
Sai Wan Village Flushing Toilet	N/A	N/A	N/A	Moderate	2/14
Sai Wan Beach Flushing Toilet	N/A	Renovation work in progress	N/A	Moderate	2/14
High Island East Dam Assembled Modular Toilet	2017	N/A	1.3	High	4/28
Tai Mong Tsai Barbecue Site (SKW/B/003) Flushing Toilet (PB944)	1986	N/A	N/A	High	4/28
Lion's Nature Education Centre, Visitor Centre Flushing Toilet (PB1070)	1991	N/A	N/A	High	4/28
Lion's Nature Education Centre, Carpark, Flushing Toilet (PB1039)	1993	N/A	1.0	High	4/28
Lion's Nature Education Centre, Deaf Cafeteria, Flushing Toilet (PB1074)	1991	N/A	N/A	High	4/28

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
Clear Water Bay Barbecue Site (CWB/B/001) Flushing Toilet (PB726)	1980	N/A	N/A	Moderate	4/28
Clear Water Bay Barbecue Site (CWB/B/001) Flushing Toilet (PB1090)	1998	N/A	1.5	Moderate	4/28
Central & Western District					
Lung Fu Shan Picnic Site (LFS/P/001) (Picnic site of Pinewood Battery) Flushing Toilet (PB1092)	N/A	N/A	N/A	Moderate	4/28
Southern District					
Aberdeen Barbecue Site (ABD/B/008) Flushing Toilet (PB668 & PB894)	1977	2002	N/A	Moderate	4/28
Pok Fu Lam Country Park Entrance Flushing Toilet (PB1014)	1991	2008	N/A	Moderate	4/28
Tai Tam Tuk Flushing Toilet (PB1089)	1998	N/A	N/A	High	4/28
Eastern District					
Tai Tam Reservoir Road Tai Tam Barbecue Site (TT/B/007) Flushing Toilet (PB1017)	1992	2012	1.0	Moderate	4/28
Mount Parker Road Barbecue Site (QB/B/102) Flushing Toilet (PB893)	1981	2003	N/A	High	4/28
Tai Fung Au Flushing Toilet (PB1009)	1990	2003	N/A	High	4/28
Woodside Biodiversity Education Centre Flushing Toilet	2012	N/A	No separate breakdown as it was included in the total construction cost of the Centre.	Moderate	4/28
Island District					

(a) Location ¹	(b) Year of construction	(c) Year of last refurbishment ²	(d) Construction cost ³ (\$ million)	(e) Utilisation rate ⁴	(f) Cleansing frequency (time per day/week)
Nam Shan Barbecue Site (LN/B/001) Flushing Toilet (PB763)	1982	N/A	N/A	Moderate	4/28
Nam Shan Campsite (LS/C/001) Flushing Toilet (PB764)	1982	Renovation work in progress	N/A	Moderate	4/28

¹ There is no public toilet managed by the Agriculture, Fisheries and Conservation Department (AFCD) in Sham Shui Po, Kowloon City, Yau Tsim Mong, Tuen Mun, Wan Chai and Kwun Tong Districts.

² Only major renovation and refurbishment works are shown in the table above. Other maintenance works (e.g. repairing of water taps and electrical appliance, replacement of water pipeline, painting of wall, etc.) are carried out from time to time as and when necessary. Information for works conducted more than 20 years ago is incomplete and thus not available.

³ Construction costs for most of the toilets constructed more than 20 years ago are incomplete and thus not available.

⁴ There are no objective and precise statistics on the utilisation rate of the toilets concerned. The utilisation rates tabulated above are divided into 3 categories (i.e. high, moderate and low) based on observation of the frontline staff.

(g) Cleansing of public toilets is conducted by staff (either cleansing workers of outsourced contractors or AFCD staff) who are also required to carry out other duties such as cleansing and litter collection in country parks and special areas. There is no separate breakdown on the number of staff only responsible for cleaning toilets.

(h) AFCD does not have the figures on the number of replenishment of toilet paper and liquid soap per week. The outsourced contractors and AFCD staff are required to ensure that there is always toilet paper available and sufficient liquid soap in the toilets and replenish as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY**ENB197****(Question Serial No. 4745)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please provide the following information over the past 5 years:

- (a) The location, construction cost, area and number of cubicles of the public toilet with the lowest construction cost.
- (b) The location, construction cost, area and number of cubicles of the public toilet with the highest construction cost.
- (c) The average cost of constructing a public toilet.
- (d) The average cost of constructing a toilet cubicle.
- (e) The average cost of constructing per square metre of a public toilet.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 359)

Reply:

- (a) to (c) Over the past 5 years, 1 new public toilet was constructed in a country park and the details are tabulated as follows:

Year of opening	Location	Construction cost (\$ million)	Number of cubicles	Area (m²)
2017	East Dam of the High Island Reservoir (within Sai Kung East Country Park)*	1.3	5	34

* Due to the site constraints, this toilet is an assembled toilet modular.

- (d) The average cost of constructing a toilet cubicle was about \$260,000.
- (e) The average cost of constructing each square metre of a public toilet was about \$40,000.

- End -

CONTROLLING OFFICER'S REPLY

ENB198

(Question Serial No. 6707)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) What are the details, staff establishment, total expenditure and the breakdown of all expenditure on combating the illegal trade of endangered species by the Government over the past 5 years and in the financial year of 2020-21?
- (b) Please set out the applications for issue of licence received related to the international trade in endangered species, the number of licences/certificates issued, the species and total number of the endangered species involved, and the number of unsuccessful applications for licences over the past 5 years.
- (c) Please set out the expenditure of the Department on the control of imports of animal skin and fur products and the details of the work concerned over the past 5 years. What was the frequency of inspections and quarantine operations conducted by the Department at various boundary control points and the Hong Kong International Airport?
- (d) Please set out, by confiscated item (e.g. pangolin scales/carcasses, ivory, elephant skin, crocodile skin, products containing ingredients from bear gall bladders, etc.) and the species of the animal involved, the details of cases involving illegal import of endangered species and animal skin and fur products over the past 5 years, including the number of cases, number of prosecutions instituted, number of persons arrested, number of persons convicted and the penalties imposed, the quantity of confiscated items and the original final destination for export, etc.
- (e) Although the Government has increased significantly the penalties under the Protection of Endangered Species of Animals and Plants Ordinance (the Ordinance), the Customs and Excise Department detected in February last year the largest pangolin scale smuggling case so far and the third largest ivory smuggling case over the past 10 years. The New York Times stated that Hong Kong is still a large transshipment hub of endangered species smuggling. In this connection, what countermeasures does the Government have for further combating endangered species smuggling in Hong Kong?

- (f) Will the Government consider introducing a certification scheme for identifying places of origin of skin and fur products, requiring that all skin and fur products imported and for trading in the market bear labels indicating whether the skin and fur used are genuine (and which types of animals they are obtained from) or counterfeit?
- (g) Will the Department conduct random inspections on products claimed to contain ingredients from bear gall bladders? If yes, what are the details? If not, will the Government consider conducting such random inspections in order to deter illegal import of animal products regulated under the Ordinance into Hong Kong?
- (h) Although the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Ordinance do not impose regulation on the methods of collecting specimens of endangered species, will the Government prohibit the sale or import in Hong Kong of products claiming to contain ingredients from bear gall bladders on humanitarian grounds?
- (i) Please set out the details of cases involving illegal felling of Agarwood over the past 5 years, including the number of cases, number of prosecutions instituted, number of persons arrested, number of persons convicted, minimum and maximum penalties, species of Agarwood involved and the quantity of seizure, etc.
- (j) What were the details of the Department's work on combating the illegal felling as well as the conservation of Agarwood over the past 5 years? How effective is the work concerned?
- (k) What are the details and estimated expenditure involved in the conservation of Agarwood in the financial year of 2020-21?

Asked by: Hon MO Claudia (LegCo internal reference no.: 7)

Reply:

- (a) The Agriculture, Fisheries and Conservation Department (AFCD) has been working closely with the Customs and Excise Department (C&ED) and strictly regulating the trade in endangered species through enforcing the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) (the Ordinance) which gives effect to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Hong Kong. The import, export/re-export and domestic sale of endangered species in Hong Kong are regulated and closely monitored through a permit/certificate system in accordance with the provisions of CITES. AFCD conducts inspections of consignments, registered stock and retail outlets to ensure relevant requirements are complied with and to detect and deter illegal local trade in endangered species. AFCD also conducts joint operations with C&ED at various import and export control points from time to time to combat illegal import and export of endangered species. Meanwhile, they also collaborate with overseas and Mainland law enforcement agencies through international joint operations and intelligence exchange to combat smuggling of endangered species.

An Inter-departmental Task Force on Wildlife Crime, comprising representatives of AFCD, C&ED and the Hong Kong Police Force (the Police), has also been established to develop strategies on intelligence exchange and co-ordinate joint enforcement operations. Joint and targeted operations, both local and international, will be undertaken to strengthen the frontline enforcement against smuggling and illegal trade in endangered species.

The Protection of Endangered Species of Animals and Plants (Amendment) Ordinance 2018 (the Amendment Ordinance) came into effect on 1 May 2018. Starting from 1 August 2018, all import and export of ivory (save for antique ivory) for commercial purposes have been banned. A licence to possess is required for keeping pre-Convention ivory for commercial purposes.

AFCD has implemented a series of measures that aim at curbing smuggling of ivory and strengthening the control of local trade in ivory. The measures include enhancing inter-departmental collaboration and stepping up joint operations and intelligence exchange with C&ED and overseas law enforcement agencies (e.g. Interpol); deploying sniffer dogs to detect ivory at import and export control points to assist in detecting and preventing smuggling of ivory; conducting inspections targeted at licensed ivory shops and non-licensed art and craft shops to check the licensing compliance as well as to detect and combat illegal ivory trade; as well as using hi-tech radiocarbon dating analysis to determine the age and hence the legality of ivory.

AFCD has carried out a series of publicity and education activities to publicise the phase-out plan of the local ivory trade and the new penalty regime among the general public, travellers and traders. These include distributing leaflets and displaying posters at various import and export control points; broadcasting TV and radio Announcements of Public Interest on cross-boundary coaches and the YouTube Channel, displaying animated posters on digital screens at 6 Shenzhen to Hong Kong immigration control points as well as conducting visits to licensed ivory shops and other art and craft shops for education and promotion.

In 2020-21, the Government will continue to implement the above measures to curb smuggling and illegal trade in endangered species.

AFCD's expenditure and manpower on combating illegal trade in endangered species over the past 5 years and the estimated expenditure earmarked for this area of work in 2020-21 are tabulated as follows:

Year	2015-16	2016-17	2017-18	2018-19	2019-20 (revised estimate)	2020-21 (estimate)
Expenditure (\$ million)	26.0	28.3	31.1	35.4	41.5	49.0
Manpower (number of staff)	38	39	43	44	48	48

- (b) The numbers of applications for permits/certificates received and permits/certificates issued by AFCD with respect to the imports, exports, re-exports and possession of scheduled species under the Ordinance over the past 5 years are tabulated as follows:

Year	Number of applications received	Number of permits/certificates issued*
2015	23 089	23 475
2016	20 042	19 935
2017	18 938	19 043
2018	19 092	18 942
2019	19 749	19 995

* The number of permits/certificates issued may differ from the number of applications received within the same year as some permits and certificates were issued in respect of the applications submitted at the end of the previous year.

Some applications were unsuccessful mainly because the supporting documents submitted in respect of the applications were invalid. AFCD does not retain statistics on the number of unsuccessful applications.

- (c) Import of live animals and animal products, including animal skin and fur products, are mainly regulated for the prevention and control of rabies and protection of endangered species through enforcing the Rabies Regulation (Cap. 421A) (the Regulation) and the Ordinance respectively. AFCD officers carry out inspections and quarantine operations, including the deployment of sniffer dogs to perform screening duties, at various boundary control points and the Hong Kong International Airport to deter illegal import of live animals and animal products controlled under the Regulation and the Ordinance with a view to preventing the introduction of exotic animals or zoonotic diseases into Hong Kong, safeguarding public health and protecting endangered species.

The expenditure involved in the control of import of live animals and animal products, including animal skin and fur products, over the past 5 years is tabulated as follows:

Year	Expenditure (\$ million)
2015-16	17.9
2016-17	19.0
2017-18	19.7
2018-19	25.2
2019-20 (revised estimate)	30.1

The information on the number of inspections and quarantine operations at various boundary control points and the Hong Kong International Airport over the past 5 years is as follows:

Year	Number of inspections and quarantine operations	
	Boundary control points	Hong Kong International Airport
2015	5 000	93 300

Year	Number of inspections and quarantine operations	
	Boundary control points	Hong Kong International Airport
2016	4 600	86 800
2017	5 600	91 600
2018	4 700	80 700
2019	5 300	59 400

- (d) The information on pangolin scales or products seized under the Ordinance over the past 5 years is tabulated as follows:

Year	2015	2016	2017	2018	2019
Number of cases	19	23	20	54	11
Weight of pangolin scales or products seized (kg)	6 400	15 400	7 900	17 600	8 940
Number of persons arrested	15	14	18	37	16
Number of persons convicted	0	6	8	8	8
Maximum penalty	N/A [^]	Imprisonment of 2 months	Imprisonment of 2 weeks	Imprisonment of 4 weeks	Imprisonment of 20 months
Minimum penalty	N/A [^]	\$1,000	Imprisonment of 2 weeks, suspended for 18 months	Imprisonment of 2 weeks, suspended for 18 months	170 hours of community service

[^] No prosecution was instituted.

The last loading places of the pangolin scales or products seized were mainly African countries such as Nigeria, Cameroon and Mozambique.

The information on ivory and elephant skin seized under the Ordinance over the past 5 years is tabulated as follows:

Year	2015	2016	2017	2018	2019
Number of cases	105	41	64	55	23
Weight of ivory seized (kg)	1 600	530	7 300	372	2 058
Quantity of elephant skins seized	1	4	0	0	0

Year	2015	2016	2017	2018	2019
(pieces)					
Number of persons arrested	57	30	60	51	21
Number of persons convicted	30	25	47	42	18
Maximum penalty	Imprisonment of 6 months	Imprisonment of 8 months	Imprisonment of 3 months	Imprisonment of 4 months	Imprisonment of 6 weeks
Minimum penalty	\$30,000	\$2,000	\$2,000	\$5,000	Imprisonment of 2 weeks, suspended for 24 months

The last loading places of the illegally imported ivory were mainly African countries such as Nigeria, Zimbabwe and South Africa. Ivory seized from inbound passengers or postal parcels was mostly worked ivory or semi-processed ivory while ivory seized from sea containers was mostly raw tusks and large cut pieces.

The information on reptile skin products seized under the Ordinance over the past 5 years is tabulated as follows:

Year	2015	2016	2017	2018	2019
Number of cases	51	61	51	52	46
Quantity of reptile skin products seized (pieces)	294	424	253	241	478
Number of persons arrested	0	2	4	4	0
Number of persons convicted	0	2	4	4	0
Maximum penalty	N/A [^]	\$12,000	Imprisonment of 2 weeks	Imprisonment of 6 weeks	N/A [^]
Minimum penalty	N/A [^]	\$6,000	Imprisonment of 2 weeks, suspended for 2 years	Imprisonment of 1 week, suspended for 18 months	N/A [^]

[^] No prosecution was instituted.

Most of the seized reptile skins were leather products of crocodile, python and water monitor. Their last loading places were mainly European countries such as Switzerland, France and Spain.

The information on bear bile products seized under the Ordinance over the past 5 years is tabulated as follows:

Year	2015	2016	2017	2018	2019
Number of cases	0	0	1	2	2
Weight of bear bile products seized (g)	0	0	10.0	91.0	25.5
Number of persons arrested	0	0	0	2	1
Number of persons convicted	0	0	0	2	1
Maximum penalty	N/A [^]	N/A [^]	N/A [^]	\$20,000 and imprisonment of 4 months, suspended for 24 months	Imprisonment of 6 weeks, suspended for 24 months
Minimum penalty	N/A [^]	N/A [^]	N/A [^]	\$5,000	N/A

[^] No prosecution was instituted.

The seized bear gall bladder products were all bear bile powder and the last loading places were the Mainland, Nigeria and Myanmar.

- (e) Since the Amendment Ordinance came into effect on 1 May 2018, the maximum penalties for offences related to illegal trade in endangered species have been increased to a fine of \$10 million and imprisonment for 10 years for Appendix I species and a fine of \$1 million and imprisonment for 7 years for Appendix II or III species. More serious cases of smuggling of endangered species were tried at District Courts instead of Magistrate Courts and the sentences handed down have been increased significantly. For instance, the penalty imposed in a case of illegal import of 1.3 kg rhino horn was an imprisonment of 12 months and that in another case of illegal export of 2.6 kg wood chips of Incense Tree was an imprisonment of 24 months. The penalties imposed in similar cases before the increase in the maximum penalties were imprisonment of 2 weeks and 2 months respectively. AFCD believes that the much heavier penalties imposed by the court would send a clear message to the public about the seriousness of such offences and provide a stronger deterrent against the illegal trade in endangered species.
- (f) to (h) The objective of CITES is to strengthen trade control through adoption of effective measures among governments of the contracting parties, so as to effectively protect the endangered species of wild fauna and flora and ensure that the sustainable use of wild fauna and flora will not be affected by international trade. Hong Kong abides by CITES in the protection of endangered species and implements it through enforcing the Ordinance. AFCD works closely with C&ED to combat smuggling of endangered species, including bear gall bladders. By deploying the risk management and intelligence-led approach, C&ED conducts checks on passengers, cargoes, postal parcels and conveyances at

various boundary control points and sea ports to effectively fight against illegal import of endangered species specimens, including animal skin and fur products of endangered species. AFCD also conducts regular inspection at local shops to detect and deter illegal trade in endangered species. Besides, the maximum penalties under the Ordinance have recently been increased by a significant margin to enhance deterrent effect against illegal trade in endangered species. AFCD has no plan to introduce a trade certification/labelling scheme for animal skin and fur products or to prohibit the sale of legally imported products containing ingredients from bear gall bladders.

- (i) Over the past 5 years, all criminal cases involving illegal felling of Incense Trees were handled by the Police under the Theft Ordinance (Cap. 210), the Summary Offences Ordinance (Cap. 228) or the Crimes Ordinance (Cap. 200). The relevant statistics are tabulated as follows:

Year	Number of				Penalty (imprisonment / months)		Quantity seized* (kg)
	Cases	Prosecutions	Persons arrested	Persons convicted	Maximum	Minimum	
2015	120	5	16	3	35	30	107
2016	54	8	22	8	30	2	217
2017	53	1	9	1	30 [#]	30 [#]	94
2018	41	0	1	0	N/A [^]	N/A [^]	5
2019	32	0	0	0	N/A [^]	N/A [^]	0

[#] There was only 1 convicted case in 2017.

[^] No prosecution was instituted.

* The quantity of agarwood seized on the persons arrested.

- (j) and (k) Conservation of endangered trees (including Incense Trees) is part of the regular work of AFCD in relation to nature conservation and management of country parks, which includes flora conservation, habitat management, law enforcement, education and publicity activities. To tackle illegal felling of Incense Trees, AFCD has implemented a species action plan for Incense Trees, which covers a series of measures, including:

- (i) establishment of a special task force to conduct targeted patrol of sites with important populations of Incense Tree, in addition to regular patrols in country parks and special areas;
- (ii) working closely with the Police in gathering and exchanging intelligence, conducting joint law enforcement operations at black spots and investigation of illegal tree felling cases, and enhancing the awareness and vigilance of the public about such offences through social media as well as various education and publicity programmes;
- (iii) enhancing liaison and cooperation with concern groups and villagers living near Incense Trees for intelligence gathering and reporting of any illegal felling activities;

- (iv) conducting a pilot scheme using infrared sensor camera traps to monitor illegal felling of Incense Trees at several strategic locations;
- (v) installing tree guards to prevent felling or vandalism of important individuals of Incense Tree;
- (vi) dressing the wounds of damaged trees with anti-fungal paint to suppress the formation of agarwood in order to discourage illegal harvesting;
- (vii) organising training sessions to help frontline staff of the Police and C&ED identify Incense Trees/agarwood and detect illegal activities;
- (viii) deploying sniffer dogs to facilitate detection of agarwood smuggling at land boundary control points;
- (ix) stepping up the extensive planting of Incense Trees in country parks. Since 2009, about 10 000 seedlings of Incense Trees have been produced and planted every year to assist in the re-stocking of this species in Hong Kong; and
- (x) supporting various research studies and activities to conserve this native species and enhance public awareness in this aspect.

In addition, long-term monitoring of important populations of Incense Trees is in place to monitor its conservation status and check on the effectiveness of the protection measures. The resources involved in implementing the above measures were absorbed in the allocation for nature conservation and management of country parks, hence no separate breakdown on the expenditure involved is available. However, starting from 2020-21, AFCD will allocate an additional provision of \$8.5 million to enhance support for the above measures.

- End -

CONTROLLING OFFICER'S REPLY

ENB199

(Question Serial No. 6709)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

- (a) Please provide, by year, the Department's total expenditure and an exhaustive breakdown of the expenditure involved in dealing with the wild pig issue, including the handling of complaints from the public, administrative expenses and manpower, etc. over the past 5 years and in 2020-21.
- (b) Please set out, by year, the work details, manpower, number and location of wild pigs administered with contraceptive drug, total expenditure and an exhaustive breakdown of the expenditure, including the expenditure on the purchase the contraceptive drug GonaCon™, commissioning of contractor, overall salaries expenditure, etc. involved in the Capture and Contraception/Relocation Programme of Wild Pigs (CCRP) since its implementation and in 2020-21.
- (c) Please set out the number of complaints about wild pigs by district over the past 5 years.
- (d) What are the locations and number of wild pig nuisance blackspots? What is the number of blackspots covered by CCRP?
- (e) It is stated in the Audit Report last year that CCRP covered only 53% of the blackspots, but the Agriculture, Fisheries and Conservation Department (AFCD) had no plan to cover the remaining 47% of the blackspots in the programme. Will the Department consider covering the remaining 47% of the blackspots? If yes, what are the details and timetable of the work involved? If not, what are the reasons?
- (f) Are there any wild pigs that developed side effects or other adverse reactions after being administered with the contraceptive drug? If yes, what are the number of wild pigs and details?
- (g) It is stated in the Audit Report last year that as at 31 May 2019, only 6 (9%) out of the 64 wild pigs administered with the vaccine and released back to the wild had been

recaptured for pregnancy tests to evaluate the effectiveness of the vaccine. While the study on the vaccine was scheduled for completion in October 2019, due to the limited number of wild pigs recaptured, the contractor had not yet obtained enough samples as at 31 July 2019 to evaluate the effectiveness of the vaccine. Why did the contractor fail to meet the target? What will its contract expire? Will the Department appoint another contractor upon expiring of the contract concerned?

- (h) What measures does the Department have on expediting the evaluation of the contraceptive vaccine? What is the current number of wild pigs administered with the vaccine, released back to the wild and recaptured for pregnancy tests? Are there enough samples to conduct the evaluation? If yes, what are the details of the effectiveness of the vaccine? If not, when is it expected to obtain enough samples?
- (i) It is stated in the Audit Report last year that while a population control programme (i.e. CCRP) has been implemented for wild pigs, AFCD has not regularly conducted population surveys of wild pigs. AFCD indicated that a pilot study for wild pig population had been commenced in April 2019 and the first batch of data had been collected for studying the effectiveness of the techniques used in the population survey. In this connection, what are the principles and objectives adopted by the Department in devising the wild pig population control programme when the number of wild pigs in Hong Kong is uncertain?
- (j) What are the details of the technology adopted in the “Pilot Study for Wild Pig Population”? Has the effectiveness of the technology been evaluated? If yes, what is the outcome? If not, what are the reasons for the lengthy process? What are the challenges?
- (k) It is stated in the Audit Report last year that as at 31 May 2019, only 66 (86%) of the 77 wild pig nuisance blackspots had banners put up to remind people of the need to refrain from feeding wild and stray animals and to advise people of the precautions to be taken when encountering wild animals. How many wild pig nuisance blackspots have banners put up?

Asked by: Hon MO Claudia (LegCo internal reference no.: 6)

Reply:

- (a) The expenditure and manpower of the Agriculture, Fisheries and Conservation Department (AFCD) involved in wild pig management over the past 5 years and the estimated expenditure and manpower involved in this respect in 2020-21 are tabulated as follows:

Year	Expenditure (\$ million)	Manpower (number of staff)
2015-16	1.8	12*
2016-17	2.4	12*
2017-18	6.8	6
2018-19	9.9	14

Year	Expenditure (\$ million)	Manpower (number of staff)
2019-20 (revised estimate)	13.8	26
2020-21 (estimate)	23.7	31

* The nuisance caused by monkeys and wild pigs was handled by the same group of staff before 2017. However, since the establishment of a dedicated team in 2017, the existing 12 staff members have become mainly responsible for handling monkey nuisance and rescue of wildlife, as well as assisting in handling wild pig nuisance where necessary.

There is no separate breakdown of the expenditure involved in handling public complaints, administrative expenses for wild pig management, etc.

- (b) AFCD has tried implementing the pilot Capture and Contraception/Relocation Programme (CCRP) to handle nuisance caused by wild pigs in urban areas since late 2017. To enable a more effective control of the number of wild pigs causing nuisance to urban areas, AFCD has regularised CCRP in phases since 2019-20 to vaccinate or sterilise wild pigs caught or rescued where the condition permits. AFCD's expenditure on the pilot CCRP since the launch of the programme and the estimated expenditure in this respect in 2020-21 are tabulated as follows:

Year	Expenditure (\$ million)
2017-18	3.8
2018-19	6.2
2019-20 (revised estimate)	6.8
2020-21 (estimate)	10.0

There is no separate breakdown of the expenditure involved in the pilot CCRP.

As of February 2020, the number of wild pigs administered with contraceptive vaccine by district is tabulated as follows:

District	Number of wild pigs administered with contraceptive vaccine		
	Year		
	2017-18 (From October 2017)	2018-19	2019-20 (as of February 2020)
Central and Western	0	7	5
Wan Chai	3	7	6
Eastern	0	2	3
Southern	11	16	10
Tuen Mun	0	6	5
North	0	1	2
Tai Po	0	2	2

District	Number of wild pigs administered with contraceptive vaccine		
	Year		
	2017-18 (From October 2017)	2018-19	2019-20 (as of February 2020)
Sha Tin	0	3	11
Sai Kung	0	2	7
Tsuen Wan	0	0	2
Yuen Long	0	0	1
Total	14	46	54

- (c) Over the past 5 years, the number of cases about wild pig sighting or nuisance received by AFCD by district is tabulated as follows:

District	Number of reports on wild pig sighting or nuisance				
	Year				
	2015-16	2016-17	2017-18	2018-19	2019-20 (as of January 2020)
Central and Western	37	34	74	102	97
Wan Chai	21	35	59	93	65
Eastern	38	40	36	60	45
Southern	115	139	205	249	190
Yau Tsim Mong	0	0	1	0	0
Sham Shui Po	5	18	5	4	22
Kowloon City	0	1	3	12	10
Wong Tai Sin	29	31	12	25	15
Kwun Tong	1	6	5	12	17
Kwai Tsing	6	11	12	18	27
Tsuen Wan	9	18	57	32	66
Tuen Mun	19	26	38	51	45
Yuen Long	30	16	24	20	23
North	17	37	26	31	20
Tai Po	53	67	54	75	68
Sha Tin	51	78	53	87	97
Sai Kung	68	79	111	127	137
Islands	11	7	12	10	6
Total	510	643	787	1 008	950

- (d) and (e) AFCD adopts a multi-pronged approach to deploy measures with regard to the cause of wild pig nuisance in each case. CCRP is one of the management measures, which is taken mainly for dealing with nuisance caused by wild pigs that are accustomed to feeding and often appears near residential areas. Since some of the nuisance black spots only involve wild pigs searching for food among outdoor refuse, maintenance of environmental hygiene is more effective in dealing with wild pig nuisance when compared to catching operations. After

the food source has been removed in some of the black spots, the nuisance problem will be solved and there will be no need to carry out catching operations. In addition, given the hilly and steep terrain of some of the black spots and for the sake of the safety of staff and wild pigs, it is not appropriate to arrange catching operations at those spots and AFCD will take other suitable follow up measures.

The number of wild pig nuisance black spots and the measures taken at those spots by district are tabulated as follows:

District (number of black spots within the district)	Management measures taken/ Number of spots involved				
	Wild pig nuisance problem solved	Pilot CCRP has been carried out	Pilot CCRP will be carried out	Involving environmental hygiene issue only	Not suitable for carrying out catching operations
Central and Western (10)	2	4	3	1	0
Eastern (3)	0	2	1	0	0
Islands (1)	0	0	0	1	0
Kowloon City (1)	0	0	0	1	0
Kwai Tsing (2)	0	0	0	0	2
North (2)	1	0	0	0	1
Sai Kung (9)	1	3	0	4	1
Sha Tin (4)	0	3	0	1	0
Southern (18)	2	14	0	1	1
Tai Po (8)	0	2	2	3	1
Tsuen Wan (5)	4	0	0	0	1
Tuen Mun (4)	0	1	0	2	1
Wan Chai (6)	3	2	0	0	1
Wong Tai Sin (2)	0	0	0	0	2
Yuen Long (2)	2	0	0	0	0
Total (77) (Percentage (100%))	15 (20%)	31 (40%)	6 (8%)	14 (18%)	11 (14%)

Summarising the above figures, the pilot CCRP has been carried out/planned to be carried out or nuisance has already been solved at 68% of wild pig nuisance black spots. The remaining nuisance black spots will be handled by taking other measures (e.g. stepping up patrol at nuisance black spots or carrying out joint operations with relevant departments). AFCD will continue to monitor the situation of every nuisance black spot and take suitable follow-up measures.

- (f) to (h) According to observation, no wild pigs show obvious side effects or other adverse reactions after being administered with contraceptive vaccine. To assess the effectiveness of the contraceptive vaccine, AFCD has sent a number of samples collected from wild pigs before and after contraceptive vaccination to the U.K. for testing in October 2019. The results indicated that 88% of wild

pigs did not get pregnant again 2 to 21 months after contraceptive vaccination. AFCD will continue to collect samples to assess the effectiveness of the vaccine. To track the vaccinated wild pigs more effectively, AFCD will commission a contractor to explore suitable tracking devices for wild pigs.

- (i) and (j) Wild pigs are generally solitary or live in small groups, secretive, widely distributed, and have extensive home range. Thus, it is very difficult to conduct a large-scale population survey on them. AFCD launched a study to estimate the number of wild pigs in the countryside using infrared camera traps in 2019. It was estimated that there were about 1 800 to 3 300 wild pigs in the countryside all over Hong Kong based on the wild pig population density at the trial sites. AFCD will extend the scope of the study to cover more sites and different seasons in 2020 so as to make a more accurate estimation of the wild pig population in the countryside.
- (k) AFCD has put up publicity banners or posters at 70 wild pig nuisance black spots so far. As the remaining nuisance black spots are located on private property (2 spots) or wild pig nuisance thereof has been solved (5 spots), publicity materials are not displayed at those spots.

- End -

CONTROLLING OFFICER'S REPLY**ENB200****(Question Serial No. 3943)**

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Over the past 3 years, regarding the conservation of biodiversity as well as promotion of sustainable and compatible use of country and marine parks, what were the staff establishment and expenditure involved respectively and the specific measures taken? Please provide the details.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 85)

Reply:

Country and marine parks are designated and managed for the purposes of nature conservation, recreation and education. Therefore, various biodiversity conservation measures are implemented by the Agriculture, Fisheries and Conservation Department (AFCD) in country and marine parks, including vegetation and habitat management, hill fire prevention and fighting, development control, patrols and law enforcement, and ecology and water quality monitoring. AFCD also provides and maintains various facilities to promote compatible use of country and marine parks, including hiking, camping, mountain biking, photo taking, barbecuing, boating, swimming, snorkelling, scuba diving, canoeing and dolphin watching, etc. Relevant education and publicity programmes are conducted for students and the general public. These include school visits, eco-tours, guided tours at visitor or education centres, hiking and tree planting, exhibitions, educational and public engagement workshops, as well as volunteer schemes. To publicise these programmes and promote nature appreciation and conservation, AFCD disseminates the information through leaflets, posters, thematic websites, mobile applications and social media.

AFCD's manpower and recurrent expenditure involved in biodiversity conservation in country and marine parks and promotion of compatible use of country and marine parks over the past 3 years are tabulated as follows:

Year	2017-18	2018-19	2019-20 (revised estimate)

Year	2017-18	2018-19	2019-20 (revised estimate)
Manpower (number of staff)	720	691	757
Recurrent expenditure (\$ million)	210	230	250

- End -

CONTROLLING OFFICER'S REPLY

ENB201

(Question Serial No. 5136)

Head: (22) Agriculture, Fisheries and Conservation Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Nature Conservation and Country Parks

Controlling Officer: Director of Agriculture, Fisheries and Conservation
(Dr LEUNG Siu-fai)

Director of Bureau: Secretary for the Environment

Question:

Please advise this Committee of the following information over the past 3 years:

- (a) What was the Department's expenditure on animal traps? What was the geographical distribution of animal traps? What were the Department's target animals? What were the types and number of animals caught, and the number of animals which died after falling into the animal traps accidentally;
- (b) The numbers of patrols conducted by the Government to combat illegal hunting by means of animal traps, the manpower deployed for this purpose, the number of illegally installed/possessed animal traps seized, the number of cases in which prosecutions were initiated and the average amount of penalties imposed on the convicted offenders;
- (c) The number of animals injured by illegally installed animal traps and subsequently euthanised by AFCD, and the number of reports received by AFCD on members of the public having been injured by animal traps, with a breakdown by animal type;
- (d) Would the Department designate "black spots of animal trapping" according to the record of illegal animal traps seized over the past 3 years, so as to step up patrols or install monitoring cameras? What measures will be taken to combat illegal installation of animal traps or illegal hunting with animal traps?

Asked by: Hon TAM Man-ho, Jeremy (LegCo internal reference no.: 401)

Reply:

- (a) The expenditure of the Agriculture, Fisheries and Conservation Department (AFCD) on purchasing and maintaining animal traps over the past 3 years is tabulated as follows:

Year	Expenditure ('000)
2017-18	20
2018-19	80
2019-20 (revised estimate)	50

In general, upon receipt of complaints or reports from members of the public regarding nuisances caused by stray animals (mostly cats and dogs), AFCD will conduct follow-up inspections and catching operations using suitable methods including setting up animal traps as necessary. As such, there is no specific location at which the animal traps are set up. Also, all the traps deployed would be retrieved immediately upon completion of the operation.

The types and number of animals caught with animal traps by AFCD over the past 3 years are tabulated as follows:

Year	Number of animals caught with animal traps				
	Dogs^{Note} (by cage/snare)	Cats^{Note} (by cage)	Pigeons^{Note} (by cage)	Monkeys (by cage/snare)	Wild pigs (by cage, net or dart gun)
2017	118/103	475	273	291/28	106
2018	40/102	299	0	195/29	197
2019	35/35	186	0	216/14	284

Note: The management of stray animals falls under the policy purview of the Food and Health Bureau.

There was no record of animals injured or died due to accidental fall into animal traps set up by AFCD over the past 3 years.

- (b) The number of patrols conducted by AFCD to combat illegal hunting of wild animals by means of animal traps, the manpower deployed, the number of animal traps seized, the number of prosecutions, as well as the average amount of fine of cases subject to a fine penalty over the past 3 years are tabulated as follows:

Year	2017-18	2018-19	2019-20 (as of December 2019)
Number of patrols* (time)	1 847	1 933	1 897
Number of traps seized (piece)	160	332	100
Number of prosecutions [#]	1	0	0
Average fine (\$)	800	N/A	N/A

* 3 to 5 staff members were involved in each patrol.

[#] Offenders have been successfully prosecuted in all cases brought to court.

- (c) Over the past 3 years, no wild animals were euthanised by AFCD due to injury caused by illegally-deployed animal traps. During the same period, AFCD received 1 report on human injury inflicted by illegally-deployed animal traps.

- (d) Under the Wild Animals Protection Ordinance (Cap. 170) (the Ordinance), no persons shall, without permission, have in their possession of hunting appliance (including animal traps), or hunt any wild animals by means of hunting appliance. Upon conviction, the maximum penalty is a fine of \$50,000. In addition, if any person hunts or has in his possession of any protected wild animals scheduled under the Ordinance, the maximum penalty is a fine of \$100,000 and an imprisonment for 1 year.

AFCD spares no effort in combating illegal hunting of wild animals, and patrols the countryside regularly, particularly to the sites where animal traps have been found. AFCD will remove any animal traps found immediately, and will display notices to remind the public that using hunting appliances is unlawful and they shall not to commit such an offence. If there is sufficient evidence, AFCD will institute prosecution against the offenders. Apart from patrolling the countryside areas, AFCD will also arrange joint operations with the Hong Kong Police Force and the Society for the Prevention of Cruelty to Animals to step up patrols at sites where animal traps have been found, and to distribute publicity leaflets to the nearby public. AFCD will keep abreast of the latest developments (including the application of surveillance cameras) from time to time, and adopt appropriate measures and technology to facilitate law enforcement.

- End -

CONTROLLING OFFICER'S REPLY

ENB202

(Question Serial No. 3870)

Head: (39) Drainage Services Department

Subhead (No. & title): Not Specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (LO Kwok-wah)

Director of Bureau: Secretary for the Environment

Question:

It is stated in Matters Requiring Special Attention in 2020–21 under this Programme that the Government will continue with the provision of professional advice and support to the development of cross-boundary infrastructure and priority infrastructure projects. Would the Government please advise this Committee of the staff establishment and estimated salary expenditure involved in the above-mentioned work in 2020-21?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 172)

Reply:

The Drainage Services Department (DSD) will provide professional advice and support to the development of stormwater and sewage treatment and disposal facilities in cross-boundary infrastructure and priority infrastructure projects, covering their investigation, design, construction and connection together with the management, operation and maintenance upon completion of projects. As the work is part of the DSD staff members' overall duties, there is no particular breakdown of the manpower and salary expenditure involved in the work.

- End -

CONTROLLING OFFICER'S REPLY**ENB203****(Question Serial No. 3667)**Head: (39) Drainage Services DepartmentSubhead (No. & title): Not SpecifiedProgramme: (2) Sewage ServicesControlling Officer: Director of Drainage Services (LO Kwok-wah)Director of Bureau: Secretary for the EnvironmentQuestion:

1. Over the past three years, what are the number of foul water pipe misconnection cases received by the Department, the number of resolved cases, as well as the expenditure on rectification of the foul water pipe misconnection outside private buildings and rehabilitation of public sewers?
2. What are the progress of and expenditure involved in each item of sewerage works over the past three years and in the coming year?
3. What is the latest progress of the Village Sewerage Programme?

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 22)Reply:

The information sought is provided as follows:

1. Over the past 3 years, the Drainage Services Department (DSD) received 103 public sewer misconnection cases. Of these, 71 cases were resolved. The expenditure on rectification of the public sewer misconnection outside private buildings was about \$1.2 million. Besides, the expenditure on rehabilitation of public sewers was about \$600 million.
2. The table below sets out the major sewerage works being implemented and subject to funding approval by the Legislative Council and the expenditure involved in the works over the past 3 years and in the coming year:

Project titles	Expected completion year	2017-18 (Actual) (\$million)	2018-19 (Actual) (\$million)	2019-20 (Revised estimate) (\$million)	2020-21 (Estimate) (\$million)
Upgrading of Central and East Kowloon sewerage – phase 3	2024	0.000	1.866	28.200	80.830
Construction of dry weather flow interceptor at Cherry Street box culvert	2022	2.429	49.009	76.770	94.390
Construction of additional sewage rising main and	2025	79.990	150.000	100.000	60.000

Project titles	Expected completion year	2017-18 (Actual) (\$million)	2018-19 (Actual) (\$million)	2019-20 (Revised estimate) (\$million)	2020-21 (Estimate) (\$million)
rehabilitation of the existing sewage rising main between Tung Chung and Siu Ho Wan					
Shek Wu Hui Effluent Polishing Plant	2034	0.000	0.000	35.000	330.000
Rehabilitation of trunk sewers in Tuen Mun	2023	0.000	4.435	67.000	70.000
Expansion of Sha Tau Kok Sewage Treatment Works – phase 1	2025	0.000	11.041	128.000	205.470
Rehabilitation of trunk sewers in Kowloon, Sha Tin and Sai Kung	2022	0.274	33.879	61.000	79.000
Upgrading of Kwun Tong preliminary treatment works	2022	15.406	56.088	59.670	65.000
Sewerage to Lei Yue Mun Village	2023	0.000	3.519	24.000	37.340
Upgrading of sewage pumping stations and sewerage along Ting Kok Road	2023	0.000	1.771	50.000	80.000
Trunk sewers at Hiram's Highway	2020	2.386	6.400	4.867	12.763
Upgrading of San Wai sewage treatment works – phase 1	2020	421.795	493.704	417.000	200.000
Enhancement works for Kwun Tong sewage pumping station	2022	9.971	135.548	246.000	176.632
Upgrading of West Kowloon and Tsuen Wan sewerage – Phase 1	2022	4.556	21.881	23.500	28.000
Outlying Islands sewerage stage 2 – Peng Chau village sewerage phase 2 package 1	2022	0.000	4.200	6.000	18.000
North District sewerage stage 2 part 2A – village sewerage for Tong To	2022	0.000	0.219	1.150	4.010
Relocation of Sha Tin sewage treatment works to caverns – site preparation and access tunnel construction	2022	0.000	0.000	156.689	289.200
Rehabilitation of underground sewers stage 1	2022	0.000	2.100	24.493	38.721
Tolo Harbour sewerage of unsewered areas, stage 2, phase 2	2024	0.000	0.000	0.000	22.000
Port Shelter sewerage, stage 2, package 3	2025	0.000	0.000	0.000	40.000
Port Shelter sewerage, stage 3, package 2	2025	0.000	0.000	0.000	50.000
Yuen Long Effluent Polishing Plant – stage 1	2026	0.000	0.000	0.000	100.000
Tseung Kwan O sewerage for villages*	2024	0.000	0.000	0.000	37.700

Project titles	Expected completion year	2017-18 (Actual) (\$million)	2018-19 (Actual) (\$million)	2019-20 (Revised estimate) (\$million)	2020-21 (Estimate) (\$million)
Village sewerage for Luk Tei Tong and Ma Po Tsuen*	2026	0.000	0.000	0.000	2.930
Outlying Islands sewerage stage 2 – Lamma village sewerage phase 2, package 2*	2025	0.000	0.000	0.000	2.095
Sewerage for Ma Yau Tong village, Tseung Kwan O*	2024	0.000	0.000	0.000	19.240
Upgrading of West Kowloon and Tsuen Wan sewerage – phase 2*	2027	0.000	0.000	0.000	97.300
Construction of San Shek Wan sewage treatment works, associated submarine outfall and Pui O sewerage works*	2026	0.000	0.000	0.000	5.238
Village Sewerage in Fanling Wai, So Kwun Po and Leng Pei Tsuen, Fanling*	2025	0.000	0.000	0.000	6.810
Upgrading of Tuen Mun sewerage, phase 1, part 2*	2024	0.000	0.000	0.000	30.000
Outlying Islands sewerage, stage 2 – upgrading of Cheung Chau sewage treatment and disposal facilities*	2026	0.000	0.000	0.000	85.000
West Kowloon and Tsuen Wan village sewerage – phase 1*	2024	0.000	0.000	0.000	16.760
Rehabilitation of underground sewers stage 2*	2025	0.000	0.000	0.000	20.260
Relocation of Sha Tin sewage treatment works to caverns – main caverns construction and upstream sewerage works*	2031	0.000	0.000	0.000	5.480

* The items of works subject to funding approval by the Legislative Council.

3. Regarding the Village Sewerage Programme, as at December 2019, sewerage works at 255 villages were completed while those at about 275 villages are being implemented or have been included in the Public Works Programme.

- End -

CONTROLLING OFFICER'S REPLY

ENB204

(Question Serial No. 3946)

Head: (39) Drainage Services Department
Subhead (No. & title): Not Specified
Programme: (2) Sewage Services
Controlling Officer: Director of Drainage Services (LO Kwok-wah)
Director of Bureau: Secretary for the Environment

Question:

It is mentioned under Matters Requiring Special Attention in 2020–21 that the Government will continue with the design and commence the construction of sewerage for some villages in places such as Sha Tin, Tai Po, Port Shelter and Tseung Kwan O. In this connection, please advise this Committee of the current progress of village sewerage works for Sha Tin, Tai Po, Port Shelter and Tseung Kwan O; the staff establishment and expenditure involved; and the anticipated commencement and completion dates of the sewerage works for the places mentioned above.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 88)

Reply:

In February 2020, the Legislative Council's Finance Committee (FC) approved funding for construction of village sewerage for a total of 11 villages in Sha Tin, Tai Po and Sai Kung (Port Shelter) at a sum of about \$1.49 billion. The works will commence in the third quarter of 2020 and be completed in phases by end 2025.

Besides, the Government will seek the FC's funding approval of about \$470 million this year for construction of village sewerage for 11 villages in Tseung Kwan O. Subject to the funding approval of the FC, the relevant works would commence in the first quarter of 2021 for completion in phases in the second quarter of 2025.

We will continue to proceed with the design of village sewerage for the other 48 villages in Sha Tin, Tai Po and Sai Kung (Port Shelter).

As the work mentioned above is part of the Drainage Services Department staff members' overall duties, there is no breakdown of the manpower and salary expenditure involved in this regard.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3872)

Head: (42) Electrical and Mechanical Services Department
Subhead (No. & title): Not Specified
Programme: (3) Energy Efficiency and Conservation, and Alternative Energy
Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)
Director of Bureau: Secretary for the Environment

Question:

Regarding the operational expenses for the operation of the District Cooling System at the Kai Tak Development which already commenced operation, will the Government inform this Committee of the recurrent expenditure and maintenance expenditure in 2019-20, as well as the estimated annual recurrent expenditure, staff establishment and the estimated annual expenditure on emoluments for the establishment concerned in 2020-21?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 174)

Reply:

The recurrent expenditure (including operation and maintenance) on the District Cooling System (DCS) at the Kai Tak Development (KTD) in 2019-20 (as of the end of February 2020) was \$31.33 million, while the estimated recurrent expenditure (including operation and maintenance) in 2020-21 is \$55.62 million.

The staff establishment for the operation of the DCS at the KTD is 1 Senior Engineer, 1 Engineer, 2 Inspectors, 1 Senior Technical Officer, 1 Treasury Accountant and 1 Accounting Officer I.

The estimated expenditure on emoluments for the above-mentioned staff establishment in 2020-21 is \$6.29 million.

- End -

CONTROLLING OFFICER'S REPLY**ENB206****(Question Serial No. 6763)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): Not SpecifiedProgramme: (1) Energy Supply; Electrical, Gas and Nuclear SafetyControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for the EnvironmentQuestion:

What are the respective numbers of electrical incidents reported to the Electrical and Mechanical Services Department (EMSD) in the past 5 years? What is the expenditure of the EMSD in 2020-21 for checking and repairing the electricity facilities in Hong Kong?

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 60)Reply:

The respective numbers of electrical incidents reported to the Electrical and Mechanical Services Department (EMSD) in the past 5 years are as follow:

Year	Number of Reported Electrical Incidents
2019	485
2018	382
2017	378
2016	427
2015	361

The checking and repairing works of electricity facilities are carried out by their responsible persons instead of the EMSD. As for the electricity facilities owned by the Government, the checking and repairing works are undertaken by the owner departments. The EMSD does not have information on the expenditure involved.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3888)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Matters Requiring Special Attention in 2020-2021 under this Programme that the Administration will continue to take forward the legislative proposal of Municipal Solid Waste (MSW) charging and undertake other preparatory work for the implementation of MSW charging. Will the Administration inform this Committee of the operational expenses, staffing and estimated annual expenditure on salaries to be involved in performing the above work in 2020-2021?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 190)

Reply:

We will continue to facilitate the scrutiny of the bill on municipal solid waste charging (MSW charging) by the Bills Committee of the Legislative Council so as to implement MSW charging according to the "polluter pays" principle. No matter whether the bill will be passed in the current legislative session, the Environmental Protection Department (EPD) will continue to carry out publicity and educational work and other preparatory work for the implementation of MSW charging, which include preparing relevant complementary systems, such as a manufacturing, inventory and distribution system for the designated garbage bags/labels, with some 4 000 sales points in the territory; upgrading the infrastructure at the waste reception facilities at landfills and refuse transfer stations to implement the charging mode of "gate-fee"; and carrying out Community Involvement Projects and pilot projects regarding MSW charging in different types of premises so that participants can try out MSW charging in actual settings and gain first-hand experience in quantity-based charging, which will promote the awareness and acceptance of different stakeholders and members of the public towards waste reduction and waste charging and prepare them for the implementation of MSW charging after the bill is passed in future.

The implementation of the above work by the EPD in the 2020-21 financial year will involve 53 posts. The estimated annual expenditure on salaries involved is about \$43 million, while about \$32 million has been earmarked for the preparatory work for MSW charging.

- End -

CONTROLLING OFFICER'S REPLY

ENB208

(Question Serial No. 3893)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

In the Matters Requiring Special Attention in 2020-2021 under this Programme, the Administration mentioned that it would continue to plan and implement the various landfill extension projects. Will the Administration advise this Committee on the following:

1. What are the operational expenses, staffing and estimated annual expenditure on salaries for the above work for 2020-2021?
2. What are the operational expenses, staffing and estimated annual expenditure on salaries of the Landfills and Development Group under the Environmental Protection Department for 2020-2021?

Asked by: Hon CHAN Chi-chuen (LegCo internal reference no.: 195)

Reply:

1. Since the funding was approved by the Legislative Council in 2014, we have pressed ahead with the implementation of the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme, as well as the design and site investigation study of the West New Territories Landfill Extension Scheme. In 2020-21, the estimated expenditure of the above extension schemes, including those for relevant design, study and works, is \$683 million in total. As the above tasks are mainly carried out by staff of the Environmental Infrastructure Division of the Environmental Protection Department (EPD), we do not have a separate breakdown for the manpower resources required for individual tasks.
2. The Landfills and Development Group (LDG) of the Environmental Infrastructure Division of the EPD is mainly responsible for managing the 3 existing strategic landfills, implementing the extension schemes and other work relating to the landfills. It is estimated that the operational expenditure associated with the 70 staff members at various levels in the LDG (including salary and other recurrent expenditure) is about \$59.51 million in 2020-21.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3649)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

With regard to the 3 strategic landfills in operation, will the Government inform this Committee for the past 3 years:

- a. of the quantities (tonnes) of various types of waste received by the 3 strategic landfills in each year in tabular form;
- b. of the quantities (tonnes) and proportion of waste delivered by land and by sea (if any) to the 3 strategic landfills in each year, and the number of refuse collection vehicle trips entering the 3 strategic landfills per day;
- c. further to the above question, of the number of vehicles entering the North East New Territories Landfill via the Lung Shan Tunnel among the others;
- d. of the number of complaints about various kinds of pollution (including odour, noise, wastewater, hygiene, etc.) received in each year relating to the 3 strategic landfills, the investigation and follow-up actions, as well as whether any prosecutions have been made in respect of the complaints?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 174)

Reply:

- a. The quantities of various types of waste received by the 3 strategic landfills in Hong Kong in the past 3 years are tabulated below:

Year	North East New Territories (NENT) Landfill (tonnes per day)			South East New Territories (SENT) Landfill ⁽¹⁾ (tonnes per day)			West New Territories (WENT) Landfill (tonnes per day)		
	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste	Municipal Waste	Overall Construction Waste	Special Waste
2017	3 117	1 160	213	0	2 300	0	7 616	747	363
2018	3 487	1 317	242	0	2 140	0	7 940	624	345
2019	3 536	1 356	288	0	2 065	0	7 521	524	346

Note:

(1) Since 6 January 2016, the SENT Landfill has only received construction waste.

b. The quantities and proportion of waste delivered by land and by sea to the 3 strategic landfills, and the number of refuse collection vehicle trips entering the 3 strategic landfills per day in the past 3 years are tabulated below:

Year	NENT Landfill		SENT Landfill		WENT Landfill ⁽²⁾			Total tonnes per day
	By land		By land		By land		By sea	
	tonnes per day	no. of vehicle trips per day	tonnes per day	no. of vehicle trips per day	tonnes per day (%)	no. of vehicle trips per day	tonnes per day (%)	
2017	4 490	664	2 300	551	2 942 (34%)	317	5 784 (66%)	8 726
2018	5 046	743	2 140	493	3 103 (35%)	340	5 806 (65%)	8 909
2019	5 180	733	2 065	475	2 707 (32%)	303	5 684 (68%)	8 391

Notes:

(1) The figures in the table above have been rounded off.

(2) Only the WENT Landfill received waste delivered by sea.

c. According to the survey conducted on the users of the NENT Landfill, about 70% of the vehicles entered the NENT Landfill via the Lung Shan Tunnel.

d. The numbers and types of environmental complaints related to the 3 strategic landfills received by the Environmental Protection Department (EPD) in the past 3 years are set out below:

NENT Landfill

Year	Number of complaints by type				
	Air	Noise	Wastewater	Waste	Miscellaneous
2017	0	0	1	0	0
2018	0	0	0	0	0
2019	1	0	2	0	0

SENT Landfill

Year	Number of complaints by type				
	Air	Noise	Wastewater	Waste	Miscellaneous
2017	49	0	0	1	0
2018	8	0	0	0	0
2019	13	0	0	0	1

WENT Landfill

Year	Number of complaints by type				
	Air	Noise	Wastewater	Waste	Miscellaneous
2017	25	1	0	0	0
2018	8	0	4	0	4
2019	6	1	1	0	0

The EPD investigated into each of the complaints received and followed up the cases in accordance with the legislation. Regarding an incident of leakage of wastewater from the WENT Landfill to the Tai Shui Hang River in 2018, the contractor of the landfill was convicted by the court and fined a total of \$28,000 for contravening the Water Pollution Control Ordinance and the Water Pollution Control (General) Regulations in November 2019.

- End -

CONTROLLING OFFICER'S REPLY**ENB210****(Question Serial No. 3650)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the 7 refuse transfer stations (RTSs) being in operation, will the Government advise this Committee on the following for the past 3 years:

- a. Please list in tabular form the average amount (tonnes) of waste received by the 7 RTSs each year.
- b. Please list in tabular form the number of vehicular trips of refuse collection vehicles and waste-loaded container trucks to/from the 7 RTSs each year.
- c. Has the Administration received any complaints about the RTSs each year? If yes, what were the number and types of complaints? Has the Administration conducted investigations, taken follow-up actions and instituted prosecutions in respect of these complaints?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 175)Reply:

- (a) The amounts of municipal solid waste (MSW) received by the refuse transfer stations (RTSs) over the past 3 years are tabulated below:

RTSs	Daily average of MSW received (tonnes) ⁽²⁾		
	2017	2018	2019
West Kowloon ⁽¹⁾	2 681	2 700	2 712
Shatin	1 503	1 655	1 611
Island East	1 194	1 225	1 186
Island West	1 161	1 153	1 097
North West New Territories	1 211	1 260	1 279
North Lantau	636	659	653
Outlying Islands ⁽¹⁾	87	90	85

Note: (1) Apart from MSW, the West Kowloon RTS also received on average about 471 (in 2017), 499 (in 2018) and 537 (in 2019) tonnes per day of grease trap waste. Besides, the Outlying Islands Transfer Facilities also received on average about 45 (in 2017), 47 (in 2018) and 32 (in 2019) tonnes per day of construction waste.

(2) Figures are rounded to the nearest whole number.

(b) The daily average numbers of vehicular trips of refuse collection vehicles (RCVs) delivering MSW to the RTSs over the past 3 years are tabulated below:

RTSs	Daily average number of vehicular trips of RCVs delivering MSW to RTSs ⁽⁴⁾		
	2017	2018	2019
West Kowloon	670	671	688
Shatin	354	387	388
Island East	281	289	289
Island West	276	282	282
North West New Territories	263	275	284
North Lantau	125	128	126
Outlying Islands	143	137	122

The daily average numbers of vehicular trips of container trucks delivering waste from the RTSs to landfills by land over the past 3 years are tabulated below:

RTSs ⁽³⁾	Daily average number of vehicular trips of container trucks delivering waste from RTSs to landfills ⁽⁴⁾		
	2017	2018	2019
Shatin	67	74	73
North West New Territories	59	61	64

Note: (3) Only the Shatin RTS and the North West New Territories RTS delivered waste to landfills by land using container trucks. Other RTSs delivered waste to landfills by sea.

(4) Figures are rounded to the nearest whole number.

(c) The numbers and types of complaints about the RTSs received by the Environmental Protection Department (EPD) over the past 3 years are set out below:

Year	Numbers and types of complaints about the RTSs				
	Air	Noise	Wastewater	Waste	Miscellaneous
2017	10	10	1	0	0
2018	11	2	0	0	0

2019	12	6	0	0	1 ⁽⁵⁾
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Note: (5) The complaint is related to long waiting time for the vehicles.

The EPD has investigated each of the above complaints received, and has not found any violations of environmental legislation or provisions of the operation contracts.

- End -

CONTROLLING OFFICER'S REPLY

ENB211

(Question Serial No. 3651)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding local air pollution, will the Government advise this Committee on:

- a. the major sources of the local air pollutants in the past 5 years;
- b. the number of deaths and the amount of medical expenditure caused by air pollution each year;
- c. the current fuel mix for electricity generation, and the anticipated change in the fuel mix for electricity generation in the coming 10 years;
- d. the expenditures allocated by the 2 power companies for purchasing new gas-fired generating units;
- e. the details of the pilot scheme for electric ferries proposed by the Government this year?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 176)

Reply:

- a. The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory (the Emission Inventory) every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The Emission Inventories for 2018 and 2019 are still under compilation. According to the Emission Inventory for 2017, the main emission sources of sulphur dioxide, nitrogen oxides, respirable suspended particulates, fine suspended particulates and carbon monoxide are vessels, power plants and vehicles, whereas the main sources of volatile organic compounds emissions are non-combustion sources (including the use of paints, printing inks and consumer products such as hair sprays, adhesives, etc.). Please refer to the Annex for the percentages of emissions from various local major air pollutant emission sources in Hong Kong's total emissions from 2013 to 2017.
- b. The adverse health effects caused by air pollution mainly include hospital admissions, clinic visits as well as premature deaths in relation to respiratory and cardiovascular diseases. According to the method developed by the Chinese University of Hong Kong under the study "Developing an Instrument for Assessing the Health and

Economic Impacts of Air Pollution in Hong Kong” commissioned by the EPD and completed in 2016, based on the data of 2019, the projected number of premature deaths will be about 2 300, representing a decrease of about 63% as compared with the 6 300 cases in 2014; whereas the medical expenditure incurred due to hospital admissions and clinic visits will be about \$99 million, representing a decrease of about 52% as compared with the \$205 million incurred in 2014.

- c. In the overall fuel mix for electricity generation in Hong Kong in 2019, coal-fired generation accounted for around 44%, gas-fired generation accounted for around 29%, nuclear electricity imported from the Mainland and local renewable energy (RE) accounted for around 27%. In 2020, the 2 power companies will increase the percentage of local gas-fired generation to around 50% and maintain the current arrangement of importing nuclear electricity from the Daya Bay Nuclear Power Station such that nuclear electricity import will account for around 25% of the overall fuel mix. At the same time, we will further develop RE, promote energy saving and meet the remaining demand for electricity by coal-fired generation. In the coming decade, when the existing coal-fired generating units gradually retire, they will be replaced by generating units using natural gas and non-fossil fuel sources.
- d. Under the 2018-23 Development Plans, the estimated total capital expenditures for the construction of the approved new gas-fired generating units by the CLP Power Hong Kong Limited and The Hongkong Electric Company Limited are about \$6 billion and \$5 billion respectively.
- e. The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the Pilot Scheme and oversee its implementation. Given the limited global application of electric passenger ferries, we will engage an independent consultant to advise on the design of electric ferries and assist ferry operators in preparing open tenders for the construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million. The actual expenditure will depend on the results of the open tenders for the electric ferries.

**The percentages of emissions from local major air pollutant emission sources
in Hong Kong's total emissions from 2013 to 2017*#**

To provide more accurate emission data to facilitate the management of air quality, the EPD will constantly update the methodologies and emission factors to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods or emission factors are updated, and therefore the current data from 2013 to 2016 may be different from the estimates provided in the past.

2017						
Pollutant emission source	Sulphur dioxide	Nitrogen oxides	Respirable suspended particulates	Fine suspended particulates	Volatile organic compounds	Carbon monoxide
Public electricity generation	43%	27%	16%	10%	2%	6%
Road transport	<1%	20%	10%	12%	19%	53%
Navigation	52%	37%	34%	41%	17%	24%
Civil aviation	4%	7%	1%	2%	2%	8%
Other combustion sources	1%	9%	16%	19%	3%	10%
Non-combustion sources	-	-	22%	16%	57%	-
2016						
Public electricity generation	46%	28%	14%	9%	2%	6%
Road transport	<1%	20%	10%	12%	18%	53%
Navigation	49%	36%	37%	43%	17%	24%
Civil aviation	3%	7%	1%	1%	2%	7%
Other combustion sources	1%	10%	17%	21%	3%	10%
Non-combustion sources	-	-	20%	14%	58%	-
2015						
Public electricity generation	37%	27%	12%	8%	2%	6%
Road transport	<1%	21%	11%	13%	19%	54%
Navigation	59%	35%	39%	45%	15%	22%
Civil aviation	3%	6%	1%	1%	2%	7%
Other combustion sources	1%	10%	18%	21%	4%	11%
Non-combustion sources	-	-	19%	13%	59%	-
2014						
Public electricity generation	53%	33%	17%	10%	2%	6%

generation						
Road transport	<1%	20%	13%	15%	19%	57%
Navigation	44%	33%	37%	44%	14%	21%
Civil aviation	2%	5%	1%	1%	2%	6%
Other combustion sources	1%	9%	16%	19%	4%	10%
Non-combustion sources	-	-	16%	11%	58%	-
2013						
Public electricity generation	47%	30%	16%	9%	2%	6%
Road transport	<1%	23%	15%	17%	20%	63%
Navigation	51%	32%	37%	43%	13%	17%
Civil aviation	1%	5%	1%	1%	2%	5%
Other combustion sources	1%	10%	16%	19%	4%	9%
Non-combustion sources	-	-	16%	10%	60%	-

Notes: “-” represents not applicable.

* The percentages may not add up to 100 due to rounding.

- End -

CONTROLLING OFFICER'S REPLY

ENB212

(Question Serial No. 3652)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding promotion of environmental protection by government departments, will the Government advise this Committee on the following for the past 5 years:

- a. the amount of paper procured by government departments each year, among which the amount and percentage of recycled paper, as well as the respective amount of expenditure;
- b. the expenditure on green procurement of various types of materials, and its percentage in the total material cost;
- c. the main regions from which the environmental products procured were imported;
- d. besides the aforesaid measures, the measures taken by government departments to take the lead in promoting environmental protection?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 177)

Reply:

a. The details of the A3 and A4 paper procured by the Government Logistics Department for government bureaux/departments in the past 5 years are as follows:

Contract period	Item	Estimated contracted quantity (Ream#)	Contract amount (\$)
1 April 2015 to 31 May 2017	A. Woodfree paper*		
	A3	23 000	887,800.00
	A4	1 146 306	22,123,705.80
	B. Recycled paper		
(1)	A3	73 000	2,876,200.00
	A4	2 951 038	58,135,448.60
26 May 2017 to 25 May 2019	A. Woodfree paper*		
	A3	21 875	656,250.00
	A4	1 079 981	16,199,715.00
	B. Recycled paper		
	A3	89 909	3,011,951.50
	A4	3 573 479	59,677,099.30
25 July 2019 to 24 July 2021	A. Woodfree paper*		
(1)	A3	21 000	768,600.00
(1)	A4	982 000	17,970,600.00
A.	B. Recycled paper		
(1)	A3	94 000	3,440,400.00
(1)	A4	3 853 000	70,509,900.00

There are 500 pieces of paper in one ream.

* The paper pulp of the woodfree paper procured is from sustainably managed forests and has no recycled content.

- b. The expenditures of government departments on green procurement in 2019 are still being compiled. The expenditures from 2015 to 2018 by category are tabulated below:

Materials	Expenditure (\$)			
	2015	2016	2017	2018
Agriculture and horticulture	244,000	6,200,000	6,295,000	3,310,000
Building and construction supplies	2,217,000	9,405,000	35,017,000	19,170,000
Cleansing products	4,616,000	12,779,000	4,361,000	4,262,000
Computer equipment and products	132,549,000	65,524,000	188,164,000	289,659,000
Distilled water	78,000	437,000	5,838,000	1,140,000
Electrical and gas appliances and light fittings	23,786,000	68,122,000	78,663,000	111,515,000
Fuel oils and hydrocarbon lubricants	55,550,000	200,634,000	7,206,000	390,921,000
Furniture	16,728,000	27,621,000	27,590,000	69,929,000
General stores and general services	65,000	1,086,000	2,943,000	1,610,000
Household goods	6,912,000	4,982,000	1,460,000	1,609,000
Office equipment	7,733,000	10,894,000	13,879,000	13,269,000
Packaging materials	224,000	1,870,000	1,433,000	2,007,000
Paper for printing and photocopying	113,411,000	25,989,000	113,419,000	29,552,000
Paper products other than those for printing and photocopying	31,234,000	30,062,000	35,759,000	55,805,000
Plastic and rubber products	31,074,000	21,688,000	36,031,000	22,854,000
Printing and publishing supplies	1,156,000	2,351,000	192,000	2,178,000
Shoes and boots	5,910,000	19,085,000	20,831,000	25,173,000
Stationery and office supplies	113,194,000	132,309,000	163,995,000	144,971,000
Telecommunication equipment and spares	35,324,000	16,157,000	26,137,000	8,389,000
Textile materials and garment	80,505,000	104,581,000	82,679,000	126,503,000
Transportation services	5,235,000	172,342,000	145,069,000	50,513,000
Vehicles and spare parts	326,891,000	191,636,000	181,339,000	390,967,000
Water using equipment	227,000	2,003,000	5,085,000	7,395,000

Total	994,863,000	1,127,757,000	1,183,385,000	1,772,701,000
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- c. The Government's procurement policy is to obtain goods and services at the best value for money through fair and open competition. We treat all tenderers equally. Suppliers from different regions are allowed to bid on an equal basis irrespective of the place of origin of the products so long as they can provide products fulfilling the green specifications. As procurement is handled by bureaux and departments themselves having regard to their needs, we do not have the relevant procurement information.
- d. At present, the Government has internal circulars and guidelines which require departments to adopt good practices in environmental protection, such as waste reduction and recycling, energy and carbon reduction in their daily operations and preparation for conferences, exhibitions and events, etc. To create a social atmosphere for inculcating a living culture of "bring your own bottle" in the public, since 20 February 2018, sale of plastic bottled water measuring 1 litre or less has been progressively ceased in automatic vending machines (AVMs) at government premises. Over 80% of about 1 600 AVMs installed in government premises have put in place the above stop-sale arrangement. The remaining AVMs will gradually implement the stop-sale arrangement by renewing existing relevant contracts, lease/tenancy agreements or permissions, etc. The Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2022 for public use in government venues. Subject to the actual work progress, it is expected that 200 additional water dispensers will be installed in 2020-21.

Moreover, starting from January 2019, the Government has taken the lead in banning plastic straws and polyfoam food containers in premises and canteens mainly serving government staff. Relevant departments, when signing new contracts and renewing existing contracts, will also require restaurant operators in government venues to avoid using disposable plastic tableware and reduce the use of disposable plastic tableware appropriately.

At the same time, the Government has led by example by adopting green procurement to promote environmental protection. The Government's Stores and Procurement Regulations require bureaux and departments to take environmental factors into account in setting out tender specifications and purchase green products as far as possible and where economically rational. The Environmental Protection Department (EPD) has developed the green specifications and guidelines for the goods and services commonly used by the Government after making reference to the practices and standards generally adopted in the market, and has provided training to frontline procurement staff, requiring bureaux and departments to practise green procurement in accordance with the relevant specifications. At present, the Government's green procurement list has been expanded to cover 150 items of green products and services. To enhance the overall performance of green procurement in the Government, the EPD has commissioned a consultancy study to further expand the Government's green procurement list to cover more products and services and update the relevant green specifications. According to the current progress, the study is expected to be completed in the second quarter of 2020. The EPD has been actively promoting green procurement by uploading the relevant information, such as the

Government's latest green procurement list and the relevant specifications, green procurement tips as well as the local and international best practices onto the EPD's website for public reference.

- End -

CONTROLLING OFFICER'S REPLY

ENB213

(Question Serial No. 3653)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the work of revitalising the restored landfills, will the Government inform this Committee:

- a. of the applications received in respect of the Restored Landfill Revitalisation Funding Scheme;
- b. further to the above question, of the applications approved and the funding involved;
- c. of the planned uses of the restored landfills which are available for development up till now;
- d. of the details of the existing scheme for provision of photovoltaic panels at the landfill and the estimated expenditure?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 178)

Reply:

a, b & c. The Environmental Protection Department (EPD) is providing the non-profit-making organisations (NPOs) with funding support for the development of recreational facilities at restored landfills via the “Restored Landfill Revitalisation Funding Scheme” (the Funding Scheme), with a view to providing a practical alternative for the effective use of restored landfills. Under Batch 1 of the Funding Scheme, approval-in-principle has been granted to the proposal submitted by the Tung Wah Group of Hospitals (TWGHs). The project proposes to revitalise approximately 2 hectares of flat area in the Tseung Kwan O Stage I Landfill into a “camp site-cum-green education ground”, so as to provide facilities for organising camping, green education, outdoor recreation, adventure training and gardening activities, etc. A technical feasibility study was completed by the TWGHs in 2018. The EPD is providing the TWGHs with funding support for the pre-construction activities for the project, including site investigation, detailed design and tender documentation, etc. The Government has earmarked \$1 billion for the Funding Scheme under the Capital Works Reserve Fund, and the funding support for the capital works of each

project is capped at \$100 million. The expenditure incurred for the above project in 2019-20 was about \$1 million.

During the implementation of Batch 1 of the Funding Scheme, we have found that many NPOs might encounter various technical constraints, difficulties and challenges when developing large-scale recreational facilities at restored landfills, such as the restrictions on the loading capacity of landfills, the needs for land formation and infrastructure, proper vehicular access, effective feeder transport, ecology of the surrounding environment and planning requirements, etc. As the development and continuous implementation of the projects will be affected by these issues in varying degrees, the Steering Committee on the Funding Scheme proposes that the Government should actively consider providing suitable guidelines and infrastructure for developing the restored landfills, and adopt a more proactive approach to expedite the development of restored landfills.

The EPD is considering and developing suitable long-term beneficial uses and the necessary infrastructure, as well as exploring the feasible interim uses, having regard to the surrounding environment and site constraints of restored landfills. The EPD is also preparing to commence a consultancy study in 2020, with a view to formulating implementation plans for the necessary infrastructure and facilities having regard to the actual circumstances of restored landfills, for more effective development of suitable beneficial uses on restored landfills in future. In the meantime, the EPD will continue to consider proposals from NPOs for development of various recreational and sports facilities on restored landfills on a self-financing basis.

- d. The EPD plans to launch a pilot solar power generation project at the South East New Territories (SENT) Landfill (the Pilot Project), with a view to establishing the technical standards and exploring suitable development and mode of operation for the use of solar power generation at landfills in the long run. The SENT Landfill is an operating landfill. Under the Pilot Project, the landfill contractor will install solar panels with a generating capacity of 1 megawatt on a restored slope of about 1 hectare. The contractor will take up the design, construction and operation of the Pilot Project on a self-financing basis via the Feed-in Tariff Scheme. The contractor is currently proceeding with the relevant statutory procedures (including the application for planning permission), and is planning to commence the Pilot Project in 2020-21.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3654)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the Producer Responsibility Scheme on glass beverage containers, will the Government advise this Committee on the following:

- a. Why is there a delay in submitting the subsidiary legislation?
- b. What is the total number of glass container collection points set up in housing estates across the territory at present?
- c. What were the quantities of waste glass containers collected and the recycling rate in the past 5 years? What are the estimated quantities of waste glass containers to be collected and the estimated recycling rate for the coming 5 years?
- d. What are the contract value, handling capacity and details of the 3 glass management contracts awarded by the Government?
- e. Further to the above question, what are the actual monthly quantities of waste glass containers processed by the relevant contractors since the contracts have been awarded?
- f. What penalties will be imposed if the contractors fail to process and deliver the required quantities of waste glass containers as stipulated in the contracts?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 179)

Reply:

- a. The Environment Protection Department (EPD) is pressing ahead with the progressive implementation of the Producer Responsibility Scheme (PRS) on glass beverage containers. We have largely completed the drafting of the necessary subsidiary legislation to provide some operational details for the implementation of the scheme. More time was spent, in the drafting process, to give due consideration to various technical details of the actual operation and to consult the relevant stakeholders where necessary. We will submit the subsidiary legislation to the Legislative Council for scrutiny as soon as possible depending on the progress of the Legislative Council.
- b.-e. Through open tenders, the EPD has appointed 2 contractors to undertake the collection and treatment services for waste glass containers in 3 regions, i.e. Hong Kong Island

(including Islands District), Kowloon and the New Territories. Details of the contracts are summarised as follows:

Region	Tendering procedure	Contractor	Contract period	Estimated contract value (\$ million)
Hong Kong Island & Islands District	Open	Baguio Waste Management & Recycling Ltd.	5-year contract (effective from November 2017)	170.8
New Territories	Open	Baguio Waste Management & Recycling Ltd.	5-year contract (effective from November 2017)	102.5
Kowloon	Open	Hong Kong Glass Reborn Limited	5-year contract (effective from May 2018)	91.5

Under the contracts, the recycling target of the 2 contractors in the first year of the contract is 15 000 tonnes in total, and the Government's goal is to gradually attain the recovery target of 50 000 tonnes per year. From the commencement of glass collection services up to the end of 2019, the quantities of waste glass containers collected and the quantities of glass recyclables delivered under the 3 glass management contracts are as follows:

Glass management contract	Total quantity of glass containers collected (tonnes)	Total quantity of glass recyclables delivered* (tonnes)
Hong Kong Island (including Islands District)	12 051	10 322
New Territories	10 623	9 972
Kowloon	8 115	7 311
Total quantity	30 789	27 605

[*Note: Some of the glass recyclables are still temporarily stored in the treatment facilities of the glass management contractors for subsequent reuse and recycling as different materials.]

The total quantities of waste glass containers collected and the recycling rates in the past 5 years are as follows:

Year	Total quantity of glass containers collected* (tonnes)	Recycling rate
2015	9 300	8.5%
2016	9 300	9.5%
2017	11 000	12.1%
2018	15 100	16.3%
2019	Under compilation	Under compilation

[*Note: The figures include the quantities of waste glass containers collected under the voluntary recycling programmes and by private recyclers. The glass management contracts for Hong Kong Island (including Islands District) and the New Territories regions commenced in November 2017, and the contract for the Kowloon region commenced in May 2018.]

As at October 2019, there were about 1 700 glass container collection points at housing estates across the territory where containers were collected for treatment by the contractors.

- f. If a contractor fails to meet the operational requirements under the contract, the Government may deduct the service fees for that year in accordance with the relevant terms. If the contractor continues with its unsatisfactory performance, and it still fails to comply with the contract requirements after warning, the EPD may terminate the relevant contract before it expires and arrange for re-tendering in accordance with relevant contract terms.

- End -

CONTROLLING OFFICER'S REPLY

ENB215

(Question Serial No. 3655)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

In the past 3 years, regarding local construction waste, will the Government advise this Committee on:

- a. the amount of public fill generated in Hong Kong and the capacity of the public fill reception facilities each year;
- b. the number of complaints received about illegal disposal of construction waste in public places or rural areas each year;
- c. the number of proactive inspections conducted to combat the acts of illegal disposal of construction waste;
- d. the number of prosecutions against the persons concerned; and the penalties imposed;
- e. what measures are in place to combat illegal disposal of construction waste; and what are the relevant manpower and expenditure?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 180)

Reply:

(a) The Government has been properly managing the inert construction and demolition materials (also known as public fill) arising from various types of construction works through a multi-pronged approach, including encouraging the construction industry to reduce the generation and to reuse the public fill as much as possible. While part of the public fill is directly reused in suitable local construction projects, the rest is delivered to public fill reception facilities (including 2 temporary fill banks) for temporary storage pending future reuse in reclamation or earth filling projects. The quantities of public fill received at the public fill reception facilities in each of the past 3 years are as follows:

Year	Public Fill Received at Public Fill Reception Facilities (million tonnes)
2017	13.3
2018	12.3
2019	11.2*

* Provisional actual figure subject to adjustment

Note: The above figures do not include the quantity of public fill that has been directly delivered to other construction projects through matching for reuse without routing through the public fill reception facilities.

(b) to (d)

The numbers of public complaints on illegal disposal of construction waste handled by the relevant government departments (including the Environmental Protection Department (EPD), the Agriculture, Fisheries and Conservation Department, the Buildings Department, the Civil Engineering and Development Department, the Drainage Services Department, the Food and Environmental Hygiene Department, the Home Affairs Department, the Lands Department, the Planning Department and the Highways Department), as well as the numbers of inspections (including proactive inspections and complaints-follow up inspections), numbers of prosecutions and total fine in the past 3 years are tabulated below:

Fly-tipping of construction waste on government land

Year	2017	2018	2019
Number of public complaints ¹	10 507	9 876	9 347
Number of inspections	13 798	14 927	17 080
Number of prosecutions			
(1) Number of summonses issued	80	82	85
(2) Number of Fixed Penalty Notices (FPNs) issued ²	33	54	42
Total fine (\$m) ³	0.56	0.46	0.43

Notes:

¹ Including multiple complaints which may arise from a single case.

² The fine level of the FPN is \$1,500.

³ Total fine includes penalties for convictions by summonses and fixed penalties.

Illegal land filling of construction waste on private land

Year	2017	2018	2019
Number of public complaints ¹	397	376	331
Number of inspections	1 662	1 437	1 302
Number of prosecutions			
Number of summonses issued	96	105	73
Total fine (\$m)	1.34	2.42	5.24

Note:

¹ Including multiple complaints which may arise from a single case.

- (e) The EPD has been maintaining close liaison with the relevant departments through inter-departmental collaboration, including exchange of intelligence, sharing of information and joint working meetings etc., to monitor the overall illegal waste disposal situation and make concerted efforts to combat illegal disposal activities according to the departments' purview and legislation. In order to step up efforts in combating illegal disposal of waste, the EPD will continue to review the enforcement strategy from time to time, and will progressively increase the installation of surveillance camera systems at the black spot locations to facilitate enforcement and enhance the deterrent effect. In the meantime, apart from the manpower arrangement for the daily integrated enforcement duties, the EPD has set up 4 additional dedicated enforcement teams comprising a total of 16 staff members to conduct proactive patrols against waste disposal at various districts and handle the relevant complaints, which help expediting collection of evidence and referrals to relevant departments for waste clearance.

The relevant enforcement work is part of the integrated enforcement duties of the EPD. We do not have a separate figure for the expenditure on staffing involved.

- End -

CONTROLLING OFFICER'S REPLY**ENB216****(Question Serial No. 3658)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the collection of waste medicines in Hong Kong, will the Government advise this Committee on:

- a. the quantity of medicines disposed of at landfills in each of the past 5 years;
- b. the existing places for collecting waste medicines from the public;
- c. whether there are any programmes for collecting waste medicines from the community; if yes, on the details; if not, on the reasons;
- d. the quantity of waste medicines collected from organisations like hospitals and clinics;
- e. the quantity of medicines disposed of by institutions; and
- f. the quantity of waste medicines handled by the Government and the expenditure involved?

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 183)Reply:

- a. The Government mainly treats waste medicines at the Chemical Waste Treatment Centre by incineration. Generally, waste medicines are disposed of at landfills only when the Chemical Waste Treatment Centre is under maintenance. Some small amounts of waste which cannot be treated at the Chemical Waste Treatment Centre are also disposed of at landfills, such as medicine containers. In the past 5 years, the quantities of medicine waste disposed of at landfills and incinerated at the Chemical Waste Treatment Centre are tabulated as follows:

Year	Quantity of medicine waste disposed of at landfills (tonnes)	Quantity of medicine waste treated at the Chemical Waste Treatment Centre (tonnes)
2015	0	504
2016	9	695

Year	Quantity of medicine waste disposed of at landfills (tonnes)	Quantity of medicine waste treated at the Chemical Waste Treatment Centre (tonnes)
2017	4	681
2018	3	848
2019	12	990

- b. and c. In accordance with the Waste Disposal Ordinance (Cap. 354), waste medicines and injections generated by healthcare institutions such as hospitals and clinics are classified as chemical waste. The storage, collection, transport and disposal of such waste has to meet the stringent requirements laid down in the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). These control measures do not apply to the disposal of medicines and injections arising from households. Given the generally small quantities of household residual medicine and injections, they are currently being handled together with general domestic solid wastes. The Government has no plans to provide household residual medicines collection services.

For safe medication practice, the Department of Health (DH) and the Hospital Authority (HA) will not use medicines returned from patients and will not collect unused medicines from patients. The DH and the HA will offer necessary advice upon patients' enquiries on disposal of unused medicines. The HA has established procedures for its pharmacies to dispose of medicines as chemical waste in accordance with the relevant regulation under the Waste Disposal Ordinance.

- d. and e. In the past 5 years, the quantities of waste medicines collected from organisations like hospitals, clinics and institutions are as follows:

Year	Quantity of waste medicines collected (tonnes)	
	From hospitals and clinics [#]	From institutions [*]
2015	45	7
2016	50	9
2017	58	11
2018	64	12
2019	65	14

[#] including hospitals, clinics and other medical service providers.

^{*} including Residential Care Homes, Child Care Centres, Youth and Community Service Centres, and other Social Welfare Organisations.

- f. The quantities of waste medicines handled by the Government are listed in part (a) above. The expenditures involved in handling waste medicines by the Government are tabulated as follows:

Year	Expenditure involved in handling medicine waste at landfills (\$)	Expenditure involved in handling medicine waste at the Chemical Waste Treatment Centre (\$)
2014-15	0	2,809,900
2015-16	1,100	3,959,100
2016-17	500	5,120,300
2017-18	400	6,596,400
2018-19	1,500	7,667,000

- End -

CONTROLLING OFFICER'S REPLY**ENB217****(Question Serial No. 4177)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the details of electric vehicle (EV) charging facilities:

- a. Please set out in tabular form the number of additional EV charging facilities and their total number in Hong Kong in the past 5 years;
- b. Please provide the current distribution and percentage of EV charging facilities in 18 districts of Hong Kong.

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 142)Reply:

- a. The number of additional public electric vehicle (EV) chargers (including the chargers open for public use at car parks managed by the government and non-government sector) and their total numbers in the past 5 years are as follows:

Year	Total number of public EV chargers	Difference with the number in the previous year
2015	1 221	+ 96
2016	1 518	+297
2017	1 862	+344
2018	2 166	+304
2019	2 929	+763

- b. The numbers of public EV chargers with a breakdown by 18 districts of Hong Kong as at the end of 2019 are as follows:

District	No. of public chargers			Sub-total
	Standard	Medium	Quick	
Central & Western	62	110	38	210
Eastern	28	67	54	149
Southern	4	12	29	45
Wan Chai	66	121	37	224
Kowloon City	64	7	15	86
Kwun Tong	551	181	62	794
Sham Shui Po	17	104	71	192
Wong Tai Sin	24	46	11	81
Yau Tsim Mong	110	124	68	302
Kwai Tsing	25	13	33	71
Tsuen Wan	17	49	12	78
Sai Kung	24	37	27	88
North	58	25	12	95
Tai Po	28	3	7	38
Sha Tin	75	51	48	174
Yuen Long	50	33	18	101
Tuen Mun	12	10	19	41
Islands	18	115	27	160
Total	1 233	1 108	588	2 929

- End -

CONTROLLING OFFICER'S REPLY**ENB218****(Question Serial No. 4866)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (-) Not SpecifiedControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Head 44 Environmental Protection Department

Regarding the work in relation to the Code on Access to Information, will the Government advise this Committee on the following:

1) Concerning the requests for information under the Code on Access to Information received by the Environmental Protection Department (EPD) from October 2018 to present for which only some of the required information has been provided, please state in table form: (i) the content of the requests for which only some of the required information has been provided; (ii) the reasons for providing some of the information only; (iii) whether the decision to withhold some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application); (iv) whether the decision to withhold some of the information was made subject to a "harm or prejudice test", i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details of how the requests have been handled eventually.

From October to December 2018

(i) Content of the requests for which only some of the required information was provided	(ii) Reasons for providing some of the information only	(iii) Whether the decision to withhold some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision to withhold some of the information was made subject to a "harm or prejudice test", i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

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2019

(i) Content of the requests for which only some of the required information was provided	(ii) Reasons for providing some of the information only	(iii) Whether the decision to withhold some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision to withhold some of the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

2) Concerning the requests for information under the Code on Access to Information received by the EPD from October 2018 to present for which the required information has not been provided, please state in table form: (i) the content of the requests refused; (ii) the reasons for refusal; (iii) whether the decision to withhold the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application); (iv) whether the decision to withhold the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details of how the requests have been handled eventually.

From October to December 2018

(i) Content of the requests refused	(ii) Reasons for refusal	(iii) Whether the decision to withhold the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision to withhold the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

2019

(i) Content of the requests refused	(ii) Reasons for refusal	(iii) Whether the decision to withhold the information was	(iv) Whether the decision to withhold the information was made subject to a
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		made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	“harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

3) Any person who believes that a department has failed to comply with any provision of the Code on Access to Information may ask the department to review the situation. Please advise this Committee of, in each of the past 5 years, (i) the number of review cases received; (ii) the number of cases, among the review cases received in the year, in which further information was disclosed after review; (iii) whether the decisions on review were made at the directorate (D1 or D2) level.

Year in which review cases were received	(i) Number of review cases received	(ii) Number of cases, among the review cases received in the year, in which further information was disclosed after review	(iii) Whether the decisions on review were made at the directorate (D1 or D2) level
2015			
2016			
2017			
2018			
2019			

4) With reference to the target response times set out in paragraphs 1.16.1 to 1.19.1 of Guidelines on Interpretation and Application of the Code on Access to Information, please advise this Committee of the following information by year in table form (with text descriptions).

(a) Within 10 days from the date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the information requested could not be provided	Number of requests for which the information requested could not be provided since the requests had to be transferred to another department which held the information under request	Number of requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information	Number of applications which the applicants indicated that they did not wish to proceed with and withdrew since they did not accept the charge

2020					
2019					
2018					
2017					
2016					

Within 10 to 21 days from the date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the information requested could not be provided	Number of requests for which the information requested could not be provided since the requests had to be transferred to another department which held the information under request	Number of requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information	Number of applications which the applicants indicated that they did not wish to proceed with and withdrew since they did not accept the charge
2020					
2019					
2018					
2017					
2016					

Within 21 to 51 days from the date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the information requested could not be provided	Number of requests for which the information requested could not be provided since the requests had to be transferred to another department which held the information under request	Number of requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information	Number of applications which the applicants indicated that they did not wish to proceed with and withdrew since they did not accept the charge
2020					
2019					
2018					
2017					
2016					

(b) cases in which information could not be provided within 21 days from date of receipt of a request in the past 5 years:

Date	Subject of information requested	Specific reason

(c) cases in which information could not be provided within 51 days from date of receipt of a request in the past 5 years:

Date	Subject of information requested	Specific reason

5) Among the requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information in the past 5 years, please state in table form the number of those on which the Privacy Commissioner for Personal Data was consulted when they were being processed. For cases on which advice had been sought, was it fully accepted in the end? For cases where the advice of the Privacy Commissioner for Personal Data was not accepted or was only partially accepted, what are the reasons?

Date	Subject	Particular exemption provision in Part 2 of the Code on Access to Information under which requests for information were refused	Whether the advice of the Privacy Commissioner for Personal Data was fully accepted	Reasons for refusing to accept or only partially accepting the advice of the Privacy Commissioner for Personal Data

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 434)

Reply:

1) and 2) From October to December 2018, among the cases of requests for information under the Code on Access to Information (the Code) handled by the Environmental Protection Department (EPD), there were no cases for which only some of the required information was provided, or the request for information was refused.

2019

(i) Content of the requests for which only some of the required information was provided	(ii) Reasons for providing some of the information only
The quantities of reusable shopping bags, paper shopping bags and plastic garbage bags disposed each year from 2008 to 2017	Since disclosure of information relating to incomplete analysis, research or statistics could be misleading, some of the information could not be disclosed (paragraph 2.13(a) of the Code).
Request for record of complaint cases	Since law enforcement, legal proceedings and privacy of the individual were involved, some of the information could not be disclosed (paragraphs 2.6(e) and 2.15 of the Code).

(i) Content of the requests for which only some of the required information was provided	(ii) Reasons for providing some of the information only
Tender information of the contract for provision of management services for EcoPark	Since third party information and information on business affairs was involved, some of the information could not be disclosed (paragraphs 2.14 and 2.16 of the Code).
Request for all complaint cases followed up by an Environmental Protection Inspector in the past 5 years	Since law enforcement, legal proceedings, third party information and privacy of the individual were involved, some of the information could not be disclosed (paragraphs 2.6(e), 2.14 and 2.15 of the Code).

2019

(iii) Content of the requests refused	(iv) Reasons for refusal
Report on air pollution control plan of the Chemical Waste Treatment Centre	Since third party information was involved, the information could not be disclosed (paragraph 2.14 of the Code).

The decisions of the above cases were made by the EPD's directorates who have considered whether the public interest in disclosure of the information would outweigh any harm or prejudice that could result from the disclosure.

3) In the past 5 years, there was a case received by the EPD in 2015 that requested for review. After the EPD's directorates have reviewed the case, no further information was disclosed.

4a) (A) Within 10 days, (B) within 11 to 21 days and (C) within 22 to 51 days from the date of receipt of the written requests:

Year in which requests were received	Number of requests for which the information requested was provided			Number of requests involving third party information for which the information requested could not be provided			Number of requests for information which were refused under the exemption provisions in Part 2 of the Code (Note: Cases that were partially rejected and/or involving third party information were included)		
	(A)	(B)	(C)	(A)	(B)	(C)	(A)	(B)	(C)
2020 (As at 29 February)	2	1	1	0	0	0	0	0	0
2019	22	36	5	1	2	0	2	3	0
2018	19	7	1	0	1	0	0	3	0
2017	25	12	2	0	0	1	0	0	1
2016	13	5	2	1	1	0	1	2	0

In the past 5 years, the EPD handled a case within 10 days from the date of receipt of the written request in 2017, that the request had to be transferred to another department which held the information under request for follow-up. Moreover, the EPD handled a case within 11 to 21 days from the date of receipt of the written request in 2019, that the applicant did not wish to settle the payment and withdrew the application.

4b) and c) The reasons that the EPD could not reply within 21 days (Table 1) and within 22 to 51 days (Table 2) from the date of receipt of the requests in the past 5 years are as follows:

- (i) It involved the need to seek legal advice for the request that the EPD had to seek legal advice from the Department of Justice.
- (ii) It involved third party information that the EPD had to consult the third party.
- (iii) The information requested by the applicant involved a substantial amount of information
- (iv) The applicant amended/added subject(s).
- (v) The applicant asked for follow-up actions/requested for new information after the reply was issued by the EPD.
- (vi) Some matters were outside the purview of the EPD and the EPD had to consult relevant bureaux/departments before providing an appropriate response.
- (vii) Longer time was required to process, verify and analyse the required information/data.
- (viii) Others (please refer to the tables).

Table 1:

Date	Subject of information requested	Specific reason(s)
19 May 2015	Power and responsibilities of public officers	(iii)
14 July 2015	Enquiry about the applicant's medical reports held by the EPD and the medical board	(vi)
25 September 2016	Tendering and environmental permit issues of the Integrated Waste Management Facilities in Shek Kwu Chau	(iv)
28 October 2016	Quantity of marine refuse recorded in Sham Wan	(iv), (vi)
13 July 2017	Complaint investigation report of a property located in Sai Kung	(ii)

Date	Subject of information requested	Specific reason(s)
3 August 2017	Handling of infectious materials under clinical waste control in Hong Kong	(vi), (viii) : It was originally planned to provide a specific reply on 23 August 2017 (i.e. 21 days after receipt of the request) after consolidating the opinions from the relevant departments, but typhoon signal no. 10 was hoisted on that day, the reply was therefore issued on the next working day (24 August 2017).
9 December 2017	The costs of Shek Kwu Chau incinerator	(ii), (v)
11 November 2018	Public comments on works project, PWP Item no. 4353DS - Village Sewerage Works at Luk Tei Tong and Ma Po Tsuen	(v)
21 January 2019	Information on waste recycling bins on Lamma Island	(iii)
11 August 2019	Air quality monitoring data (2 cases)	(vii)
29 October 2019	i) Air quality monitoring data in Tuen Mun ii) Investigation of the odd smell found in Tuen Mun	(vi)
9 December 2019	Use of tear gas in police operations i) Complaints or enquiries about air quality or pollution ii) Frequency, location and results of air quality monitoring	(vii)

Table 2:

Date	Subject of information requested	Specific reason(s)
9 January 2015	Staff record of the community waste reduction project “Glass Recycling for a Greener Tomorrow”	(ii)
31 January 2018	Information about a landfilling case in Pui O	(i), (ii), (iii), (vi)

Date	Subject of information requested	Specific reason(s)
23 July 2018	The asbestos investigation and analysis report submitted by a company	(i), (ii)
1 August 2019	Applicability of the Water Pollution Control Ordinance to specialised crowd management vehicles	(vi)

- 5) In the past 5 years, the EPD did not consult the Privacy Commissioner for Personal Data on cases where requests for information were refused.

- End -

CONTROLLING OFFICER'S REPLY

ENB219

(Question Serial No. 5251)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste (2) Air (3) Noise (4) Water (5) Environmental Assessment and Planning (6) Nature Conservation

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Over the past year, the Police have used chemical weapons such as tear gas rounds and pepper spray frequently and improperly. In this connection, please advise this Committee whether the Environmental Protection Department has grasped the information on the composition of the chemical weapons used by the Police. Has the Department performed environmental testing in areas where chemical weapons were used to ascertain the chemical weapons' impacts on the environment?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 1855)

Reply:

Regarding the impacts of tear gas residue on the environment, tear gas is mainly a particulate compound. Since it is heavier than air, its dispersion is limited and it has no significant impact on the overall air quality. The Environmental Protection Department (EPD) has analysed all the particulate matter (PM) data recorded at the air quality monitoring stations near the areas where tear gas was launched since June 2019 by comparing the PM levels recorded at the monitoring stations during the period when tear gas was launched and the period before, as well as comparing the data with those recorded at other monitoring stations near the areas where no tear gas was launched. According to the analysis, the EPD did not find any anomalies in the PM levels recorded at the monitoring stations near the areas where tear gas was launched, indicating that tear gas has not caused any significant increase in the PM concentration in the entire area. As regards the water environment, the EPD did not find any anomalies in the routine water quality monitoring results recorded since June 2019.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 5598)

Head: (44) Environmental Protection Department

Subhead (No. & title): (700) General non-recurrent

Programme: (-) Not Specified

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

What are the estimated expenditure and work plan for the item “840 New Energy Transport Fund”? Why is it that the funding for this new commitment item has to be sought in the context of the Appropriation Bill? Even if this is not a new arrangement, why is the funding not sought individually from the Finance Committee of the Legislative Council?

What are the estimated expenditure and work plan for the new items “809 Pilot Scheme for Electric Public Light Buses”, “812 Pilot Scheme for Electric Ferries”, “815 Ex-gratia payment for phasing out Euro IV diesel commercial vehicles”, “818 Extension of the Cleaner Production Partnership Programme”, “819 Green Tech Fund” and “811 Pilot Subsidy Scheme for Installation of Electric Vehicle Charging-enabling Infrastructure in Car Parks of Existing Private Residential Buildings”? Why is it that the funding for the above has to be sought in the context of the Appropriation Bill? Even if this is not a new arrangement, why is the funding not sought individually from the Finance Committee of the Legislative Council?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 805)

Reply:

The arrangement to include in the draft Estimates funding proposals for creating commitments or increasing expenditure ceilings for approved commitment items under the General Revenue Account for scrutiny and approval by the Legislative Council (LegCo) in the context of the Appropriation Bill is in line with the requirements under sections 5 and 6 of the Public Finance Ordinance. The Government explained the relevant arrangements to the Finance Committee in early 2015. In the case of the relevant items, before the funding proposals were included in the draft Estimates, we provided relevant information to the LegCo Panel on Environmental Affairs (EA Panel) in December 2019 and January 2020 respectively. We have included the necessary provisions for these proposals under the Environmental Protection Department's sub-heads of expenditure, and provided appropriate information in the Controlling Officer's Report for Members' consideration.

The estimated expenditures and the relevant LegCo papers for the items are set out below:

Item	Estimated expenditure	LegCo Paper
809 Pilot Scheme for Electric Public Light Buses	A provision of \$80 million is proposed for launching the pilot scheme.	LC Paper No. CB(1)336/19-20(04)
811 Pilot Subsidy Scheme for Installation of Electric Vehicle Charging-enabling Infrastructure in Car Parks of Existing Private Residential Buildings	A provision of \$2 billion is proposed for launching the pilot scheme.	LC Paper No. CB(1)233/19-20(05)
812 Pilot Scheme for Electric Ferries	A provision of \$350 million is proposed for launching the pilot scheme.	LC Paper No. CB(1)336/19-20(04)
815 Ex-gratia payment for phasing out Euro IV diesel commercial vehicles	A provision of \$7.1 billion is proposed for launching the ex-gratia payment scheme.	LC Paper No. CB(1)336/19-20(04)
818 Extension of the Cleaner Production Partnership Programme	A provision of \$311 million is proposed for extending the Programme for 5 years until March 2025.	LC Paper No. CB(1)233/19-20(05)
819 Green Tech Fund	A provision of \$200 million is proposed for setting up the Green Tech Fund.	LC Paper No. CB(1)336/19-20(04)
840 New Energy Transport Fund	An additional provision of \$800 million is proposed to be injected into the Fund to extend its scope.	LC Paper No. CB(1)336/19-20(04)

- End -

CONTROLLING OFFICER'S REPLY**ENB221****(Question Serial No. 5713)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (6) Nature ConservationControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Under the new nature conservation policy introduced in 2004, the Government identified 12 priority sites for enhanced conservation (priority conservation sites), and proposed the implementation of the Management Agreement Scheme (MA Scheme) and the Public-private Partnership Pilot Scheme (PPP Scheme) to conserve these ecologically important sites. Please advise this Committee on the following information on the 12 priority conservation sites:

- (i) the land area;
- (ii) the respective proportion of government land area and private land area;
- (iii) the current land use status;
- (iv) the applications received for the MA Scheme and the PPP Scheme in the past, the approval results of the applications and the progress of the schemes; and
- (v) whether the Government has reviewed the new nature conservation policy; if yes, please provide the details.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 540)Reply:

- (i)-(iii) The land areas, respective proportions of government land area and private land area and current land use status of the 12 priority sites for enhanced conservation (priority sites) under the new nature conservation policy (NNCP) are tabulated below:

	Priority site for enhanced conservation	Land area (hectares)	Government land area (%)	Private land area (%)	Current land use status
1	Ramsar Site	1 551	94	6	Mai Po Marshes Nature Reserve and fish ponds
2	Sha Lo Tung	55	53	47	Mainly consists of woodland, streams and abandoned agricultural land, and also

	Priority site for enhanced conservation	Land area (hectares)	Government land area (%)	Private land area (%)	Current land use status
					several village houses
3	Tai Ho	256	86	14	Mainly consists of mangroves and streams, as well as farmland and villages
4	Fung Yuen	42	92	8	Fung Yuen Butterfly Reserve, woodland, farmland and orchards
5	Luk Keng Marsh	37	26	74	Marshes and villages
6	Mui Tsz Lam and Mau Ping	46	70	30	Villages, farmland and woodland, some deserted village houses
7	Wu Kau Tang	103	65	35	Villages, abandoned farmland/ marshes
8	Long Valley and Ho Sheung Heung	151	59	41	Farmland and ponds
9	Deep Bay Wetland outside Ramsar Site	1 012	41	59	Mainly consists of fish ponds
10	Cheung Sheung	16	72	28	Mainly consists of abandoned farmland/marshes
11	Yung Shue O	32	48	52	Villages, abandoned farmland/ marshes
12	Sham Chung	31	55	45	Abandoned farmland/marshes, and several village houses

(iv) Under the Management Agreement (MA) Scheme of the NNCP, the Government has received 29 applications in total and all of them were approved. Details of the funded MA projects are as follows:

Priority site for enhanced conservation	Details of the funded MA projects

Priority site for enhanced conservation	Details of the funded MA projects
Ramsar Site	<p>Since 2012, the Hong Kong Bird Watching Society has managed about 700 hectares of fish ponds at Ramsar Site and Deep Bay Wetland outside Ramsar Site under the MA Scheme. Total funding of some \$59.2 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, a significant increase in the number of ardeids has been recorded at the fish ponds covered by the project. There was an over 20-fold increase in the mean number of waterbirds recorded as a result of the drain down of fish ponds.</p>
Deep Bay Wetland outside Ramsar Site	(Please refer to the above part about Ramsar Site)
Sha Lo Tung	<p>Since 2018, Green Power Limited has managed about 11 hectares of land under the MA Scheme and carried out agricultural rehabilitation and conservation management activities. Total funding of some \$17.58 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, the project proponent has removed weeds and <i>Mikania micrantha</i>, carried out agricultural rehabilitation activities, established artificial marsh and eco-pond within the site, and launched an ecological baseline survey.</p>
Fung Yuen	<p>Since 2005, the Environmental Association has managed about 2 hectares of land under the MA Scheme. Total funding of some \$35.34 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, the total number of butterfly species in Fung Yuen has increased from 162 in 2005 to 217 in 2019, representing about 80% of the butterfly species in Hong Kong.</p>
Long Valley and Ho Sheung Heung	<p>Since 2005, the Conservancy Association and the Hong Kong Bird Watching Society have managed over 18 hectares of land under the MA Scheme. Total funding of some \$44.89 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, the total number of bird species recorded in Long Valley increased from 221 in 2005 to 316 in 2019, representing more than 50% of the bird species in Hong Kong.</p>

Apart from the above 5 priority sites for enhanced conservation, the following funded MA projects are carried out in country park enclaves or private land within country parks.

Location of the scheme	Details of the approved MA projects
Lai Chi Wo (country park enclave)	<p>Since 2017, the Hong Kong Countryside Foundation and the Conservancy Association have managed about 5 hectares of land under the MA Scheme. Total funding of some \$15.57 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, the project proponents have carried out agricultural rehabilitation activities at the site. Some uncommon and rare butterfly and dragonfly species have been recorded.</p>
Sai Wan (private land within country park)	<p>Since 2017, the Sai Kung District Community Centre has managed about 0.5 hectare of land under the MA Scheme. Total funding of some \$22.59 million has been approved for the project concerned so far.</p> <p>Since the implementation of the MA Scheme, the project proponent has carried out agricultural rehabilitation activities at the site and launched an ecological baseline survey.</p>

Under the Public-private Partnership Pilot Scheme (PPP Scheme) promulgated under the NNCP, the Government received a total of 6 applications, which involved lands located at Sha Lo Tung, Tai Ho, Mui Tsz Lam and Mau Ping, Wu Kau Tang, Yung Shue O and Tin Fook Wai (situated at Deep Bay Wetland outside Ramsar Site). Subsequently, the proponent of the Tin Fook Wai project withdrew the application. The Government has been discussing the arrangements of the PPP Scheme with relevant proponents. In April 2008, after consulting the Advisory Council on the Environment, the Government supported the Sha Lo Tung project from the conservation angle. Following years of exploring different options due to the uniqueness of Sha Lo Tung in ecological environment and other aspects, for the purpose of the long-term conservation of Sha Lo Tung, the Chief Executive in Council gave in-principle agreement in June 2017 to the pursuit of a proposal for the contemporaneous surrender of private land with high ecological importance in Sha Lo Tung to the Government and granting of a piece of land at the Shuen Wan Restored Landfill in Tai Po to the Sha Lo Tung Development Company Limited (SLTDC). The Government is discussing the details of the land exchange proposal with the SLTDC.

- (v) The Government reviewed and enhanced the arrangements of the MA Scheme and the PPP Scheme in 2011, including extending the scope of the MA Scheme from the 12 priority sites to country park enclaves and private land within county parks. In addition, the Government formulated the long-term conservation mechanism of the PPP Scheme in the same year. Developers are required to make an upfront lump sum donation to the Environment and Conservation Fund (ECF) sufficient to support the pledged conservation programmes, and to identify competent bodies as their conservation agents, as well as apply to the ECF for the funding required for

implementation of the conservation programmes. These arrangements can facilitate the implementation of the programmes concerned.

The Government will review the implementation and effectiveness of relevant policies and measures from time to time and will conduct review again where necessary.

- End -

CONTROLLING OFFICER'S REPLY**ENB222****(Question Serial No. 5714)**

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (-) Not Specified

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please advise this Committee on the following:

- (a) Has the Environmental Protection Department conducted any study or test on the fish supply to Hong Kong for marine toxins? If yes, what are the number of samples and results of various tests?
- (b) How will the data obtained be used? How can the public and relevant stakeholders obtain the data? If not, will the Environmental Protection Department take forward the relevant work?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 541)

Reply:

The Environmental Protection Department's monitoring programme does not cover fish supplied to Hong Kong and marine toxins that are not generated by anthropogenic pollution (such as ciguatera toxin). They are under the scope of food safety.

Regarding food safety, the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department adopts a risk-based approach through its routine Food Surveillance Programme (FSP) to test ciguatera toxin in fish and related products collected at the import, wholesale and retail levels to ensure their compliance with the legal requirements in Hong Kong and are fit for human consumption. From 2015 to 2019, under the FSP, the numbers of fish and related product samples tested for ciguatera toxin are tabulated as follows –

Year	2015	2016	2017	2018	2019	Total
Number of samples tested	170	280	300	270	280	1 300

All the test results were satisfactory.

The CFS provides relevant food safety information to the general public and other stakeholders through a multitude of channels, including press releases, CFS website, social media, meetings, pamphlets and other publications.

- End -

CONTROLLING OFFICER'S REPLY**ENB223****(Question Serial No. 5715)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

In the past 5 years, what were the number of cases of illegal disposal of construction waste, the numbers of prosecutions, the numbers of persons involved, the numbers of convictions by the court and the penalties imposed each year? What were the number of inspections conducted by the Government on illegal disposal of construction waste, the staffing and financial expenditure involved each year?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 542)Reply:

The numbers of public complaints on illegal disposal of construction waste handled by the relevant government departments (including the Environmental Protection Department (EPD), the Agriculture, Fisheries and Conservation Department, the Buildings Department, the Civil Engineering and Development Department, the Drainage Services Department, the Food and Environmental Hygiene Department, the Home Affairs Department, the Lands Department, the Planning Department and the Highways Department), as well as the numbers of inspections, numbers of prosecutions, numbers of persons involved, numbers of convictions by the court and total fine in the past 5 years are tabulated below:

Fly-tipping of construction waste on government land

Year	2015	2016	2017	2018	2019
Number of public complaints ¹	6 499	8 225	10 507	9 876	9 347
Number of inspections	14 889	16 795	13 798	14 927	17 080
Number of prosecutions					
(1) Number of summonses issued	71	105	80	82	85
Summonses involving individuals	70	101	67	74	68
Summonses involving companies	1	4	13	8	17

Year	2015	2016	2017	2018	2019
(2) Number of convictions by the court	67	101	77	79	85
(3) Number of Fixed Penalty Notices (FPNs) issued ²	32	45	33	54	42
Total fine (\$m) ³	0.43	0.89	0.56	0.46	0.43

Notes:

¹ Including multiple complaints which may arise from a single case.

² The fine level of the FPN is \$1,500.

³ Total fine includes penalties for convictions by summonses and fixed penalties

Illegal land filling of construction waste on private land

Year	2015	2016	2017	2018	2019
Number of public complaints ¹	456	571	397	376	331
Number of inspections	1 455	1 622	1 662	1 437	1 302
Number of prosecutions					
(1) Number of summonses issued	28	52	96	105	73*
Summonses involving individuals	22	30	84	94	58
Summonses involving companies	6	22	12	11	15
(2) Number of convictions by the court	25	41	69	63	106*
Total fine (\$m)	0.99	1.22	1.34	2.42	5.24

Notes:

¹ Including multiple complaints which may arise from a single case.

* The number of convictions was compiled by year of conclusion of the cases, therefore the number of convictions was larger than that of prosecutions in 2019.

The relevant enforcement work is part of the daily duties of the EPD and relevant government departments. We do not have a separate figure for the expenditure on staffing involved.

- End -

CONTROLLING OFFICER'S REPLY

ENB224

(Question Serial No. 5716)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the cooking fumes produced by restaurants and catering businesses, will the Administration advise on:

1. the number of complaints received and substantiated in the past 5 years, with a breakdown by District Council district;
2. the number of cases in which notices were issued by the Environmental Protection Department (EPD) against excessive emission of cooking fumes to require necessary remedial actions to be taken;
3. the expenditure and establishment of the EPD in controlling emission of cooking fumes from restaurants and catering businesses in the past 5 years; and
4. whether the EPD has conducted proactive inspections of restaurants on excessive emission of cooking fumes; if yes, of the figure; if no, of the reasons?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 543)

Reply:

1. The numbers of complaints received by the Environmental Protection Department (EPD) against the emission of oily fumes and cooking odour from restaurants and catering businesses from 2015 to 2019 are given in Annex 1.

In handling the complaints, the EPD will remind the operators of the restaurants and catering businesses to check their air pollution control equipment and carry out proper maintenance work, etc., and will take further follow-up action when necessary. The numbers of cases in which the EPD took follow-up actions from 2015 to 2019, such as giving warnings, issuing statutory notices to require improvement or referring the case to other departments for follow-up, are given in Annex 2.

2. The numbers of statutory notices issued by the EPD relating to the emission of oily fumes and cooking odour from restaurants and catering businesses in accordance with the Air Pollution Control Ordinance from 2015 to 2019 are as follows:

Year	2015	2016	2017	2018	2019
Number of statutory notices	25	57	64	54	50

3. As handling of complaints against oily fumes from restaurants and catering businesses and taking follow-up actions are part of the routine pollution control duties of the EPD, there is no separate breakdown for the manpower resources and expenditure involved.
4. Besides carrying out investigations in response to complaints, the EPD also conducts proactive inspections of restaurants and catering businesses. The numbers of inspections completed by the EPD from 2015 to 2019 are as follows:

Year	2015	2016	2017	2018	2019
Number of inspections	3 230	3 735	4 021	3 742	3 713

**Complaints against emission of oily fumes and cooking odour
from restaurants and catering businesses from 2015 to 2019**

District Council District	2015	2016	2017	2018	2019
Central & Western	152	126	111	133	95
Wan Chai	81	59	93	129	87
Eastern	100	95	80	60	57
Southern	15	16	12	9	20
Yau Tsim Mong	140	110	102	126	121
Sham Shui Po	97	64	69	78	91
Kowloon City	124	97	106	120	100
Wong Tai Sin	37	30	38	35	36
Kwun Tong	57	47	51	33	39
Tsuen Wan	45	34	63	36	31
Tuen Mun	22	35	30	44	31
Yuen Long	32	61	49	54	53
North	13	21	20	21	25
Tai Po	33	33	36	23	26
Sai Kung	47	25	26	17	55
Sha Tin	79	60	51	56	51
Kwai Tsing	38	28	58	29	11
Islands	16	14	12	12	5
Total	1 128	955	1 007	1 015	934

Complaints against emission of oily fumes and cooking odour from restaurants and catering businesses from 2015 to 2019 (follow-up action required)

District Council District	2015	2016	2017	2018	2019
Central & Western	53	22	30	43	18
Wan Chai	13	3	12	8	8
Eastern	10	20	14	20	13
Southern	1	4	3	0	3
Yau Tsim Mong	44	27	54	44	45
Sham Shui Po	10	13	4	15	33
Kowloon City	6	9	31	3	0
Wong Tai Sin	2	2	7	0	9
Kwun Tong	3	4	2	0	1
Tsuen Wan	20	13	27	12	1
Tuen Mun	5	15	7	24	15
Yuen Long	7	2	6	9	23
North	3	5	3	3	3
Tai Po	9	5	13	12	10
Sai Kung	16	5	4	0	9
Sha Tin	49	34	13	28	20
Kwai Tsing	7	8	11	7	4
Islands	8	5	1	2	0
Total	266	196	242	230	215

- End -

CONTROLLING OFFICER'S REPLY**ENB225****(Question Serial No. 6669)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Under sections 16B and 16C of the Waste Disposal Ordinance, the persons who intend to carry out construction waste land filling activities on private land are required to submit written permission from the land owner in a specified form (EPD-238) to the Environmental Protection Department (EPD) and obtain acknowledgement from the EPD, before carrying out such activities. Please provide the numbers of written permissions received by the EPD and the numbers of notification forms acknowledged under section 16C(3) in the past 5 years (2015-2019).

	2015	2016	2017	2018	2019
Written permissions received					
Notification forms acknowledged under section 16C(3)					

2) Please provide the numbers of notification forms acknowledged under section 16C(3) by district in the past 5 years (2015-2019).

District	Number of notification forms acknowledged under section 16C(3)
Central & Western	
Eastern	
Southern	
Wan Chai	
Kowloon City	
Kwun Tong	
Sham Shui Po	

Wong Tai Sin	
Yau Tsim Mong	
Islands	
Kwai Tsing	
North	
Sai Kung	
Sha Tin	
Tai Po	
Tsuen Wan	
Tuen Mun	
Yuen Long	

3) Please provide the numbers of prosecutions regarding the enforcement of relevant environmental legislation (Air Pollution Control Ordinance, Water Pollution Control Ordinance and Noise Control Ordinance) against the environmental problems or environmental nuisance caused by deposition of construction and demolition waste in the past 5 years (2015-2019).

	2015	2016	2017	2018	2019
Air Pollution Control Ordinance					
Water Pollution Control Ordinance					
Noise Control Ordinance					

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 2062)

Reply:

(1) and (2) With effect from 4 August 2014, any person who intends to deposit construction waste on private land shall obtain prior written permission of all owners of the relevant land given in a specified form under the Waste Disposal (Amendment) Ordinance 2013. The form shall be submitted to the Environmental Protection Department (EPD), together with the relevant information, at least 21 days prior to commencing the deposition activity, and shall receive written acknowledgement by the EPD.

In the past 5 years, the EPD processed a total of 167 notification forms for deposition of construction waste on private land, of which 138 were acknowledged. The numbers of notification forms processed and acknowledged by the EPD in accordance with the requirements specified under section 16C of the Waste Disposal Ordinance and the numbers of the acknowledged cases by district are tabulated below:

	Year				
	2015	2016	2017	2018	2019
Number of notification forms processed	25	43	26	41	32
Number of notification forms acknowledged	22	37	16	35	28
Distribution of acknowledged cases by district*					
Islands	6	14	7	5	4
North	10	18	4	18	13
Tai Po	0	0	0	1	0
Tsuen Wan	1	1	1	1	1
Tuen Mun	0	0	2	3	3
Yuen Long	5	4	2	7	7

Note: * Only the districts with acknowledged cases in the past 5 years are listed.

- (3) In the past 5 years, apart from the enforcement actions taken under the Waste Disposal Ordinance and the Public Cleansing and Prevention of Nuisances Regulation, the EPD instituted 19 prosecutions in total under the Air Pollution Control Ordinance against the environmental nuisance caused by deposition of construction waste on government or private land. The Water Pollution Control Ordinance and the Noise Control Ordinance were not involved. The number of prosecutions by year is as follows:

	Year				
	2015	2016	2017	2018	2019
Air Pollution Control Ordinance	3	9	0	4	3

- End -

CONTROLLING OFFICER'S REPLY**ENB226****(Question Serial No. 6672)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

A large number of trees were destroyed by typhoon Mangkhut in 2018. Fallen trees and wood material collected by the Environmental Protection Department were provided to the public for reuse or recycling. As at 29 February 2020, what was the total amount of wood material being reused or recycled? What were the numbers of beneficiaries or groups respectively?

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 2065)Reply:

A large amount of tree waste was generated after the attack of super typhoon Mangkhut in 2018. The Environmental Protection Department (EPD) recovered about 1 300 tonnes of tree waste which were suitable for reuse, recycling or upcycling. Such tree waste was available to government departments, different organisations/groups and members of the public after shredding or proper handling. The relevant work was completed in April 2019. The quantities recovered and numbers of beneficiaries/groups/organisations are tabulated below:

Quantity recovered	Number of beneficiaries/groups/organisations
About 1 000 pieces (about 35 tonnes in weight) of whole piece of wood log were recovered for reuse or upcycling	About 95 (including government departments, public organisations, groups and members of the public). In addition, among the 1 000 pieces of whole piece of wood log, about 360 pieces were collected at the Community Green Stations under the EPD. However, the EPD does not have the data on the groups or members of the public involved.
About 1 270 tonnes of wood chips were used as bulking agent for composting, mulch for planting purposes, etc.	About 10 (including education and landscaping organisations, farms, facilities under the EPD, groups and members of the public).

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 6676)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding waste import/export, please advise this Committee on:

- i) the amounts (in containers) of various recyclables, including waste plastics, paper and electrical and electronic equipment, imported from/exported to different countries (including Mainland China, the USA, Japan, South Korea, Germany and others) in the past 5 years, with a breakdown by type;
- ii) the number of inspections conducted by Environmental Protection Department and the relevant government departments on suspected illegal waste shipments, the number of actual interceptions, the number of prosecutions instituted, the number of people convicted and the penalties generally imposed on them, as well as the types of illegal waste involved and their respective amounts in each of the past 5 years in table form.

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 5000)

Reply:

- i) The trade statistics on recyclables compiled by the Government are presented in weight. Moreover, as no corresponding commodity code is assigned for waste electrical and electronic equipment under the prevailing trade statistics system, we cannot provide the import/export statistics on such item.

The import statistics on the weights of paper and plastic recyclables by supplier over the past 5 years (i.e. 2015 to 2019) are set out below^{Note 1 and Note 2:}

Import of paper recyclables (by supplier)	2015	2016	2017	2018	2019
	Unit: '000 tonnes				
•Mainland China	0	0	4	11	2
•USA	0	5	1	18	1
•Japan	0	0	0	6	0
•Korea	0	0	0	0	0
•Germany	0	0	0	0	0

Import of paper recyclables (by supplier)	2015	2016	2017	2018	2019
	Unit: '000 tonnes				
•Others	10	2	19	67	31
Total^{Note 3}	10	7	24	103	34

Import of plastic recyclables (by supplier)	2015	2016	2017	2018	2019
	Unit: '000 tonnes				
•Mainland China	38	21	22	15	10
•USA	740	782	520	172	127
•Japan	614	617	366	78	71
•Korea	59	76	43	5	4
•Germany	231	221	139	63	87
•Others	1 179	1 159	799	269	314
Total^{Note 3}	2 861	2 876	1 889	601	614

Notes:

1. Data source: The external merchandise trade statistics compiled by the Census and Statistics Department.
2. Amounts less than 500 tonnes are shown as 0.
3. The above figures may not add up to total due to rounding off.

The export statistics on the weights^{Note 4} of paper and plastic recyclables by destination over the past 5 years (i.e. 2015 to 2019) are set out below^{Note 5 and Note 6}.

Export of paper recyclables (by destination)	2015	2016	2017	2018	2019
	Unit: '000 tonnes				
•Mainland China	860	776	723	688	504
•USA	0	0	0	0	0
•Japan	0	0	0	0	0
•Korea	0	0	5	9	15
•Germany	0	0	0	0	0
•Others	40	40	66	20	18
Total^{Note 7}	901	817	794	718	537

Export of plastic recyclables (by destination)	2015	2016	2017	2018	2019
	Unit: '000 tonnes				
•Mainland China	2 797	2 805	1 711	50	0
•USA	0	0	0	0	0
•Japan	0	0	0	0	0
•Korea	3	1	1	1	0
•Germany	0	0	0	0	0
•Others	24	10	79	237	234
Total^{Note 7 and Note 8}	2 824	2 817	1 791	288	235

Notes:

4. Amount of export includes re-exports and domestic exports.
5. Data source: The external merchandise trade statistics compiled by the Census and Statistics Department.

6. Amounts less than 500 tonnes are shown as 0.
7. The above figures may not add up to total due to rounding off.
8. The amount of waste plastics exported has reduced significantly since 2018. This was mainly related to the Mainland's ban on the imports of waste plastics from daily sources since 2018. In response to the relevant requirement, local recyclers have progressively changed their modus operandi by treating and converting some imported waste plastics into plastic pellets as raw materials or recyclable products for local consumption or export to the Mainland and other regions in the form of raw materials or local products (no longer belong to the waste plastics category). As such, the export figures on waste plastics since 2018 could not fully reflect the actual situation of the waste plastics recycling industry.

ii) The Environmental Protection Department (EPD) and the Customs and Excise Department have been conducting inspections and random checks on import/export shipments based on risk assessment and intelligence to intercept illegal trans-boundary movements of controlled waste. The EPD's relevant enforcement figures on waste import/export over the past 5 years (i.e. 2015 to 2019) are set out below:

	No. of inspections on suspected illegal waste import/export shipments	No. of successful interceptions of illegal waste import/export shipments	Types of waste involved in illegal waste import/export ^{Note 9} (figure in brackets shows the number of shipments)	No. of prosecutions	No. of convicted persons/companies ^{Note 10}	Average amount of fines imposed on convicted persons/companies
2015	581	40	Chemical waste (38) Other controlled waste (2)	22	13	About \$46,000
2016	644	57	Chemical waste (55) Other controlled waste (2)	27	16	About \$27,000
2017	644	36	Chemical waste (26) Other controlled waste (10)	66	45	About \$18,000
2018	720	53	Chemical waste (47) Other controlled waste (6)	43	26	About \$26,000
2019	1 066	99	Chemical waste (54) Other controlled waste (45)	61	37	About \$25,000

Notes:

9. Chemical wastes: such as waste cathode ray tubes, waste flat panel display units, waste printed circuit boards and waste batteries, etc.; Other controlled waste: such as waste toner/ink cartridges of printers, waste regulated electrical equipment and municipal waste, etc.
10. Individual persons/companies might be involved in multiple cases of prosecution/conviction for illegal import/export of different types of waste or repeated offences of illegal waste import/export.

- End -

CONTROLLING OFFICER'S REPLY

ENB228

(Question Serial No. 6678)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the 8 Community Green Stations (CGSs) currently in operation across the territory, please provide the following information to this Committee:

- i) the operator of each CGS
- ii) the construction cost and annual operating cost of each CGS in the past 5 years
- iii) the duration of operation
- iii) the required quantity of recyclables to be recovered as stated in the contract and other conditions
- iv) the contractual requirements of the operator and the actual number of staff (including full-time and part-time staff)
- v) the types of recyclables collected and the quantity of each type of recyclables recovered in the past 5 years
- vi) the number of visitors

Regarding the Islands CGS which will commence operation in the first quarter of 2020, please provide its:

- i) operator
- ii) duration of operation
- iii) required quantity of recyclables to be recovered as stated in the contract and other conditions
- iv) contractual requirements of the operator and the actual number of staff (including full-time and part-time staff)

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 5002)

Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The information on the 8 CGSs currently in operation is set out in the table below:

CGS [Note 1]	Estimated construction cost (\$m)	Operator under current contract
Sha Tin CGS	20.50	Christian Family Service Centre
Eastern CGS	27.30	Po Leung Kuk
Kwun Tong CGS	29.00	Christian Family Service Centre
Yuen Long CGS	29.00	Hong Chi Association
Sham Shui Po CGS	29.00	Po Leung Kuk
Tuen Mun CGS	25.00	Yan Oi Tong Ltd.
Kwai Tsing CGS	26.00	New Life Psychiatric Rehabilitation Association
Tai Po CGS	25.00	Hong Chi Association

Note 1: The operator of the Islands CGS is OIWA Limited. The Islands CGS is expected to commence operation in 2020.

The contracts for operation of CGSs are for a period of 3 years in general. The operators are required to provide designated services and meet pre-set performance indicators in the contract period, including a total quantity of recyclables collected in the contract period ranging from 345 tonnes to 1 320 tonnes, depending on the unique background of individual districts. Other operational requirements of the contracts include opening hours and the number of environmental education activities organised, etc. The total number of staff for the CGSs is not specified in the contracts. At present, the operators of the 8 CGSs have a total of about 170 staff.

From 2015 to 2019, the quantities of various types of recyclables collected, the numbers of visitors, the numbers of educational activities organised and the operating expenditures in respect of the CGSs already in operation are set out below:

	2015	2016	2017	2018	2019
Quantity of various types of recyclables collected (tonnes)					
Electrical appliances and computer products	51.7	97.1	213.5	303.8	431.7
Glass bottles	103.2	483.6	1 042.5	1 555.7	1 947.4
Rechargeable batteries	0.3	1.7	4.9	5.0	7.0
Compact fluorescent lamps/fluorescent tubes	1.3	6.9	14.0	16.2	23.0
Waste paper	0.9	3.6	39.5	90.4	148.8

Waste plastics	0.2	2.3	16.0	59.1	125.9
Waste metals	0.1	0.9	7.1	12.9	22.5
Number of visitors, number of educational activities organised and operating expenditure					
Number of visitors	31 387	159 459	287 910	320 192	498 500
Number of educational activities	719	1 155	1 354	1 202	1 514
Operating expenditure [Note 2](\$m)	5.73	6.04	17.49	23.97	About 31

Note 2: The total expenditure in 2019 is still being validated.

- End -

CONTROLLING OFFICER'S REPLY

ENB229

(Question Serial No. 6679)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please provide the following information:

1. Please tabulate the quantities (in tonnes) of waste and recyclables treated by the West New Territories (WENT) Landfill, the North East New Territories (NENT) Landfill, the South East New Territories (SENT) Landfill, the Chemical Waste Treatment Centre (CWTC), the Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK), the Organic Resources Recovery Centre Phase 1 (O • PARK1), the livestock waste treatment facilities, the contract glass recycling facilities for the New Territories region, the contract glass recycling facilities for Kowloon region and the contract glass recycling facilities for Hong Kong Island region in the past 5 years.
2. Please tabulate the recurrent cost per tonne of waste or recyclables collected, and the overall operating cost of the WENT Landfill, the NENT Landfill, the SENT Landfill, the CWTC, the WEEE • PARK, the O • PARK1, the livestock waste treatment facilities, the contract glass recycling facilities for the New Territories region, the contract glass recycling facilities for Kowloon region and the contract glass recycling facilities for Hong Kong Island region respectively in the past 5 years.
3. Please advise on the estimated cost per tonne of waste collected for treatment, the cost per tonne of waste treated, and the overall operating cost of the Shek Kwu Chau incinerator in future.

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 5003)

Reply:

1. In the past 5 years, the quantities of waste and recyclables treated by the various waste management and recycling facilities are tabulated below:

Facility/Service	Calendar year				
	2015	2016	2017	2018	2019
	Quantities of waste/recyclables treated (Unit: tonnes)				
West New Territories (WENT) Landfill ⁽¹⁾	2 768 516	3 225 771	3 185 047	3 251 838	3 062 751
North East New Territories (NENT) Landfill ⁽¹⁾	1 248 102	1 470 943	1 638 786	1 841 906	1 890 810
South East New Territories (SENT) Landfill ⁽¹⁾	1 495 656	914 936	839 446	781 140	753 907
Chemical Waste Treatment Centre (CWTC) ⁽²⁾	13 724	15 157	17 647	16 657	15 769
Waste Electrical and Electronic Equipment Treatment and Recycling Facility (WEEE • PARK) ⁽³⁾	Not applicable	Not applicable	930	10 830	23 980
Organic Resources Recovery Centre Phase 1 (O • PARK1) ⁽⁴⁾	Not applicable	Not applicable	Not applicable	14 519	33 704
Animal Waste Composting Plant (AWCP) in Ngau Tam Mei ⁽⁵⁾	7 423	7 840	9 710	9 702	9 952
Free livestock waste collection ⁽⁵⁾	22 194	23 019	23 612	23 726	24 855
Glass management contract for the New Territories region ⁽⁶⁾	Not applicable	Not applicable	Not applicable	3 600	7 023
Glass management contract for Kowloon region ⁽⁶⁾	Not applicable	Not applicable	Not applicable	1 913	6 202
Glass management contract for Hong Kong Island region ⁽⁶⁾	Not applicable	Not applicable	Not applicable	4 063	7 988

Note:

- (1) The quantities are the total quantities of solid waste disposed of at the landfills.
- (2) The quantities include MARPOL waste and clinical waste.
- (3) The quantities are the total quantities of waste regulated electrical equipment (including air conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors) treated by the facility. The WEEE • PARK has commenced operation since the end of 2017.
- (4) The quantities are the quantities of food waste treated by the O • PARK1. The O • PARK1 has commenced its operation of collecting and treating food waste since July 2018.
- (5) To prevent epidemic diseases such as avian influenza and African Swine Fever, all of the waste collected from the poultry and pig rearing trades will be delivered to the landfills for disposal at present. The AWCP in Ngau Tam Mei is mainly used for treating horse manure and a certain amount of yard waste.
- (6) The quantities are the quantities of waste glass containers collected by the glass management contractors. The contractor for Hong Kong Island region and the New Territories region began providing glass container collection

and treatment services in January 2018. The contractor for Kowloon region began providing the services in July 2018.

2. In the past 5 years, the operating cost per tonne of waste or recyclables collected, and the respective overall operating cost of the various waste management and recycling facilities are tabulated below:

Facility/Service	Operating cost per tonne of waste (\$/tonne)				
	2015-16 (Actual)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Revised estimate)
WENT Landfill	90	90	110	110	120
NENT Landfill	130	120	130	120	110
SENT Landfill	160	210	240	260	300
CWTC	13,980	12,540	13,020	19,650	16,510
WEEE • PARK ⁽¹⁾	Not applicable	Not applicable	14,490	10,550	9,870
O • PARK1 ⁽²⁾	Not applicable	Not applicable	Not applicable	1,320	1,430
AWCP in Ngau Tam Mei	2,280	1,880	2,250	2,600	2,290
Free livestock waste collection ⁽³⁾	200	210	210	210	400
Glass management contract for the New Territories region	Not applicable	Not applicable	Not applicable	2,200	2,120
Glass management contract for Kowloon region	Not applicable	Not applicable	Not applicable	1,210	1,240
Glass management contract for Hong Kong Island region	Not applicable	Not applicable	Not applicable	2,720	2,600

Facility/Service	Operating cost (\$m)				
	2015-16 (Actual)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Revised estimate)
WENT Landfill	271	293	361	364	360
NENT Landfill	168	181	223	218	219
SENT Landfill	219	191	197	202	219
CWTC	195	203	219	331 ⁽⁵⁾	264
WEEE • PARK ⁽¹⁾	Not applicable	2	28	165	229
O • PARK1 ⁽²⁾	Not applicable	Not applicable	Not applicable	11	47
AWCP in Ngau Tam Mei	17	15	22	25	23

Free livestock waste collection ⁽³⁾	5	5	5	5	10
Glass management contract for the New Territories region ⁽⁴⁾	Not applicable	Not applicable	Not applicable	3	19
Glass management contract for Kowloon region ⁽⁴⁾	Not applicable	Not applicable	Not applicable	3	6
Glass management contract for Hong Kong Island region ⁽⁴⁾	Not applicable	Not applicable	Not applicable	3	24

Note:

- (1) The WEEE • PARK has commenced operation since the end of 2017.
- (2) The O • PARK1 has commenced its operation of collecting and treating food waste since July 2018.
- (3) To prevent epidemic diseases such as avian influenza and African Swine Fever, since the end of March 2019, the livestock waste collected are sealed properly by plastic bags and delivered to the landfills for disposal to further enhance epidemic control.
- (4) The contractor for Hong Kong Island region and the New Territories region began providing glass container collection and treatment services in January 2018. The contractor for Kowloon region began providing the services in July 2018.
- (5) Includes the increase in operating cost under the revised price fluctuation index agreement.

3. The Design-Build, plus 15-year Operate contract for the Integrated Waste Management Facilities (IWMF) Phase 1 next to Shek Kwu Chau was awarded in November 2017. The incinerator and mechanical treatment plant at IWMF can treat 3 000 tonnes and 200 tonnes of municipal solid waste each day respectively once the operation is commenced. The annual operating cost of the facility is about \$400 million⁽¹⁾ and the commuted cost per tonne of waste treated is \$370 approximately. As the facility will only treat waste delivered from refuse transfer stations, there will be no additional collection cost.

Note:

- (1) The above annual recurrent operating cost is the estimate made when the contract was awarded in 2017. It does not include other estimated costs, such as price adjustment and project contingencies during the 15-year contract operation period.

- End -

CONTROLLING OFFICER'S REPLY

ENB230

(Question Serial No. 6680)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding "\$300 million earmarked for the Cleaner Production Partnership Programme", "to encourage Hong Kong-owned factories to adopt cleaner production technologies, so as to help improve regional environment", please explain its implementation with the \$300 million by providing:

- i) the specific details of the Programme
- ii) the implementation timetable.

Asked by: Hon CHU Hoi-dick (LegCo internal reference no.: 5004)

Reply:

The Cleaner Production Partnership Programme (the Programme) comprises 4 key initiatives, namely: (a) to assist participating Hong Kong-owned factories to carry out on-site improvement assessments; (b) to support Hong Kong-owned factories to carry out demonstration projects on cleaner production technologies and practices; (c) to support relevant trade and industry associations of Hong Kong to carry out trade-specific promotion and publicity activities; and (d) to organise cross-trade technology promotion activities by the Hong Kong Productivity Council (HKPC), which is the implementation agent of the Programme. In the past 5 years, around 800 funding applications for on-site improvement assessments and demonstration projects were approved. Around 100 promotion and publicity activities carried out by relevant trade and industry associations of Hong Kong were also funded. Furthermore, the HKPC organised more than 170 cross-trade technology promotion activities with over 17 000 participants. The Programme has brought the environmental benefits of emission reductions and energy saving to the region.

The Programme was first launched in April 2008, and the current phase will end in March 2020. It is proposed in the 2020-21 Budget that \$311 million be allocated for extending the Programme for 5 years until March 2025. Subject to funding approval of the Legislative Council, the Government will launch a new phase of the Programme in 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB231

(Question Serial No. 3565)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding discharge from landfills, please advise on the following:

- (a) What were the expenditure and manpower establishment for handling discharge from landfills in the past 3 years (2017-18 to 2019-20)?
- (b) How many times did the contractors responsible for handling discharge from landfills fail to meet the contractual requirements in the past 3 years (2017-18 to 2019-20)?
- (c) What were the daily amounts of discharge from various major sewage treatment plants managed by the Drainage Services Department, landfills managed by the Environmental Protection Department and wastewater treatment facilities of power plants operated by the private sector, as well as the water quality monitoring data (including the annual mean of major water quality data and discharge limit indicated by the monitoring data of the facilities) in the past 3 years (2017-18 to 2019-20)?
- (d) Did any monitoring station detect exceedance over prescribed limits near the discharge points of sewage treatment plants in the past 3 years (2017-18 to 2019-20)?

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 69)

Reply:

- (a) Management and monitoring of the operation of landfills is mainly carried out by the Environmental Infrastructure Division of the Environmental Protection Department (EPD). We do not have a separate breakdown of the manpower resources required for individual tasks.
- (b) In the past 3 years (2017-18 to 2019-20), the contractor of the Pillar Point Valley Restored Landfill in Tuen Mun failed to meet the contractual requirement on leachate discharge for 9 times in 2017-18, while the contractor of the West New Territories Landfill failed to meet the contractual requirement on leachate discharge for 1 time in 2018-19. The EPD exercised the relevant provisions of the landfill contracts to require the contractors to make improvements and deduct their operation payments according to the mechanism for non-compliance with operation and environmental performance as stipulated in the contracts.

- (c) The discharge flow rates, effluent quality monitoring data and discharge upper limits of the major sewage treatment works managed by the Drainage Services Department (DSD), leachate treatment plants of landfills managed by the EPD and sewage treatment facilities of power stations operated by the private sector in the past 3 years are set out in detail in the following tables.

(1) Major Sewage Treatment Works Managed by the DSD

Name	Maximum Discharge Limit in the Water Pollution Control Ordinance (WPCO) Licence (x1000m ³ /day)	Annual Average of Effluent Quality as shown in the Facilities' Monitoring Data (Year 2017, 2018, 2019)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)
Chemically Enhanced Primary Treatment				
Stonecutters Island Sewage Treatment Works	4 000	2017: 61 2018: 62 2019: 55 (Upper limit: 150) ⁽²⁾	2017: 50 2018: 49 2019: 52 (Upper limit: 114)	Not Applicable
Pillar Point Sewage Treatment Works	525	2017: 84 2018: 96 2019: 76 (Upper limit: 360)	2017: 50 2018: 44 2019: 45 (Upper limit: 240)	Not Applicable
Siu Ho Wan Sewage Treatment Works	360	2017: 68 2018: 76 2019: 71 (Upper limit: 200)	2017: 50 2018: 62 2019: 62 (Upper limit: 200)	Not Applicable
Sham Tseng Sewage Treatment Works	50.5	2017: 44 2018: 37 2019: 34 (Upper limit: 220)	2017: 53 2018: 45 2019: 45 (Upper limit: 180)	Not Applicable
Secondary Treatment				
Sha Tin Sewage Treatment Works	1 020	2017: < 5 2018: < 5 2019: < 5 (Upper limit: 40)	2017: < 8 2018: < 7 2019: < 14 (Upper limit: 60)	2017: < 10 2018: < 11 2019: < 8 (Upper limit: 35)
Tai Po Sewage Treatment Works	250	2017: < 5 2018: < 5 2019: < 5 (Upper limit: 40)	2017: < 7 2018: < 9 2019: < 9 (Upper limit: 60)	2017: < 10 2018: < 10 2019: < 9 (Upper limit: 35)
Shek Wu Hui Sewage Treatment Works	240	2017: < 5 2018: < 5 2019: < 5 (Upper limit: 40)	2017: < 7 2018: < 7 2019: < 6 (Upper limit: 60)	2017: < 9 2018: < 7 2019: < 6 (Upper limit: 28) ⁽³⁾

Name	Maximum Discharge Limit in the Water Pollution Control Ordinance (WPCO) Licence (x1000m ³ /day)	Annual Average of Effluent Quality as shown in the Facilities' Monitoring Data (Year 2017, 2018, 2019)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)
Yuen Long Sewage Treatment Works	210	2017: < 6 2018: < 7 2019: < 6 (Upper limit: 40)	2017: < 10 2018: < 14 2019: < 9 (Upper limit: 60)	Not Applicable
Stanley Sewage Treatment Works	34.7	2017: < 4 2018: < 4 2019: < 5 (Upper limit: 40)	2017: < 4 2018: < 3 2019: < 3 (Upper limit: 60)	2017: < 4 2018: < 5 2019: < 5 (Upper limit: 26) ⁽³⁾
Sai Kung Sewage Treatment Works	24	2017: < 5 2018: < 5 2019: < 5 (Upper limit: 40)	2017: < 6 2018: < 6 2019: < 6 (Upper limit: 60)	2017: < 4 2018: < 4 2019: < 6 (Upper limit: 24)

(2) Leachate Treatment Plants at Landfills Managed by EPD

Name	Maximum Discharge Limit in the WPCO Licence (m ³ /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2017, 2018, 2019)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
Pillar Point Valley Landfill	2 600	2017: 4 2018: 5 2019: 8 (Upper limit: 800)	2017: 7 2018: 7 2019: 7 (Upper limit: 800)	2017: 86 2018: 76 2019: 75 (Upper limit: 100)
Tseung Kwan O Stage I and Stage II/III Landfill	1 450	2017: 10 2018: 9 2019: 8 (Upper limit: 800)	2017: 9 2018: 6 2019: 6 (Upper limit: 800)	2017: 46 2018: 52 2019: 67 (Upper limit: 200)
Siu Lang Shui Landfill, Ma Tso Lung Landfill, Ngau Tam Mei Landfill and Gin Drinkers Bay Landfill ⁽⁴⁾	480	2017: 17 2018: 22 2019: 41 (Upper limit: 800)	2017: 6 2018: 7 2019: 6 (Upper limit: 800)	2017: 62 2018: 69 2019: 44 (Upper limit: 200)

Name	Maximum Discharge Limit in the WPCO Licence (m ³ /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2017, 2018, 2019)		
		Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen (mg/L)
Sai Tso Wan Landfill, Ngau Chi Wan Landfill, Jordan Valley Landfill, Ma Yau Tong West Landfill and Ma Yau Tong Central Landfill ⁽⁵⁾	<u>Jordan Valley Landfill</u> 350	<u>Jordan Valley Landfill</u> 2017: 28 2018: 23 2019: 19 (Upper limit: 800)	<u>Jordan Valley Landfill</u> 2017: 30 2018: 31 2019: 28 (Upper limit: 800)	<u>Jordan Valley Landfill</u> 2017: 69 2018: 49 2019: 51 (Upper limit: 200)
	<u>Ma Yau Tong Central Landfill</u> 350	<u>Ma Yau Tong Central Landfill</u> 2017: 3 2018: Not Applicable 2019: 2 (Upper limit: 800)	<u>Ma Yau Tong Central Landfill</u> 2017: 61 2018: Not Applicable 2019: 87 (Upper limit: 800)	<u>Ma Yau Tong Central Landfill</u> 2017: 91 2018: Not Applicable 2019: 83 (Upper limit: 200)
Shuen Wan Landfill ⁽⁶⁾	Not Applicable	Not Applicable	Not Applicable	Not Applicable
West New Territories Landfill	3 000 ⁽⁷⁾	2017: 10 2018: 11 2019: 17 (Upper limit: 800)	2017: 97 2018: 35 2019: 19 (Upper limit: 800)	2017: 137 2018: 106 2019: 104 (Upper limit: 200)
North East New Territories Landfill	2 800	2017: 20 2018: 25 2019: 20 (Upper limit: 400)	2017: 53 2018: 57 2019: 57 (Upper limit: 400)	2017: 103 2018: 113 2019: 111 (Upper limit: 150)
South East New Territories Landfill	2 000	2017: 21 2018: 11 2019: 12 (Upper limit: 800)	2017: 78 2018: 58 2019: 37 (Upper limit: 800)	2017: 95 2018: 90 2019: 83 (Upper limit: 200)

(3) Sewage Treatment Facilities of Power Stations

Name	Operator	Maximum Discharge Limit in the WPCO Licence (m ³ /day)	Annual Average of Discharge Quality as shown in the Facilities' Monitoring Data (Year 2017, 2018, 2019)		
			Biochemical Oxygen Demand (mg/L)	Suspended Solids (mg/L)	Total Nitrogen ⁽¹⁾ (mg/L)
Castle Peak Power Station	Castle Peak Power Company Limited	2 000	2017: 5 2018: 5 2019: <5 (Upper limit: 20)	2017: 7 2018: 8 2019: 6 (Upper limit: 30)	Not Applicable
Black Point Power Station	Castle Peak Power Company Limited	420	2017: 5 2018: <5 2019: <5 (Upper limit: 20)	Not Applicable	Not Applicable
Lamma Power Station	HK Electric	664	2017: <2 2018: <2 2019: <2 ⁽⁸⁾ (Upper limit: 20)	2017: 13 2018: 13 2019: 15 ⁽⁸⁾ (Upper limit: 30)	Not Applicable
Penny's Bay Power Station (Standby facility)	Castle Peak Power Company Limited	4 181	Not Applicable ⁽⁹⁾ (Upper limit: 20)	Not Applicable ⁽⁹⁾ (Upper limit: 30)	Not Applicable

Notes:

- (1) Discharge upper limits and the water quality monitoring requirements are formulated based on the design of the sewage treatment facilities and the carrying capacity of the relevant receiving waters.
 - (2) The discharge upper limit of biochemical oxygen demand of the Stonecutters Island Sewage Treatment Works has been updated to 150 mg/L since 3 March 2017.
 - (3) The figure stated is the sum of the amounts of ammonia nitrogen, nitrate nitrogen and nitrite nitrogen in the water sample(s).
 - (4) Leachate from these landfills is collected and delivered to the Gin Drinkers Bay leachate treatment plant for collective treatment.
 - (5) Leachate from these landfills is collected and delivered to the Jordan Valley and Ma Yau Tong Central leachate treatment plants for collective treatment, while the Ma Yau Tong Central leachate treatment plant is operated only in wet seasons when necessary and there was no need for operation in 2018.
 - (6) Leachate from the Shuen Wan Landfill is collected and delivered to the adjacent Tai Po Sewage Treatment Works for treatment.
 - (7) The maximum discharge limit in the WPCO Licence of the West New Territories Landfill has been updated to 3 000 m³ per day since 29 November 2017.
 - (8) Figures as at September 2019.
 - (9) The Penny's Bay Power Station is a standby facility and there is no discharge recorded from 2017 to 2019.
- (d) All the discharge from the major sewage treatment works managed by the DSD, leachate treatment plants of landfills managed by the EPD, and sewage treatment facilities of power stations operated by the private sector should comply with the relevant discharge

limits and the corresponding requirements stipulated in the licence granted under the WPCO to ensure that the discharge would not cause any adverse impact on the surrounding environment. The Environmental Compliance Division of the EPD conducts inspections to the relevant facilities operated by the public and private sectors at irregular time intervals to check whether the facilities are in normal operation and in compliance with the discharge limits in the licences issued. At present, the DSD also conducts regular water quality monitoring at major sewage treatment works. There are on-site EPD staff at all landfills to conduct regular environmental monitoring and to monitor the day-to-day operation of the facilities. The Government has not set up additional monitoring stations near the discharge points of sewage treatment plants to monitor discharge from sewage treatment plants.

- End -

CONTROLLING OFFICER'S REPLY

ENB232

(Question Serial No. 3349)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please give a reply for 2015/16 to 2020/21 (estimate) school years, with a breakdown by kindergarten, primary and secondary school:

1. How many applications for the Environment and Conservation Fund have been received from schools each school year to conduct basic conversion works and install facilities necessary for implementing on-site meal portioning on campus? What are the respective numbers of approved and rejected applications?
2. How many subsidised schools have given up on-site meal portioning before they had honoured the aforesaid undertaking and (b) after they had honoured such undertaking in each school year?
3. What are the respective numbers of schools implementing on-site meal portioning and using disposable lunch boxes provided by meal suppliers each school year, and the respective percentages of such numbers in the relevant total, as well as the respective numbers of students involved?
4. What are the respective amounts of lunch boxes and food waste disposed of by schools in each school year?
5. What are the numbers of additional water dispensers being installed in schools in each school year and the percentages of such numbers in the total number of schools?
6. What are the specific details of the scheme to promote reduction in the use of disposable plastic tableware in schools in each school year? What are the respective numbers of the schools, students and relevant expenditure involved?
7. Has \$3 million been earmarked for subsidising 60 schools to acquire refrigerators, rice steamers, dish washers and dish dryers in the coming year? If yes, what are the relevant eligibility criteria, specific details of the scheme and estimated number of disposable lunch boxes reduced?
8. Has reference been made to the experiences of other places for the scheme of subsidising schools to acquire rice steamers? If yes, what are the relevant details? What are the cost of each rice steamer, the maximum number of lunch boxes that can be processed concurrently and the time required for reheating each time?

Asked by: Hon IP Kin-yuen (LegCo internal reference no.: 121)

Reply:

The Government has been promoting green lunch practices and the “food wise” culture in schools with a view to enabling students to adopt a green living lifestyle and reduce wastage of food. In promoting the “food wise” culture and reduction of food waste in schools, apart from implementing on-site meal portioning (OMP), the schools could also adopt measures such as meal portioning in classrooms, students bringing their own lunches, and using reusable or recyclable containers and tableware to promote green lunch practices.

1. Since 2009, the Environment and Conservation Fund (ECF) has subsidised schools to conduct conversion and installation works with a view to implementing OMP Projects. A total of 127 schools, including 46 secondary schools, 75 primary schools, 1 secondary-cum-primary school and 5 special schools, have been funded by the ECF and completed the conversion and installation works necessary for implementing OMP Projects so far. The Education Bureau (EDB) revised the Schedule of Accommodation in 2009-10 to include the tuck shop-cum-central portioning area into the standard facilities of newly built schools and therefore the number of new applications for the above subsidy has continued to decrease.

In the past 5 years, the ECF approved 17 applications from schools, including 9 secondary schools, 6 primary schools, 1 secondary-cum-primary school and 1 special school, for implementing OMP Projects. The number of projects approved and the amount of subsidy granted by year are as follows:

Year	Number of projects approved	Amount granted (\$m)
2015-16	4	4.89
2016-17	12	17.98
2017-18	1	1.88
2018-19	-	-
2019-20	-	-

In addition, over the past 5 years, an application from a school was rejected. That school was a newly built school and its standard provision had already included the tuck shop-cum-central portioning area. To avoid duplication of resources, the ECF suggested the school to use the funding from the EDB to install facilities necessary for implementing OMP.

2. The schools subsidised by the ECF to install relevant facilities are required to implement OMP for at least 3 years. A school must obtain prior approval from the ECF if it does not use the facilities to implement OMP within these 3 years. To date, the ECF has not received any notification from schools for not undertaking the implementation of OMP within the three-year commitment period. To monitor the progress of implementing OMP in the subsidised schools, the ECF Secretariat conducts site inspections of the schools from time to time and reminds the schools to comply with the conditions of funding approval in a timely manner. No violation of the conditions has been identified so far.

Furthermore, as at 31 December 2019, 8 subsidised schools have notified the ECF after the three-year commitment period that they would no longer use the facilities to implement OMP.

3. According to the results of the surveys conducted by the Environmental Protection Department (EPD) in 2015, 2017 and 2019 using questionnaires, the information on Hong Kong secondary and primary schools implementing OMP and using disposable lunch boxes provided by lunch suppliers is projected as follows:

2015/16 school year	Number of schools	Breakdown of schools			
		Secondary school	Primary school	Secondary-cum-primary school	Special school
OMP	282 [Note 1]	123 (44%)	142 (50%)	12 (4%)	5 (2%)
Using disposable lunch boxes provided by lunch suppliers without adopting OMP	400	189 (47%)	199 (50%)	5 (1%)	7 (2%)

2016/17 school year	Number of schools	Breakdown of schools			
		Secondary school	Primary school	Secondary-cum-primary school	Special school
OMP	296 [Note 1]	136 (46%)	148 (50%)	9 (3%)	3 (1%)
Using disposable lunch boxes provided by lunch suppliers without adopting OMP	605	243 (40%)	331 (55%)	4 (1%)	27 (4%)

2018/19 school year	Number of schools	Breakdown of schools			
		Secondary school	Primary school	Secondary-cum-primary school	Special school
OMP	208 [Note 1]	97 (47%)	94 (45%)	13 (6%)	4 (2%)
Using disposable lunch boxes provided by lunch suppliers without adopting OMP	594	199 (33%)	374 (63%)	5 (1%)	16 (3%)

[Note 1]: The number of schools subsidised by the ECF to implement OMP is included in the relevant figure.

The EPD does not maintain relevant information concerning kindergartens.

4. According to the results of the survey conducted by the EPD in 2017, it is estimated that in 2016/17 school year, lunch suppliers provided about 400 000 lunch meals on each school day to secondary and primary schools in Hong Kong, about 220 000 (around 55%) of them were packed in disposable lunch boxes. The EPD does not maintain information on the food waste disposed of by schools.
5. The EPD will launch a pilot scheme in 2020-21 to encourage students to inculcate a living culture of “bring your own bottle”. We will provide smart water dispensers with their exteriors designed by students to about 80 primary and secondary school premises via the contractors, and support the schools to carry out relevant education and experiential activities, such as signing a charter to cease the sale of bottled water, for conveying green messages such as waste reduction at source and clean recycling to students in an interactive approach. Subject to the effectiveness of the pilot scheme, including feedback and comments from schools and students etc., we will consider expanding the scope of the scheme to include more primary and secondary schools. We do not have the statistics on the numbers of water dispensers in schools.
- 6&7. To encourage schools to reduce the use of disposable plastic food containers and tableware, the EPD, together with the EDB and the Department of Health (DH), have updated the Handbook of Selection of Lunch Suppliers (the Handbook), which includes encouraging schools to incorporate service requirements concerning the use of reusable food containers and tableware in the tender. The DH also released the updated Handbook in September 2019.

The EPD has commissioned a consultancy study on “plastic-free” school lunch arrangement in March 2020, which includes arranging 15 primary and secondary schools to participate in a trial on on-site portioning of cooked meal (i.e. a school lunch supplier delivers the cooked food to the school, and portions the food at school using reusable food containers) so as to avoid the use of disposable lunch boxes, reduce food waste and cultivate an environmentally friendly lifestyle among students. The estimated expenditure of this study is \$2.5 million in 2020-21.

In addition, the EPD will launch a new pilot scheme through the ECF, which has earmarked \$4.5 million for subsidising about 50 secondary and primary schools to install the necessary equipment, including refrigerators, steam cabinets, dishwashers and disinfection machines, so as to encourage students to bring their own lunches using reusable food containers and tableware. It is estimated that about 50 students in each of the participating schools will use the necessary equipment to bring their own lunches and therefore around 450 000 disposable lunch boxes can be saved each year. We will invite secondary and primary schools to participate in the pilot scheme as early as possible.

8. Steam cabinets acquired by schools subsidised under the pilot scheme are used for reheating the lunches brought by the students. The Electrical and Mechanical Services Trading Fund will be entrusted with the task of arranging the procurement of the necessary equipment, including the steam cabinets. There are various models of steam cabinets in the market with different capacity and power. Taking a common model used in schools as an example, one steam cabinet can reheat around 50 lunch

boxes at the same time, requiring a total of approximately 60 minutes, and the price for a steam cabinet is about \$18,000 (based on the price in the first quarter of 2020).

- End -

CONTROLLING OFFICER'S REPLY

ENB233

(Question Serial No. 4531)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It was mentioned in last year's Estimates that "the food waste collected mainly from selected public markets and cooked food centres will be delivered to the new Organic Waste Treatment Facility for treatment." In this connection, will the Department provide:

- (1) the expenditure involved and the breakdown of the expenditure;
- (2) the numbers and names of the selected markets and cooked food centres, and the selection criteria;
- (3) given that it is mentioned in last year's reply that the pilot scheme would be launched in the second half of 2018, the details of the scheme at present, including the implementation date, collection details and the estimated amount of food waste to be collected?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 112)

Reply:

The Organic Resources Recovery Centre Phase 1 (O • PARK1) was completed and commissioned in July 2018. To encourage the commercial and industrial sectors to recycle food waste properly and achieve the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection at the same time to separate at source and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the O • PARK1 for recovery. The markets and cooked food centres covered in the pilot scheme are selected with regard to factors such as their proximity to the O • PARK1, accessibility of land transport, and the amount of food waste generated, etc. The lists of the participating venues are at Annex 1 and Annex 2.

In addition, the Environmental Protection Department (EPD) has been collecting food waste generated from lunch suppliers for primary and secondary schools and food left uneaten by students after lunch, and delivering such food waste to the O • PARK1 since February 2019. Since the implementation of phase 1 of the pilot scheme on free food waste collection, the

quantity of food waste collected was about 310 tonnes per month. In the 2019-20 financial year, the expenditure involved was about \$25.2 million.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases starting from the second half of 2020, which will extend the services to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale food markets under the Agriculture, Fisheries and Conservation Department, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have participated in the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund or with experience in food waste separation at source. As at February 2020, 260 units have agreed to participate in phase 2 of the pilot scheme. As the participating organisations need time to familiarise themselves with the separation and actual collection of food waste and the transport arrangement, it is not yet possible to estimate the actual amount of food waste to be collected.

**FEHD public markets and cooked food centres/markets
participating in phase 1 of the pilot scheme on free food waste collection**

District	Name of public market and cooked food centre/market	District	Name of public market and cooked food centre/market
Central/Western	Sheung Wan Market and Cooked Food Centre	Kowloon City	Kowloon City Market and Cooked Food Centre
	Smithfield Market and Cooked Food Centre		To Kwa Wan Market and Cooked Food Centre
	Shek Tong Tsui Market and Cooked Food Centre		Hung Hom Market and Cooked Food Centre
	Sai Ying Pun Market	Mong Kok	Fa Yuen Street Market and Cooked Food Centre
Eastern	Sai Wan Ho Market and Cooked Food Centre	Sham Shui Po	Tai Kok Tsui Market and Cooked Food Centre
	Yue Wan Market and Cooked Food Centre		Po On Road Market and Cooked Food Centre
	Java Road Market and Cooked Food Centre	Wong Tai Sin	Pei Ho Street Market and Cooked Food Centre
	Chai Wan Market and Cooked Food Centre		Tai Shing Street Market and Cooked Food Centre
	Quarry Bay Market and Cooked Food Centre		Ngau Chi Wan Market and Cooked Food Centre
	Electric Road Market and Cooked Food Centre		Choi Hung Road Market and Cooked Food Centre
	Aldrich Bay Market and Cooked Food Centre		Sheung Fung Street Market
Southern	Aberdeen Market and Cooked Food Centre	Yau Tsim	Kwun Chung Market and Cooked Food Centre
	Yue Kwong Road Market and Cooked Food Centre		Yau Ma Tei Market
	Tin Wan Market and Cooked Food Centre		Haiphong Road Temporary Market cum Haiphong Road Temporary Cooked Food Hawker Bazaar
	Ap Lei Chau Market and Cooked Food Centre	Kwai Tsing	North Kwai Chung Market
Wan Chai	Causeway Bay Market		Wing Fong Street Market
	Bowrington Road Market and Cooked Food Centre	Tsing Yi Market	
	Lockhart Road Market and Cooked Food Centre	Tsuen Wan	Tsuen Wan Market
	Wong Nai Chung Market and Cooked Food Centre		Yeung Uk Road Market
	Wan Chai Market		Heung Che Street Market

			and Cooked Food Centre
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Annex 2

**HA wet markets and shopping centres
participating in phase 1 of the pilot scheme on free food waste collection**

District	Name of shopping centre
Southern	Wah Fu (I) Shopping Centre
	Wah Fu (II) Commercial Complex
Sham Shui Po	Nam Shan Shopping Centre
Kowloon City	Ching Long Shopping Centre
Kwai Tsing	Cheung Ching Commercial Complex
	Kwai Shing West Estate Shopping Centre
	Kwai Chung Shopping Centre
	Lai Yiu Shopping Centre
	Lei Muk Shue Shopping Centre

- End -

CONTROLLING OFFICER'S REPLY

ENB234

(Question Serial No. 4533)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned in the Budget of 2019 that the Department will press ahead with the introduction of a producer responsibility scheme (PRS) on plastic beverage containers. In this connection, will the Department reply on the following:

- (1) When will the Department submit a paper to the Legislative Council?
- (2) Has the Department made reference to the relevant policies of other countries and their effectiveness? If yes, what are the details?
- (3) Has the Department assessed or gathered statistics on the daily or annual quantity of plastic beverage containers imported to Hong Kong? If yes, please provide the figures.
- (4) Has the Department assessed or gathered statistics on the daily or annual quantity of plastic beverage containers produced in Hong Kong? If yes, please provide the figures.
- (5) Has the Department assessed or gathered statistics on the number of food manufacturers who produce beverages in plastic containers in Hong Kong? If yes, please provide the figures.
- (6) Regarding “to launch a pilot scheme on the application of reverse vending machine” for collecting such containers, how many of these “reverse vending machines” are there in Hong Kong at present? What is the quantity of containers collected? What is the cost of each “reverse vending machine”? What is the average cost for collecting one such container?
- (7) Regarding “to launch a pilot scheme on the application of reverse vending machine”, what is the Department’s work plan? What are the anticipated announcement date and implementation timetable of the scheme?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 114)

Reply:

- (1) – (2) The Environmental Protection Department (EPD) has engaged a consultant to review the experience of other regions regarding the introduction of a producer responsibility scheme (PRS) on plastic beverage containers. The “deposit-refund system” is often adopted for the PRS on plastic product containers in places like Europe, North America and Australia to provide a

financial incentive for consumers to return their used containers. On the other hand, it is common for the Asian region to introduce legislation, including waste charging, to require or encourage separation of recyclables at source in order to facilitate recycling of plastic containers. In addition, some regions implementing the “deposit-refund system”, including Germany, Norway, the Netherlands, Denmark, New York City of the United States and the State of South Australia of Australia, also use reverse vending machines (RVMs) to facilitate consumers’ return of beverage containers, which helps enhance the efficiency and quality of recycling.

The Government is carefully considering the recommendations of the consultancy study for mapping out the way forward, and plans to consult the public in the second half of 2020. We will submit the relevant papers to the Legislative Council in a timely manner.

- (3) – (5) According to the statistics of municipal solid waste disposed of at landfills in 2018, it is estimated that the annual quantity of waste plastic beverage containers generated in Hong Kong is about 45 000 tonnes. We do not have breakdowns for the quantity of plastic beverage containers imported to or produced in Hong Kong, nor do we have statistics on the number of food manufacturers who produce beverages in plastic containers in Hong Kong.
- (6) – (7) The EPD has installed 10 RVMs at 7 Community Green Stations starting from June 2019 for conducting a technical trial on RVMs with a view to working out the technical details for a pilot scheme to be launched later. In addition, the EPD also, through the Recycling Fund and the Environment and Conservation Fund, supports the trade and organisations to launch recycling projects related to RVMs for plastic beverage containers. So far, the 2 funds have approved a total of 5 projects involving 31 RVMs. We have also noted that some other organisations have also started trials on the use of RVMs in recent years, but we have not compiled the relevant statistics.

The price of RVMs in the market ranges from several ten thousand to several hundred thousand dollars per unit, depending on factors such as their capacity, functions, technical support and places of manufacture. The EPD is preparing for the implementation of the pilot scheme on RVMs with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB235

(Question Serial No. 4536)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Will the Department reply on the following in tabular form:

- (1) The numbers of three-colour recycling bins and glass bottle recycling bins across the territory in the past 5 years.
- (2) The respective quantities of waste paper, aluminium cans, plastic bottles and glass bottles collected by three-colour recycling bins across the territory in the past 5 years, among which, the quantities of recyclables and non-recyclables.
- (3) The numbers of contractors contracted for the collection of recyclables in three-colour recycling bins and glass bottle recycling bins in the past 5 years.
- (4) Does the Department have any plan to review the effectiveness of three-colour recycling bins and glass bottle recycling bins, and to increase or reduce the number of these bins? If yes, what are the details?
- (5) What are the types, quantities and proportions of recyclables in local waste?
- (6) What are the respective percentages of the quantities of recyclables collected by three-colour recycling bins and glass bottle recycling bins in the total quantity of recyclables across the territory? Please reply by type of waste.
- (7) Has the Government reviewed the recycling effectiveness of three-colour recycling bins and glass bottle recycling bins? If yes, what are the details of the review? If no, what are the reasons?
- (8) Does the Government have any plan to recycle waste paper, aluminium cans, plastic bottles and glass bottles by other means (e.g. collecting them from merchants and restaurants proactively)? If yes, what are the details? If no, what are the reasons?
- (9) What are the Administration's estimated expenditures on three-colour recycling bins and glass bottle recycling bins in 2020-21?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 117)

Reply:

The Environmental Protection Department (EPD) has been encouraging the public to practise source separation of recyclables at home or in workplace through continuous promotion of the Source Separation of Waste Programme (the Programme). As at early 2020, over 2 200 housing estates, some 700 rural villages and over 1 000 commercial and industrial (C&I) buildings have participated in the Programme. The Government has now placed about 17 000 sets of recycling bins (RBs) at housing estates and C&I buildings which have participated in the Programme, government office buildings, schools, country parks and other public places, covering over 80% of the places where Hong Kong people live and work. Apart from the RBs provided by the Government, additional RBs are also placed by many housing estates or C&I buildings on their own. The EPD does not have the number of these RBs, hence we do not have information on the quantities of recyclables collected by RBs across the territory, the recovery rates, the percentages of the quantities of recyclables collected in the total quantity of recyclables in Hong Kong and the numbers of contractors involved, etc.

Since 2018, the glass management contractors (GMCs)³ appointed by the Government have been providing collection and treatment services for waste glass containers and setting up collection points in each district progressively. As at October 2019, there were about 4 000 glass container collection points across the territory. From the commencement of contracts up to the end of 2019, the total quantity of waste glass containers collected by the GMCs was 30 789 tonnes.

Regarding estimated expenditure, as there are multiple contracts on provision of recyclables collection service for RBs in public places that will end in 2020-21, the expenditure on new service contracts will depend on the results of open tenders later. The Environment and Conservation Fund has earmarked about \$2 million for providing free RBs or replacing damaged bins for schools, as well as housing estates and C&I buildings which have participated in the Programme. As for waste glass container recycling, the EPD has earmarked \$130 million in 2020-21 as the payment for the provision of waste glass container collection and treatment services under the 3 glass management contracts.

To facilitate waste reduction and resource recovery as well as the implementation of municipal solid waste (MSW) charging following the passage of the related bill in future, relevant departments will continue to adjust the number of RBs in public places in light of actual circumstances and needs. We will also review the usage of RBs in public places, including the locations where RBs are placed, quality of recyclables, etc., to improve their effectiveness. On recycling of waste glass containers, the 2 GMCs set up glass container collection points at suitable locations in each district for public use. We will review the arrangement and effectiveness from time to time.

³ The EPD, through open tenders, has appointed contractors to undertake collection and treatment services for waste glass containers in 3 regions, i.e. Hong Kong Island (including Islands District), Kowloon and the New Territories. The contracts for Hong Kong Island and the New Territories regions commenced in November 2017, and the contract for the Kowloon region commenced in May 2018. At present, there are a total of 2 contractors providing collection and treatment services for waste glass containers across the territory.

On the recovery of various types of recyclables, according to the reports on “Monitoring of Solid Waste in Hong Kong” compiled by the EPD, the statistics on the quantity of recyclables recovered from MSW in 2018 are set out as follows:

Recyclable type	Quantity recovered	
	Thousand tonnes	Percentage share
Paper	694.6	39.1%
Plastics	64.2	3.6%
Ferrous metals	788.7	44.4%
Non-ferrous metals	126.9	7.1%
Glass ⁽¹⁾	15.1	0.9%
Rubber tyres ⁽²⁾	5.8	0.3%
Textiles	6.4	0.4%
Wood	5.9	0.3%
Food waste ⁽³⁾	27.0	1.5%
Electrical and electronic equipment ⁽⁴⁾	42.0	2.4%
Yard waste ⁽⁵⁾	1.0	0.1%
Total⁽⁶⁾	1 777.6	100.0%

Notes:

- (1) Glass beverage bottles recovered for reuse through deposit-and-refund system operated by local beverage manufacturers are not included.
- (2) The quantity includes reuse, retreading and recycling of vehicle tyres and retreading of aircraft tyres in Hong Kong.
- (3) The quantity of food waste recycled locally includes those recycled by industrial operators and those recycled at the O • PARK and the Outlying Islands Transfer Facilities and the EPD’s composting facilities at Kowloon Bay. The composting facilities at Kowloon Bay has ceased operation since July 2018.
- (4) The volume of waste electrical and electronic equipment recovered for recycling is compiled from the results of a biennial survey on “Generation & Disposal Practice of Used/ End-of-Life Electrical & Electronic Equipment and Batteries in Hong Kong” commissioned by the EPD, and figures from market research and local recyclers.
- (5) The quantity of yard waste recycled locally includes yard waste recycled on-site and off-site within Hong Kong.
- (6) The above-mentioned figures may not add up to total due to rounding off.

The Government will continue to implement various initiatives in 2020-21 to increase the recovery quantities of various types of recyclables.

On recycling of waste paper, the Government will set aside a sum of not less than \$300 million each year starting from 2020-21 for implementing a scheme to collect and recycle waste paper. The EPD will engage several service contractors through open tender to collect waste paper (including cardboards, newspapers and office papers) from their associated street corner recycling shops/mobile recyclers/frontline collectors across the territory under service contracts. The waste paper collected will be further processed, including screening, sorting and baling, before exporting to the Mainland or overseas (e.g. Southeast Asia) markets for recycling to paper products. This can turn waste into resources and ensure stable and diversified recycling outlets for local waste paper. The tendering exercise is now underway. The service is scheduled to commence in the second half of 2020 and it is expected that not less than 40 000 tonnes of waste paper will be processed each month.

On recycling of waste plastics, the EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively and engaging

contractors under service contracts to provide free collection service of non-C&I waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since January 2020. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020.

On recycling of plastic bottles, the EPD is preparing for the implementation of a pilot scheme on reverse vending machines (RVMs), with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme on RVMs is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020.

On recycling of waste glass containers, besides setting up glass container collection points at suitable locations such as residential estates and C&I premises, the 2 GMCs will also provide direct waste glass container collection service for relevant waste producers (e.g. catering premises) so as to increase the quantity of waste glass containers recovered.

- End -

CONTROLLING OFFICER'S REPLY**ENB236****(Question Serial No. 4539)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please list the numbers of water dispensers installed in government venues, including the Bureau's offices and the premises and sites under its purview, the electricity consumption involved, the actual expenditures incurred for repair, maintenance and other operations in the past 5 years, as well as estimates of the number of water dispensers at government departments and on government sites, the electricity consumption to be involved, the actual expenditures to be incurred for repair, maintenance and other operations in 2020-21.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 120)Reply:

According to the information provided by various government bureaux and departments in recent years, there are a total of about 11 300 water dispensers in government venues. The numbers of water dispensers installed in government venues in the past 5 years and the estimated number in 2020-21 are as follows:

Year	Number of water dispensers
2015-16	Relevant statistics are not available
2016-17	About 10 500
2017-18	About 11 200
2018-19	About 11 200
2019-20	About 11 300
2020-21	The Government will install additional water dispensers as necessary in new government venues or when conducting renovation works. In addition, to inculcate a living culture of "bring your own bottle", the Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2022 for public use in government venues. Subject to the actual work progress, it is expected that 200 additional units will be installed in 2020-21. The Government has earmarked some \$82 million and \$32 million respectively for the costs of

	installing 500 new water dispensers and procuring the five-year maintenance service.
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Besides, there are no separate meters installed to measure the electricity consumption of water dispensers by various bureaux and departments, and there is also no breakdown specifically for the relevant expenditures incurred for repair, maintenance and other operations.

- End -

CONTROLLING OFFICER'S REPLY**ENB237****(Question Serial No. 4543)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (-) Not SpecifiedControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out by year in tabular form the following information of the T • PARK in Tuen Mun since its opening in 2015:

- (1) The number of visitors in each year, by group and individual visits;
- (2) The highest, lowest, median and mean numbers of visitors in each year;
- (3) The number of users who made reservations for using the spa pools at the T • PARK, the highest, lowest, median and mean numbers of users with reservations in each year;
- (4) The items and amounts of the operating expenditure of the T • PARK, and the manpower involved (posts and number of staff) in each year, and the estimated expenditure for 2020-2021.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 124)Reply:

(1), (2) and (3)

The Environmental Education Centre of the T • PARK has been open to the public since 29 June 2016. The numbers of visitors to the T • PARK and the spa pools are set out below:

Year	July to December 2016	2017	2018	2019
Number of visitors each year	Individual: 28 419 Group: 13 326	Individual: 55 168 Group: 24 617	Individual: 54 834 Group: 24 351	Individual: 45 240 Group: 20 600
Number of visitors each month	Highest: 8 074 Lowest: 5 131 Median: 7 300 Mean: 6 958	Highest: 8 085 Lowest: 4 328 Median: 6 809 Mean: 6 649	Highest: 8 240 Lowest: 3 816 Median: 7 082 Mean: 6 599	Highest: 7 078 Lowest: 2 810 Median: 5 883 Mean: 5 487

Number of users who made reservations for using the spa pools each year	29 652	67 048	72 578	40 527
Number of users who made reservations for using the spa pools each month	Highest: 5 304 Lowest: 4 195 Median: 5 018 Mean: 4 942	Highest: 7 281 Lowest: 4 845* Median: 5 925* Mean: 5 942*	Highest: 8 077 Lowest: 3 910* Median: 6 768* Mean: 6 544*	Highest: 4 659 Lowest: 2 036* Median: 3 648* Mean: 3 612*

* Note: Annual maintenance was carried out at the spa pools during June 2017, June 2018 and June 2019. The above statistics on the number of users have excluded the figures for the periods.

(4)

The T • PARK operates under a Design-Build-Operate contract. The expenditure of the Sludge Treatment Facility and the Environmental Education Centre has already been included in the overall operating cost of the project and a breakdown by individual item is not available. The overall operating expenditure of the T • PARK each year is as follows and the manpower resources for the relevant work have been absorbed by the existing staff of the Environmental Protection Department.

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Operating expenditure (\$m)	220 (Actual)	237 (Actual)	250 (Actual)	260 (Actual)	264 (Revised estimate)	284 (Estimate)

- End -

CONTROLLING OFFICER'S REPLY

ENB238

(Question Serial No. 4545)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

In the early years, the Government proposed that sale of some plastic bottled water should be progressively ceased in automatic vending machines (AVMs) in government venues, so as to encourage waste reduction at source. In this regard, please reply on the following:

- (1) Regarding the plan to cease the sale of bottled water, what is the current progress? How many AVMs have ceased selling plastic bottled water? How many AVMs are still selling plastic bottled water?
- (2) What is the percentage of government venues installed with both AVMs and water dispensers? Please list the government venues installed with AVMs but not water dispensers.
- (3) Please list the water dispensers newly installed in government venues and the expenditures involved in the past 3 years.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 126)

Reply:

- (1)&(2) Since 20 February 2018, sale of plastic bottled water measuring 1 litre or less has been progressively ceased in automatic vending machines (AVMs) in government venues. Over 80% of about 1 600 AVMs installed in government venues have put in place the above stop-sale arrangement. The remaining AVMs will gradually implement the stop-sale arrangement by renewing existing relevant contracts, lease/tenancy agreements or permissions, etc. We do not have statistics on the government venues installed with AVMs and water dispensers.
- (3) The Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers from about 2 700 units at present to about 3 200 units by 2022 for public use in government venues. The Government has earmarked some \$82 million and \$32

million respectively for the costs of installing 500 new water dispensers and procuring the five-year maintenance service.

- End -

CONTROLLING OFFICER'S REPLY

ENB239

(Question Serial No. 4700)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding air pollution, will the Government inform this Committee of:

1. the indexes of distribution of health risk categories recorded at various air quality monitoring stations each month in the past 3 years;
2. whether the Government will implement any improvement measures for districts with poorer results in the Air Quality Health Index (such as Tuen Mun, Tung Chung, Yuen Long and Tsuen Wan); if yes, of the plan; if not, of the reasons for that?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 289)

Reply:

1. With significant improvement in the air quality in recent years, the health risks encountered by the public have also reduced. The total numbers of days (in percentage) with the health risk category of "High" or above level recorded at the general and roadside air quality monitoring stations (AQMSs) in 2019 were 13.5% and 13.7% respectively, which were lower than the 14.1% and 26.2% recorded in 2014. The monthly distribution of the health risk categories recorded at various AQMSs from 2017 to 2019 is tabulated at the Annex.
2. When there is a relatively high air pollution level in the Pearl River Delta (PRD) region and Hong Kong is subject to light northwesterly winds, Tuen Mun, Tung Chung, Yuen Long and Tsuen Wan, which are situated in the west of Hong Kong, are more susceptible to the regional pollution impact (such as ozone and suspended particulates) and hence resulting in higher air pollution. For the rest of the times, the air quality in these districts is generally comparable to that in other districts. In fact, the number of hours with the health risk category of "Low" level recorded at Tung Chung AQMS in the past 3 years was more than that recorded at all other general AQMSs.

Ozone is a complicated regional air pollution problem. Ozone is not emitted directly from pollution sources, but is formed by chemical reactions amongst various air pollutants in the ambient air. Ozone is mainly formed by photochemical reactions of

nitrogen oxides (NO_x) (including nitric oxide and nitrogen dioxide (NO₂)) and volatile organic compounds (VOCs) under sunlight, which in turn promotes the formation of suspended particulates. When it is sunny and the wind is weak in the PRD region, the regional ozone concentration will increase. If the prevailing winds are northwesterly, they will bring the ozone formed in the PRD region to the west of Hong Kong, and then to other districts.

To improve regional air quality, including solving the ozone pollution problem, the Hong Kong Special Administrative Region (HKSAR) Government and Guangdong (GD) Provincial Government have been striving to reduce emissions from major sources, including power plants, vehicles and industries, etc., in the PRD region since 2002. In 2012, the HKSAR and GD governments endorsed a set of 2015 emission reduction targets and 2020 emission reduction ranges of 4 major air pollutants (i.e. sulphur dioxide (SO₂), NO_x, respirable suspended particulates (RSP) and VOCs) for Hong Kong (HK) and the PRD Economic Zone, adopting 2010 as the base year.

Both HK and GD jointly released the results of the mid-term review on air pollutant emission reduction targets in the PRD region in December 2017, confirming that both sides had achieved their respective 2015 emission reduction targets and finalised the reduction targets for 2020. The details are as follows:

Pollutant	Region ^{Note1}	2015 Emission reduction target ^{Note2}	Actual emission reduction in 2015 ^{Note2} (according to the 2015 Emission Inventory)	2020 Emission reduction target ^{Note2}
SO ₂	HK	-25%	-45%	-55%
	PRD Economic Zone	-16%	-25%	-28%
NO _x	HK	-10%	-14%	-20%
	PRD Economic Zone	-18%	-22%	-25%
RSP	HK	-10%	-20%	-25%
	PRD Economic Zone	-10%	-14%	-17%
VOC	HK	-5%	-14%	-15%
	PRD Economic Zone	-10%	-11%	-20%

Note 1: The PRD Economic Zone includes Guangzhou, Shenzhen, Zhuhai, Dongguan, Zhongshan, Foshan, Jiangmen, Huizhou and Zhaoqing.

Note 2: Reductions are relative to 2010 emission levels.

The HKSAR Government and GD Provincial Government are continuing to implement the control measures under the Pearl River Delta Regional Air Quality Management

Plan to meet the above emission reduction targets for 2020. The key emission reduction measures implemented by HK include: requiring power plants to increase the use of natural gas in electricity generation; progressively tightening the emission caps for power plants; tightening vehicle emission standards for newly registered vehicles to Euro VI; progressively phasing out Euro IV diesel commercial vehicles; and requiring vessels within Hong Kong waters to use compliant fuel (including low-sulphur fuel), etc.

The key emission reduction measures implemented by GD include: various enhancement measures on air pollution prevention and control such as controlling the pollutant emissions of coal-fired thermal power plants; advancing the implementation of National VI emission standards for motor vehicles in the PRD region; promoting the use of electric buses and other new energy vehicles; introducing remedial measures to tackle pollution caused by diesel goods vehicles; enhancing emission control for vessels; promoting pollution prevention and control for non-road mobile machinery; enhancing VOCs pollution prevention and control; enhancing management of construction sites and transportation dust as well as total prohibition of open burning, etc.

With the implementation of various emission reduction measures mentioned above, the average concentrations of major air pollutants (including RSP, fine suspended particulates, NO₂ and SO₂) in the ambient air and at roadside have dropped by about 30% to 60% over the past 7 years (i.e. from 2013 to 2019). This reflects that the air quality improvement measures implemented in recent years have been effective.

To further improve the regional air quality, HK and GD have launched a study on post-2020 regional air pollutant emission reduction targets and concentration levels, with a view to formulating emission reduction targets beyond 2020, predicting the achievable air quality levels, and reviewing the attainment of the above emission reduction targets for 2020.

Table 1: The monthly distribution of health risk categories recorded at various AQMSs in 2017

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jan 2017	Low	0	1	3	4	3	4	5	5	4	4	4	4	4	5	4	4
	Moderate	26	28	27	26	27	26	26	25	25	27	26	26	26	25	26	26
	High	2	0	1	0	1	1	0	1	1	0	0	0	0	1	0	1
	Very High	3	2	0	1	0	0	0	0	0	1	0	1	1	1	0	1
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb 2017	Low	0	0	2	3	2	2	3	3	3	2	4	4	5	2	5	4
	Moderate	27	26	25	25	25	26	25	25	25	25	22	21	23	26	23	22
	High	1	2	1	0	1	0	0	0	0	1	2	3	0	0	0	2
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2017	Low	0	0	1	1	0	1	2	2	1	0	2	2	3	1	2	1
	Moderate	28	28	29	29	29	29	27	28	29	29	28	28	27	29	28	28
	High	2	2	0	0	1	0	1	0	0	1	0	0	0	0	0	2
	Very High	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2017	Low	1	5	6	5	6	8	9	7	5	7	13	13	10	8	8	9
	Moderate	23	22	22	24	23	20	20	22	24	22	15	14	19	19	21	18
	High	3	3	1	1	1	2	1	1	1	1	0	1	1	2	1	3
	Very High	3	0	1	0	0	0	0	0	0	0	2	2	0	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2017	Low	0	1	1	2	1	4	4	2	3	4	7	5	3	5	8	6
	Moderate	24	24	24	24	23	22	22	25	23	20	18	19	21	20	18	20
	High	2	2	1	1	3	3	3	0	1	4	2	3	2	2	1	3
	Very High	5	4	4	4	4	2	2	4	3	3	3	2	2	4	4	1
	Serious	0	0	1	0	0	0	0	0	0	1	0	1	2	3	0	1
Jun 2017	Low	3	25	28	30	30	28	30	26	30	30	29	30	30	30	30	29
	Moderate	27	5	2	0	0	2	0	4	0	0	1	0	0	0	0	1
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		Roadside AQMS			General AQMS													
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun	
Health Risk Category		Number of days																
Jul 2017	Low	15	27	26	27	27	27	27	26	27	27	25	25	27	27	27	27	
	Moderate	13	2	3	2	2	2	2	3	2	2	3	3	1	1	2	2	
	High	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	
	Very High	0	1	1	1	1	1	1	1	1	1	0	2	1	1	0	1	2
	Serious	2	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	0
Aug 2017	Low	3	23	15	24	24	19	24	19	22	23	21	22	24	19	24	22	
	Moderate	23	4	13	4	3	8	4	8	5	3	5	4	2	6	3	6	
	High	2	1	0	0	2	1	1	1	0	1	0	0	0	1	1	2	
	Very High	3	3	3	3	2	3	2	3	4	4	3	4	3	4	3	1	
	Serious	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0
Sep 2017	Low	0	10	8	12	12	13	15	11	14	13	14	12	16	12	13	13	
	Moderate	23	13	15	11	11	10	8	13	10	11	7	9	7	11	11	10	
	High	0	0	0	0	1	1	0	0	0	1	1	0	1	0	0	1	
	Very High	4	5	4	4	5	5	5	3	2	4	5	3	0	6	4	5	
	Serious	3	2	3	3	1	1	2	3	4	1	3	6	6	1	2	1	
Oct 2017	Low	2	3	3	6	5	6	6	6	6	5	6	6	8	5	5	5	
	Moderate	18	21	19	16	18	18	19	17	17	19	14	12	14	17	19	18	
	High	8	5	6	8	7	6	5	3	2	6	3	5	3	3	3	4	
	Very High	3	2	3	1	1	1	1	5	6	1	8	8	6	6	4	4	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Nov 2017	Low	0	3	2	3	2	3	2	3	5	3	5	4	4	3	4	3	
	Moderate	24	24	25	25	26	26	27	25	20	25	19	17	20	22	23	23	
	High	5	2	2	1	1	1	0	1	3	1	2	3	2	4	2	3	
	Very High	1	1	1	1	1	0	1	1	2	1	4	4	4	1	1	1	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
Dec 2017	Low	0	0	0	2	1	2	2	2	2	2	1	1	2	2	2	2	
	Moderate	16	19	21	21	24	23	22	20	20	24	18	18	18	20	23	22	
	High	7	7	4	7	5	5	6	6	6	3	7	4	7	5	3	3	
	Very High	8	5	6	1	1	1	1	3	3	2	5	8	4	4	3	4	

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
2017 whole year	Low	24	98	95	119	113	117	129	112	122	120	131	128	136	119	132	125
	Moderate	272	216	225	207	211	212	202	215	200	207	176	171	178	196	197	196
	High	33	24	16	18	23	20	17	13	14	19	17	19	17	19	11	24
	Very High	31	24	24	17	16	14	14	21	23	16	34	34	22	27	22	18
	Serious	5	3	5	4	2	2	3	4	6	3	7	13	12	4	3	2

Table 2: The monthly distribution of health risk categories recorded at various AQMSs in 2018

		Roadside AQMS			General AQMS													
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun	
Health Risk Category		Number of days																
Jan 2018	Low	1	4	6	8	6	6	9	6	7	7	6	6	9	6	6	8	
	Moderate	25	23	22	21	22	23	20	23	20	22	22	21	19	23	23	19	
	High	3	2	1	0	2	0	1	0	2	0	0	0	1	0	0	3	
	Very High	2	2	1	2	1	2	1	1	1	2	1	2	0	2	2	1	
	Serious	0	0	1	0	0	0	0	1	1	0	2	2	2	0	0	0	
Feb 2018	Low	1	1	1	1	0	0	5	2	1	3	5	3	5	2	2	0	
	Moderate	22	24	27	27	28	28	23	26	27	25	23	24	23	26	26	28	
	High	2	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	Very High	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mar 2018	Low	0	0	2	1	2	3	3	3	2	2	6	3	6	2	3	3	
	Moderate	27	29	27	30	28	28	28	26	29	29	23	27	25	28	27	28	
	High	3	2	2	0	1	0	0	2	0	0	1	1	0	1	1	0	
	Very High	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Apr 2018	Low	0	10	6	9	7	8	8	7	9	8	10	7	13	12	7	7	
	Moderate	27	20	24	20	21	22	22	22	20	20	19	21	16	17	22	21	
	High	3	0	0	1	2	0	0	1	1	2	1	1	0	1	1	2	
	Very High	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
May 2018	Low	2	14	11	19	17	14	19	17	22	17	15	13	20	22	18	16	
	Moderate	27	16	18	11	13	16	11	13	8	13	13	14	8	8	12	14	
	High	1	0	1	0	0	0	0	0	0	0	0	2	2	1	0	0	
	Very High	1	1	1	1	1	1	1	1	1	1	3	2	1	0	1	1	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun 2018	Low	5	11	14	16	14	14	16	13	14	14	14	14	14	17	14	13	
	Moderate	23	17	15	12	14	15	13	16	15	15	15	14	14	13	15	16	
	High	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	1	
	Very High	2	2	1	2	0	0	1	1	1	0	1	2	2	0	1	0	

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		Roadside AQMS			General AQMS													
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun	
Health Risk Category		Number of days																
Jul 2018	Low	11	27	22	28	26	25	27	27	27	28	27	27	27	27	27	29	
	Moderate	20	4	9	3	5	6	4	4	4	3	3	3	3	3	4	2	
	High	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
	Very High	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 2018	Low	5	12	6	21	19	15	17	18	20	19	18	17	19	20	20	19	
	Moderate	20	12	17	4	7	12	9	8	5	8	6	7	5	5	6	7	
	High	1	2	3	1	2	0	1	0	1	0	0	0	1	2	0	2	
	Very High	3	3	3	3	2	3	2	2	2	3	4	4	4	3	4	2	
	Serious	2	2	2	2	1	1	2	3	3	1	3	3	2	1	1	1	
Sep 2018 Note 1	Low	4	8	7	10	8	10	11	10	12	8	9	10	11	10	9	4	
	Moderate	23	19	20	17	20	18	16	17	16	20	15	13	12	14	17	12	
	High	0	0	1	1	0	0	1	1	0	1	2	0	2	3	1	0	
	Very High	3	3	2	2	2	2	2	2	2	1	4	7	5	3	3	0	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oct 2018	Low	0	0	1	1	2	1	1	2	1	1	3	2	1	2	3	1	
	Moderate	22	19	21	22	20	25	21	21	21	23	17	15	19	19	18	21	
	High	5	9	3	2	5	2	5	4	4	4	1	3	3	4	4	6	
	Very High	4	3	6	6	4	3	4	4	5	3	10	11	8	6	6	3	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Nov 2018	Low	0	0	0	2	2	0	2	1	3	1	3	3	6	2	1	2	
	Moderate	28	26	26	25	26	28	25	26	23	27	23	22	20	26	26	27	
	High	0	2	2	2	2	2	3	3	3	2	2	3	2	1	3	0	
	Very High	2	2	2	1	0	0	0	0	1	0	1	1	1	1	0	1	
	Serious	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	
Dec 2018	Low	2	3	6	9	9	7	12	10	10	12	9	6	11	11	9	12	
	Moderate	28	27	24	21	22	24	19	21	20	19	19	22	17	20	22	19	
	High	1	0	1	1	0	0	0	0	1	0	2	1	1	0	0	0	
	Very High	0	1	0	0	0	0	0	0	0	0	1	2	2	0	0	0	

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
2018 whole year	Low	31	90	82	125	112	103	130	116	128	120	125	111	142	133	119	114
	Moderate	292	236	250	213	226	245	211	223	208	224	198	203	181	202	218	214
	High	19	20	14	8	16	5	11	11	12	10	9	13	13	13	10	14
	Very High	21	17	16	17	10	11	11	11	13	10	27	32	24	16	17	8
	Serious	2	2	3	2	1	1	2	4	4	1	6	6	5	1	1	1

Note 1: As affected by typhoon Mangkhut, the operation of Tap Mun AQMS was temporarily suspended from 16 to 30 September 2018.

Table 3: The monthly distribution of health risk categories recorded at various AQMSs in 2019

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jan 2019	Low	0	0	1	3	2	2	3	2	2	3	3	4	3	2	4	6
	Moderate	26	23	24	24	28	26	26	25	23	23	24	21	20	25	24	23
	High	3	4	3	3	0	2	1	3	5	4	3	6	4	3	3	2
	Very High	2	4	3	1	1	1	1	1	1	1	1	0	4	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb 2019	Low	2	4	5	11	10	10	11	12	11	8	13	16	17	10	12	8
	Moderate	26	24	23	17	18	18	17	16	17	20	15	12	11	18	16	20
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2019	Low	1	3	5	7	5	5	7	7	7	4	7	7	8	5	7	7
	Moderate	30	27	26	24	25	26	24	24	24	26	23	23	23	26	24	24
	High	0	1	0	0	1	0	0	0	0	1	1	1	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2019	Low	5	9	8	10	10	8	12	12	11	9	10	10	12	8	10	8
	Moderate	22	18	19	18	18	19	16	16	18	19	18	19	16	20	17	21
	High	2	1	1	1	1	3	2	1	0	2	1	0	1	1	2	1
	Very High	1	2	2	1	1	0	0	1	1	0	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2019	Low	5	3	7	9	8	4	9	9	9	8	10	10	11	9	9	9
	Moderate	26	27	24	22	23	27	22	22	22	22	21	20	20	22	22	21
	High	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun 2019	Low	6	17	20	24	24	18	24	26	26	24	26	26	26	24	23	24
	Moderate	23	12	9	5	5	11	5	3	3	5	3	3	3	5	6	6
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jul 2019	Low	10	21	20	27	27	22	27	27	27	27	25	26	27	26	26	26
	Moderate	19	8	9	2	2	7	2	2	2	2	4	3	2	3	3	3
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Very High	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	1
	Serious	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Aug 2019	Low	11	11	12	16	15	12	16	15	14	14	10	10	12	13	15	13
	Moderate	17	16	16	11	12	15	11	12	13	13	14	16	14	13	12	14
	High	0	1	0	0	1	0	1	0	0	1	2	1	0	0	0	0
	Very High	1	1	1	2	1	2	1	2	2	1	3	1	2	3	2	3
	Serious	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	1
Sep 2019	Low	4	4	5	8	9	6	7	9	9	8	5	8	9	6	7	8
	Moderate	15	15	14	11	11	13	12	11	11	12	9	8	8	12	11	11
	High	3	3	2	3	4	5	3	2	2	4	5	3	2	2	4	5
	Very High	6	6	7	6	5	5	6	6	6	5	7	6	6	9	7	6
	Serious	2	2	2	2	1	1	2	2	2	1	4	5	5	1	1	0
Oct 2019	Low	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Moderate	22	19	22	22	22	23	26	24	22	22	17	16	19	21	22	20
	High	5	6	4	4	5	4	2	4	4	5	4	5	5	3	5	7
	Very High	4	6	5	5	4	4	3	3	4	4	10	9	7	7	4	3
	Serious	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Nov 2019	Low	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	26	17	24	22	25	20	22	22	22	22	12	11	14	21	23	17
	High	3	9	5	6	4	8	6	4	7	6	5	5	5	4	4	11
	Very High	1	4	1	2	1	2	2	4	1	2	13	14	10	5	3	2
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Dec 2019	Low	1	1	1	2	3	3	1	1	1	3	1	1	2	1	2	2
	Moderate	25	23	27	26	27	25	27	26	26	27	23	22	24	27	26	28
	High	2	4	0	0	0	1	1	1	1	1	1	3	1	0	1	1
	Very High	3	3	3	3	1	2	2	3	3	0	6	5	4	3	2	0

	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
2019 whole year	Low	45	73	84	117	113	90	117	120	118	108	110	118	127	104	115	111
	Moderate	277	229	237	204	216	230	210	203	203	213	183	174	174	213	206	208
	High	18	30	15	17	16	23	16	15	19	25	22	25	18	13	19	29
	Very High	21	29	25	23	17	19	18	23	21	16	43	38	36	31	22	15
	Serious	4	4	4	4	3	3	4	4	4	3	7	10	10	4	3	2

- End -

CONTROLLING OFFICER'S REPLY

ENB240

(Question Serial No. 4701)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please state in tabular form by month the number of days in which the Hong Kong air quality did not comply with the “short-term air quality guidelines” of the World Health Organisation in the past 3 years. How many days were there for each health risk category in each month?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 300)

Reply:

The World Health Organisation (WHO)'s “Air Quality Guidelines” (WHO Guidelines) have promulgated a set of “ultimate targets” and “interim targets” (ITs) for various key air pollutants which enable governments to, having regard to their local circumstances, progressively tighten their air quality standards through adopting the ITs, and meet the WHO's “ultimate targets” eventually. At present, no country has fully adopted the WHO's “ultimate targets” as its statutory air quality standards. Half of our Air Quality Objectives (AQOs) have adopted the “ultimate targets” as specified in the WHO Guidelines, with the rest pitching at the WHO ITs.

According to the data recorded at various air quality monitoring stations (AQMSs) by the Environmental Protection Department (EPD) in 2019, the concentrations of respirable suspended particulates (RSP), fine suspended particulates (FSP) and sulphur dioxide (SO₂) all met the relevant Hong Kong's AQOs. Although the concentrations of nitrogen dioxide (NO₂) recorded at some AQMSs in 2019 exceeded the concentration limit, the annual average concentrations of ambient and roadside NO₂ have dropped by about 30% respectively from 2013 to 2019, indicating that the emission control measures implemented in recent years are effective. As for ozone (O₃), apart from the influence of regional photochemical smog, the vehicle emission control measures implemented in recent years have led to a reduction of vehicular emission of nitric oxide (NO), so there is less NO to react with and titrate O₃, resulting in an increase of O₃ concentration level. The O₃ level at some AQMSs in 2019 still exceeded the concentration limit.

The status of compliance, number of exceedances and relevant data of various AQMSs from 2017 to 2019 by using Hong Kong's AQOs and the "ultimate targets" in the WHO Guidelines for comparison are set out at **Annex 1**.

With significant improvement in the air quality in recent years, the health risks encountered by the public have also reduced. The total numbers of days (in percentage) with the health risk category of "High" or above level recorded at the general and roadside AQMSs in 2019 were 13.5% and 13.7% respectively, which were lower than the 14.1% and 26.2% recorded in 2014. The monthly distribution of the health risk categories recorded at various AQMSs from 2017 to 2019 is tabulated at **Annex 2**.

Table 1: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term Air Quality Objectives of Hong Kong (AQOs) and WHO's Air Quality Guidelines (WHO AQG) in 2017

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2017	Compliance with the standard? (Yes/No)		Annual average concentration in 2017	Compliance with the standard? (Yes/No)		Annual average concentration in 2017	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	35	Yes	No	23	Yes	No	40	Yes	Yes
	Eastern	33	Yes	No	20	Yes	No	42	No	No
	Kwun Tong	39	Yes	No	23	Yes	No	44	No	No
	Sham Shui Po	33	Yes	No	21	Yes	No	54	No	No
	Kwai Chung	35	Yes	No	23	Yes	No	57	No	No
	Tsuen Wan	33	Yes	No	22	Yes	No	52	No	No
	Tseung Kwan O	31	Yes	No	18	Yes	No	28	Yes	Yes
	Yuen Long	40	Yes	No	22	Yes	No	41	No	No
	Tuen Mun	43	Yes	No	27	Yes	No	46	No	No
	Tung Chung	34	Yes	No	21	Yes	No	36	Yes	Yes
	Tai Po	32	Yes	No	22	Yes	No	39	Yes	Yes
	Sha Tin	31	Yes	No	21	Yes	No	34	Yes	Yes
	Tap Mun	35	Yes	No	20	Yes	No	10	Yes	Yes
Roadside AQMS	Causeway Bay	46	Yes	No	31	Yes	No	97	No	No
	Central	33	Yes	No	21	Yes	No	80	No	No
	Mong Kok	38	Yes	No	27	Yes	No	81	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 2: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	84(1)/Yes	-	59(0)/Yes	-	164(1)/Yes	-
	Eastern	74(0)/Yes	-	49(0)/Yes	-	139(0)/Yes	-
	Kwun Tong	84(1)/Yes	-	53(0)/Yes	-	199(18)/Yes	-
	Sham Shui Po	72(0)/Yes	-	46(0)/Yes	-	194(15)/Yes	-
	Kwai Chung	74(0)/Yes	-	49(0)/Yes	-	204(20)/No	-
	Tsuen Wan	77(3)/Yes	-	52(3)/Yes	-	179(8)/Yes	-
	Tseung Kwan O	65(0)/Yes	-	43(0)/Yes	-	165(2)/Yes	-
	Yuen Long	87(2)/Yes	-	52(2)/Yes	-	156(2)/Yes	-
	Tuen Mun	99(9)/Yes	-	65(3)/Yes	-	188(12)/Yes	-
	Tung Chung	81(5)/Yes	-	57(2)/Yes	-	144(2)/Yes	-
	Tai Po	82(1)/Yes	-	55(0)/Yes	-	127(0)/Yes	-
	Sha Tin	72(1)/Yes	-	54(1)/Yes	-	144(0)/Yes	-
	Tap Mun	74(0)/Yes	-	43(0)/Yes	-	52(0)/Yes	-
Roadside AQMS	Causeway Bay	90(2)/Yes	-	65(4)/Yes	-	325(272)/No	-
	Central	84(2)/Yes	-	56(1)/Yes	-	267(126)/No	-
	Mong Kok	84(0)/Yes	-	57(1)/Yes	-	257(90)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 3: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	125(0)/Yes	-	29(0)/Yes	-	159(9)/Yes	-
	Eastern	54(0)/Yes	-	14(0)/Yes	-	160(8)/Yes	-
	Kwun Tong	53(0)/Yes	-	19(0)/Yes	-	135(2)/Yes	-
	Sham Shui Po	76(0)/Yes	-	25(0)/Yes	-	130(3)/Yes	-
	Kwai Chung	93(0)/Yes	-	24(0)/Yes	-	129(4)/Yes	-
	Tsuen Wan	105(0)/Yes	-	24(0)/Yes	-	141(7)/Yes	-
	Tseung Kwan O	39(0)/Yes	-	15(0)/Yes	-	175(22)/No	-
	Yuen Long	80(0)/Yes	-	20(0)/Yes	-	175(13)/No	-
	Tuen Mun	88(0)/Yes	-	26(0)/Yes	-	176(20)/No	-
	Tung Chung	87(0)/Yes	-	21(0)/Yes	-	187(14)/No	-
	Tai Po	39(0)/Yes	-	9(0)/Yes	-	181(17)/No	-
	Sha Tin	53(0)/Yes	-	16(0)/Yes	-	167(14)/No	-
	Tap Mun	32(0)/Yes	-	14(0)/Yes	-	192(37)/No	-
Roadside AQMS	Causeway Bay	95(0)/Yes	-	25(0)/Yes	-	78(0)/Yes	-
	Central	91(0)/Yes	-	24(0)/Yes	-	103(0)/Yes	-
	Mong Kok	83(0)/Yes	-	20(0)/Yes	-	91(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 4: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 610(0)/Yes	-	1 414(0)/Yes	-
	Tseung Kwan O	1 830(0)/Yes	-	1 574(0)/Yes	-
	Yuen Long	1 450(0)/Yes	-	1 324(0)/Yes	-
	Tuen Mun	1 740(0)/Yes	-	1 630(0)/Yes	-
	Tung Chung	1 810(0)/Yes	-	1 544(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
Tap Mun	1 770(0)/Yes	-	1 543(0)/Yes	-	
Roadside AQMS	Causeway Bay	2 420(0)/Yes	-	2 090(0)/Yes	-
	Central	2 050(0)/Yes	-	1 879(0)/Yes	-
	Mong Kok	2 390(0)/Yes	-	2 156(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 5: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term AQOs and WHO AQG in 2018

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2018	Compliance with the standard? (Yes/No)		Annual average concentration in 2018	Compliance with the standard? (Yes/No)		Annual average concentration in 2018	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	34	Yes	No	21	Yes	No	39	Yes	Yes
	Eastern	33	Yes	No	19	Yes	No	39	Yes	Yes
	Kwun Tong	38	Yes	No	22	Yes	No	43	No	No
	Sham Shui Po	33	Yes	No	21	Yes	No	49	No	No
	Kwai Chung	32	Yes	No	20	Yes	No	55	No	No
	Tsuen Wan	30	Yes	No	20	Yes	No	45	No	No
	Tseung Kwan O	28	Yes	No	15	Yes	No	28	Yes	Yes
	Yuen Long	37	Yes	No	20	Yes	No	43	No	No
	Tuen Mun	42	Yes	No	26	Yes	No	47	No	No
	Tung Chung	31	Yes	No	18	Yes	No	33	Yes	Yes
	Tai Po	31	Yes	No	19	Yes	No	36	Yes	Yes
	Sha Tin	32	Yes	No	19	Yes	No	35	Yes	Yes
Tap Mun	31	Yes	No	17	Yes	No	11	Yes	Yes	
Roadside AQMS	Causeway Bay	46	Yes	No	30	Yes	No	87	No	No
	Central	34	Yes	No	21	Yes	No	80	No	No
	Mong Kok	36	Yes	No	24	Yes	No	79	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 6: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2018 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	70(2)/Yes	-	46(2)/Yes	-	159(4)/Yes	-
	Eastern	68(1)/Yes	-	39(0)/Yes	-	128(0)/Yes	-
	Kwun Tong	78(2)/Yes	-	45(0)/Yes	-	178(11)/Yes	-
	Sham Shui Po	59(0)/Yes	-	41(0)/Yes	-	152(1)/Yes	-
	Kwai Chung	62(0)/Yes	-	38(0)/Yes	-	196(14)/Yes	-
	Tsuen Wan	71(2)/Yes	-	48(2)/Yes	-	181(9)/Yes	-
	Tseung Kwan O	53(0)/Yes	-	32(0)/Yes	-	135(0)/Yes	-
	Yuen Long	75(4)/Yes	-	46(1)/Yes	-	150(3)/Yes	-
	Tuen Mun	87(4)/Yes	-	53(2)/Yes	-	177(11)/Yes	-
	Tung Chung	73(2)/Yes	-	48(2)/Yes	-	156(7)/Yes	-
	Tai Po	69(0)/Yes	-	47(0)/Yes	-	125(0)/Yes	-
	Sha Tin	65(1)/Yes	-	40(0)/Yes	-	149(0)/Yes	-
	Tap Mun	60(0)/Yes	-	32(0)/Yes	-	51(0)/Yes	-
Roadside AQMS	Causeway Bay	82(1)/Yes	-	55(1)/Yes	-	277(148)/No	-
	Central	74(1)/Yes	-	50(1)/Yes	-	257(120)/No	-
	Mong Kok	73(2)/Yes	-	51(2)/Yes	-	240(44)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 7: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs		SO ₂		SO ₂		O ₃	
		AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1
Average time		10-minute	10-minute	24-hour	24-hour	8-hour	8-hour
Concentration limit (µg/m ³)		500	500	125	20	160	100
Number of exceedances allowed		3	Not specified	3	Not specified	9	Not specified
AQMS		Short-term concentrations in 2018 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)					
General AQMS	Central/Western	135(0)/Yes	-	22(0)/Yes	-	164(11)/No	-
	Eastern	123(0)/Yes	-	12(0)/Yes	-	161(10)/No	-
	Kwun Tong	51(0)/Yes	-	12(0)/Yes	-	130(0)/Yes	-
	Sham Shui Po	98(0)/Yes	-	21(0)/Yes	-	147(5)/Yes	-
	Kwai Chung	134(0)/Yes	-	27(0)/Yes	-	133(1)/Yes	-
	Tsuen Wan	113(0)/Yes	-	21(0)/Yes	-	148(9)/Yes	-
	Tseung Kwan O	38(0)/Yes	-	11(0)/Yes	-	169(15)/No	-
	Yuen Long	52(0)/Yes	-	16(0)/Yes	-	162(10)/No	-
	Tuen Mun	94(0)/Yes	-	20(0)/Yes	-	173(18)/No	-
	Tung Chung	88(0)/Yes	-	19(0)/Yes	-	173(14)/No	-
	Tai Po	24(0)/Yes	-	8(0)/Yes	-	167(13)/No	-
	Sha Tin	76(0)/Yes	-	16(0)/Yes	-	182(17)/No	-
	Tap Mun	29(0)/Yes	-	13(0)/Yes	-	184(20)/No	-
Roadside AQMS	Causeway Bay	82(0)/Yes	-	19(0)/Yes	-	78(0)/Yes	-
	Central	101(0)/Yes	-	20(0)/Yes	-	96(0)/Yes	-
	Mong Kok	88(0)/Yes	-	19(0)/Yes	-	97(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 8: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2018 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 680(0)/Yes	-	1 421(0)/Yes	-
	Tseung Kwan O	2 130(0)/Yes	-	1 838(0)/Yes	-
	Yuen Long	1 720(0)/Yes	-	1 574(0)/Yes	-
	Tuen Mun	1 900(0)/Yes	-	1 666(0)/Yes	-
	Tung Chung	1 780(0)/Yes	-	1 353(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun	1 170(0)/Yes	-	1 151(0)/Yes	-
Roadside AQMS	Causeway Bay	2 610(0)/Yes	-	2 047(0)/Yes	-
	Central	2 330(0)/Yes	-	1 685(0)/Yes	-
	Mong Kok	2 340(0)/Yes	-	2 041(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 9: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term AQOs and WHO AQG in 2019

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2019	Compliance with the standard? (Yes/No)		Annual average concentration in 2019	Compliance with the standard? (Yes/No)		Annual average concentration in 2019	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	30	Yes	No	20	Yes	No	37	Yes	Yes
	Eastern	31	Yes	No	18	Yes	No	38	Yes	Yes
	Kwun Tong	38	Yes	No	21	Yes	No	45	No	No
	Sham Shui Po	33	Yes	No	18	Yes	No	48	No	No
	Kwai Chung	29	Yes	No	18	Yes	No	54	No	No
	Tsuen Wan	30	Yes	No	20	Yes	No	46	No	No
	Tseung Kwan O	29	Yes	No	17	Yes	No	29	Yes	Yes
	Yuen Long	37	Yes	No	20	Yes	No	44	No	No
	Tuen Mun	41	Yes	No	24	Yes	No	47	No	No
	Tung Chung	30	Yes	No	19	Yes	No	33	Yes	Yes
	Tai Po	31	Yes	No	20	Yes	No	36	Yes	Yes
	Sha Tin	28	Yes	No	17	Yes	No	32	Yes	Yes
	Tap Mun	31	Yes	No	17	Yes	No	10	Yes	Yes
Roadside AQMS	Causeway Bay	43	Yes	No	27	Yes	No	81	No	No
	Central	37	Yes	No	24	Yes	No	80	No	No
	Mong Kok	35	Yes	No	24	Yes	No	78	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 10: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	69(2)/Yes	-	49(2)/Yes	-	153(3)/Yes	-
	Eastern	66(0)/Yes	-	40(0)/Yes	-	136(4)/Yes	-
	Kwun Tong	73(0)/Yes	-	44(0)/Yes	-	184(10)/Yes	-
	Sham Shui Po	65(1)/Yes	-	36(2)/Yes	-	176(6)/Yes	-
	Kwai Chung	59(0)/Yes	-	39(0)/Yes	-	184(12)/Yes	-
	Tsuen Wan	65(2)/Yes	-	47(1)/Yes	-	177(2)/Yes	-
	Tseung Kwan O	60(0)/Yes	-	38(0)/Yes	-	155(3)/Yes	-
	Yuen Long	83(2)/Yes	-	45(1)/Yes	-	161(0)/Yes	-
	Tuen Mun	89(4)/Yes	-	53(2)/Yes	-	166(2)/Yes	-
	Tung Chung	75(2)/Yes	-	52(1)/Yes	-	149(0)/Yes	-
	Tai Po	65(2)/Yes	-	47(1)/Yes	-	142(0)/Yes	-
	Sha Tin	60(0)/Yes	-	39(0)/Yes	-	150(0)/Yes	-
Tap Mun	64(0)/Yes	-	35(0)/Yes	-	56(0)/Yes	-	
Roadside AQMS	Causeway Bay	80(3)/Yes	-	54(3)/Yes	-	287(121)/No	-
	Central	74(3)/Yes	-	53(3)/Yes	-	252(116)/No	-
	Mong Kok	74(3)/Yes	-	55(3)/Yes	-	248(88)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 11: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	62(0)/Yes	-	12(0)/Yes	-	191(23)/No	-
	Eastern	41(0)/Yes	-	7(0)/Yes	-	169(17)/No	-
	Kwun Tong	41(0)/Yes	-	11(0)/Yes	-	150(5)/Yes	-
	Sham Shui Po	41(0)/Yes	-	14(0)/Yes	-	164(11)/No	-
	Kwai Chung	53(0)/Yes	-	18(0)/Yes	-	143(6)/Yes	-
	Tsuen Wan	45(0)/Yes	-	13(0)/Yes	-	171(14)/No	-
	Tseung Kwan O	25(0)/Yes	-	12(0)/Yes	-	185(33)/No	-
	Yuen Long	42(0)/Yes	-	11(0)/Yes	-	200(25)/No	-
	Tuen Mun	45(0)/Yes	-	12(0)/Yes	-	203(24)/No	-
	Tung Chung	57(0)/Yes	-	18(0)/Yes	-	208(28)/No	-
	Tai Po	20(0)/Yes	-	10(0)/Yes	-	197(27)/No	-
	Sha Tin	27(0)/Yes	-	12(0)/Yes	-	199(33)/No	-
Tap Mun	19(0)/Yes	-	12(0)/Yes	-	212(51)/No	-	
Roadside AQMS	Causeway Bay	51(0)/Yes	-	11(0)/Yes	-	108(3)/Yes	-
	Central	42(0)/Yes	-	15(0)/Yes	-	133(4)/Yes	-
	Mong Kok	39(0)/Yes	-	10(0)/Yes	-	125(1)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 12: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 970(0)/Yes	-	1 835(0)/Yes	-
	Tseung Kwan O	2 170(0)/Yes	-	1 935(0)/Yes	-
	Yuen Long	2 150(0)/Yes	-	1 903(0)/Yes	-
	Tuen Mun	2 050(0)/Yes	-	1 758(0)/Yes	-
	Tung Chung	2 260(0)/Yes	-	1 874(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun	1 360(0)/Yes	-	1 350(0)/Yes	-
Roadside AQMS	Causeway Bay	2 620(0)/Yes	-	2 309(0)/Yes	-
	Central	2 440(0)/Yes	-	2 205(0)/Yes	-
	Mong Kok	2 280(0)/Yes	-	2 103(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 1: The monthly distribution of health risk categories recorded at various AQMSs in 2017

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jan 2017	Low	0	1	3	4	3	4	5	5	4	4	4	4	4	5	4	4
	Moderate	26	28	27	26	27	26	26	25	25	27	26	26	26	25	26	26
	High	2	0	1	0	1	1	0	1	1	0	0	0	0	1	0	1
	Very High	3	2	0	1	0	0	0	0	0	1	0	1	1	1	0	1
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb 2017	Low	0	0	2	3	2	2	3	3	3	2	4	4	5	2	5	4
	Moderate	27	26	25	25	25	26	25	25	25	25	22	21	23	26	23	22
	High	1	2	1	0	1	0	0	0	0	1	2	3	0	0	0	2
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2017	Low	0	0	1	1	0	1	2	2	1	0	2	2	3	1	2	1
	Moderate	28	28	29	29	29	29	27	28	29	29	28	28	27	29	28	28
	High	2	2	0	0	1	0	1	0	0	1	0	0	0	0	0	2
	Very High	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2017	Low	1	5	6	5	6	8	9	7	5	7	13	13	10	8	8	9
	Moderate	23	22	22	24	23	20	20	22	24	22	15	14	19	19	21	18
	High	3	3	1	1	1	2	1	1	1	1	0	1	1	2	1	3
	Very High	3	0	1	0	0	0	0	0	0	0	2	2	0	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2017	Low	0	1	1	2	1	4	4	2	3	4	7	5	3	5	8	6
	Moderate	24	24	24	24	23	22	22	25	23	20	18	19	21	20	18	20
	High	2	2	1	1	3	3	3	0	1	4	2	3	2	2	1	3
	Very High	5	4	4	4	4	2	2	4	3	3	3	2	2	4	4	1
	Serious	0	0	1	0	0	0	0	0	1	0	1	2	3	0	0	1
Jun 2017	Low	3	25	28	30	30	28	30	26	30	30	29	30	30	30	30	29
	Moderate	27	5	2	0	0	2	0	4	0	0	1	0	0	0	0	1
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS													
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun	
Health Risk Category		Number of days																
Jul 2017	Low	15	27	26	27	27	27	27	26	27	27	25	25	27	27	27	27	
	Moderate	13	2	3	2	2	2	2	3	2	2	3	3	1	1	2	2	
	High	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	
	Very High	0	1	1	1	1	1	1	1	1	1	0	2	1	1	0	1	2
	Serious	2	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	0
Aug 2017	Low	3	23	15	24	24	19	24	19	22	23	21	22	24	19	24	22	
	Moderate	23	4	13	4	3	8	4	8	5	3	5	4	2	6	3	6	
	High	2	1	0	0	2	1	1	1	0	1	0	0	0	1	1	2	
	Very High	3	3	3	3	2	3	2	3	4	4	3	4	3	4	3	1	
	Serious	0	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	
Sep 2017	Low	0	10	8	12	12	13	15	11	14	13	14	12	16	12	13	13	
	Moderate	23	13	15	11	11	10	8	13	10	11	7	9	7	11	11	10	
	High	0	0	0	0	1	1	0	0	0	1	1	0	1	0	0	1	
	Very High	4	5	4	4	5	5	5	3	2	4	5	3	0	6	4	5	
	Serious	3	2	3	3	1	1	2	3	4	1	3	6	6	1	2	1	
Oct 2017	Low	2	3	3	6	5	6	6	6	6	5	6	6	8	5	5	5	
	Moderate	18	21	19	16	18	18	19	17	17	19	14	12	14	17	19	18	
	High	8	5	6	8	7	6	5	3	2	6	3	5	3	3	3	4	
	Very High	3	2	3	1	1	1	1	5	6	1	8	8	6	6	4	4	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Nov 2017	Low	0	3	2	3	2	3	2	3	5	3	5	4	4	3	4	3	
	Moderate	24	24	25	25	26	26	27	25	20	25	19	17	20	22	23	23	
	High	5	2	2	1	1	1	0	1	3	1	2	3	2	4	2	3	
	Very High	1	1	1	1	1	0	1	1	2	1	4	4	4	1	1	1	
	Serious	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
Dec 2017	Low	0	0	0	2	1	2	2	2	2	2	1	1	2	2	2	2	
	Moderate	16	19	21	21	24	23	22	20	20	24	18	18	18	20	23	22	
	High	7	7	4	7	5	5	6	6	6	3	7	4	7	5	3	3	
	Very High	8	5	6	1	1	1	1	3	3	2	5	8	4	4	3	4	
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	Roadside AQMS			General AQMS													
	Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun	
Health Risk Category	Number of days																
2017 whole year	Low	24	98	95	119	113	117	129	112	122	120	131	128	136	119	132	125
	Moderate	272	216	225	207	211	212	202	215	200	207	176	171	178	196	197	196
	High	33	24	16	18	23	20	17	13	14	19	17	19	17	19	11	24
	Very High	31	24	24	17	16	14	14	21	23	16	34	34	22	27	22	18
	Serious	5	3	5	4	2	2	3	4	6	3	7	13	12	4	3	2

Table 2: The monthly distribution of health risk categories recorded at various AQMSs in 2018

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jan 2018	Low	1	4	6	8	6	6	9	6	7	7	6	6	9	6	6	8
	Moderate	25	23	22	21	22	23	20	23	20	22	22	21	19	23	23	19
	High	3	2	1	0	2	0	1	0	2	0	0	0	1	0	0	3
	Very High	2	2	1	2	1	2	1	1	1	2	1	2	0	2	2	1
	Serious	0	0	1	0	0	0	0	1	1	0	2	2	2	0	0	0
Feb 2018	Low	1	1	1	1	0	0	5	2	1	3	5	3	5	2	2	0
	Moderate	22	24	27	27	28	28	23	26	27	25	23	24	23	26	26	28
	High	2	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	Very High	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2018	Low	0	0	2	1	2	3	3	3	2	2	6	3	6	2	3	3
	Moderate	27	29	27	30	28	28	28	26	29	29	23	27	25	28	27	28
	High	3	2	2	0	1	0	0	2	0	0	1	1	0	1	1	0
	Very High	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2018	Low	0	10	6	9	7	8	8	7	9	8	10	7	13	12	7	7
	Moderate	27	20	24	20	21	22	22	22	20	20	19	21	16	17	22	21
	High	3	0	0	1	2	0	0	1	1	2	1	1	0	1	1	2
	Very High	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2018	Low	2	14	11	19	17	14	19	17	22	17	15	13	20	22	18	16
	Moderate	27	16	18	11	13	16	11	13	8	13	13	14	8	8	12	14
	High	1	0	1	0	0	0	0	0	0	0	0	2	2	1	0	0
	Very High	1	1	1	1	1	1	1	1	1	1	3	2	1	0	1	1
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun 2018	Low	5	11	14	16	14	14	16	13	14	14	14	14	14	17	14	13
	Moderate	23	17	15	12	14	15	13	16	15	15	15	14	14	13	15	16
	High	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	1
	Very High	2	2	1	2	0	0	1	1	1	0	1	2	2	0	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jul 2018	Low	11	27	22	28	26	25	27	27	27	28	27	27	27	27	27	29
	Moderate	20	4	9	3	5	6	4	4	4	3	3	3	3	3	4	2
	High	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 2018	Low	5	12	6	21	19	15	17	18	20	19	18	17	19	20	20	19
	Moderate	20	12	17	4	7	12	9	8	5	8	6	7	5	5	6	7
	High	1	2	3	1	2	0	1	0	1	0	0	0	1	2	0	2
	Very High	3	3	3	3	2	3	2	2	2	3	4	4	4	3	4	2
	Serious	2	2	2	2	1	1	2	3	3	1	3	3	2	1	1	1
Sep 2018 Note 1	Low	4	8	7	10	8	10	11	10	12	8	9	10	11	10	9	4
	Moderate	23	19	20	17	20	18	16	17	16	20	15	13	12	14	17	12
	High	0	0	1	1	0	0	1	1	0	1	2	0	2	3	1	0
	Very High	3	3	2	2	2	2	2	2	2	1	4	7	5	3	3	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oct 2018	Low	0	0	1	1	2	1	1	2	1	1	3	2	1	2	3	1
	Moderate	22	19	21	22	20	25	21	21	21	23	17	15	19	19	18	21
	High	5	9	3	2	5	2	5	4	4	4	1	3	3	4	4	6
	Very High	4	3	6	6	4	3	4	4	5	3	10	11	8	6	6	3
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov 2018	Low	0	0	0	2	2	0	2	1	3	1	3	3	6	2	1	2
	Moderate	28	26	26	25	26	28	25	26	23	27	23	22	20	26	26	27
	High	0	2	2	2	2	2	3	3	3	2	2	3	2	1	3	0
	Very High	2	2	2	1	0	0	0	0	1	0	1	1	1	1	0	1
	Serious	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
Dec 2018	Low	2	3	6	9	9	7	12	10	10	12	9	6	11	11	9	12
	Moderate	28	27	24	21	22	24	19	21	20	19	19	22	17	20	22	19
	High	1	0	1	1	0	0	0	0	1	0	2	1	1	0	0	0
	Very High	0	1	0	0	0	0	0	0	0	0	1	2	2	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
2018 whole year	Low	31	90	82	125	112	103	130	116	128	120	125	111	142	133	119	114
	Moderate	292	236	250	213	226	245	211	223	208	224	198	203	181	202	218	214
	High	19	20	14	8	16	5	11	11	12	10	9	13	13	13	10	14
	Very High	21	17	16	17	10	11	11	11	13	10	27	32	24	16	17	8
	Serious	2	2	3	2	1	1	2	4	4	1	6	6	5	1	1	1

Note 1: As affected by Typhoon Mangkhut, the operation of Tap Mun AQMS was temporarily suspended from 16 to 30 September 2018.

Table 3: The monthly distribution of health risk categories recorded at various AQMSs in 2019

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jan 2019	Low	0	0	1	3	2	2	3	2	2	3	3	4	3	2	4	6
	Moderate	26	23	24	24	28	26	26	25	23	23	24	21	20	25	24	23
	High	3	4	3	3	0	2	1	3	5	4	3	6	4	3	3	2
	Very High	2	4	3	1	1	1	1	1	1	1	1	0	4	1	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb 2019	Low	2	4	5	11	10	10	11	12	11	8	13	16	17	10	12	8
	Moderate	26	24	23	17	18	18	17	16	17	20	15	12	11	18	16	20
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar 2019	Low	1	3	5	7	5	5	7	7	7	4	7	7	8	5	7	7
	Moderate	30	27	26	24	25	26	24	24	24	26	23	23	23	26	24	24
	High	0	1	0	0	1	0	0	0	0	1	1	1	0	0	0	0
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr 2019	Low	5	9	8	10	10	8	12	12	11	9	10	10	12	8	10	8
	Moderate	22	18	19	18	18	19	16	16	18	19	18	19	16	20	17	21
	High	2	1	1	1	1	3	2	1	0	2	1	0	1	1	2	1
	Very High	1	2	2	1	1	0	0	1	1	0	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May 2019	Low	5	3	7	9	8	4	9	9	9	8	10	10	11	9	9	9
	Moderate	26	27	24	22	23	27	22	22	22	22	21	20	20	22	22	21
	High	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1
	Very High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun 2019	Low	6	17	20	24	24	18	24	26	26	24	26	26	26	24	23	24
	Moderate	23	12	9	5	5	11	5	3	3	5	3	3	3	5	6	6
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Very High	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
Jul 2019	Low	10	21	20	27	27	22	27	27	27	27	25	26	27	26	26	26
	Moderate	19	8	9	2	2	7	2	2	2	2	4	3	2	3	3	3
	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Very High	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	1
	Serious	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0
Aug 2019	Low	11	11	12	16	15	12	16	15	14	14	10	10	12	13	15	13
	Moderate	17	16	16	11	12	15	11	12	13	13	14	16	14	13	12	14
	High	0	1	0	0	1	0	1	0	0	1	2	1	0	0	0	0
	Very High	1	1	1	2	1	2	1	2	2	1	3	1	2	3	2	3
	Serious	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	1
Sep 2019	Low	4	4	5	8	9	6	7	9	9	8	5	8	9	6	7	8
	Moderate	15	15	14	11	11	13	12	11	11	12	9	8	8	12	11	11
	High	3	3	2	3	4	5	3	2	2	4	5	3	2	2	4	5
	Very High	6	6	7	6	5	5	6	6	6	5	7	6	6	9	7	6
	Serious	2	2	2	2	1	1	2	2	2	1	4	5	5	1	1	0
Oct 2019	Low	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Moderate	22	19	22	22	22	23	26	24	22	22	17	16	19	21	22	20
	High	5	6	4	4	5	4	2	4	4	5	4	5	5	3	5	7
	Very High	4	6	5	5	4	4	3	3	4	4	10	9	7	7	4	3
	Serious	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Nov 2019	Low	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Moderate	26	17	24	22	25	20	22	22	22	22	12	11	14	21	23	17
	High	3	9	5	6	4	8	6	4	7	6	5	5	5	4	4	11
	Very High	1	4	1	2	1	2	2	4	1	2	13	14	10	5	3	2
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Dec 2019	Low	1	1	1	2	3	3	1	1	1	3	1	1	2	1	2	2
	Moderate	25	23	27	26	27	25	27	26	26	27	23	22	24	27	26	28
	High	2	4	0	0	0	1	1	1	1	1	1	3	1	0	1	1
	Very High	3	3	3	3	1	2	2	3	3	0	6	5	4	3	2	0
	Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Roadside AQMS			General AQMS												
		Causeway Bay	Central	Mong Kok	Central/Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Health Risk Category		Number of days															
2019 whole year	Low	45	73	84	117	113	90	117	120	118	108	110	118	127	104	115	111
	Moderate	277	229	237	204	216	230	210	203	203	213	183	174	174	213	206	208
	High	18	30	15	17	16	23	16	15	19	25	22	25	18	13	19	29
	Very High	21	29	25	23	17	19	18	23	21	16	43	38	36	31	22	15
	Serious	4	4	4	4	3	3	4	4	4	3	7	10	10	4	3	2

- End -

CONTROLLING OFFICER'S REPLY**ENB241****(Question Serial No. 4991)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Would the Department please reply in table form:

- (1) the number of applications for the Environment and Conservation Fund (ECF), the amount of grants approved by the Department, the organisations, the types of recycling activities, and the quantities and types of waste recovered respectively in the past 5 years;
- (2) the criteria of the Department for approving the applications, and whether the Department will review the effectiveness of the ECF;
- (3) the budget of the ECF for 2020-21.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 814)Reply:

1. The numbers of applications received for the Environment and Conservation Fund (ECF), the organisations funded by the ECF and the amount of funding involved in the past 5 years are as follows:

	Number of applications	Recipient organisations	Amount of funding
2015-16	434	Please refer to the Environment and Conservation Fund Trustee Report 2015-2016. The website is as follows: http://www.legco.gov.hk/yr16-17/english/counmtg/papers/cm20161109-sp022-e.pdf	\$190,191,916.39

	Number of applications	Recipient organisations	Amount of funding
2016-17	465	Please refer to the Environment and Conservation Fund Trustee Report 2016-2017. The website is as follows: https://www.legco.gov.hk/yr17-18/english/counmtg/papers/cm20171115-sp022-e.pdf	\$242,420,752.91
2017-18	465	Please refer to the Environment and Conservation Fund Trustee Report 2017-2018. The website is as follows: https://www.legco.gov.hk/yr18-19/english/counmtg/papers/cm20181114-sp024-e.pdf	\$203,492,736.36
2018-19	409	Please refer to the Environment and Conservation Fund Trustee Report 2018-2019. The website is as follows: https://www.legco.gov.hk/yr19-20/english/counmtg/papers/cm20191113-sp047-e.pdf	\$246,556,585.65
2019-20	(Note 1)	(Note 1)	(Note 1)

(Note 1): As the information on the funding for the 2019-20 financial year is still being compiled, it is not available at this stage.

The waste recovery projects under the ECF include Community Waste Reduction Projects and Food Waste Recycling Projects in Housing Estates. In the past 5 years (as at end of December 2019), the ECF provided a total funding of about \$328 million to non-profit-making organisations and community groups through the Community Waste Reduction Projects funding scheme to implement waste reduction projects, with a target of recovering a total of some 28 300 tonnes of recycled materials such as plastics, food waste, surplus food, glass, used electrical and electronic equipment, etc. Meanwhile, the ECF also provided \$10.68 million of funding to housing estates through the Food Waste Recycling Projects in Housing Estates to promote food waste recovery, and recovered a total of 1 777 tonnes of food waste.

2. Applications from non-profit-making organisations and community groups will be considered for funding support under the ECF. Generally, an application to be considered for ECF support should fulfill the following basic requirements:
 - (i) The project must contribute to the overall environment of Hong Kong, or raise environmental awareness of the community, or mobilise the community to take action to improve the environment;
 - (ii) The benefits of the project must accrue to the community as a whole, and not just to individuals, a single private organisation or a consortium of private companies; and
 - (iii) The project must be non-profit-making in nature.

We will review the effectiveness of the fund from time to time.

3. The budget of the ECF for 2020-21 is under preparation and is not available at this stage.

- End -

CONTROLLING OFFICER'S REPLY**ENB242****(Question Serial No. 4992)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Will the Department reply in tabular form:

- (1) the expenditures on waste reduction at source and waste recovery respectively in the past 5 years;
- (2) the expenditures on waste reduction at source and waste recovery respectively in 2020-2021?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 815)Reply:

- (1) Since the work on waste reduction at source and waste recovery is part of the routine waste management duties of the Environmental Protection Department (EPD), there is no separate breakdown for the expenditures involved. The total expenditure of the EPD on the Waste Programme in the past 5 years is tabulated below:

2015-16 Actual expenditure	\$2.2204 billion
2016-17 Actual expenditure	\$2.3559 billion
2017-18 Actual expenditure	\$2.6417 billion
2018-19 Actual expenditure	\$3.1468 billion
2019-20 Revised estimates	\$3.6655 billion

- (2) In 2020-21, the total estimated expenditure of the EPD on waste management is \$4.8478 billion.

- End -

CONTROLLING OFFICER'S REPLY

ENB243

(Question Serial No. 4993)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

One of the functions of the Environmental Protection Department (EPD) is to take actions to conduct regular inspections in the rural areas of the New Territories and on various black spots so as to detect illegal or unauthorised disposal of construction waste or land filling. In this connection, will the Administration advise this Committee on the following:

a) The numbers of inspections conducted by the EPD on illegal disposal of construction waste in the New Territories (excluding Lantau), as well as the numbers of successful prosecutions in the past 5 years:

Year

Number of inspections conducted during office hours on weekdays

Number of inspections conducted during non-office hours on weekdays

Number of inspections conducted during weekends and holidays

Number of successful prosecutions

b) What were the staffing and expenditure involved for the inspections conducted by the EPD on illegal disposal of construction waste in the New Territories (excluding Lantau) in the past 5 years?

c) How did the Administration formulate improvement measures and staffing in response to the findings of the direct investigation conducted by The Ombudsman in January this year?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 816)

Reply:

a) The numbers of inspections conducted by the Environmental Protection Department (EPD) on illegal disposal of construction waste in the New Territories (excluding Islands District and Lantau), as well as the numbers of convictions by the court in the past 5 years are as follows:

Year	Number of inspections conducted during office hours on weekdays	Number of inspections conducted during non-office hours on weekdays	Number of inspections conducted during weekends and holidays	Number of convictions by the court
2015	4 293 *			31
2016	4 206 *			73
2017	2 443	518	120	60
2018	2 562	502	171	59
2019	2 806	452	115	70

Note:

* Breakdowns of the inspection numbers are available from 2017 onwards. Therefore, annual total figures are provided for the numbers of inspections in 2015 and 2016.

- b) The relevant enforcement work is part of the integrated enforcement duties of the EPD. We do not have a separate figure for the expenditure on staffing involved.
- c) Regarding the recommendations in the investigation report of the Office of The Ombudsman in January 2018, the EPD has followed up on the implementation of the relevant measures, including flexible deployment of manpower resources to step up inspections at illegal construction waste disposal hotspots during and outside office hours and on holidays according to specific needs, and holding regular liaison meetings with the relevant departments with a view to strengthening communication and coordination of efforts in combating illegal disposal of construction waste.

- End -

CONTROLLING OFFICER'S REPLY

ENB244

(Question Serial No. 4994)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

One of the functions of the Environmental Protection Department (EPD) is to take actions to conduct regular inspections in the rural areas of the New Territories and on various black spots so as to detect illegal or unauthorised disposal of construction waste or land filling. In this connection, will the Administration advise this Committee on the following:

a) The numbers of inspections conducted by the EPD on illegal disposal of construction waste in Lantau, as well as the numbers of successful prosecutions in the past 5 years:

Year

Number of inspections conducted during office hours on weekdays

Number of inspections conducted during non-office hours on weekdays

Number of inspections conducted during weekends and holidays

Number of successful prosecutions

b) What were the staffing and expenditure involved for the inspections conducted by the EPD on illegal disposal of construction waste in Lantau in the past 5 years?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 817)

Reply:

- a) The numbers of inspections conducted by the Environmental Protection Department (EPD) on illegal disposal of construction waste in Islands District (including Lantau), as well as the number of convictions by the court in the past 5 years are as follows:

Year	Number of inspections conducted during office hours on weekdays	Number of inspections conducted during non-office hours on weekdays	Number of inspections conducted during weekends and holidays	Number of convictions by the court
2015	318 *			0
2016	374 *			0
2017	250	2	15	0
2018	229	11	8	1
2019	131	2	6	2

Note:

- * Breakdowns of the inspection numbers are available from 2017 onwards. Therefore, annual total figures are provided for the number of inspections in 2015 and 2016.

- b) The relevant enforcement work is part of the integrated enforcement duties of the EPD. We do not have a separate figure for the expenditure on staffing involved.

- End -

CONTROLLING OFFICER'S REPLY

ENB245

(Question Serial No. 5099)

Head: (44) Environmental Protection Department

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

What were the details of the activities organised, manpower and expenditure involved in each district of the network of Community Green Stations implemented by the Administration in the past 3 years?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 1139)

Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages.

In the past 3 years, CGS operators organised more than 4 000 educational activities in different districts and collected more than 6 000 tonnes of various types of recyclables. Apart from collecting recyclables at the stations and housing estates in the relevant districts, CGS operators often set up mobile collection points in the districts to facilitate residents nearby to participate in recycling and publicise the message of clean recycling.

The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation was about \$72 million in the past 3 years (2017 to 2019). At present, a total of 18 posts are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

- End -

CONTROLLING OFFICER'S REPLY**ENB246****(Question Serial No. 5100)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

What were the numbers of visitors to the Visitor Centre with the theme of waste management in the EcoPark in the past 3 years? What were the manpower and expenditure involved? Has the Administration invited groups or schools for visits? If yes, what are the details? If no, what are the reasons?

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 1140)Reply:

The Environmental Protection Department (EPD) has been inviting groups and schools to visit the EcoPark through outreach programmes, electronic communication, mails, etc. with a view to enhancing environmental awareness of the public and encouraging the groups and schools concerned to more proactively participate in and promote green work at community level. The numbers of visitors to the Visitor Centre of the EcoPark in the past 3 years are set out in the table below:

Total number of visitors	Year		
	2017	2018	2019
	21 504	25 097	17 954

Managing the operation of the EcoPark (including its Visitor Centre) is part of the work of the Waste Reduction and Recycling Division of the EPD. We do not have a separate breakdown for the manpower and expenditure involved for such work. Besides, the EPD is engaging a contractor at a lump sum monthly fee of about \$1.24 million to manage the EcoPark. Apart from the daily management of the public area and facilities of the EcoPark, the contractor should also be responsible for carrying out promotional activities on waste recovery, including managing the Visitor Centre and the website of the EcoPark, etc.

- End -

CONTROLLING OFFICER'S REPLY**ENB247****(Question Serial No. 6146)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding roadside air quality, will the Administration advise this Committee on the following:

(a) Please set out, according to the types in the table, the number of various types of first registered vehicles in Hong Kong respectively in each of the past 5 years:

Vehicle type	Exhaust emission standard	Number of first registered vehicles				
		2015	2016	2017	2018	2019
Petrol private car	Euro III or before					
	Euro IV					
	Euro V					
	Euro VI					
	Electric vehicle (EV)					
	Sub-total					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

(b) Please set out, according to the vehicle types in the table, the number, age, overall pollutant emissions and percentage contribution of various emissions in the overall air pollutant emissions of each vehicle type in Hong Kong respectively in each of the past 5 years (if the latest data of 2018 is not available, please set out the data of the most recent 5 years):

Vehicle type	Exhaust emission standard	Number of registered vehicles				
		2015	2016	2017	2018	2019
Petrol private car	Euro I					
	Euro II					
	Euro III					
	Euro IV					
	Euro V					
	Euro VI					
	Electric vehicle (EV)					
	Sub-total					
	Average age					
Diesel private car	(same as the above categories)					
Taxi						
Motorcycle						
Public light bus						
Private light bus						
Light goods vehicle						
Medium goods vehicle						
Heavy goods vehicle						
Non-franchised public bus						
Private light bus						

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Respirable suspended particulates (RSP) PM ₁₀ (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										

	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Fine suspended particulates (FSP) PM _{2.5} (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods											

vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Sulphur dioxide (SO ₂) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Nitrogen oxides (NO _x) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Volatile organic compounds (VOCs) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										

Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Carbon monoxide (CO) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Vehicle type	Exhaust emission standard	Air pollutant emissions									
		Ozone (O ₃) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2015		2016		2017		2018		2019	
		Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Petrol private car	Euro I										
	Euro II										
	Euro III										
	Euro IV										
	Euro V										
	Euro VI										
Diesel private car	(same as the above categories)										
Taxi											
Motorcycle											
Public light bus											
Private light bus											
Light goods vehicle											
Medium goods vehicle											
Heavy goods vehicle											
Non-franchised public bus											
Private light bus											

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 46)

Reply:

- (a) The numbers of various types of first registered vehicles in Hong Kong by exhaust emission standard in the past 5 years are tabulated as follows:

Vehicle type	Exhaust emission standard	Number of first registered vehicles				
		2015	2016	2017	2018	2019
Petrol private car	Euro V	46 122	36 266	17 006	0	0
	Euro VI	0	0	18 530	41 551	35 858
	Sub-total	46 122	36 266	35 536	41 551	35 858
Diesel private car	Euro V (Note 1)	1 593	1 896	4 246	265	28
	Sub-total	1 593	1 896	4 246	265	28

Vehicle type	Exhaust emission standard	Number of first registered vehicles				
		2015	2016	2017	2018	2019
Electric private car	-	2 607	3 020	3 860	471	2 423
Taxi	Euro V	2 340	1 821	979	0	0
	Euro VI	0	0	968	1 770	1 118
	Electric vehicle	0	1	0	0	0
	Sub-total	2 340	1 822	1 947	1 770	1 118
Motorcycle	Euro III	6 037	5 542	5 801	5 286	6 468
	Electric vehicle	0	2	2	0	0
	Sub-total	6 037	5 544	5 803	5 286	6 468
Public light bus	Euro V	164	214	222	496	481
	Electric vehicle	0	0	0	0	0
	Sub-total	164	214	222	496	481
Private light bus	Euro V	404	319	269	400	267
	Euro VI	0	0	0	2	1
	Electric vehicle	0	4	1	0	1
	Sub-total	404	323	270	402	269
Light goods vehicle	Euro V	8 706	6 726	6 607	1 545	0
	Euro VI	0	0	0	4 816	6 536
	Electric vehicle	11	11	12	16	42
	Sub-total	8 717	6 737	6 619	6 377	6 578
Medium goods vehicle	Euro V	4 729	3 270	3 267	2 551	0
	Euro VI	0	0	0	385	2 177
	Electric vehicle	0	0	0	0	0
	Sub-total	4 729	3 270	3 267	2 936	2 177
Heavy goods vehicles	Euro V	1 021	791	688	502	0
	Euro VI	0	0	0	50	236
	Electric vehicle	0	0	0	0	0
	Sub-total	1 021	791	688	552	236
Non-franchised public bus	Euro V	737	803	648	575	98
	Euro VI	0	0	0	94	347
	Electric vehicle	3	0	2	0	2
	Sub-total	740	803	650	669	447

Note 1: The number of vehicles includes vehicles which met the specified requirements under the transitional arrangement. According to the established practice of tightening the exhaust emission standards of newly registered vehicles in the past, the Environmental Protection Department (EPD) will provide a transitional arrangement under which car dealers can process the diesel private cars (unsold vehicles) which have arrived in Hong Kong but not yet been first registered before the implementation of new emission standards.

(b) The numbers and average ages of various types of registered vehicles by exhaust emission standard in the past 5 years are tabulated as follows.

Vehicle type	Exhaust emission standard	Number of registered vehicles				
		2015	2016	2017	2018	2019
Petrol private car	Pre-Euro	9 097	7 744	6 813	6 326	5 926
	Euro I	6 904	5 105	3 857	3 087	2 523
	Euro II	53 660	42 934	33 431	26 013	19 982
	Euro III	114 082	104 941	94 324	83 515	71 250
	Euro IV	214 714	212 658	209 639	205 230	198 050
	Euro V	159 968	195 256	211 617	211 043	210 050
	Euro VI	0	0	18 280	59 312	95 021
	Sub-total	558 425	568 638	577 961	594 526	602 802
	Average age (Note 2)	7	7	8	8	8
Diesel private car	Euro IV or before	2 132	2 114	2 099	2 075	2 039
	Euro V (Note 3)	3 523	5 418	9 661	9 924	9 942
	Sub-total	5 655	7 532	11 760	11 999	11 981
	Average age (Note 2)	7	6	5	6	6
Electric private vehicle	-	3 806	6 829	10 666	11 080	13 447
	Average age (Note 2)	<1	1	1	2	2
Taxi	Euro III or before	10 897	9 115	7 258	5 687	4 721
	Euro IV	2 394	2 385	2 332	2 283	2 163
	Euro V	4 839	6 662	7 604	7 458	7 440
	Euro VI	0	0	968	2 735	3 839
	Electric vehicle	8	1	1	0	0
	Sub-total	18 138	18 163	18 163	18 163	18 163
	Average age (Note 2)	9	9	8	8	8
Motorcycle (Note 4)	Pre-Euro	12 533	12 217	11 904	11 626	11 347
	Euro I	21 663	20 814	19 950	19 072	18 174
	Euro III	34 122	39 256	44 539	49 203	54 888
	Electric vehicle	50	45	45	19	17
	Sub-total	68 368	72 332	76 438	79 920	84 426
	Average age (Note 2)	9	9	10	10	10
Public light bus	Pre-Euro	0	0	0	0	0
	Euro I	151	5	1	1	0
	Euro II	952	901	703	433	322
	Euro III	2 262	2 260	2 255	2 039	1 674
	Euro IV	653	639	626	619	614
	Euro V	332	545	765	1 258	1 736
	Euro VI	0	0	0	0	0
	Electric vehicle	0	0	0	0	0
	Sub-total	4 350	4 350	4 350	4 350	4 346

Vehicle type	Exhaust emission standard	Number of registered vehicles				
		2015	2016	2017	2018	2019
	Average age (Note 2)	10	10	10	10	9
Private light bus	Pre-Euro	11	5	1	0	0
	Euro I	204	33	7	0	0
	Euro II	419	333	107	65	31
	Euro III	232	216	193	157	74
	Euro IV	915	914	896	874	829
	Euro V	1 296	1 614	1 883	2 281	2 546
	Euro VI	0	0	0	2	3
	Electric vehicle	4	7	7	6	6
	Sub-total	3 081	3 122	3 094	3 385	3 489
	Average age (Note 2)	6	6	5	5	5
Light goods vehicle	Pre-Euro	142	78	55	46	40
	Euro I	2 587	67	29	19	9
	Euro II	6 705	3 989	132	86	73
	Euro III	15 097	13 606	11 561	7 793	826
	Euro IV	24 087	24 011	23 914	23 810	23 697
	Euro V	23 314	30 031	36 609	38 108	38 025
	Euro VI	0	0	0	4 816	11 351
	Electric vehicle	65	74	84	94	125
	Sub-total	71 997	71 856	72 384	74 772	74 146
	Average age (Note 2)	7	6	6	6	5
Medium goods vehicle	Pre-Euro	31	14	8	1	0
	Euro I	653	5	3	2	0
	Euro II	3 308	2 096	19	10	6
	Euro III	8 162	7 084	5 840	3 750	352
	Euro IV	11 576	11 564	11 534	11 512	11 482
	Euro V	12 980	16 245	19 499	22 029	22 008
	Euro VI	0	0	0	385	2 562
	Electric vehicle	2	2	2	1	0
	Sub-total	36 712	37 010	36 905	37 690	36 410
	Average age (Note 2)	6	6	6	6	6
Heavy goods vehicle	Pre-Euro	5	3	1	0	0
	Euro I	163	0	0	0	0
	Euro II	524	348	4	3	2
	Euro III	428	388	332	215	19
	Euro IV	1 503	1 501	1 501	1 500	1 498
	Euro V	2 862	3 651	4 341	4 841	4 838
	Euro VI	0	0	0	50	286
	Electric vehicle	0	0	0	0	0

Vehicle type	Exhaust emission standard	Number of registered vehicles				
		2015	2016	2017	2018	2019
	Sub-total	5 485	5 891	6 179	6 609	6 643
	Average age (Note 2)	4	4	4	4	5
Non-franchised public bus	Pre-Euro	3	2	0	0	0
	Euro I	34	2	0	0	0
	Euro II	321	143	46	22	0
	Euro III	1 489	987	605	355	77
	Euro IV	2 824	2 737	2 592	2 359	2 284
	Euro V	2 367	3 165	3 786	4 293	4 378
	Euro VI	0	0	0	93	440
	Electric vehicle	7	7	9	8	8
	Sub-total	7 045	7 043	7 038	7 130	7 187
	Average age (Note 2)	5	5	5	5	6

Note 2: Counting from the dates of first registration of the vehicles.

Note 3: The number of vehicles includes vehicles which met the specified requirements under the transitional arrangement. According to the established practice of tightening the exhaust emission standards of newly registered vehicles in the past, the EPD will provide a transitional arrangement under which car dealers can process the diesel private cars (unsold vehicles) which have arrived in Hong Kong but not yet been first registered before the implementation of new emission standards.

Note 4: The exhaust emission standard for motorcycles was upgraded to Euro III from Euro I on 1 January 2007 in Hong Kong.

The Hong Kong Air Pollutant Emission Inventory is compiled by the EPD every year to analyse the distribution and trend of major emission sources in Hong Kong. The vehicle emission inventory for 2018 is still under compilation. The estimated overall air pollutant emissions and their percentage contribution* in the overall air pollutant emissions of various types of vehicles in Hong Kong from 2013 to 2017 are tabulated as follows:

* To provide more accurate emission data to facilitate the management of air quality, the EPD will constantly update the methodologies and emission factors to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods or emission factors are updated. As such, the data may be different from the estimates provided in the past.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 5)									
		Respirable suspended particulates (RSP) PM ₁₀ (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car	Pre-Euro	3	0.0%	2	0.0%	2	0.0%	2	0.0%	1	0.0%
	Euro I	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	9	0.2%	7	0.1%	6	0.1%	5	0.1%	3	0.1%
	Euro III	3	0.1%	3	0.0%	3	0.1%	2	0.1%	2	0.1%
	Euro IV	7	0.1%	6	0.1%	6	0.1%	6	0.1%	6	0.1%
	Euro V	3	0.1%	5	0.1%	6	0.1%	8	0.2%	8	0.2%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.0%
Diesel private car	Euro IV or before	2	0.0%	2	0.0%	2	0.0%	2	0.0%	2	0.0%
	Euro V	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Taxi (Note 6)	Euro III or before	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro IV	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro V	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Motorcycle	Pre-Euro	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
	Euro I	6	0.1%	5	0.1%	4	0.1%	4	0.1%	3	0.1%
	Euro III	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
Public light bus	Pre-Euro	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	28	0.5%	22	0.4%	13	0.3%	0	0.0%	0	0.0%
	Euro II	44	0.7%	41	0.7%	29	0.6%	29	0.7%	16	0.4%
	Euro III	22	0.4%	25	0.4%	11	0.2%	12	0.3%	15	0.4%
	Euro IV	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
	Euro V	0	0.0%	0	0.0%	1	0.0%	2	0.0%	2	0.0%
Private light bus	Pre-Euro	2	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	2	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	1	0.0%	1	0.0%	1	0.0%	1	0.0%	0	0.0%
	Euro III	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro IV	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
	Euro V	2	0.0%	2	0.0%	3	0.1%	3	0.1%	3	0.1%
Light goods vehicle	Pre-Euro	52	0.9%	28	0.5%	0	0.0%	0	0.0%	0	0.0%
	Euro I	44	0.7%	27	0.5%	13	0.3%	0	0.0%	0	0.0%
	Euro II	36	0.6%	28	0.5%	19	0.4%	12	0.3%	0	0.0%
	Euro III	23	0.4%	22	0.4%	19	0.4%	18	0.4%	15	0.4%
	Euro IV	23	0.4%	23	0.4%	24	0.5%	24	0.6%	24	0.6%
	Euro V	6	0.1%	13	0.2%	21	0.4%	27	0.6%	33	0.8%
Medium goods vehicle (Note 7)	Pre-Euro	18	0.3%	10	0.2%	0	0.0%	0	0.0%	0	0.0%
	Euro I	4	0.1%	3	0.1%	2	0.0%	0	0.0%	0	0.0%
	Euro II	6	0.1%	5	0.1%	4	0.1%	2	0.1%	0	0.0%
	Euro III	4	0.1%	5	0.1%	5	0.1%	5	0.1%	5	0.1%
	Euro IV	4	0.1%	4	0.1%	5	0.1%	5	0.1%	6	0.1%

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 5)									
		Respirable suspended particulates (RSP) PM ₁₀ (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
	Euro V	2	0.0%	4	0.1%	7	0.1%	8	0.2%	10	0.3%
Heavy goods vehicle (Note 8)	Pre-Euro	171	2.9%	94	1.7%	0	0.0%	0	0.0%	0	0.0%
	Euro I	49	0.8%	33	0.6%	16	0.3%	0	0.0%	0	0.0%
	Euro II	67	1.1%	57	1.0%	42	0.9%	24	0.5%	0	0.0%
	Euro III	64	1.1%	70	1.2%	75	1.6%	61	1.4%	56	1.4%
	Euro IV	15	0.3%	19	0.3%	35	0.7%	35	0.8%	47	1.2%
	Euro V	6	0.1%	12	0.2%	22	0.5%	26	0.6%	34	0.8%
Non-franchised bus (Note 9)	Pre-Euro	7	0.1%	6	0.1%	0	0.0%	0	0.0%	0	0.0%
	Euro I	2	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	6	0.1%	5	0.1%	5	0.1%	3	0.1%	1	0.0%
	Euro III	23	0.4%	19	0.3%	15	0.3%	9	0.2%	6	0.1%
	Euro IV	13	0.2%	15	0.3%	18	0.4%	20	0.5%	21	0.5%
	Euro V	3	0.1%	6	0.1%	8	0.2%	12	0.3%	17	0.4%

Note 5: Numbers in tonnes are rounded to the nearest integer.

Note 6: Vehicles using liquefied petroleum gas as fuel hardly emit RSP. Their RSP emissions are generally estimated as “0”.

Note 7: Medium goods vehicle refers to goods vehicle with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 8: Heavy goods vehicle refers to goods vehicle with gross vehicle weight greater than 15 tonnes.

Note 9: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 10)									
		Fine suspended particulates (FSP) PM _{2.5} (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car	Pre-Euro	2	0.1%	2	0.0%	2	0.0%	1	0.0%	1	0.0%
	Euro I	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	8	0.2%	7	0.1%	5	0.1%	4	0.1%	3	0.1%
	Euro III	3	0.1%	3	0.1%	2	0.1%	2	0.1%	2	0.1%
	Euro IV	6	0.1%	6	0.1%	6	0.2%	6	0.2%	5	0.2%
	Euro V	3	0.1%	4	0.1%	6	0.2%	7	0.2%	7	0.2%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.0%
Diesel private car	Euro IV or before	2	0.0%	2	0.0%	2	0.1%	2	0.1%	2	0.1%
	Euro V	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Taxi (Note 11)	Euro III or before	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro IV	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro V	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Motorcycle	Pre-Euro	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro I	4	0.1%	4	0.1%	3	0.1%	3	0.1%	3	0.1%
	Euro III	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
Public light bus	Pre-Euro	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	26	0.6%	20	0.5%	12	0.3%	0	0.0%	0	0.0%
	Euro II	41	0.9%	38	0.8%	27	0.7%	26	0.8%	14	0.5%
	Euro III	20	0.4%	23	0.5%	10	0.3%	11	0.3%	14	0.4%
	Euro IV	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
	Euro V	0	0.0%	0	0.0%	1	0.0%	1	0.0%	2	0.1%
Private light bus	Pre-Euro	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	1	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro III	1	0.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro IV	1	0.0%	1	0.0%	1	0.0%	1	0.0%	1	0.0%
	Euro V	1	0.0%	2	0.0%	3	0.1%	3	0.1%	3	0.1%
Light goods vehicle	Pre-Euro	48	1.0%	26	0.6%	0	0.0%	0	0.0%	0	0.0%
	Euro I	40	0.8%	25	0.6%	12	0.3%	0	0.0%	0	0.0%
	Euro II	33	0.7%	26	0.6%	18	0.5%	11	0.3%	0	0.0%
	Euro III	21	0.4%	20	0.5%	17	0.5%	16	0.5%	14	0.4%
	Euro IV	21	0.4%	21	0.5%	22	0.6%	22	0.7%	22	0.7%
	Euro V	6	0.1%	12	0.3%	19	0.5%	25	0.7%	30	1.0%
Medium goods vehicle (Note 12)	Pre-Euro	16	0.3%	10	0.2%	0	0.0%	0	0.0%	0	0.0%
	Euro I	4	0.1%	3	0.1%	1	0.0%	0	0.0%	0	0.0%
	Euro II	5	0.1%	5	0.1%	4	0.1%	2	0.1%	0	0.0%
	Euro III	4	0.1%	5	0.1%	5	0.1%	4	0.1%	4	0.1%
	Euro IV	4	0.1%	4	0.1%	5	0.1%	5	0.1%	5	0.2%
	Euro V	2	0.0%	3	0.1%	6	0.2%	7	0.2%	9	0.3%

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 10)									
		Fine suspended particulates (FSP) PM _{2.5} (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%

Heavy goods vehicle (Note 13)	Pre-Euro	157	3.3%	87	2.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	45	1.0%	30	0.7%	15	0.4%	0	0.0%	0	0.0%
	Euro II	62	1.3%	53	1.2%	39	1.0%	22	0.6%	0	0.0%
	Euro III	59	1.2%	64	1.4%	69	1.8%	56	1.6%	52	1.7%
	Euro IV	14	0.3%	18	0.4%	32	0.9%	33	0.9%	43	1.4%
	Euro V	6	0.1%	11	0.3%	20	0.5%	24	0.7%	31	1.0%
Non-franchised bus (Note 14)	Pre-Euro	7	0.1%	6	0.1%	0	0.0%	0	0.0%	0	0.0%
	Euro I	2	0.0%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
	Euro II	5	0.1%	5	0.1%	5	0.1%	3	0.1%	1	0.0%
	Euro III	22	0.5%	17	0.4%	13	0.4%	9	0.3%	5	0.2%
	Euro IV	12	0.3%	13	0.3%	17	0.4%	18	0.5%	19	0.6%
	Euro V	3	0.1%	6	0.1%	7	0.2%	11	0.3%	15	0.5%

Note 10: Numbers in tonnes are rounded to the nearest integer.

Note 11: Vehicles using liquefied petroleum gas as fuel hardly emit FSP. Their FSP emissions are generally estimated as "0".

Note 12: Medium goods vehicle refers to goods vehicle with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 13: Heavy goods vehicle refers to goods vehicle with gross vehicle weight greater than 15 tonnes.

Note 14: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 15)									
		Nitrogen oxides (NOx) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car	Pre-Euro	180	0.2%	140	0.1%	120	0.1%	110	0.1%	100	0.1%
	Euro I	50	0.0%	40	0.0%	30	0.0%	30	0.0%	20	0.0%
	Euro II	290	0.3%	230	0.2%	190	0.2%	160	0.2%	130	0.1%
	Euro III	120	0.1%	110	0.1%	80	0.1%	90	0.1%	80	0.1%
	Euro IV	90	0.1%	90	0.1%	70	0.1%	70	0.1%	70	0.1%
	Euro V	9	0.0%	10	0.0%	20	0.0%	20	0.0%	20	0.0%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	<5	0.0%
Diesel private car	Euro IV or before	10	0.0%	9	0.0%	10	0.0%	10	0.0%	9	0.0%
	Euro V	<5	0.0%	<5	0.0%	6	0.0%	8	0.0%	20	0.0%
Taxi	Euro III or before	5 500	4.8%	3 600	3.3%	4 000	4.1%	3 700	4.0%	2 900	3.4%
	Euro IV	290	0.3%	180	0.2%	160	0.2%	180	0.2%	180	0.2%
	Euro V	70	0.1%	80	0.1%	90	0.1%	130	0.1%	160	0.2%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	10	0.0%
Motorcycle	Pre-Euro	20	0.0%	10	0.0%	10	0.0%	10	0.0%	10	0.0%
	Euro I	90	0.1%	80	0.1%	60	0.1%	60	0.1%	50	0.1%
	Euro III	40	0.0%	50	0.0%	50	0.1%	60	0.1%	70	0.1%
Public light bus	Pre-Euro	9	0.0%	7	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	160	0.1%	120	0.1%	80	0.1%	<5	0.0%	0	0.0%
	Euro II	220	0.2%	210	0.2%	190	0.2%	170	0.2%	90	0.1%
	Euro III	640	0.6%	500	0.4%	450	0.5%	470	0.5%	480	0.6%
	Euro IV	70	0.1%	60	0.1%	60	0.1%	60	0.1%	60	0.1%
	Euro V	<5	0.0%	6	0.0%	10	0.0%	20	0.0%	30	0.0%
Private light bus	Pre-Euro	40	0.0%	20	0.0%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	30	0.0%	30	0.0%	20	0.0%	<5	0.0%	<5	0.0%
	Euro II	30	0.0%	30	0.0%	20	0.0%	20	0.0%	6	0.0%
	Euro III	30	0.0%	20	0.0%	10	0.0%	10	0.0%	10	0.0%
	Euro IV	50	0.0%	50	0.0%	40	0.0%	40	0.0%	40	0.0%
	Euro V	30	0.0%	40	0.0%	60	0.1%	60	0.1%	70	0.1%
Light goods vehicle	Pre-Euro	780	0.7%	440	0.4%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro I	500	0.4%	320	0.3%	160	0.2%	<5	0.0%	<5	0.0%
	Euro II	710	0.6%	580	0.5%	420	0.4%	270	0.3%	<5	0.0%
	Euro III	710	0.6%	680	0.6%	610	0.6%	560	0.6%	490	0.6%
	Euro IV	1 100	1.0%	1 100	0.9%	1 000	1.0%	1 000	1.1%	970	1.1%
	Euro V	330	0.3%	700	0.6%	1 100	1.1%	1 300	1.5%	1 600	1.9%
Medium goods vehicle (Note 16)	Pre-Euro	470	0.4%	270	0.2%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	110	0.1%	80	0.1%	50	0.0%	<5	0.0%	<5	0.0%
	Euro II	230	0.2%	190	0.2%	160	0.2%	90	0.1%	<5	0.0%
	Euro III	280	0.2%	270	0.2%	280	0.3%	240	0.3%	220	0.3%
	Euro IV	250	0.2%	260	0.2%	280	0.3%	270	0.3%	280	0.3%

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 15)									
		Nitrogen oxides (NO _x) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
	Euro V	80	0.1%	170	0.2%	310	0.3%	360	0.4%	460	0.5%
Heavy goods vehicle (Note 17)	Pre-Euro	1 400	1.2%	750	0.7%	<5	0.0%	0	0.0%	0	0.0%
	Euro I	570	0.5%	360	0.3%	210	0.2%	<5	0.0%	0	0.0%
	Euro II	1 500	1.3%	1 200	1.1%	960	1.0%	570	0.6%	8	0.0%
	Euro III	1 200	1.1%	1 200	1.1%	1 200	1.2%	960	1.0%	810	1.0%
	Euro IV	1 100	1.0%	1 200	1.0%	1 300	1.4%	1 200	1.3%	1 300	1.5%
	Euro V	330	0.3%	650	0.6%	1 100	1.1%	1 300	1.4%	1 600	1.9%
Non-franchised bus (Note 18)	Pre-Euro	100	0.1%	80	0.1%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	50	0.0%	40	0.0%	20	0.0%	<5	0.0%	0	0.0%
	Euro II	160	0.1%	140	0.1%	140	0.1%	90	0.1%	30	0.0%
	Euro III	660	0.6%	520	0.5%	370	0.4%	250	0.3%	140	0.2%
	Euro IV	580	0.5%	580	0.5%	580	0.6%	590	0.6%	590	0.7%
	Euro V	170	0.1%	290	0.3%	420	0.4%	580	0.6%	720	0.8%

Note 15: The numbers in tonnes smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred.

Note 16: Medium goods vehicle refers to goods vehicle with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 17: Heavy goods vehicle refers to goods vehicle with gross vehicle weight greater than 15 tonnes.

Note 18: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 19)									
		Volatile organic compounds (VOCs) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car	Pre-Euro	60	0.2%	50	0.2%	40	0.1%	30	0.1%	30	0.1%
	Euro I	20	0.1%	20	0.1%	10	0.0%	8	0.0%	6	0.0%
	Euro II	120	0.4%	90	0.4%	60	0.2%	50	0.2%	40	0.1%
	Euro III	80	0.3%	70	0.3%	40	0.2%	40	0.2%	40	0.1%
	Euro IV	30	0.1%	30	0.1%	30	0.1%	30	0.1%	30	0.1%
	Euro V	7	0.0%	10	0.0%	20	0.1%	20	0.1%	20	0.1%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	<5	0.0%
	Evaporative emission (Note 20)	650	2.3%	590	2.2%	590	2.2%	540	2.0%	520	2.1%
Diesel private car	Euro IV or before	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro V	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	6	0.0%
Taxi	Euro III or before	390	1.4%	240	0.9%	170	0.7%	170	0.6%	140	0.6%
	Euro IV	20	0.1%	10	0.0%	10	0.0%	10	0.0%	10	0.0%
	Euro V	<5	0.0%	8	0.0%	10	0.0%	20	0.1%	20	0.1%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	<5	0.0%
Motorcycle	Pre-Euro	90	0.3%	80	0.3%	70	0.3%	60	0.2%	60	0.2%
	Euro I	490	1.7%	430	1.6%	380	1.5%	330	1.2%	300	1.2%
	Euro III	80	0.3%	100	0.4%	120	0.5%	140	0.5%	160	0.6%
		Evaporative emission (Note 20)	2 200	7.9%	2 300	8.8%	2 500	9.6%	2 600	9.6%	2 800
Public light bus	Pre-Euro	<5	0.0%	<5	0.0%	0	0.0%	0	0.0%	0	0.0%
	Euro I	10	0.0%	8	0.0%	5	0.0%	<5	0.0%	0	0.0%
	Euro II	20	0.1%	10	0.1%	10	0.1%	10	0.1%	7	0.0%
	Euro III	310	1.1%	240	0.9%	230	0.9%	230	0.9%	230	0.9%
	Euro IV	40	0.1%	40	0.2%	50	0.2%	60	0.2%	70	0.3%
	Euro V	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Private light bus	Pre-Euro	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro II	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro III	10	0.0%	10	0.0%	6	0.0%	<5	0.0%	<5	0.0%
	Euro IV	10	0.0%	10	0.0%	10	0.0%	10	0.0%	10	0.0%
	Euro V	7	0.0%	10	0.0%	10	0.1%	20	0.1%	20	0.1%
		Evaporative emission (Note 20)	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 19)									
		Volatile organic compounds (VOCs) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Light goods vehicle	Pre-Euro	30	0.1%	20	0.1%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro I	50	0.2%	30	0.1%	20	0.1%	<5	0.0%	<5	0.0%
	Euro II	60	0.2%	50	0.2%	40	0.1%	20	0.1%	<5	0.0%
	Euro III	60	0.2%	60	0.2%	50	0.2%	50	0.2%	40	0.2%
	Euro IV	20	0.1%	20	0.1%	20	0.1%	20	0.1%	20	0.1%
	Euro V	6	0.0%	10	0.0%	20	0.1%	20	0.1%	30	0.1%
	Evaporative emission (Note 20)	6	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Medium goods vehicle (Note 21)	Pre-Euro	40	0.1%	20	0.1%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	9	0.0%	7	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro II	20	0.1%	20	0.1%	20	0.1%	10	0.0%	<5	0.0%
	Euro III	30	0.1%	30	0.1%	30	0.1%	20	0.1%	20	0.1%
	Euro IV	5	0.0%	6	0.0%	8	0.0%	8	0.0%	10	0.0%
	Euro V	<5	0.0%	6	0.0%	10	0.0%	10	0.0%	20	0.1%
Heavy goods vehicle (Note 22)	Pre-Euro	100	0.4%	50	0.2%	<5	0.0%	0	0.0%	0	0.0%
	Euro I	40	0.2%	30	0.1%	20	0.1%	<5	0.0%	0	0.0%
	Euro II	60	0.2%	50	0.2%	40	0.2%	20	0.1%	<5	0.0%
	Euro III	90	0.3%	90	0.3%	90	0.4%	70	0.3%	60	0.2%
	Euro IV	20	0.1%	20	0.1%	20	0.1%	20	0.1%	20	0.1%
	Euro V	5	0.0%	10	0.0%	20	0.1%	20	0.1%	30	0.1%
Non-franchised bus (Note 23)	Pre-Euro	9	0.0%	7	0.0%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	0	0.0%
	Euro II	10	0.0%	9	0.0%	9	0.0%	<5	0.0%	<5	0.0%
	Euro III	50	0.2%	40	0.1%	30	0.1%	20	0.1%	10	0.0%
	Euro IV	30	0.1%	30	0.1%	30	0.1%	30	0.1%	30	0.1%
	Euro V	10	0.0%	20	0.1%	30	0.1%	30	0.1%	40	0.2%

Note 19: The numbers in tonnes smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred.

Note 20: Since evaporative emission standard is different from tailpipe emission standard, the figures are set out separately for easy identification.

Note 21: Medium goods vehicle refers to goods vehicle with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 22: Heavy goods vehicle refers to goods vehicle with gross vehicle weight greater than 15 tonnes.

Note 23: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 24)									
		Carbon monoxide (CO)									
		(tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car	Pre-Euro	850	1.2%	750	1.2%	840	1.5%	750	1.3%	670	1.2%
	Euro I	290	0.4%	230	0.4%	220	0.4%	170	0.3%	130	0.2%
	Euro II	2 000	2.9%	1 800	2.9%	1 800	3.2%	1 500	2.5%	1 100	2.0%
	Euro III	3 100	4.5%	3 200	5.2%	3 800	6.7%	3 600	6.1%	3 100	5.4%
	Euro IV	950	1.4%	980	1.6%	1 100	1.9%	1 100	1.9%	1 100	1.9%
	Euro V	330	0.5%	510	0.8%	690	1.2%	860	1.5%	900	1.6%
Diesel private car	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	80	0.1%
	Euro IV or before	8	0.0%	7	0.0%	8	0.0%	8	0.0%	7	0.0%
Euro V	<5	0.0%	7	0.0%	10	0.0%	20	0.0%	40	0.1%	
	Euro III or before	16 300	23.5%	10 600	17.2%	6 900	12.1%	7 300	12.4%	6 600	11.5%
Taxi	Euro IV	690	1.0%	420	0.7%	380	0.7%	440	0.8%	460	0.8%
	Euro V	630	0.9%	790	1.3%	620	1.1%	1 000	1.8%	1 400	2.4%
	Euro VI	0	0.0%	0	0.0%	0	0.0%	0	0.0%	50	0.1%
	Pre-Euro	620	0.9%	530	0.9%	470	0.8%	410	0.7%	380	0.7%
Motorcycle	Euro I	3 600	5.1%	3 100	5.1%	2 700	4.7%	2 400	4.1%	2 200	3.8%
	Euro III	510	0.7%	630	1.0%	770	1.3%	870	1.5%	990	1.7%
	Pre-Euro	<5	0.0%	<5	0.0%	0	0.0%	0	0.0%	0	0.0%
Public light bus	Euro I	30	0.0%	20	0.0%	10	0.0%	<5	0.0%	0	0.0%
	Euro II	40	0.1%	40	0.1%	40	0.1%	30	0.1%	20	0.0%
	Euro III	6 700	9.6%	5 000	8.1%	4 200	7.3%	4 400	7.5%	4 500	7.9%
	Euro IV	1 100	1.6%	1 100	1.7%	1 000	1.8%	1 200	2.0%	1 400	2.4%
	Euro V	<5	0.0%	<5	0.0%	8	0.0%	20	0.0%	20	0.0%
	Pre-Euro	7	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	0	0.0%
Private light bus	Euro I	10	0.0%	9	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
	Euro II	20	0.0%	10	0.0%	5	0.0%	<5	0.0%	<5	0.0%
	Euro III	230	0.3%	190	0.3%	110	0.2%	80	0.1%	80	0.1%
	Euro IV	260	0.4%	250	0.4%	210	0.4%	220	0.4%	210	0.4%
	Euro V	110	0.2%	180	0.3%	220	0.4%	290	0.5%	320	0.6%
	Pre-Euro	220	0.3%	140	0.2%	20	0.0%	20	0.0%	20	0.0%
Light goods vehicle	Euro I	250	0.4%	150	0.3%	80	0.1%	20	0.0%	10	0.0%
	Euro II	180	0.3%	150	0.2%	110	0.2%	90	0.1%	30	0.1%
	Euro III	250	0.4%	240	0.4%	220	0.4%	200	0.3%	180	0.3%
	Euro IV	270	0.4%	280	0.5%	290	0.5%	310	0.5%	320	0.6%
	Euro V	80	0.1%	170	0.3%	270	0.5%	350	0.6%	410	0.7%
	Pre-Euro	100	0.1%	60	0.1%	<5	0.0%	<5	0.0%	0	0.0%
Medium goods vehicle (Note 25)	Euro I	20	0.0%	10	0.0%	7	0.0%	<5	0.0%	<5	0.0%
	Euro II	40	0.1%	30	0.1%	30	0.1%	20	0.0%	<5	0.0%
	Euro III	60	0.1%	60	0.1%	60	0.1%	50	0.1%	50	0.1%
	Euro IV	50	0.1%	60	0.1%	80	0.1%	80	0.1%	100	0.2%

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 24)									
		Carbon monoxide (CO) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
Euro V		20	0.0%	30	0.1%	70	0.1%	80	0.1%	120	0.2%

Vehicle type	Exhaust emission standard	Air pollutant emissions (Note 24)									
		Carbon monoxide (CO) (tonnes/percentage in overall air pollutant emissions in Hong Kong)									
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Heavy goods vehicle (Note 26)	Pre-Euro	270	0.4%	140	0.2%	<5	0.0%	0	0.0%	0	0.0%
	Euro I	240	0.3%	150	0.2%	90	0.2%	<5	0.0%	0	0.0%
	Euro II	390	0.6%	310	0.5%	250	0.4%	150	0.3%	<5	0.0%
	Euro III	670	1.0%	640	1.0%	670	1.2%	530	0.9%	450	0.8%
	Euro IV	440	0.6%	470	0.8%	550	1.0%	510	0.9%	550	1.0%
	Euro V	90	0.1%	170	0.3%	300	0.5%	340	0.6%	420	0.7%
Non-franchised bus (Note 27)	Pre-Euro	30	0.0%	20	0.0%	<5	0.0%	<5	0.0%	0	0.0%
	Euro I	20	0.0%	20	0.0%	9	0.0%	<5	0.0%	0	0.0%
	Euro II	60	0.1%	50	0.1%	40	0.1%	20	0.0%	<5	0.0%
	Euro III	250	0.4%	200	0.3%	150	0.3%	110	0.2%	60	0.1%
	Euro IV	200	0.3%	210	0.4%	230	0.4%	250	0.4%	260	0.5%
	Euro V	50	0.1%	90	0.1%	130	0.2%	190	0.3%	260	0.4%

Note 24: The numbers in tonnes smaller than 5 are shown as “<5”, the numbers between 5 and 10 are rounded to the nearest integer, the numbers between 10 and 1 000 are rounded to the nearest ten, the numbers between 1 000 and 10 000 are rounded to the nearest hundred, and 3 significant figures are retained for the numbers greater than 10 000.

Note 25: Medium goods vehicle refers to goods vehicle with gross vehicle weight of 5.5 tonnes to 15 tonnes.

Note 26: Heavy goods vehicle refers to goods vehicle with gross vehicle weight greater than 15 tonnes.

Note 27: There are no separate emission calculations for non-franchised public and private buses.

Vehicle type (Note 28)	Air pollutant emissions (Note 29)										
	Sulphur dioxide (SO ₂) (tonnes/percentage in overall air pollutant emissions in Hong Kong)										
		2013		2014		2015		2016		2017	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Petrol private car		9	0.0%	9	0.0%	10	0.0%	10	0.1%	10	0.1%
Diesel private car		<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Taxi		<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Motorcycle		<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Public light bus		<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%

Private light bus	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Light goods vehicle	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%
Medium and heavy goods vehicle	12	0.0%	12	0.0%	12	0.1%	12	0.1%	12	0.1%
Non-franchised bus	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%	<5	0.0%

Note 28: Since motor vehicle emission of sulphur dioxide is calculated based on fuel consumption of various types of vehicles, a breakdown of the emission by exhaust emission standard is not available. There are no separate emission calculations for medium goods vehicles and heavy goods vehicles.

Note 29: The numbers in tonnes smaller than 5 are shown as “<5” and the numbers equal to or greater than 5 are rounded to the nearest integer.

Since ozone is not directly emitted from pollution sources (such as motor vehicles) but is formed by photochemical reactions of some air pollutants (including nitrogen oxides and volatile organic compounds) under sunlight, it is not included in the emission inventory.

- End -

CONTROLLING OFFICER'S REPLY

ENB248

(Question Serial No. 6147)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the policy on promoting electric vehicles (EVs), please tabulate the numbers of public chargers at car parks managed by the Housing Authority, Link, MTR Corporation Limited, the Urban Renewal Authority, the Science Park and the Cyberport:

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers		
			Standard	Medium	Quick

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 56)

Reply:

The respective number of electric vehicle (EV) chargers (including the EV chargers at the hourly and monthly parking spaces) installed at car parks managed by the Hong Kong Housing Authority (HA), Link Asset Management Limited (Link), the Urban Renewal Authority (URA), MTR Corporation Limited (MTRC), Hong Kong Science and Technology Parks Corporation (HKSTP) and Hong Kong Cyberport Management Company Limited (Cyberport) are tabulated as follows:

Number of private car parking spaces and EV chargers at car parks in public housing estates and malls under the HA

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers [#]		
			Standard	Medium	Quick
HA	Choi Hing Court	80	73	0	0
	Choi Tak Estate	259	5*	5*	0
	Domain	152	7	5	0
	Cheung Sha Wan Estate	30	11	0	0
	Choi Ying Estate	145	4	0	0
	Chun Man Court	395	3	0	0
	Easeful Court	86	4	0	0
	Hoi Lok Court	125	24	0	0
	Hong Wah Court	234	3	0	0
	Hung Fuk Estate	139	41	0	0
	Kai Ching Estate	141	43	3	0
	Kai Long Court	42	4	0	0
	King Shan Court	320	1	0	0
	Kwai Chung Estate (Phase 3 and Phase 4)	647	7*	7*	3
	Lei On Court	423	3	0	0
	Lin Tsui Estate	6	2	0	0
	Long Ching Estate	11	1	0	0
	Long Shin Estate	37	11	0	0
	Lower Ngau Tau Kok Estate	158	54	0	0
	Mei Tin Estate	297	20	0	0
	Mun Tung Estate	140	45	0	0
	Ngan Ho Court	40	4	0	0
	Ngan Wai Court	14	2	0	0
On Kay Court	224	1	0	0	
On Tai Estate	252	61	0	0	

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers [#]		
			Standard	Medium	Quick
	On Tat Estate	276	83	3	0
	Ping Shek Estate	254	3	0	0
HA	Ping Yan Court	132	44	0	0
	Po Heung Estate	117	37	0	0
	Po Shek Wu Estate	221	65	0	0
	Shek Mun Estate (Phase 2)	86	11	0	0
	Sheung Chui Court	57	18	0	0
	Shui Chuen O Estate	415	126	0	0
	Shui Pin Wai Estate	158	3	0	1
	So Uk Estate (Phase 1)	47	15	0	0
	So Uk Estate (Phase 2)	126	52	0	0
	Tak Long Estate	208	60	4	1
	Tung Shing Court	71	1	0	0
	Tung Tao Court	249	4	0	0
	Un Chau Estate	80	3	0	0
	Yan Tin Estate	122	8	0	0
	Yau Lai Shopping Centre	72	6*	6*	2
	Yi Fung Court	214	6	0	0
Ying Tung Estate	93	23	0	0	
Yue Wan Estate	206	0	0	1	

* Standard and medium chargers are installed in the same parking space

Includes monthly and hourly parking spaces

Number of private car parking spaces and EV chargers at car parks under the Link

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers		
			Standard	Medium	Quick
Link	Fu Tung	460	3*	3*	0
	Tai Wo	430	3*	3*	0
	Temple Mall North	380	3*	3*	2
	Temple Mall North	380	0	2	0
	Lok Fu	680	3*	3*	0
	Tin Shing	1 380	28*	28*	3
	Choi Yuen	520	4*	4*	2
	Cheung Fat	540	3*	3*	0
	TKO Spot	1 050	0	0	2
	Cheung On	420	0	0	2
	Fu Tai	570	0	2	2
	Yat Tung	1 760	0	2	6
	Hing Wah	240	0	2	1
	Oi Tung	560	0	1	0
	Stanley Plaza	370	0	0	1
	Oi Man	720	0	2	0
	Fu Shin	480	0	2	0
	Chung On	870	0	2	0
	The Quayside	415	312	100	3

* Standard and medium chargers are installed in the same parking space

**Number of parking spaces and EV chargers at car parks
under the URA, HKSTP, Cyberport and MTRC**

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers		
			Standard	Medium	Quick
URA	eResidence (Commercial Portion)	6	0	0	6
	The Avenue (Commercial Portion)	59	8	20	4
	The Forest SKYPARK (Commercial Portion)	7	7	0	0
	Citywalk	114	2	0	0
	Citywalk 2	88	2	0	0
HKSTP	Bio-Informatics Centre (2W)	89	0	2	0
	P1 Carpark (3W)	530	2	0	0
	Photonics Centre (2E)/Wireless Centre (3E)	163	2	0	0
	Building 5E	112	2	0	0
	SAE Technology Centre (6E)	95	1	0	0
	P2 Carpark	655	0	18	11
	P3 Carpark	350	350	0	0
Cyberport	Cyberport Carpark 1/2	530	2	0	8
	Cyberport Carpark 3	253	0	0	2
	Cyberport Carpark 4	44	0	0	0
MTRC	Tsuen Wan West Station	120	0	0	2
	Paradise Mall	415	1	0	2
	Maritime Square 1	220	3	0	2
	Maritime Square 2	65	0	2	0
	Elements	896	0	5	4
	One International Finance Centre	136	1	2	0
	Two International Finance Centre	1 172	0	7	0
	PopCorn 1	115	1	1	2
	PopCorn 2	50	1	1	0

Organisation	Location of the car park	Number of parking spaces	Number of EV chargers		
			Standard	Medium	Quick
MTRC	Choi Hung Park & Ride Public Car Park	450	1	2	0
	Plaza Ascot	67	1	0	1
	Sun Tuen Mun Shopping Centre	421	0	3	0
	Hanford Plaza	22	0	1	0
	Hung Hom Station	871	0	2	0

- End -

ENB249

CONTROLLING OFFICER'S REPLY

(Question Serial No. 6148)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the pilot scheme to subsidise the installation of electric vehicle charging-enabling infrastructure in car parks of private residential buildings, please advise this Committee on the following:

- (a) According to the details set out by the Government, how many residential car parks are eligible at present? What is the number of parking spaces involved?
- (b) Will the Government's Inter-departmental Working Group established for this scheme be tasked with vetting the applications as well so as to reduce the time required by owners' organisations to visit different departments? If yes, what are the details? If no, what are the reasons? What measures does the Government have in place to facilitate the submission of applications by owners' organisations according to the requirements of different departments?
- (c) What is the anticipated time required for the administrative procedures for handling the applications? What measures are in place to shorten the time for handling the applications to enable owners' organisations to commence works as soon as possible?
- (d) If owners' organisations lack sufficient funds to commence the works, will the Government pay the upfront payment for owners' organisations? If yes, what are the details? If no, what are the reasons? How will the Government help these owners' organisations?
- (e) As electric vehicle owners are the minority in owners' organisations at present, what measures will the Government take to promote owners' organisations' participation in this scheme?

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 57)

Reply:

The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As the pilot scheme involves multi-departmental collaboration on issues covering property management, land lease, building modification, fire safety, technical issues, tendering, contract administration, etc., we have established an Inter-departmental Working Group, which comprises representatives from the Environmental Protection Department, Development Bureau, Buildings Department, Electrical and Mechanical Services Department, Fire Services Department, Home Affairs Department, Housing Department, Lands Department, and Planning Department. The departments will provide advice and facilitate the commencement and operation of the pilot scheme.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020. We will organise briefing sessions for owners' corporations, property management companies and the general public to introduce the details of the pilot scheme and explain technical issues such as electricity supply and installation works, so as to encourage them to support and participate in the scheme. We will also promote the scheme through various channels, including setting up a website, social media and publicity leaflets, etc.

- End -

CONTROLLING OFFICER'S REPLY

ENB250

(Question Serial No. 6149)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Will the Government please tabulate by emission standards the number of registered private cars, their year of first registration and countries of origin as at 31 December 2019?

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 58)

Reply:

According to the information provided by the Transport Department, the information on the registered private cars as at 31 December 2019 is set out at Annex.

The number of registered pre-Euro private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin											Sub-total	
	Australia	Belgium	France	Germany	Italy	Japan	Korea	New Zealand	South Africa	Sweden	UK		USA
1950	0	0	0	0	0	0	0	0	0	0	1	0	1
1952	0	0	0	0	0	0	0	0	0	0	3	0	3
1954	0	0	0	1	0	0	0	0	0	0	0	0	1
1958	0	0	0	2	0	0	0	0	0	0	0	0	2
1960	0	0	0	1	0	0	0	0	0	0	1	0	2
1961	0	0	0	0	0	0	0	0	0	0	4	0	4
1962	0	0	0	2	0	0	0	0	0	0	2	0	4
1963	0	0	0	3	0	0	0	0	0	0	0	0	3
1964	0	0	0	3	0	0	0	0	0	0	1	0	4
1965	0	0	0	2	0	0	0	0	0	0	3	1	6
1966	0	0	0	3	1	0	0	0	0	1	0	0	5
1967	0	0	0	4	1	0	0	0	0	0	6	1	12
1968	0	0	0	6	0	0	0	0	0	0	3	0	9
1969	0	0	0	9	1	0	0	0	0	1	5	0	16
1970	0	0	0	22	2	0	0	0	0	0	16	0	40
1971	1	0	0	22	0	0	0	0	0	0	5	0	28
1972	0	0	1	27	5	0	0	0	0	1	13	0	47

Year of first registration	Country of origin											Sub-total	
	Australia	Belgium	France	Germany	Italy	Japan	Korea	New Zealand	South Africa	Sweden	UK		USA
1973	2	0	0	46	3	2	0	0	0	0	25	1	79
1974	1	0	0	18	3	0	0	0	0	0	20	0	42
1975	1	0	0	13	2	2	0	0	0	0	16	0	34
1976	0	0	1	15	1	7	0	0	0	0	18	0	42
1977	0	0	0	16	4	13	0	0	0	0	23	1	57
1978	3	0	0	25	2	12	0	0	0	1	11	0	54
1979	0	0	1	27	4	3	0	0	0	0	26	1	62
1980	0	0	0	35	2	19	0	0	0	0	35	2	93
1981	2	0	1	46	4	23	0	0	0	1	24	1	102
1982	0	0	0	52	2	13	0	0	0	0	12	0	79
1983	0	0	0	18	0	13	0	0	0	0	1	0	32
1984	0	0	0	15	6	16	0	0	0	0	5	1	43
1985	0	0	0	39	11	25	0	0	0	0	10	0	85
1986	0	1	0	65	12	61	0	0	2	0	21	0	162
1987	0	2	2	67	14	72	0	0	1	0	24	1	183

Year of first registration	Country of origin											Sub-total	
	Australia	Belgium	France	Germany	Italy	Japan	Korea	New Zealand	South Africa	Sweden	UK		USA
1988	0	2	1	102	9	121	0	0	0	2	28	0	265
1989	0	2	2	168	10	189	0	1	0	6	31	1	410
1990	0	1	2	158	9	306	0	0	0	3	35	0	514
1991	0	1	3	215	21	470	0	0	0	9	52	2	773
1992	0	0	3	257	10	406	0	0	0	21	39	1	737
1993	2	1	2	318	45	598	1	0	0	15	86	0	1 068
1994	0	5	2	566	46	696	0	0	0	12	88	1	1 416
1995	1	8	0	181	14	201	0	0	0	4	20	1	430
Total												6 949	

The number of registered Euro I private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin										Sub-total	
	Belgium	France	Germany	Italy	Japan	Korea	Mexico	Spain	Sweden	UK		USA
1995	6	1	298	28	473	0	0	0	4	71	1	882
1996	3	1	427	55	811	2	7	1	11	102	2	1 422
1997	1	1	158	16	524	2	1	0	3	36	21	763
1998	0	0	0	0	53	0	0	0	0	1	0	54
Total											3 121	

The number of registered Euro II private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin											
	Australia	Belgium	Denmark	France	Germany	Italy	Japan	Korea	Malaysia	Mexico	Netherlands	Portugal
1997	1	9	0	5	567	52	2 158	3	0	2	0	0
1998	0	5	0	10	762	42	2 951	1	0	2	1	0
1999	0	2	1	3	672	34	3 910	0	5	1	9	1
2000	0	21	0	46	1 399	60	6 199	13	1	27	16	0

Year of first registration	Country of origin						Sub-total
	South Africa	Spain	Sweden	Thailand	UK	USA	
1997	0	1	2	0	114	101	3 015
1998	0	0	29	19	70	87	3 979
1999	19	1	17	0	74	86	4 835
2000	170	8	14	0	128	112	8 214
						Total	20 043

The number of registered Euro III private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin										
	Australia	Austria	Belgium	Finland	France	Germany	Italy	Japan	Korea	Malaysia	Mexico
2001	0	0	13	13	76	1 580	91	8 219	6	1	28
2002	0	0	25	35	74	1 782	88	9 340	14	1	10
2003	1	0	28	32	67	2 232	76	7 815	33	1	25
2004	0	91	61	11	70	3 160	105	11 516	151	0	30
2005	0	115	92	79	86	3 595	118	12 194	327	1	20

Year of first registration	Country of origin								Sub-total
	Netherlands	Portugal	Spain	South Africa	Sweden	Thailand	UK	USA	
2001	20	0	16	458	16	6	133	119	10 795
2002	51	0	29	480	24	4	321	213	12 491
2003	19	0	30	380	43	149	419	170	11 520
2004	4	1	25	749	118	234	622	283	17 231
2005	69	0	18	1 249	127	232	699	195	19 216
								Total	71 253

The number of registered Euro IV private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin											
	Australia	Austria	Belgium	Canada	China	Finland	France	Germany	India	Italy	Japan	Korea
2006	0	93	56	0	0	153	84	4 213	0	140	13 928	207
2007	2	69	96	1	0	164	105	5 995	0	312	18 430	147
2008	0	45	62	0	1	126	110	7 118	0	338	20 078	100
2009	6	12	73	0	0	78	74	7 938	10	435	14 557	74
2010	3	78	93	0	1	82	38	12 396	22	389	20 614	172
2011	2	403	72	0	7	27	182	14 113	8	433	19 940	211
2012	1	172	43	0	5	1	68	5 344	1	333	7 950	173

Year of first registration	Country of origin											Sub-total
	Malaysia	Mexico	Netherlands	New Zealand	Poland	South Africa	Spain	Sweden	Thailand	UK	USA	
2006	0	59	56	0	0	1 375	20	152	139	666	367	21 708
2007	1	59	30	0	0	1 123	19	282	121	840	557	28 353
2008	0	58	0	1	30	972	15	235	0	713	915	30 917
2009	0	10	0	0	42	637	25	249	0	643	751	25 614
2010	0	12	0	0	0	800	20	305	2	1 066	890	36 983
2011	0	185	0	0	138	863	54	297	70	1 200	1 051	39 256
2012	0	125	0	0	103	139	37	106	48	636	288	15 573
											Total	198 404

The number of registered Euro V private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin												
	Australia	Austria	Belgium	Brazil	China	Czech	Finland	France	Germany	Hungary	India	Italy	Japan
2012	3	342	177	1	2	0	0	152	9 287	0	0	377	11 965
2013	0	527	307	0	5	22	167	180	16 047	83	0	473	20 232
2014	0	387	337	0	2	45	496	159	13 832	1 311	0	506	22 300
2015	1	247	224	0	0	0	497	74	13 021	1 598	0	593	24 276
2016	1	160	188	0	4	0	265	85	9 923	666	1	387	19 072
2017	0	25	93	0	4	0	123	120	6 294	212	0	315	9 248
2018	0	0	0	0	0	0	0	0	1	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0

Year of first registration	Country of origin										
	Korea	Malaysia	Mexico	Netherlands	Poland	Portugal	Singapore	Slovakia	Slovenia	South Africa	Spain
2012	304	0	525	0	66	0	0	0	0	620	42
2013	638	0	431	0	123	14	0	0	0	801	119
2014	697	1	228	3	112	258	0	254	0	624	580
2015	744	0	145	47	76	241	0	253	0	1 273	481
2016	842	0	41	58	62	234	1	349	16	1 037	627
2017	1 283	0	23	112	5	88	0	115	4	458	408
2018	241	0	0	0	0	0	0	0	0	0	22
2019	28	0	0	0	0	0	0	0	0	0	0

Year of first registration	Country of origin						Sub-total
	Sweden	Switzerland	Thailand	Turkey	UK	USA	
2012	80	0	73	0	1 091	842	25 949
2013	139	0	84	0	1 518	1 469	43 379
2014	82	0	59	0	1 399	1 329	45 001
2015	96	1	74	7	1 708	1 482	47 159
2016	238	0	59	18	1 899	1 023	37 256
2017	132	0	2	15	1 028	848	20 955
2018	0	0	0	0	0	1	265
2019	0	0	0	0	0	0	28
Total							219 992

The number of registered Euro VI private cars by year of first registration and country of origin as at 31 December 2019

Year of first registration	Country of origin													
	Australia	Austria	Belgium	China	Czech	Finland	France	Germany	Hungary	Italy	Japan	Korea	Malaysia	Mexico
2017	0	46	46	6	0	131	24	4 489	226	169	10 178	294	0	167
2018	1	90	164	52	0	40	61	9 910	423	444	22 490	966	3	517
2019	3	229	157	111	61	61	103	7 115	479	454	20 581	829	0	502

Year of first registration	Country of origin													Sub-total
	Netherlands	Poland	Portugal	Slovakia	Slovenia	South Africa	Spain	Sweden	Thailand	Turkey	UK	USA		
2017	122	15	71	92	25	541	122	246	70	6	899	279	18 264	
2018	289	12	203	457	23	783	342	393	258	22	2 012	1 102	41 057	
2019	245	2	97	439	0	788	302	144	115	12	1 588	1 283	35 700	
												Total	95 021	

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CONTROLLING OFFICER'S REPLY**ENB251****(Question Serial No. 6151)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Environmental Protection Department continues with the development of the network of Community Green Stations (CGSs) in 18 districts of Hong Kong. Please list by year in tabular form the following information:

- (a) a breakdown of expenditure for various CGSs from their inception up to this year and the current progress, including detailed information on the location, scale and quantity of waste handled, date of commencement of works/operation, expenditure on construction cost involved, manpower arrangement and estimated operating expenditure; and
 (b) the utilisation rate and relevant effectiveness of the completed CGSs.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 116)Reply:

The Environmental Protection Department (EPD) continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works of all CGSs is estimated to be about \$400 million. The current progress of individual CGSs is set out in the table below:

CGS	Site	Latest Development
Sha Tin CGS	10 On Ping Street, Shek Mun	The CGS commenced operation in May 2015.
Eastern CGS	30 Oi Shun Road, Shau Kei Wan	The CGS commenced operation in August 2015.
Kwun Tong CGS	27 Sheung Yee Road, Kowloon Bay	The CGS commenced operation in January 2017.
Yuen Long CGS	65 Tin Wah Road, Tin Shui Wai	The CGS commenced operation in January 2017.

CGS	Site	Latest Development
Sham Shui Po CGS	339 Tung Chau Street	The CGS commenced operation in October 2017.
Tuen Mun CGS	9 Tuen Yee Street	The CGS commenced operation in September 2018.
Kwai Tsing CGS	12 Tam Kon Shan Road, Tsing Yi	The CGS commenced operation in November 2018.
Tai Po CGS	25 Dai Wah Street	The CGS commenced operation in October 2019.
Islands CGS	1 Chung Mun Road, Tung Chung, Lantau	The CGS is expected to commence operation in 2020.
Sai Kung CGS	3 Po Lam Lane	Design and construction works are in progress.
Wan Chai CGS	Wan Shing Street, near Hung Hing Road	Design and construction works are in progress.
Wong Tai Sin CGS	Po Kong Village Road, near Tsz Wan Shan Road	The site has been confirmed and the application procedure for temporary government land allocation is in progress.
Tsuen Wan CGS, Kowloon City CGS, Southern CGS, Yau Tsim Mong CGS, Central and Western CGS and North CGS	Site yet to be confirmed	We are continuing with site search and other associated preparatory work.

The CGS operators are required to provide designated services and meet pre-set performance indicators in the contract period, including a total quantity of recyclables collected in the contract period ranging from 345 tonnes to 1 320 tonnes, depending on the unique background of individual districts. At present, a total of 18 posts in the EPD are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts. From 2015 to 2019, the quantities of various types of recyclables collected, the numbers of visitors, the numbers of educational activities organised and the operating expenditures in respect of the CGSs already in operation are set out below:

	2015	2016	2017	2018	2019
Quantity of various types of recyclables collected (tonnes)					
Electrical appliances and computer products	51.7	97.1	213.5	303.8	431.7
Glass bottles	103.2	483.6	1 042.5	1 555.7	1 947.4
Rechargeable batteries	0.3	1.7	4.9	5.0	7.0

	2015	2016	2017	2018	2019
Quantity of various types of recyclables collected (tonnes)					
Compact fluorescent lamps/fluorescent tubes	1.3	6.9	14.0	16.2	23.0
Waste paper	0.9	3.6	39.5	90.4	148.8
Waste plastics	0.2	2.3	16.0	59.1	125.9
Waste metals	0.1	0.9	7.1	12.9	22.5
Number of visitors, number of educational activities organised and operating expenditure					
Number of visitors	31 387	159 459	287 910	320 192	498 500
Number of educational activities	719	1 155	1 354	1 202	1 514
Operating expenditure [Note] (\$ m)	5.73	6.04	17.49	23.97	About 31

Note: The total expenditure in 2019 is being validated.

Since their inception, the CGSs have been running smoothly. They have generally been well received by the local community and have been making good progress in providing support for community recycling. The Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS and the Yuen Long CGS, which were the first to commence operation, all exceeded the designated requirements in the respective service contracts of the quantity of recyclables to be recovered and those relating to the organisation of educational activities during the period of their first service contracts while the 4 follow-on contracts also commenced smoothly. As for the Sham Shui Po CGS, the Tuen Mun CGS, the Kwai Tsing CGS and the Tai Po CGS, which are still operating in the period of their first service contracts, we will continue to monitor compliance of their operation performance with the contractual requirements. Moreover, we will take into account views from various stakeholders and make suitable adjustments to the work of the CGSs on environmental education and recycling support as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB252

(Question Serial No. 6152)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please set out in table form details of various air quality improvement policies or measures, promotional/educational activities, work or plans, etc. implemented by the Administration in each year from 2014 to 2019:

1. the names of the policies or measures;
2. the details and implementation schedules;
3. the personnel establishment and manpower resources involved;
4. the expenditure;
5. the effectiveness and the number of people reached;
6. the pollutant emissions, other environmental implications and the way of handling; and
7. the reviews and future work plans.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 115)

Reply:

The Environmental Protection Department (EPD) will fully consult the relevant industries and stakeholders before the introduction of new policies or measures, and report their views to the Legislative Council in a timely manner. Before implementing the policies or measures, the EPD will publicise the policies or measures to the public and the relevant stakeholders as and when required through different channels, including press releases, briefings, television and radio commercials, advertising lightboxes at bus stops, posters and leaflets, etc. For example, we launched "Clean Air and You" series of promotional videos and television Announcements of Public Interest of "Air Quality Getting Better" in 2016 to promote the effectiveness of the air pollution control measures in improving air quality, promote the use of electric vehicles and explain the formation of regional smog, etc. As at the end of February 2020, the hit rate of the "Clean Air and You" series of promotional videos on the EPD website and social networking websites was over 79 000 counts.

Please refer to the Annex for the air quality improvement policies and key measures implemented by the EPD.

Details of air quality improvement measures implemented by the EPD between 2014 and 2019

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>1. Encouraging the use of environment-friendly (EF) commercial vehicles</p>	<p>Since April 2008, the Government has launched the Tax Incentives Scheme for EF Commercial Vehicles to encourage vehicle owners to choose EF commercial vehicles with exhaust emissions that out-perform the prevailing statutory emission standards.</p> <p>The qualifying standards for EF commercial vehicles are reviewed and updated annually in the light of vehicle technological advancement such that the tax incentive is available only to vehicles of outstanding environmental performance.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>From the launch of the Tax Incentives Scheme for EF Commercial Vehicles to the end of December 2019, the number of newly registered EF commercial vehicles was about 67 500 and the amount of first registration tax concession was about \$1.8 billion.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>2. Pilot Green Transport Fund (PGTF)</p>	<p>The PGTF has been put in place since March 2011 for application by the public transport sectors, goods vehicle operators and charitable/non-profit making organisations to try out green innovative transport technologies.</p> <p>To further promote wider use of green innovative transport technologies by the transport sector, the EPD has completed a review of the scope of the PGTF. We propose renaming the PGTF to the “New Energy Transport Fund”, enhancing the detailed conditions of subsidy and extending the scope of the PGTF.</p>	<p>As at the end of February 2020, the total amount of subsidy approved was about \$154 million.</p> <p>An injection of an additional \$800 million into the PGTF is proposed for extending its scope.</p> <p>The overall workload will be absorbed by the existing resources of the EPD and undertaken by 2 time-limited non-directorate posts to be created for a period of 5 years.</p>	<p>As at the end of February 2020, the PGTF has approved 183 trial applications, including 110 on electric commercial vehicles, 65 on hybrid commercial vehicles and 8 on technologies applicable to conventional buses or ferries.</p> <p>The results of the review and the relevant recommendations received support from the PGTF Steering Committee and the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo) in January 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
3. Trial of electric buses	To fully subsidise the franchised bus companies (FBCs) to purchase 36 single-deck electric buses for conducting a two-year trial on different routes.	Funding of \$180 million was approved in 2012 for conducting the trial. The relevant workload has been partly absorbed by the existing resources of the EPD and the Transport Department (TD). The EPD and the TD have created 3 two-year time-limited posts (until end of March 2014; including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Motor Vehicle Examiner I) to undertake the relevant work. The TD has further created a time-limited Transport Officer I post to cope with the relevant work of the trial and other emission reduction measures related to franchised buses.	At present, 33 electric buses have commenced operation. The remaining 3 electric buses are expected to commence operation in 2020.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>4. Phasing out pre-Euro IV diesel commercial vehicles (DCVs)</p>	<p>The EPD launched an incentive-cum-regulatory scheme in March 2014 with the aim of progressively phasing out some 82 000 pre-Euro IV DCVs by the end of 2019.</p> <p>Moreover, the EPD has also set a limit on the service life of DCVs newly registered on or after 1 February 2014 at 15 years.</p>	<p>Funding of about \$11.4 billion was approved for implementation of the ex-gratia payment scheme.</p> <p>The relevant workload has been partly absorbed by the existing resources of the EPD and the TD. Moreover, the EPD has created 3 time-limited posts (from 2013-14 to 2019-20), including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer and 1 Environmental Protection Inspector, to implement the ex-gratia payment scheme. In addition, the TD has created in phases a maximum of 25 time-limited posts (reduced to 6 in 2020-21, including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 1 Clerical Officer, 2 Assistant Clerical Officers) according to the progress of the scheme to handle the applications and relevant work for the ex-gratia payment scheme.</p>	<p>As at end of February 2020, about 77 900 DCVs have been granted an ex-gratia payment, accounting for about 95% of the eligible vehicles, and involving a subsidy amount of about \$10.5 billion.</p> <p>In view of the economic downturn in the past few months, some transport trades were not able to complete the necessary procedures and submit applications for ex-gratia payment by the original deadline due to operational difficulties. Hence, the EPD has extended the deadline by 6 months to 30 June 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>5. Phasing out Euro IV DCVs</p>	<p>To continuously improve roadside air quality, the EPD plans, by making reference to the scheme of phasing out pre-Euro IV DCVs, to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue the licences of relevant vehicles after the specified deadlines.</p> <p>We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia payment of 15% of the average vehicle body price for goods vehicles assembled with additions.</p>	<p>It is proposed that \$7.1 billion be earmarked for implementing the ex-gratia payment scheme.</p> <p>The relevant workload has been partly absorbed with the existing resources of the EPD and the TD. Moreover, the EPD will create 3 four-year time-limited posts (from 2020-21 to 2023-24), including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Environmental Protection Inspector, to implement the ex-gratia payment scheme. In addition, the TD will create 6 time-limited posts (including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 1 Clerical Officer, 1 Assistant Clerical Officer and 1 Motor Vehicle Examiner I) in the above years to handle the applications and relevant work for the ex-gratia payment scheme.</p>	<p>The details of the scheme received support from the EA Panel of the LegCo in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that this scheme will be launched in the second half of 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>6. Strengthening the control of emissions from petrol and liquefied petroleum gas (LPG) vehicles</p>	<p>The EPD has been using roadside remote sensing equipment to identify petrol and LPG vehicles emitting excessively since 1 September 2014. For any vehicle found emitting excessively, the EPD will issue an Emission Testing Notice to its owner. The owner is required to rectify the excessive emission problem and send the vehicle to a Designated Vehicle Emission Testing Centre for an emission test with the aid of a chassis dynamometer within 12 working days so as to confirm the rectification of the excessive emission problem. If the owner fails to send the vehicle to the testing centre, or the vehicle fails to pass the emission test, the licence of the vehicle concerned will be cancelled by the TD.</p>	<p>This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.</p>	<p>As at the end of February 2020, the EPD has monitored some 4.23 million vehicle counts using roadside remote sensing equipment and issued 22 262 Emission Testing Notices requiring the owners to repair and to rectify the excessive emissions of their vehicles. During the above period, the licences of a total of 251 vehicles were cancelled for failing the emission test. Another 1 075 vehicles were scrapped by their owners voluntarily. The percentage of petrol vehicles emitting excessively has reduced from about 10% to less than 3%, while the percentage of LPG vehicles emitting excessively has reduced from about 80% to 16% from 2014 to 2019.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
7. Setting up franchised bus low emission zones (FBLEZs)	<p>To improve roadside air quality and protect public health, the Government set up FBLEZs at the busy road sections in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with selective catalytic reduction (SCR) devices and diesel particulate filters) to run in these zones.</p> <p>To further improve roadside air quality within the FBLEZs, we have tightened the emission requirements of low emission buses in the 3 FBLEZs to Euro V emission standards starting from 31 December 2019.</p>	This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.	3 FBLEZs were set up at the end of 2015. According to the reports submitted by the FBCs, as of December 2019, the overall compliance rate was about 99.8%. In case of traffic congestion, vehicle breakdowns and traffic accidents, etc., the FBCs may need to deploy non-low emission buses to run in the FBLEZs occasionally in order to maintain normal bus services.
8. Implementing Euro VI emission standards for first registered vehicles	The Government has tightened in phases by vehicle type the emission standards for first registered vehicles to Euro VI starting from 1 July 2017, and has tightened the emission standards for first registered diesel private cars to California LEV III starting from 1 October 2017.	This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.	Compared with their Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less nitrogen oxides (NOx) and 50% less respirable suspended particulates (RSP) while Euro VI light duty diesel vehicles emit about 55% less NOx.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>9. Trial on retrofitting Euro IV and V double-deck franchised buses with enhanced SCR systems</p>	<p>The Government plans to fully subsidise FBCs to conduct a trial on retrofitting Euro IV and V double-deck franchised buses of the dominant bus models with enhanced SCR systems (the Trial), so as to establish the technical feasibility of the retrofitting work in Hong Kong, and to confirm the emission reduction performance of the enhanced SCR systems from different suppliers under the local driving and operation conditions. The Trial is expected to commence in 2020.</p>	<p>The estimated expenditure of the Trial is about \$38 million.</p> <p>The relevant workload is partly absorbed by the existing resources of the EPD and TD. The EPD has created 2 additional two-year time-limited posts (until end of March 2021, including 1 Environmental Protection Officer and 1 Environmental Protection Inspector) to undertake and follow up on the relevant trial.</p> <p>The TD has also created 2 two-year time-limited posts (until end of March 2021, including 1 Transport Officer II and 1 Motor Vehicle Examiner I) to undertake the relevant work.</p>	<p>A Task Force comprising the EPD, the TD, FBCs and local experts has been set up to draw up technical specifications and detailed arrangements for the Trial, and monitor and evaluate the operational performance and emission reduction performance of the buses retrofitted with the enhanced SCR systems.</p> <p>If the Trial is successful, the Government will consider fully subsidising the FBCs to retrofit Euro IV and V diesel double-deck buses of qualified models (bus models that have passed the Trial) with enhanced SCR systems to reduce their emissions before their retirement.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vessels			
10. Controlling the sulphur content of locally supplied marine light diesel	The sulphur content of locally supplied marine light diesel has been capped at 0.05% since 1 April 2014.	This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.	The EPD conducted a total of 14 inspections in the past financial year. The sulphur content of all samples complied with the regulation.
11. Requiring vessels to use compliant fuel	The Air Pollution Control (Fuel for Vessels) Regulation has been in force since 1 January 2019, requiring vessels to use compliant fuel (including low sulphur fuel with sulphur content not exceeding 0.5%) within Hong Kong waters to dovetail with the control of the marine emission control areas in Mainland waters. The Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation which had been implemented since 1 July 2015 was repealed on 1 January 2019.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	During the period when the Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation was in effect, the EPD conducted surprise inspections of 383 vessels, and initiated 6 prosecutions successfully. In the past financial year, the EPD conducted surprise inspections of 172 vessels, and initiated 3 prosecutions successfully during the enforcement of the Air Pollution Control (Fuel for Vessels) Regulation. The inspection results showed that most vessels complied with the regulation and had switched to use low-sulphur marine fuel before entering Hong Kong waters.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Other emission sources			
<p>12. Controlling the emissions from the power sector</p>	<p>The EPD has formulated Technical Memorandums (TMs) in accordance with the Air Pollution Control Ordinance to stipulate air pollutant emission caps for the power sector.</p> <p>Since 2010, the EPD has successively promulgated 8 TMs to progressively tighten the emission caps of sulphur dioxide (SO₂), NO_x and RSP for the power sector.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>The latest Eighth TM was issued in November 2019 and the emission caps stipulated in it will come into effect in 2024. Compared with the emission caps stated in the First TM, the annual emissions of SO₂, NO_x and RSP will be reduced by 87%, 71% and 69% respectively.</p> <p>To meet the emission caps stated in the TM, the power plants have to maximise the use of low-emission coal and electricity generated by renewable energy facilities, etc. In addition, the 2 power companies have each completed the construction of a new gas-fired generating unit and are planning to construct 3 more new gas-fired generating units to increase the proportion of gas-fired electricity generation and replace the coal-fired generating units which are to retire. After all the new gas-fired units commence operation, the percentage of local gas-fired electricity generation will be raised to about 55% in the total fuel mix for electricity generation.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Other emission sources			
<p>13. Controlling the emissions from non-road mobile machinery (NRMM)</p>	<p>Starting from 1 June 2015, NRMM (including regulated machines and non-road vehicles) newly sold or leased for use in Hong Kong have to comply with the statutory emission standards. NRMM that had been in use in Hong Kong when the legislation came into effect is exempted from compliance with the new requirements.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>Starting from 1 December 2015, all NRMM to be used in construction sites, airport, container terminals and other specified locations are required to bear approval or exemption labels issued by the EPD. As at the end of January 2020, labels were issued to a total of around 53 600 NRMM.</p> <p>Currently, the statutory emission standards for regulated machines and non-road vehicles are EU Stage IIIA and Euro VI standards (or their equivalent standards) respectively. The Government has tightened the statutory emission standards for some non-road vehicles to Euro VI in phases starting from 1 January 2019 to tie in with the latest emission standards for newly registered road vehicles.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
14. Mid-term review study on the 2015 and 2020 air pollutant emission reduction targets	The progress on emission reduction of major air pollutants in the Pearl River Delta (PRD) region has been reviewed in order to provide a robust scientific basis for concluding the emission reduction results of the two places for 2015 and finalising the emission reduction targets for 2020.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	Hong Kong (HK) and Guangdong (GD) governments set the 2015 emission reduction targets and the 2020 emission reduction ranges for the PRD region in November 2012, and rolled out various emission reduction measures under the Pearl River Delta Regional Air Quality Management Plan (RAQMP). The two sides commenced the joint mid-term review study in February 2015 and released the results of the study at the end of 2017, which concluded the achievements of the 2015 emission reduction targets and finalised the emission reduction targets for 2020.
15. Collaboration on post-2020 regional air pollutant emission reduction	To further improve regional air quality, the HKSAR Government and GD Provincial Government are working together to formulate a regional air pollutant emission reduction plan beyond 2020.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	HK and GD established a joint science team in 2018 and launched a study on post-2020 regional air pollutant emission reduction targets and concentration levels, with a view to formulating an emission reduction plan beyond 2020.
16. Guangdong-Hong Kong-Macao Joint Regional PM _{2.5} (fine suspended particulates) Study	The Study aims to understand the formation mechanisms and control of PM _{2.5} pollution in the PRD Region, so as to provide a scientific basis for the formulation of strategies to tackle regional air pollution problems.	The HK side commissioned a consultant to conduct sampling, analysis and computer modelling, etc. The total expenditure was about \$9 million. There is no separate breakdown for the manpower resources and expenditure involved in the Study.	The Study began in late 2014. GD, HK and Macao completed the concurrent field monitoring programmes, sample analysis, air quality modelling and integrated analysis, etc. as scheduled. The Study was completed in 2018.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
17. Pearl River Delta (PRD) Regional Air Quality Management Plan (RAQMP)	HK and GD have implemented a host of emission reduction measures targeting at key emission sources, including power plants, vehicles, vessels and industrial facilities, etc., as well as regional air quality monitoring.	The RAQMP is undertaken by the EPD with its existing manpower and resources. There is no separate breakdown for the manpower resources and expenditure for the work.	<p>The RAQMP has been an ongoing collaboration initiative drawn up since December 2003. The annual average levels of SO₂, nitrogen dioxide and RSP measured by the PRD Regional Air Quality Monitoring Network (the Network) in 2018 recorded a decrease by 81%, 28% and 36% respectively as compared with 2006. This indicates that the emission reduction measures implemented by GD and HK in recent years have been effective.</p> <p>The Network was enhanced by GD, HK and Macao in September 2014 to provide real-time air quality information of the PRD Region.</p>
18. Cleaner Production Partnership Programme (the Programme)	Launched in April 2008, the Programme encourages and facilitates Hong Kong-owned factories in GD and HK to adopt cleaner production technologies and practices through funding support and technology promotion activities, thereby improving the regional air quality. The current phase of the Programme ended in March 2020. The Government has proposed to earmark \$311 million for extending the Programme for 5 years until March 2025.	<p>The Government's total expenditure for implementing the Programme from 2008 to 2020 was around \$293 million.</p> <p>This is part of the EPD's routine work. There is no separate breakdown for the expenditure involved.</p>	As at March 2020, about 3 300 funded projects were approved and more than 560 awareness and technology promotion activities were organised under the Programme.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
19. Routine monitoring of volatile organic compounds (VOCs) in the PRD Regional Air Quality Monitoring Network	HK and GD have adopted a progressive approach to include routine monitoring of VOCs in the PRD Regional Air Quality Monitoring Network in 3 phases from 2017 to 2020. VOCs contribute to the formation of ozone. The monitoring data can help investigate the causes of ozone formation in the PRD region.	The EPD appointed a contractor to undertake the daily operation and maintenance work of the above VOCs monitoring stations established in Phase 2. The expenditure on the operating contract in 2018-2020 is \$1.1 million per year.	HK and GD completed the work in Phase 1 in 2017, of which included considering the distribution and locations of stations for routine VOCs monitoring, selecting the parameters to be monitored and determining the monitoring methods, compiling the standard operating procedures and the quality assurance/quality control protocol. Both sides also completed the pilot of online VOCs monitoring and commenced preliminary data analysis in Phase 2 in 2019. Both sides are now reviewing the experience gained in Phase 2 comprehensively, including monitoring equipment operation, expenditure, data quality and preliminary analysis results, etc., and by making reference to relevant national standards and guidelines, both sides will fine tune the monitoring plan and increase the number of VOCs routine monitoring stations in the region progressively.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
20. Regional air quality forecasting	Targeting at the heavily polluted weather in the PRD region, GD and HK are conducting air quality forecasting meetings at the technical level to jointly forecast the development of heavily polluted weather in the region, analyse and identify the causes so as to formulate and adopt appropriate preventive measures in advance.	The study is undertaken by the EPD with its existing manpower and resources. There is no separate breakdown for the manpower resources and expenditure for the study.	GD and HK are currently increasing technical exchanges and trainings in air pollution forecasting and are beginning to conduct forecasting meetings at the technical level to jointly enhance their forecasting capability of atmospheric pollution in the PRD region.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Review of the Air Quality Objectives			
<p>21. Review of the Air Quality Objectives (AQOs)</p>	<p>The current AQOs came into effect on 1 January 2014. According to section 7A of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the Advisory Council on the Environment (ACE).</p> <p>The AQOs Review (the Review) was conducted between 2016 and 2018. The review report was submitted to the ACE in February 2019.</p>	<p>The work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the manpower resources and expenditure for the study.</p> <p>Besides, the EPD commissioned a consultancy through open tender in November 2016 to assist in the Review. The consultancy contract fee was about \$7.7 million.</p>	<p>After the Environment Bureau (ENB) completed the Review in December 2018, the ENB consulted the ACE and the EA Panel of the LegCo respectively in March 2019, and conducted a public consultation from July to October in 2019.</p> <p>Taking into account the various factors and views gathered, the protection of public health and the principle of progressively tightening the AQOs to improve air quality on a sustainable basis, we recommend to tighten the 24-hour AQO of SO₂ and the annual and 24-hour AQOs of PM_{2.5} in accordance with the recommendations of the Review. We submitted the final recommendations to the EA Panel of the LegCo and the ACE in December 2019 and January 2020 respectively. We will introduce an amendment bill to the LegCo for the implementation of the new AQOs as soon as possible.</p>

- End -

CONTROLLING OFFICER'S REPLY

ENB253

(Question Serial No. 6154)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the review of the sewerage master plans for Central and East Kowloon, West Kowloon, Tsuen Wan and Kwai Chung, Tuen Mun, Tsing Yi, the Outlying Islands, Hong Kong Island, North District and Tolo Harbour areas, what is the progress of the review? What are the estimated expenditures and effectiveness? Please set out the details in table form.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 105)

Reply:

The review of the sewerage master plans for various districts of Hong Kong was completed some years ago. Making reference to these plans, the Government has progressively initiated and completed a number of sewerage infrastructure upgrading and construction projects (such as sewage treatment works and dry weather flow interceptors) in various districts, as well as the expansion of the sewerage systems. The completion years of review of the various district plans, and the estimated expenditures for the sewerage works in the coming 3 years are as follows:

		Estimated expenditure for the sewerage works with funding approved (\$ million)		
District	Completion year of the sewerage master plan review	2020-21	2021-22	2022-23
Central and East Kowloon	2003	83	173	79
West Kowloon, Tsuen Wan and Kwai Chung	2010	122	62	51
Tuen Mun and Tsing Yi	2003	125	85	71
Outlying Islands	2002	45	101	21
Hong Kong Island ^{Note}	2003	0	0	0
North District and Tolo Harbour	2002	688	969	1,060
	Total	1,063	1,390	1,282

Note: The works projects for Hong Kong Island have been substantially completed.

- End -

CONTROLLING OFFICER'S REPLY

ENB254

(Question Serial No. 6155)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (4) Water

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Harbour Area Treatment Scheme (HATS) Stage 2A has been commissioned since December 2015. The main objectives were to upgrade the 8 existing Preliminary Treatment Works (PTWs), upgrade the existing chemical treatment capacity of the Stonecutters Island Sewage Treatment Works (SCISTW), and construct a deep sewage tunnel to collect and transfer sewage from the PTWs to SCISTW for treatment. Please advise this Committee on the following:

(a) List in tabular form the following in respect of each year upon commissioning of the HATS:

(i) the expenditure details and amounts involved in the improvement of the PTWs, as well as the effectiveness indicators;

(ii) the chemical treatment loading on the SCISTW, as well as the expenditure details (including maintenance) and amounts involved;

(b) What was the effectiveness of the HATS in improving the water quality since its commissioning? Please list the indicators in detail;

(c) Does the Administration have any plan to implement the next stage of the HATS for continuous improvement in water quality? If yes, what are the details? If no, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 103)

Reply:

The expenditure details and amounts of the various items of upgrading works for the Preliminary Treatment Works (PTWs), as well as the effectiveness indicators since the commissioning of the Harbour Area Treatment Scheme (HATS) Stage 2A in December 2015 are set out in the following table:

Financial year	Upgrading works for the PTW	Approximate amount (HK\$ million)	Effectiveness indicator
2016-17	Upgrading of screenings dewatering system no. 2 at Wan Chai East PTW	0.5	Replacing the ageing screenings dewatering system to enhance system efficiency, and extending the designed life span by 15 years to increase the reliability of the overall operation of the PTW.
2018-19	Advance works for upgrading of inlet chamber at Central PTW	3.8	Replacing the dilapidated penstock to enhance maintenance accessibility and flexibility, and extending the designed life span by 15 years to increase the reliability of the overall operation of the PTW.
2019-20	Wave protection enhancement works at Ap Lei Chau PTW	17.3	Strengthening the resilience against wave surge to withstand the impact of great waves with a return period of 100 years.

The sewage treatment quantity of Stonecutters Island Sewage Treatment Works (SCISTW), as well as the expenditure details (including maintenance) and amounts involved are set out in the following table:

Financial year	Approximate sewage treatment quantity of SCISTW (million cubic metres)	Expenditure details		Approximate total expenditure (HK\$ million)
		Approximate plant maintenance expenses (HK\$ million)	Approximate plant operating expenses (HK\$ million)	
2016-17	695	157	319	476
2017-18	671	139	338	476
2018-19	665	159	311	470
2019-20	680	158	353	511

In terms of the key water quality parameters, the annual average dissolved oxygen (DO) and the annual geometric mean *E. coli* levels of the Victoria Harbour Water Control Zone in the years from 2016 to 2019 had increased by 3% and dropped by 63% respectively as compared with the years from 2011 to 2015, while ammonia nitrogen also dropped by 15%. When compared with the years from 2000 to 2001 before the HATS Stage 1 was commissioned, the DO level even increased by 15% and the *E. coli* level dropped by 92%,

while unionised ammonia nitrogen also dropped by 52%. In general, the overall compliance rate with the key Water Quality Objectives increased from an average of 75% in the years from 2011 to 2015 to an average of 93% in the years from 2016 to 2019.

The HATS Stage 2A can provide adequate capacity to handle the projected sewage flow in the next twenty-odd years. Upon commissioning of the HATS Stage 2A in 2015, the overall water quality of Victoria Harbour has greatly improved. To further enhance the water quality of the Harbour, the Government is focusing on the alleviation of near shore pollution problem, including the construction of more dry weather flow interceptors and rehabilitation of the aged sewers in various districts.

- End -

CONTROLLING OFFICER'S REPLY

ENB255

(Question Serial No. 6157)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please set out in tabular form the pollutant emissions of various ocean-going vessels (OGVs) and the percentages of their emissions of various types of pollutants in the overall air pollutants in Hong Kong in the past 5 years, with a breakdown by types of OGVs.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 81)

Reply:

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major air pollution sources in Hong Kong. The Hong Kong Air Pollutant Emission Inventories for 2018 and 2019 are still under compilation.

The emissions of major air pollutants from ocean-going vessels (OGVs) and their percentages in Hong Kong's total emissions from 2013 to 2017* are tabulated below:

*To provide more accurate emission data to facilitate the management of air quality, the EPD will continuously update the methodologies and emission factors to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods or emission factors are updated, and therefore the current data from 2013 to 2016 may be different from the estimates provided in the past.

Year	OGV type	OGV emissions (tonnes)/Percentage in Hong Kong's total emissions											
		Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compounds		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
2017	Cruise ship	230	1%	1 190	1%	40	<1%	40	1%	40	<1%	100	<1%
	Oil tanker	240	1%	410	<1%	30	<1%	30	<1%	20	<1%	40	<1%
	Container vessel	6 690	41%	9 900	12%	760	19%	690	22%	330	1%	890	2%
	General cargo vessel	120	<1%	230	<1%	20	<1%	10	<1%	10	<1%	20	<1%
	Others	710	4%	1 470	2%	90	2%	80	3%	60	<1%	140	<1%
	All OGVs	7 990	49%	13 200	16%	940	23%	850	27%	460	2%	1 190	2%
2016	Cruise ship	390	2%	1 240	1%	80	2%	80	2%	60	<1%	120	<1%
	Oil tanker	330	2%	460	<1%	40	<1%	40	1%	20	<1%	40	<1%
	Container vessel	6 590	38%	10 120	11%	880	20%	810	24%	500	2%	1 120	2%
	General cargo vessel	160	<1%	240	<1%	20	<1%	20	<1%	10	<1%	20	<1%
	Others	700	4%	1 190	1%	90	2%	80	2%	50	<1%	110	<1%
	All OGVs	8 170	47%	13 250	14%	1 120	25%	1 020	30%	640	2%	1 410	2%
2015	Cruise ship	1 020	5%	1 640	2%	150	3%	140	4%	70	<1%	160	<1%
	Oil tanker	400	2%	370	<1%	40	<1%	40	1%	20	<1%	40	<1%
	Container vessel	8 440	43%	10 710	11%	1 050	22%	950	25%	500	2%	1 190	2%
	General cargo vessel	230	1%	250	<1%	30	<1%	20	<1%	10	<1%	20	<1%
	Others	1 010	5%	1 680	2%	120	3%	110	3%	60	<1%	150	<1%
	All OGVs	11 100	57%	14 650	15%	1 390	29%	1 260	33%	660	3%	1 560	3%
2014	Cruise ship	1 130	4%	1 840	2%	180	3%	170	4%	80	<1%	180	<1%
	Oil tanker	490	2%	330	<1%	40	<1%	40	<1%	10	<1%	30	<1%

		OGV emissions (tonnes)/Percentage in Hong Kong's total emissions											
Year	OGV type	Sulphur dioxide		Nitrogen oxides		Respirable suspended particulates		Fine suspended particulates		Volatile organic compounds		Carbon monoxide	
		tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
	Container vessel	9 540	30%	11 570	10%	1 160	20%	1 050	24%	530	2%	1 260	2%
	General cargo vessel	220	<1%	230	<1%	30	<1%	20	<1%	10	<1%	20	<1%
	Others	1 190	4%	2 250	2%	140	2%	130	3%	80	<1%	200	<1%
	All OGVs	12 580	40%	16 210	15%	1 550	27%	1 410	32%	710	3%	1 690	3%
2013	Cruise ship	660	2%	1 380	1%	80	1%	70	1%	50	<1%	120	<1%
	Oil tanker	660	2%	470	<1%	60	<1%	50	1%	20	<1%	40	<1%
	Container vessel	9 670	31%	12 050	11%	1 150	19%	1 040	22%	410	1%	1 000	1%
	General cargo vessel	300	<1%	320	<1%	30	<1%	30	<1%	10	<1%	30	<1%
	Others	1 100	4%	1 350	1%	120	2%	110	2%	50	<1%	120	<1%
	All OGVs	12 400	39%	15 570	14%	1 440	24%	1 310	28%	540	2%	1 300	2%

Note: The figures for OGV emissions are rounded to the nearest ten. There may be slight discrepancies between the sums of emissions and percentages of various OGV types and the total OGV emissions and percentages shown in the table because of rounding.

- End -

CONTROLLING OFFICER'S REPLY**ENB256****(Question Serial No. 6158)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding roadside air quality, will the Administration advise this Committee on the following:

(a) Please set out by emission standard, the number, age, emissions of various pollutants (sulphur dioxide (SO₂), nitrogen oxides (NO_x), respirable suspended particulates (RSP or PM₁₀), fine suspended particulates (FSP or PM_{2.5}), volatile organic compounds (VOCs), carbon monoxide (CO) and ozone (O₃)) from buses owned by each franchised bus company and their percentage in total bus emissions as well as overall pollutant emissions in Hong Kong from 2014 to the end of 2019 and as at 1 March 2020;

(b) Please set out the respective numbers of each type of franchised buses which have been and have not yet been retrofitted with selective catalytic reduction devices (SCRs) as at 31 December 2019 in the table below.

	Euro II		Euro III		Euro IV		Euro V		Euro VI/ hybrid/electric bus	
	Retrofitted with SCRs	Not yet retrofitted with SCRs	Retrofitted with SCRs	Not yet retrofitted with SCRs	Retrofitted with SCRs	Not yet retrofitted with SCRs	Retrofitted with SCRs	Not yet retrofitted with SCRs	Retrofitted with SCRs	Not yet retrofitted with SCRs
KMB										
CTB										
NWFB										
LWB										
NLB										
Sub-total										
% in all buses										

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 77)

Reply:

(a) The numbers and average ages of licensed buses by vehicle emission standard owned by each franchised bus company in Hong Kong from 2015 to the end of 2019 are tabulated below:

Bus company	Category	End 2015	End 2016	End 2017	End 2018	End 2019
		Number of buses	Number of buses	Number of buses	Number of buses	Number of buses
The Kowloon Motor Bus Company (1933) Limited	Euro II	1 157	705	395	113	22
	Euro III	1 097	1 096	1 092	1 039	891
	Euro IV	106	106	93	93	93
	Euro V	1 522	2 003	2 369	2 827	2 823
	Euro VI (including hybrid bus)	3	3	4	5	220
	Electric bus	3	3	14	17	16
	Sub-total	3 888	3 916	3 967	4 094	4 065
	Average age	9.3	8.1	7.5	6.9	6.8
Citybus Limited (Franchise for Hong Kong Island and Cross-Harbour Bus Network)	Euro II	170	50	0	0	0
	Euro III	9	9	9	9	0
	Euro IV	28	28	23	24	24
	Euro V	550	672	698	679	675
	Euro VI (including hybrid bus)	2	2	2	27	47
	Electric bus	3	6	6	6	5
	Sub-total	762	767	738	745	751
	Average age	6.2	4.4	4.1	4.9	5.7
Citybus Limited (Franchise for the Airport and North Lantau Bus Network)	Euro II	81	26	1	0	0
	Euro III	0	0	0	0	0
	Euro IV	0	0	0	0	0
	Euro V	101	153	205	221	221
	Euro VI (including hybrid bus)	0	0	0	12	20
	Electric bus	0	0	0	0	0
	Sub-total	182	179	206	233	241
	Average age	8.5	4.3	2.5	3.0	3.9
New World First Bus Services Limited	Euro II	388	267	84	10	0
	Euro III	75	74	74	34	7
	Euro IV	38	38	38	38	38
	Euro V	216	307	496	512	528
	Euro VI (including hybrid bus)	1	1	6	64	108
	Electric bus	2	4	4	4	4
	Sub-total	720	691	702	662	685
	Average age	11.3	9.7	5.9	4.3	4.3

Bus company	Category	End 2015	End 2016	End 2017	End 2018	End 2019
		Number of buses	Number of buses	Number of buses	Number of buses	Number of buses
Long Win Bus Company Limited	Euro II	31	1	0	0	0
	Euro III	18	18	18	17	18
	Euro IV	32	32	31	32	32
	Euro V	109	191	192	208	225
	Euro VI (including hybrid bus)	0	0	0	0	0
	Electric bus	0	0	4	4	4
	Sub-total	190	242	245	261	279
	Average age	5.9	3.3	4.1	4.8	5.5
New Lantao Bus Company (1973) Limited	Euro II	2	0	0	0	0
	Euro III	54	38	31	17	13
	Euro IV	26	26	23	23	23
	Euro V	41	57	70	113	113
	Euro VI (including hybrid bus)	0	0	0	0	5
	Electric bus	0	0	0	2	2
	Sub-total	123	121	124	155	156
	Average age	7.6	7.4	7.8	5.9	6.5

The Environmental Protection Department (EPD) compiles the Hong Kong Air Pollutant Emission Inventory every year to analyse the distribution and trends of major emission sources in Hong Kong. The vehicle emission inventory for 2018 is still under compilation. Besides, as we have not estimated the emissions from franchised buses according to individual franchised bus companies, we are not able to provide the relevant emission data. The estimated air pollutant emissions* from franchised buses in Hong Kong in the 5 years from 2013 to 2017 are as follows:

* To provide more accurate emission data to facilitate the management of air quality, the EPD will constantly update the methodologies and emission factors to compile emission inventories. By making reference to the practices of international environmental agencies, we will recalculate historical emission inventories whenever emission estimation methods or emission factors are updated. As such, the data may be different from the estimates provided in the past.

Table 1: The percentage of emissions of nitrogen oxides (NOx) from franchised buses in total emissions of NOx in Hong Kong

Year	Nitrogen oxides (NOx) (tonnes/percentage) (Note)							
	Exhaust emission standard	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Total
2013	Tonnes	640	2 700	1 400	120	480	<5	5 300
	Percentage in emissions of all franchised buses	12%	51%	26%	2%	9%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	1%	2%	1%	0%	0%	0%	5%
2014	Tonnes	220	2 500	1 300	130	660	<5	4 900
	Percentage in emissions of all franchised buses	5%	52%	27%	3%	13%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	2%	1%	0%	1%	0%	4%
2015	Tonnes	<5	1 700	1 300	130	980	<5	4 100
	Percentage in emissions of all franchised buses	0%	42%	31%	3%	24%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	2%	1%	0%	1%	0%	4%
2016	Tonnes	<5	930	1 300	140	1 300	<5	3 700
	Percentage in emissions of all franchised buses	0%	25%	34%	4%	37%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	1%	1%	0%	1%	0%	4%
2017	Tonnes	<5	450	820	120	1 600	<5	3 000
	Percentage in emissions of all franchised buses	0%	15%	27%	4%	54%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.5%	1.0%	0.1%	1.9%	0.0%	3.6%

Note: The figures in tonnes smaller than 5 are shown as “<5”; the numbers between 5 and 10 are rounded to the nearest integer; the numbers between 10 and 1 000 are rounded to the nearest ten; the numbers between 1 000 and 10 000 are rounded to the nearest hundred. Figures may not add up to total due to rounding off.

Table 2: The percentage of emissions of respirable suspended particulates (RSP) from franchised buses in total emissions of RSP in Hong Kong

Year	Respirable suspended particulates (RSP or PM ₁₀) (tonnes/percentage) (Note)							
	Exhaust emission standard	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Total
2013	Tonnes	20	50	10	<5	10	<5	100
	Percentage in emissions of all franchised buses	24%	46%	15%	2%	12%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.4%	0.8%	0.2%	0.0%	0.2%	0.0%	1.6%
2014	Tonnes	8	40	20	<5	20	<5	90
	Percentage in emissions of all franchised buses	9%	51%	17%	3%	19%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.1%	0.8%	0.3%	0.0%	0.3%	0.0%	1.5%
2015	Tonnes	<5	30	20	<5	30	<5	80
	Percentage in emissions of all franchised buses	0%	41%	22%	4%	33%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.7%	0.4%	0.1%	0.5%	0.0%	1.6%
2016	Tonnes	<5	20	20	<5	40	<5	80
	Percentage in emissions of all franchised buses	0%	25%	23%	4%	47%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.5%	0.4%	0.1%	0.8%	0.0%	1.8%
2017	Tonnes	<5	10	20	<5	50	<5	80
	Percentage in emissions of all franchised buses	0%	13%	25%	4%	59%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.2%	0.5%	0.1%	1.2%	0.0%	2.0%

Note: The figures in tonnes smaller than 5 are shown as “<5”; the numbers between 5 and 10 are rounded to the nearest integer; the numbers between 10 and 1 000 are rounded to the nearest ten. Figures may not add up to total due to rounding off.

Table 3: The percentage of emissions of fine suspended particulates (FSP) from franchised buses in total emissions of FSP in Hong Kong

Year	Fine suspended particulates (FSP or PM _{2.5}) (tonnes/percentage) (Note)							
	Exhaust emission standard	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Total
2013	Tonnes	20	40	10	<5	10	<5	90
	Percentage in emissions of all franchised buses	24%	46%	15%	2%	12%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.5%	0.9%	0.3%	0.0%	0.2%	0.0%	1.9%
2014	Tonnes	8	40	10	<5	20	<5	80
	Percentage in emissions of all franchised buses	9%	51%	17%	3%	19%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.2%	0.9%	0.3%	0.1%	0.4%	0.0%	1.8%
2015	Tonnes	<5	30	20	<5	20	<5	70
	Percentage in emissions of all franchised buses	0%	41%	22%	4%	33%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.8%	0.4%	0.1%	0.6%	0.0%	1.9%
2016	Tonnes	<5	20	20	<5	30	<5	70
	Percentage in emissions of all franchised buses	0%	25%	23%	4%	47%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.5%	0.5%	0.1%	1.0%	0.0%	2.1%
2017	Tonnes	<5	9	20	<5	40	<5	70
	Percentage in emissions of all franchised buses	0%	13%	25%	4%	59%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.3%	0.6%	0.1%	1.4%	0.0%	2.3%

Note: The figures in tonnes smaller than 5 are shown as “<5”; the numbers between 5 and 10 are rounded to the nearest integer; the numbers between 10 and 1 000 are rounded to the nearest ten. Figures may not add up to total due to rounding off.

Table 4: The percentage of emissions of volatile organic compounds (VOCs) from franchised buses in total emissions of VOCs in Hong Kong

Year	Volatile organic compounds (VOCs) (tonnes/percentage) (Note)							
	Exhaust emission standard	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Total
2013	Tonnes	20	40	20	<5	9	<5	80
	Percentage in emissions of all franchised buses	21%	45%	22%	2%	10%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%
2014	Tonnes	6	40	20	<5	10	<5	70
	Percentage in emissions of all franchised buses	8%	49%	25%	2%	16%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%
2015	Tonnes	<5	30	20	<5	20	<5	70
	Percentage in emissions of all franchised buses	0%	43%	28%	2%	27%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.2%
2016	Tonnes	<5	20	20	<5	20	<5	60
	Percentage in emissions of all franchised buses	0%	30%	29%	2%	39%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.2%
2017	Tonnes	<5	10	20	<5	30	<5	60
	Percentage in emissions of all franchised buses	0%	18%	31%	2%	50%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.2%

Note: The figures in tonnes smaller than 5 are shown as “<5”; the numbers between 5 and 10 are rounded to the nearest integer; the numbers between 10 and 1 000 are rounded to the nearest ten. Figures may not add up to total due to rounding off.

Table 5: The percentage of emissions of carbon monoxide (CO) from franchised buses in total emissions of CO in Hong Kong

Year	Carbon monoxide (CO) (tonnes/percentage) (Note)							
	Exhaust emission standard	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Total
2013	Tonnes	150	310	150	50	270	<5	920
	Percentage in emissions of all franchised buses	16%	33%	16%	5%	29%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	0%	0%	0%	0%	0%	1%
2014	Tonnes	50	290	150	50	370	<5	910
	Percentage in emissions of all franchised buses	6%	32%	16%	5%	40%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	0%	0%	0%	1%	0%	1%
2015	Tonnes	<5	220	150	50	550	<5	970
	Percentage in emissions of all franchised buses	0%	23%	15%	5%	57%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	0%	0%	0%	1%	0%	2%
2016	Tonnes	<5	150	140	60	760	<5	1 100
	Percentage in emissions of all franchised buses	0%	14%	13%	5%	68%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	0%	0%	0%	1%	0%	2%
2017	Tonnes	<5	90	140	50	920	<5	1 200
	Percentage in emissions of all franchised buses	0%	7%	12%	4%	77%	0%	100%
	Percentage in total pollutant emissions in Hong Kong	0%	0%	0%	0%	2%	0%	2%

Note: The figures in tonnes smaller than 5 are shown as “<5”; the numbers between 5 and 10 are rounded to the nearest integer; the numbers between 10 and 1 000 are rounded to the nearest ten; the numbers between 1 000 and 10 000 are rounded to the nearest hundred. Figures may not add up to total due to rounding off.

Table 6: The percentage of emissions of sulphur dioxide (SO₂) from franchised buses in total emissions of SO₂ in Hong Kong

Air pollutant	Air pollutant emissions from franchised buses (tonnes) [Percentage in total emissions in Hong Kong]				
	2013	2014	2015	2016	2017
Sulphur dioxide (SO ₂)	5 [<1%]	5 [<1%]	5 [<1%]	5 [<1%]	4 [<1%]

Note: The vehicle emission figures are rounded to the nearest integer. Since the estimation of SO₂ emissions is based on the total fuel consumption of franchised buses, a breakdown by exhaust emission standard is not available.

Since ozone is not directly emitted from pollution sources (such as vehicles) but is formed by the photochemical reactions of some air pollutants (including NO_x and VOCs) under sunlight, it is not included in the emission inventory.

- (b) To improve roadside air quality, the Government has fully subsidised the franchised bus companies (FBCs) to retrofit eligible Euro II and III franchised buses with SCR devices for upgrading their emission performance to Euro IV or above level. The retrofit programme was completed at the end of 2017.

As at the end of December 2019, the distribution of licensed Euro II and III buses owned by each franchised bus company is tabulated below:

Franchised bus company	Euro II		Euro III	
	Retrofitted with SCRs	Not yet retrofitted with SCRs	Retrofitted with SCRs	Not yet retrofitted with SCRs
KMB	22	0	471	420
CTB	0	0	0	0
NWFB	0	0	7	0
LWB	0	0	8	10
NLB	0	0	0	13
Sub-total	22	0	486	443

In addition, all Euro IV, V and VI franchised buses have been equipped with after-treatment devices such as SCRs or exhaust gas recirculation devices upon purchase. To further reduce the emissions of franchised buses, the Government plans to fully subsidise FBCs to conduct a trial on retrofitting Euro IV and V double-deck franchised buses of the dominant bus models with enhanced SCR systems (the Trial), so as to establish the technical feasibility of the retrofitting work in Hong Kong, and to confirm the emission reduction performance of the enhanced SCR systems from different suppliers under the local driving and operation conditions. The Trial is expected to commence in 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB257

(Question Serial No. 6159)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the pilot scheme for electric public light buses, please set out in tabular form details such as the work schedule, contents, a breakdown of the expenditure involved and the amount, and the anticipated time of implementation. How does the scheme improve the air quality in the Administration's estimation? Please set out the expected improvement in the index.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 70)

Reply:

The Government has proposed to earmark \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

Electric light buses do not have exhaust emissions. They will help improve the air quality at the roadside, and promote Hong Kong's image as a green city. Under the pilot scheme for e-PLB, we will collect data to assess the performance of this green means of transport in terms of operation and environmental effectiveness.

- End -

CONTROLLING OFFICER'S REPLY

ENB258

(Question Serial No. 6160)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the pilot scheme for electric ferries, please set out in tabular form details such as the work schedule, contents, a breakdown of the expenditure involved and the amount, and the anticipated time of implementation. How does the scheme improve the air quality as expected by the Administration? Please set out an index of anticipated improvement.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 69)

Reply:

The Government proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric passenger ferries, we will engage an independent consultant to advise on the design of the electric ferries and assist ferry operators to prepare open tenders for the construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million, which covers the following:

Items	Estimated cost
Capital cost for the 4 new electric ferries	About \$240 million
Capital and installation costs for the charging facilities	About \$60 million
Operating and maintenance costs of the electric ferries during the trial operation	About \$50 million

The actual expenditure will depend on the results of the open tenders for the electric ferries. The Government will create 9 time-limited non-directorate posts for a period of 7 years to cope with the additional workload arising from the pilot scheme.

Electric ferries do not have exhaust emissions. They will help improve the air quality around ferries, and promote Hong Kong's image as a green city. Under the pilot scheme for electric ferries, we will collect data to assess the performance of electric ferries in terms of operation and environmental effectiveness.

- End -

CONTROLLING OFFICER'S REPLY

ENB259

(Question Serial No. 6161)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the air quality monitoring network, please advise this Committee on the following:

(a) 2 new air quality monitoring stations (AQMSs) were set up in North District and Southern District by the Government last year and they have commenced operation. Please set out a breakdown of the expenditure and the amount involved in the 2 AQMSs since their operation, including but not limited to the daily operation, maintenance frequency and costs, etc.

(b) Using Hong Kong's Air Quality Objectives (AQOs) and the World Health Organisation's (WHO) Air Quality Guidelines separately for comparison, please tabulate by year the respective status of compliance, numbers of exceedances and discrepancies in exceedance data of the various types of air pollutants recorded at various AQMSs in Hong Kong from 2016 to 2019.

(c) Please tabulate by year the distribution (in days) and percentage of different categories of the Air Quality Health Index (AQHI) recorded at various AQMSs in Hong Kong from 2016 to 2019.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 68)

Reply:

The Environmental Protection Department (EPD) has completed the trial run for the general Air Quality Monitoring Stations (AQMSs) in Southern District and North District as planned, which are expected to be commissioned in the second quarter of this year. The estimated annual operating cost (including operation, maintenance and other costs) for the 2 AQMSs is about \$900,000 in total.

The World Health Organisation (WHO)'s "Air Quality Guidelines" (WHO Guidelines) have promulgated a set of "ultimate targets" and "interim targets" (ITs) for various key air

pollutants which enable governments to, having regard to their local circumstances, progressively tighten their air quality standards through adopting the ITs, and meet the WHO's "ultimate targets" eventually. At present, no country has fully adopted the WHO's "ultimate targets" as its statutory air quality standards. Half of our Air Quality Objectives (AQOs) have adopted the "ultimate targets" as specified in the WHO Guidelines, with the rest pitching at the WHO ITs.

According to the data recorded at various AQMSs by the EPD in 2019, the concentrations of respirable suspended particulates (RSP), fine suspended particulates (FSP) and sulphur dioxide (SO₂) all met the relevant Hong Kong's AQOs. Although the concentrations of nitrogen dioxide (NO₂) recorded at some AQMSs in 2019 exceeded the concentration limit, the annual average concentrations of ambient and roadside NO₂ have dropped by about 30% respectively from 2013 to 2019, indicating that the emission control measures implemented in recent years are effective. As for ozone (O₃), apart from the influence of regional photochemical smog, the vehicle emission control measures implemented in recent years have led to a reduction of vehicular emission of nitric oxide (NO), so there is less NO to react with and titrate O₃, resulting in an increase of O₃ concentration level. The O₃ level at some AQMSs in 2019 still exceeded the concentration limit.

The detailed data and status of compliance of different types of air pollutants recorded at various AQMSs from 2016 to 2019 are set out at Annex 1.

With significant improvement in the air quality in recent years, the health risks encountered by the public have also reduced. The total numbers of days (in percentage) with the health risk category of "High" or above level recorded at the general and roadside AQMSs in 2019 were 13.5% and 13.7% respectively, which were lower than the 14.1% and 26.2% recorded in 2014. The distribution (by number of days and percentage) of different categories of the Air Quality Health Index (AQHI) recorded at various AQMSs from 2016 to 2019 are set out at Annex 2.

Table 1: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term Air Quality Objectives of Hong Kong (AQOs) and WHO's Air Quality Guidelines (WHO AQG) in 2016

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2016	Compliance with the standard? (Yes/No)		Annual average concentration in 2016	Compliance with the standard? (Yes/No)		Annual average concentration in 2016	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	32	Yes	No	22	Yes	No	43	No	No
	Eastern	30	Yes	No	20	Yes	No	46	No	No
	Kwun Tong	37	Yes	No	23	Yes	No	54	No	No
	Sham Shui Po	35	Yes	No	23	Yes	No	58	No	No
	Kwai Chung	33	Yes	No	22	Yes	No	59	No	No
	Tsuen Wan	31	Yes	No	21	Yes	No	56	No	No
	Tseung Kwan O ^{Note 2}	27	-	-	17	-	-	29	-	-
	Yuen Long	37	Yes	No	23	Yes	No	46	No	No
	Tuen Mun	44	Yes	No	27	Yes	No	51	No	No
	Tung Chung	33	Yes	No	21	Yes	No	36	Yes	Yes
	Tai Po	29	Yes	No	20	Yes	No	33	Yes	Yes
	Sha Tin	29	Yes	No	20	Yes	No	38	Yes	Yes
Tap Mun ^{Note 3}	30	-	-	19	-	-	10	-	-	
Roadside AQMS	Causeway Bay	45	Yes	No	32	Yes	No	89	No	No
	Central	31	Yes	No	20	Yes	No	78	No	No
	Mong Kok	37	Yes	No	26	Yes	No	78	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Note 2: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016. No compliance assessment is made due to insufficient data.

Note 3: The operation of Tap Mun Monitoring Station was temporarily suspended due to rooftop refurbishment works from 30 November 2015 to 25 February 2016. No compliance assessment is made due to insufficient data.

Table 2: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2016

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2016 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	80(2)/Yes	-	50(0)/Yes	-	152(0)/Yes	-
	Eastern	71(3)/Yes	-	45(0)/Yes	-	134(0)/Yes	-
	Kwun Tong	89(4)/Yes	-	50(0)/Yes	-	200(18)/Yes	-
	Sham Shui Po	77(3)/Yes	-	48(0)/Yes	-	161(4)/Yes	-
	Kwai Chung	71(1)/Yes	-	50(0)/Yes	-	185(8)/Yes	-
	Tsuen Wan	75(1)/Yes	-	53(0)/Yes	-	175(8)/Yes	-
	Tseung Kwan O ^{Note 3}	59(0)/-	-	41(0)/-	-	127(0)/-	-
	Yuen Long	86(4)/Yes	-	63(1)/Yes	-	149(1)/Yes	-
	Tuen Mun	103(10)/No	-	63(2)/Yes	-	167(4)/Yes	-
	Tung Chung	92(6)/Yes	-	63(2)/Yes	-	150(0)/Yes	-
	Tai Po	74(1)/Yes	-	55(0)/Yes	-	112(0)/Yes	-
	Sha Tin	66(2)/Yes	-	44(0)/Yes	-	137(0)/Yes	-
	Tap Mun ^{Note 4}	68(1)/-	-	43(0)/-	-	58(0)/-	-
	Roadside AQMS	Causeway Bay	89(4)/Yes	-	59(2)/Yes	-	274(134)/No
Central		82(1)/Yes	-	50(0)/Yes	-	258(79)/No	-
Mong Kok		80(2)/Yes	-	57(0)/Yes	-	218(36)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Note 3: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016. No compliance assessment is made due to insufficient data.

Note 4: The operation of Tap Mun Monitoring Station was temporarily suspended due to rooftop refurbishment works from 30 November 2015 to 25 February 2016. No compliance assessment is made due to insufficient data.

Table 3: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2016

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2016 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	103(0)/Yes	-	27(0)/Yes	-	138(3)/Yes	-
	Eastern	82(0)/Yes	-	16(0)/Yes	-	132(4)/Yes	-
	Kwun Tong	53(0)/Yes	-	17(0)/Yes	-	116(0)/Yes	-
	Sham Shui Po	126(0)/Yes	-	26(0)/Yes	-	106(2)/Yes	-
	Kwai Chung	147(0)/Yes	-	36(0)/Yes	-	107(1)/Yes	-
	Tsuen Wan	94(0)/Yes	-	24(0)/Yes	-	116(3)/Yes	-
	Tseung Kwan O ^{Note 3}	40(0)/-	-	13(0)/-	-	152(7)/-	-
	Yuen Long	58(0)/Yes	-	17(0)/Yes	-	143(5)/Yes	-
	Tuen Mun	75(0)/Yes	-	28(0)/Yes	-	143(7)/Yes	-
	Tung Chung	63(0)/Yes	-	20(0)/Yes	-	142(4)/Yes	-
	Tai Po	37(0)/Yes	-	10(0)/Yes	-	147(5)/Yes	-
	Sha Tin	67(0)/Yes	-	16(0)/Yes	-	141(2)/Yes	-
	Tap Mun ^{Note 4}	45(0)/-	-	15(0)/-	-	169(15)/ No	-
Roadside AQMS	Causeway Bay	89(0)/Yes	-	15(0)/Yes	-	69(0)/Yes	-
	Central	75(0)/Yes	-	24(0)/Yes	-	96(0)/Yes	-
	Mong Kok	83(0)/Yes	-	21(0)/Yes	-	71(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Note 3: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016. No compliance assessment is made due to insufficient data.

Note 4: The operation of Tap Mun Monitoring Station was temporarily suspended due to rooftop refurbishment works from 30 November 2015 to 25 February 2016. No compliance assessment is made due to insufficient data.

Table 4: The short-term concentrations of carbon monoxide (CO) recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2016

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2016 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	2 750(0)/Yes	-	2 339(0)/Yes	-
	Tseung Kwan O ^{Note 3}	1 850(0)/-	-	1 673(0)/-	-
	Yuen Long	2 080(0)/Yes	-	1 474(0)/Yes	-
	Tuen Mun	2 050(0)/Yes	-	1 843(0)/Yes	-
	Tung Chung	2 260(0)/Yes	-	1 581(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun ^{Note 4}	1 470(0)/-	-	1 453(0)/-	-
Roadside AQMS	Causeway Bay	3 130(0)/Yes	-	2 215(0)/Yes	-
	Central	2 000(0)/Yes	-	1 739(0)/Yes	-
	Mong Kok	2 570(0)/Yes	-	1 911(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

Note 3: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016. No compliance assessment is made due to insufficient data.

Note 4: The operation of Tap Mun Monitoring Station was temporarily suspended due to rooftop refurbishment works from 30 November 2015 to 25 February 2016. No compliance assessment is made due to insufficient data.

“//” denotes CO was not measured at the AQMS.

Table 5: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term AQOs and WHO AQG in 2017

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2017	Compliance with the standard? (Yes/No)		Annual average concentration in 2017	Compliance with the standard? (Yes/No)		Annual average concentration in 2017	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	35	Yes	No	23	Yes	No	40	Yes	Yes
	Eastern	33	Yes	No	20	Yes	No	42	No	No
	Kwun Tong	39	Yes	No	23	Yes	No	44	No	No
	Sham Shui Po	33	Yes	No	21	Yes	No	54	No	No
	Kwai Chung	35	Yes	No	23	Yes	No	57	No	No
	Tsuen Wan	33	Yes	No	22	Yes	No	52	No	No
	Tseung Kwan O	31	Yes	No	18	Yes	No	28	Yes	Yes
	Yuen Long	40	Yes	No	22	Yes	No	41	No	No
	Tuen Mun	43	Yes	No	27	Yes	No	46	No	No
	Tung Chung	34	Yes	No	21	Yes	No	36	Yes	Yes
	Tai Po	32	Yes	No	22	Yes	No	39	Yes	Yes
	Sha Tin	31	Yes	No	21	Yes	No	34	Yes	Yes
Tap Mun	35	Yes	No	20	Yes	No	10	Yes	Yes	
Roadside AQMS	Causeway Bay	46	Yes	No	31	Yes	No	97	No	No
	Central	33	Yes	No	21	Yes	No	80	No	No
	Mong Kok	38	Yes	No	27	Yes	No	81	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 6: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	84(1)/Yes	-	59(0)/Yes	-	164(1)/Yes	-
	Eastern	74(0)/Yes	-	49(0)/Yes	-	139(0)/Yes	-
	Kwun Tong	84(1)/Yes	-	53(0)/Yes	-	199(18)/Yes	-
	Sham Shui Po	72(0)/Yes	-	46(0)/Yes	-	194(15)/Yes	-
	Kwai Chung	74(0)/Yes	-	49(0)/Yes	-	204(20)/No	-
	Tsuen Wan	77(3)/Yes	-	52(3)/Yes	-	179(8)/Yes	-
	Tseung Kwan O	65(0)/Yes	-	43(0)/Yes	-	165(2)/Yes	-
	Yuen Long	87(2)/Yes	-	52(2)/Yes	-	156(2)/Yes	-
	Tuen Mun	99(9)/Yes	-	65(3)/Yes	-	188(12)/Yes	-
	Tung Chung	81(5)/Yes	-	57(2)/Yes	-	144(2)/Yes	-
	Tai Po	82(1)/Yes	-	55(0)/Yes	-	127(0)/Yes	-
	Sha Tin	72(1)/Yes	-	54(1)/Yes	-	144(0)/Yes	-
	Tap Mun	74(0)/Yes	-	43(0)/Yes	-	52(0)/Yes	-
Roadside AQMS	Causeway Bay	90(2)/Yes	-	65(4)/Yes	-	325(272)/No	-
	Central	84(2)/Yes	-	56(1)/Yes	-	267(126)/No	-
	Mong Kok	84(0)/Yes	-	57(1)/Yes	-	257(90)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 7: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	125(0)/Yes	-	29(0)/Yes	-	159(9)/Yes	-
	Eastern	54(0)/Yes	-	14(0)/Yes	-	160(8)/Yes	-
	Kwun Tong	53(0)/Yes	-	19(0)/Yes	-	135(2)/Yes	-
	Sham Shui Po	76(0)/Yes	-	25(0)/Yes	-	130(3)/Yes	-
	Kwai Chung	93(0)/Yes	-	24(0)/Yes	-	129(4)/Yes	-
	Tsuen Wan	105(0)/Yes	-	24(0)/Yes	-	141(7)/Yes	-
	Tseung Kwan O	39(0)/Yes	-	15(0)/Yes	-	175(22)/No	-
	Yuen Long	80(0)/Yes	-	20(0)/Yes	-	175(13)/No	-
	Tuen Mun	88(0)/Yes	-	26(0)/Yes	-	176(20)/No	-
	Tung Chung	87(0)/Yes	-	21(0)/Yes	-	187(14)/No	-
	Tai Po	39(0)/Yes	-	9(0)/Yes	-	181(17)/No	-
	Sha Tin	53(0)/Yes	-	16(0)/Yes	-	167(14)/No	-
	Tap Mun	32(0)/Yes	-	14(0)/Yes	-	192(37)/No	-
Roadside AQMS	Causeway Bay	95(0)/Yes	-	25(0)/Yes	-	78(0)/Yes	-
	Central	91(0)/Yes	-	24(0)/Yes	-	103(0)/Yes	-
	Mong Kok	83(0)/Yes	-	20(0)/Yes	-	91(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 8: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2017

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2017 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 610(0)/Yes	-	1 414(0)/Yes	-
	Tseung Kwan O	1 830(0)/Yes	-	1 574(0)/Yes	-
	Yuen Long	1 450(0)/Yes	-	1 324(0)/Yes	-
	Tuen Mun	1 740(0)/Yes	-	1 630(0)/Yes	-
	Tung Chung	1 810(0)/Yes	-	1 544(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun	1 770(0)/Yes	-	1 543(0)/Yes	-
Roadside AQMS	Causeway Bay	2 420(0)/Yes	-	2 090(0)/Yes	-
	Central	2 050(0)/Yes	-	1 879(0)/Yes	-
	Mong Kok	2 390(0)/Yes	-	2 156(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 9: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term AQOs and WHO AQG in 2018

Long-term (annual) AQOs ^{Note 1}	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2018	Compliance with the standard? (Yes/No)		Annual average concentration in 2018	Compliance with the standard? (Yes/No)		Annual average concentration in 2018	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	34	Yes	No	21	Yes	No	39	Yes	Yes
	Eastern	33	Yes	No	19	Yes	No	39	Yes	Yes
	Kwun Tong	38	Yes	No	22	Yes	No	43	No	No
	Sham Shui Po	33	Yes	No	21	Yes	No	49	No	No
	Kwai Chung	32	Yes	No	20	Yes	No	55	No	No
	Tsuen Wan	30	Yes	No	20	Yes	No	45	No	No
	Tseung Kwan O	28	Yes	No	15	Yes	No	28	Yes	Yes
	Yuen Long	37	Yes	No	20	Yes	No	43	No	No
	Tuen Mun	42	Yes	No	26	Yes	No	47	No	No
	Tung Chung	31	Yes	No	18	Yes	No	33	Yes	Yes
	Tai Po	31	Yes	No	19	Yes	No	36	Yes	Yes
	Sha Tin	32	Yes	No	19	Yes	No	35	Yes	Yes
	Tap Mun	31	Yes	No	17	Yes	No	11	Yes	Yes
Roadside AQMS	Causeway Bay	46	Yes	No	30	Yes	No	87	No	No
	Central	34	Yes	No	21	Yes	No	80	No	No
	Mong Kok	36	Yes	No	24	Yes	No	79	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 10: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2018 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	70(2)/Yes	-	46(2)/Yes	-	159(4)/Yes	-
	Eastern	68(1)/Yes	-	39(0)/Yes	-	128(0)/Yes	-
	Kwun Tong	78(2)/Yes	-	45(0)/Yes	-	178(11)/Yes	-
	Sham Shui Po	59(0)/Yes	-	41(0)/Yes	-	152(1)/Yes	-
	Kwai Chung	62(0)/Yes	-	38(0)/Yes	-	196(14)/Yes	-
	Tsuen Wan	71(2)/Yes	-	48(2)/Yes	-	181(9)/Yes	-
	Tseung Kwan O	53(0)/Yes	-	32(0)/Yes	-	135(0)/Yes	-
	Yuen Long	75(4)/Yes	-	46(1)/Yes	-	150(3)/Yes	-
	Tuen Mun	87(4)/Yes	-	53(2)/Yes	-	177(11)/Yes	-
	Tung Chung	73(2)/Yes	-	48(2)/Yes	-	156(7)/Yes	-
	Tai Po	69(0)/Yes	-	47(0)/Yes	-	125(0)/Yes	-
	Sha Tin	65(1)/Yes	-	40(0)/Yes	-	149(0)/Yes	-
Tap Mun	60(0)/Yes	-	32(0)/Yes	-	51(0)/Yes	-	
Roadside AQMS	Causeway Bay	82(1)/Yes	-	55(1)/Yes	-	277(148)/No	-
	Central	74(1)/Yes	-	50(1)/Yes	-	257(120)/No	-
	Mong Kok	73(2)/Yes	-	51(2)/Yes	-	240(44)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 11: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2018 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	135(0)/Yes	-	22(0)/Yes	-	164(11)/ No	-
	Eastern	123(0)/Yes	-	12(0)/Yes	-	161(10)/ No	-
	Kwun Tong	51(0)/Yes	-	12(0)/Yes	-	130(0)/Yes	-
	Sham Shui Po	98(0)/Yes	-	21(0)/Yes	-	147(5)/Yes	-
	Kwai Chung	134(0)/Yes	-	27(0)/Yes	-	133(1)/Yes	-
	Tsuen Wan	113(0)/Yes	-	21(0)/Yes	-	148(9)/Yes	-
	Tseung Kwan O	38(0)/Yes	-	11(0)/Yes	-	169(15)/No	-
	Yuen Long	52(0)/Yes	-	16(0)/Yes	-	162(10)/No	-
	Tuen Mun	94(0)/Yes	-	20(0)/Yes	-	173(18)/No	-
	Tung Chung	88(0)/Yes	-	19(0)/Yes	-	173(14)/No	-
	Tai Po	24(0)/Yes	-	8(0)/Yes	-	167(13)/No	-
	Sha Tin	76(0)/Yes	-	16(0)/Yes	-	182(17)/No	-
Tap Mun	29(0)/Yes	-	13(0)/Yes	-	184(20)/No	-	
Roadside AQMS	Causeway Bay	82(0)/Yes	-	19(0)/Yes	-	78(0)/Yes	-
	Central	101(0)/Yes	-	20(0)/Yes	-	96(0)/Yes	-
	Mong Kok	88(0)/Yes	-	19(0)/Yes	-	97(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 12: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2018

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2018 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 680(0)/Yes	-	1 421(0)/Yes	-
	Tseung Kwan O	2 130(0)/Yes	-	1 838(0)/Yes	-
	Yuen Long	1 720(0)/Yes	-	1 574(0)/Yes	-
	Tuen Mun	1 900(0)/Yes	-	1 666(0)/Yes	-
	Tung Chung	1 780(0)/Yes	-	1 353(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun	1 170(0)/Yes	-	1 151(0)/Yes	-
Roadside AQMS	Causeway Bay	2 610(0)/Yes	-	2 047(0)/Yes	-
	Central	2 330(0)/Yes	-	1 685(0)/Yes	-
	Mong Kok	2 340(0)/Yes	-	2 041(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 13: The annual average concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant long-term AQOs and WHO AQG in 2019

Long-term (annual) AQOs Note 1	RSP			FSP			NO ₂			
	Concentration limit (µg/m ³)	AQOs (WHO IT-2)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO IT-1)	WHO AQG	Concentration limit (µg/m ³)	AQOs (WHO AQG)	WHO AQG	
		50	20		35	10		40	40	
Number of exceedances allowed	Not applicable									
AQMS	Annual average concentration in 2019	Compliance with the standard? (Yes/No)		Annual average concentration in 2019	Compliance with the standard? (Yes/No)		Annual average concentration in 2019	Compliance with the standard? (Yes/No)		
General AQMS	Central/Western	30	Yes	No	20	Yes	No	37	Yes	Yes
	Eastern	31	Yes	No	18	Yes	No	38	Yes	Yes
	Kwun Tong	38	Yes	No	21	Yes	No	45	No	No
	Sham Shui Po	33	Yes	No	18	Yes	No	48	No	No
	Kwai Chung	29	Yes	No	18	Yes	No	54	No	No
	Tsuen Wan	30	Yes	No	20	Yes	No	46	No	No
	Tseung Kwan O	29	Yes	No	17	Yes	No	29	Yes	Yes
	Yuen Long	37	Yes	No	20	Yes	No	44	No	No
	Tuen Mun	41	Yes	No	24	Yes	No	47	No	No
	Tung Chung	30	Yes	No	19	Yes	No	33	Yes	Yes
	Tai Po	31	Yes	No	20	Yes	No	36	Yes	Yes
	Sha Tin	28	Yes	No	17	Yes	No	32	Yes	Yes
	Tap Mun	31	Yes	No	17	Yes	No	10	Yes	Yes
Roadside AQMS	Causeway Bay	43	Yes	No	27	Yes	No	81	No	No
	Central	37	Yes	No	24	Yes	No	80	No	No
	Mong Kok	35	Yes	No	24	Yes	No	78	No	No

Note 1: There are no long-term AQOs for SO₂ and O₃.

Table 14: The short-term concentrations of RSP, FSP and NO₂ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	RSP		FSP		NO ₂		
	AQOs (WHO IT-2)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO AQG)	WHO AQG Note 1	
Average time	24-hour	24-hour	24-hour	24-hour	1-hour	1-hour	
Concentration limit (µg/m ³)	100	50	75	25	200	200	
Number of exceedances allowed	9	Not specified	9	Not specified	18	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	69(2)/Yes	-	49(2)/Yes	-	153(3)/Yes	-
	Eastern	66(0)/Yes	-	40(0)/Yes	-	136(4)/Yes	-
	Kwun Tong	73(0)/Yes	-	44(0)/Yes	-	184(10)/Yes	-
	Sham Shui Po	65(1)/Yes	-	36(2)/Yes	-	176(6)/Yes	-
	Kwai Chung	59(0)/Yes	-	39(0)/Yes	-	184(12)/Yes	-
	Tsuen Wan	65(2)/Yes	-	47(1)/Yes	-	177(2)/Yes	-
	Tseung Kwan O	60(0)/Yes	-	38(0)/Yes	-	155(3)/Yes	-
	Yuen Long	83(2)/Yes	-	45(1)/Yes	-	161(0)/Yes	-
	Tuen Mun	89(4)/Yes	-	53(2)/Yes	-	166(2)/Yes	-
	Tung Chung	75(2)/Yes	-	52(1)/Yes	-	149(0)/Yes	-
	Tai Po	65(2)/Yes	-	47(1)/Yes	-	142(0)/Yes	-
	Sha Tin	60(0)/Yes	-	39(0)/Yes	-	150(0)/Yes	-
Tap Mun	64(0)/Yes	-	35(0)/Yes	-	56(0)/Yes	-	
Roadside AQMS	Causeway Bay	80(3)/Yes	-	54(3)/Yes	-	287(121)/No	-
	Central	74(3)/Yes	-	53(3)/Yes	-	252(116)/No	-
	Mong Kok	74(3)/Yes	-	55(3)/Yes	-	248(88)/No	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term RSP and FSP concentrations under AQOs were the tenth highest level and the short-term NO₂ concentrations were the nineteenth highest level.

Table 15: The short-term concentrations of SO₂ and O₃ recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	SO ₂		SO ₂		O ₃		
	AQOs (WHO AQG)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	AQOs (WHO IT-1)	WHO AQG Note 1	
Average time	10-minute	10-minute	24-hour	24-hour	8-hour	8-hour	
Concentration limit (µg/m ³)	500	500	125	20	160	100	
Number of exceedances allowed	3	Not specified	3	Not specified	9	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} (µg/m ³), number of exceedances (in brackets) and compliance with the standard? (Yes/No)						
General AQMS	Central/Western	62(0)/Yes	-	12(0)/Yes	-	191(23)/No	-
	Eastern	41(0)/Yes	-	7(0)/Yes	-	169(17)/No	-
	Kwun Tong	41(0)/Yes	-	11(0)/Yes	-	150(5)/Yes	-
	Sham Shui Po	41(0)/Yes	-	14(0)/Yes	-	164(11)/No	-
	Kwai Chung	53(0)/Yes	-	18(0)/Yes	-	143(6)/Yes	-
	Tsuen Wan	45(0)/Yes	-	13(0)/Yes	-	171(14)/No	-
	Tseung Kwan O	25(0)/Yes	-	12(0)/Yes	-	185(33)/No	-
	Yuen Long	42(0)/Yes	-	11(0)/Yes	-	200(25)/No	-
	Tuen Mun	45(0)/Yes	-	12(0)/Yes	-	203(24)/No	-
	Tung Chung	57(0)/Yes	-	18(0)/Yes	-	208(28)/No	-
	Tai Po	20(0)/Yes	-	10(0)/Yes	-	197(27)/No	-
	Sha Tin	27(0)/Yes	-	12(0)/Yes	-	199(33)/No	-
Tap Mun	19(0)/Yes	-	12(0)/Yes	-	212(51)/No	-	
Roadside AQMS	Causeway Bay	51(0)/Yes	-	11(0)/Yes	-	108(3)/Yes	-
	Central	42(0)/Yes	-	15(0)/Yes	-	133(4)/Yes	-
	Mong Kok	39(0)/Yes	-	10(0)/Yes	-	125(1)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term SO₂ concentrations (10-minute and 24-hour) under AQOs were the fourth highest level and the short-term O₃ concentrations were the tenth highest level.

Table 16: The short-term concentrations of CO recorded at various AQMSs and the status of compliance with the relevant short-term AQOs and WHO AQG in 2019

Short-term AQOs	CO		CO		
	AQOs (WHO AQG)	WHO AQG ^{Note 1}	AQOs (WHO AQG)	WHO AQG ^{Note 1}	
Average time	1-hour	1-hour	8-hour	8-hour	
Concentration limit ($\mu\text{g}/\text{m}^3$)	30 000	30 000	10 000	10 000	
Number of exceedances allowed	0	Not specified	0	Not specified	
AQMS	Short-term concentrations in 2019 ^{Note 2} ($\mu\text{g}/\text{m}^3$), number of exceedances (in brackets) and compliance with the standard? (Yes/No)				
General AQMS	Central/Western	//	//	//	//
	Eastern	//	//	//	//
	Kwun Tong	//	//	//	//
	Sham Shui Po	//	//	//	//
	Kwai Chung	//	//	//	//
	Tsuen Wan	1 970(0)/Yes	-	1 835(0)/Yes	-
	Tseung Kwan O	2 170(0)/Yes	-	1 935(0)/Yes	-
	Yuen Long	2 150(0)/Yes	-	1 903(0)/Yes	-
	Tuen Mun	2 050(0)/Yes	-	1 758(0)/Yes	-
	Tung Chung	2 260(0)/Yes	-	1 874(0)/Yes	-
	Tai Po	//	//	//	//
	Sha Tin	//	//	//	//
	Tap Mun	1 360(0)/Yes	-	1 350(0)/Yes	-
Roadside AQMS	Causeway Bay	2 620(0)/Yes	-	2 309(0)/Yes	-
	Central	2 440(0)/Yes	-	2 205(0)/Yes	-
	Mong Kok	2 280(0)/Yes	-	2 103(0)/Yes	-

Note 1: Chapter 8 of the WHO Guidelines states that “When the standards set are to be legally binding, criteria must be identified to determine compliance. This is quantified through the number of acceptable exceedances over a certain period of time. ...Compliance criteria are defined in each country in order to compare the most representative data with the standards, and to minimize the designation of non-compliance owing to uncontrollable circumstances such as extreme weather.” The Guidelines do not provide any recommendations on the number of acceptable exceedances and hence the pollutant concentrations recorded at each AQMS are not compared with the short-term WHO AQG.

Note 2: The short-term CO concentrations (1-hour and 8-hour) under AQOs were the first highest level.

“//” denotes CO was not measured at the AQMS.

Table 1: The distribution by number of days of the daily highest health risk category recorded at various AQMSs in 2016

Health Risk Category (AQHI)	Roadside AQMS			General AQMS												
	Cause-way Bay	Central	Mong Kok	Central / Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O ^{Note 2}	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun ^{Note 3}
Number of days																
Low (1 to 3)	34	85	88	137	117	91	126	113	125	125	153	134	156	166	163	127
Moderate (4 to 6)	293	253	252	207	233	254	225	227	215	156	170	184	166	180	191	164
High (7)	17	12	16	11	10	13	9	16	12	5	15	16	17	10	7	14
Very high (8 to 10)	19	13	9	7	4	6	4	8	12	3	25	26	22	8	3	4
Serious (10+)	3	3	1	4	2	2	2	2	2	2	3	6	5	2	2	1
Percentage ^{Note 1}																
Low (1 to 3)	9.3%	23.2%	24.0%	37.4%	32.0%	24.9%	34.4%	30.9%	34.2%	43.0%	41.8%	36.6%	42.6%	45.4%	44.5%	41.0%
Moderate (4 to 6)	80.1%	69.1%	68.9%	56.6%	63.7%	69.4%	61.5%	62.0%	58.7%	53.6%	46.4%	50.3%	45.4%	49.2%	52.2%	52.9%
High (7)	4.6%	3.3%	4.4%	3.0%	2.7%	3.6%	2.5%	4.4%	3.3%	1.7%	4.1%	4.4%	4.6%	2.7%	1.9%	4.5%
Very high (8 to 10)	5.2%	3.6%	2.5%	1.9%	1.1%	1.6%	1.1%	2.2%	3.3%	1.0%	6.8%	7.1%	6.0%	2.2%	0.8%	1.3%
Serious (10+)	0.8%	0.8%	0.3%	1.1%	0.5%	0.5%	0.5%	0.5%	0.5%	0.7%	0.8%	1.6%	1.4%	0.5%	0.5%	0.3%

Note 1: The percentages may not add up to 100% due to rounding.

Note 2: Tseung Kwan O Monitoring Station commenced operation on 16 March 2016.

Note 3: The operation of Tap Mun Monitoring Station was temporarily suspended due to rooftop refurbishment works from 30 November 2015 to 25 February 2016.

Table 2: The distribution by number of days of the daily highest health risk category recorded at various AQMSs in 2017

Health Risk Category (AQHI)	Roadside AQMS			General AQMS												
	Causeway Bay	Central	Mong Kok	Central / Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Number of days																
Low (1 to 3)	24	98	95	119	113	117	129	112	122	120	131	128	136	119	132	125
Moderate (4 to 6)	272	216	225	207	211	212	202	215	200	207	176	171	178	196	197	196
High (7)	33	24	16	18	23	20	17	13	14	19	17	19	17	19	11	24
Very high (8 to 10)	31	24	24	17	16	14	14	21	23	16	34	34	22	27	22	18
Serious (10+)	5	3	5	4	2	2	3	4	6	3	7	13	12	4	3	2
Percentage ^{Note}																
Low (1 to 3)	6.6%	26.8%	26.0%	32.6%	31.0%	32.1%	35.3%	30.7%	33.4%	32.9%	35.9%	35.1%	37.3%	32.6%	36.2%	34.2%
Moderate (4 to 6)	74.5%	59.2%	61.6%	56.7%	57.8%	58.1%	55.3%	58.9%	54.8%	56.7%	48.2%	46.8%	48.8%	53.7%	54.0%	53.7%
High (7)	9.0%	6.6%	4.4%	4.9%	6.3%	5.5%	4.7%	3.6%	3.8%	5.2%	4.7%	5.2%	4.7%	5.2%	3.0%	6.6%
Very high (8 to 10)	8.5%	6.6%	6.6%	4.7%	4.4%	3.8%	3.8%	5.8%	6.3%	4.4%	9.3%	9.3%	6.0%	7.4%	6.0%	4.9%
Serious (10+)	1.4%	0.8%	1.4%	1.1%	0.5%	0.5%	0.8%	1.1%	1.6%	0.8%	1.9%	3.6%	3.3%	1.1%	0.8%	0.5%

Note: The percentages may not add up to 100% due to rounding.

Table 3: The distribution by number of days of the daily highest health risk category recorded at various AQMSs in 2018

Health Risk Category (AQHI)	Roadside AQMS			General AQMS												
	Causeway Bay	Central	Mong Kok	Central / Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Number of days																
Low (1 to 3)	31	90	82	125	112	103	130	116	128	120	125	111	142	133	119	114
Moderate (4 to 6)	292	236	250	213	226	245	211	223	208	224	198	203	181	202	218	214
High (7)	19	20	14	8	16	5	11	11	12	10	9	13	13	13	10	14
Very high (8 to 10)	21	17	16	17	10	11	11	11	13	10	27	32	24	16	17	8
Serious (10+)	2	2	3	2	1	1	2	4	4	1	6	6	5	1	1	1
Percentage ^{Note}																
Low (1 to 3)	8.5%	24.7%	22.5%	34.2%	30.7%	28.2%	35.6%	31.8%	35.1%	32.9%	34.2%	30.4%	38.9%	36.4%	32.6%	32.5%
Moderate (4 to 6)	80.0%	64.7%	68.5%	58.4%	61.9%	67.1%	57.8%	61.1%	57.0%	61.4%	54.2%	55.6%	49.6%	55.3%	59.7%	61.0%
High (7)	5.2%	5.5%	3.8%	2.2%	4.4%	1.4%	3.0%	3.0%	3.3%	2.7%	2.5%	3.6%	3.6%	3.6%	2.7%	4.0%
Very high (8 to 10)	5.8%	4.7%	4.4%	4.7%	2.7%	3.0%	3.0%	3.0%	3.6%	2.7%	7.4%	8.8%	6.6%	4.4%	4.7%	2.3%
Serious (10+)	0.5%	0.5%	0.8%	0.5%	0.3%	0.3%	0.5%	1.1%	1.1%	0.3%	1.6%	1.6%	1.4%	0.3%	0.3%	0.3%

Note: The percentages may not add up to 100% due to rounding.

Table 4: The distribution by number of days of the daily highest health risk category recorded at various AQMSs in 2019

Health Risk Category (AQHI)	Roadside AQMS			General AQMS												
	Causeway Bay	Central	Mong Kok	Central / Western	Eastern	Kwun Tong	Sham Shui Po	Kwai Chung	Tsuen Wan	Tseung Kwan O	Yuen Long	Tuen Mun	Tung Chung	Tai Po	Sha Tin	Tap Mun
Number of days																
Low (1 to 3)	45	73	84	117	113	90	117	120	118	108	110	118	127	104	115	111
Moderate (4 to 6)	277	229	237	204	216	230	210	203	203	213	183	174	174	213	206	208
High (7)	18	30	15	17	16	23	16	15	19	25	22	25	18	13	19	29
Very high (8 to 10)	21	29	25	23	17	19	18	23	21	16	43	38	36	31	22	15
Serious (10+)	4	4	4	4	3	3	4	4	4	3	7	10	10	4	3	2
Percentage ^{Note}																
Low (1 to 3)	12.3%	20.0%	23.0%	32.1%	31.0%	24.7%	32.1%	32.9%	32.3%	29.6%	30.1%	32.3%	34.8%	28.5%	31.5%	30.4%
Moderate (4 to 6)	75.9%	62.7%	64.9%	55.9%	59.2%	63.0%	57.5%	55.6%	55.6%	58.4%	50.1%	47.7%	47.7%	58.4%	56.4%	57.0%
High (7)	4.9%	8.2%	4.1%	4.7%	4.4%	6.3%	4.4%	4.1%	5.2%	6.8%	6.0%	6.8%	4.9%	3.6%	5.2%	7.9%
Very high (8 to 10)	5.8%	7.9%	6.8%	6.3%	4.7%	5.2%	4.9%	6.3%	5.8%	4.4%	11.8%	10.4%	9.9%	8.5%	6.0%	4.1%
Serious (10+)	1.1%	1.1%	1.1%	1.1%	0.8%	0.8%	1.1%	1.1%	1.1%	0.8%	1.9%	2.7%	2.7%	1.1%	0.8%	0.5%

Note: The percentages may not add up to 100% due to rounding.

- End -

CONTROLLING OFFICER'S REPLY**ENB260****(Question Serial No. 6162)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the air quality of covered public transport interchanges across the territory, the air quality objectives adopted in the Practice Note for Professional Persons - Control of Air Pollution in Semi-Confined Public Transport Interchanges (the Practice Note) are formulated according to the Air Quality Objectives of Hong Kong in 1987 and have not yet been updated. The Administration indicated in last year's reply that it, together with the relevant government departments, set up an inter-departmental Task Force in mid-2018 to conduct a review of the Practice Note. The Task Force was in the process of drafting the revised Practice Note as well as establishing the timetable for the review process.

Will the Government advise this Committee on the latest developments of the work? Please set out in tabular form the timetable for the work and the breakdown and amount of various items of expenditure involved in the process:

	Item	Year	Description (nature/name of work, etc.)	Quantity (if any)	Amount
1 (Example)	Administrative expenditure (with a breakdown)				
2 (Example)	Manpower arrangement (with a breakdown)				
3					
4					

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 65)

Reply:

The inter-departmental Task Force set up by the Environmental Protection Department (EPD) together with the relevant government departments in mid-2018 has largely completed the drafting of the revised Practice Note for Professional Persons - Control of Air Pollution in Semi-Confined Public Transport Interchanges (the Practice Note). We anticipate that the consultation with the trade, relevant stakeholders and the Professional Persons Environmental Consultative Committee and the updating of the Practice Note can be completed in 2020.

The workload for the review of the Practice Note is absorbed with the existing resources of the EPD. There is no separate breakdown for the manpower resources and expenditure involved.

- End -

CONTROLLING OFFICER'S REPLY

ENB261

(Question Serial No. 6163)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Government set up “low emission zones” (LEZs) in some sections of 3 roads in Causeway Bay, Mong Kok and Central in December 2015, requiring that only franchised buses of Euro IV or above could run through these zones. Setting up LEZs is one of the initiatives mapped out by the Hong Kong Government in *A Clean Air Plan for Hong Kong* to improve air quality. In this connection, will the Administration advise this Committee on the following:

- (a) Since the implementation of the trial of the 3 pilot LEZs up to the present, how effective are the LEZs? Please list the emission reduction levels (in g) for pollutants, including but not limited to nitrogen dioxide (NO₂), PM_{2.5} and PM₁₀, for each year since the implementation of the trial and the emission reduction targets and measurement results of the concentrations of roadside air pollutants for comparison.
- (b) Using 31 December 2018 and 31 December 2019 as the basis of calculation, what were the respective numbers of franchised buses, with a breakdown by Euro model, plying the 3 LEZs?
- (c) Both the 1-hour and annual NO₂ levels recorded at roadside monitoring stations situated in the 3 LEZs exceeded the limits of the Air Quality Objectives (AQOs) of Hong Kong. Regarding the exceedances at the roadside monitoring stations, will the Government consider extending the scope of restriction in the LEZs to cover other vehicle types? If yes, what are the details? If no, what are the reasons? Does the Administration have other emission reduction measures in place to ensure compliance of the AQOs at roadside monitoring stations? If yes, what are the details? If no, what are the reasons?
- (d) Will the Government consider setting up additional restricted areas in other severely polluted districts to further reduce roadside pollution in Hong Kong? If yes, what are the details? If no, what are the reasons?

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 60)

Reply:

(a)

The Government has set up Franchised Bus Low Emission Zones (FBLEZs) at 3 busy road sections in Central, Causeway Bay and Mong Kok since 31 December 2015, allowing only low emission buses (i.e. buses meeting Euro IV or higher emission standards or Euro II and III buses retrofitted with selective catalytic reduction devices (SCRs) and diesel particulate filters (DPFs)) to ply the routes running through the FBLEZs. To further improve the roadside air quality of FBLEZs, the Government has tightened the emission requirements of low emission buses in the 3 FBLEZs to Euro V emission standards from 31 December 2019.

Hong Kong is a small place where there are different air pollution sources. With vehicles travelling in different districts and various air quality improvement measures being implemented in parallel, assessing the air pollutant concentrations at individual road sections cannot properly reflect the importance and effectiveness of a particular improvement measure.

Nevertheless, the Environmental Protection Department (EPD) has been monitoring the roadside air quality. According to the monitoring data of the 3 roadside Air Quality Monitoring Stations (AQMSs) (Central, Causeway Bay and Mong Kok), the average concentrations of major roadside air pollutants (including respirable suspended particulates (RSP), fine suspended particulates (FSP), nitrogen dioxide (NO₂) and sulphur dioxide (SO₂)) have dropped by 30% to 60% respectively from 2013 to 2019. This reflects that the various air quality improvement measures implemented in recent years have been effective.

The concentrations of major roadside pollutants recorded at the roadside AQMSs from 2013 to 2019 are tabulated as follows.

Air pollutants	2013	2014	2015	2016	2017	2018	2019	Change from 2013 to 2019 (%)
	Concentration unit (µg/m ³)							
RSP	57	50	45	38	39	39	38	-33%
FSP	37	32	30	26	26	25	25	-32%
NO ₂	120	102	99	82	86	82	80	-33%
SO ₂	11	9	8	7	7	7	5	-55%

(b)

The bus deployment data provided by the franchised bus companies (FBCs) for the last working day of December 2018 and December 2019 is tabulated as follows.

The bus deployment data for the last working day of December 2018

Location of FBLEZ	Emission standard/ Bus type	The Kowloon Motor Bus Company (1933) Limited (KMB)	Citybus Limited (CTB)	New World First Bus Services Limited (NWFB)
Causeway Bay (Yee Wo Street)	Euro IV*	15	17	25
	Euro V	373	455	230
	Euro VI	0	15	27
	Electric bus	0	2	0
	Total	388	489	282
Central (junction of Des Voeux Road Central and Pedder Street)	Euro IV*	12	17	27
	Euro V	511	470	210
	Euro VI	0	19	23
	Electric bus	0	0	0
	Total	523	506	260
Mong Kok (junction of Nathan Road and Lai Chi Kok Road)	Euro IV*	47	5	29
	Euro V	906	211	137
	Euro VI	3	12	13
	Electric bus	0	0	0
	Total	956	228	179

The bus deployment data for the last working day of December 2019

Location of FBLEZ	Emission standard/ Bus type	KMB	CTB	NWFB
Causeway Bay (Yee Wo Street)	Euro IV*	0	2	0
	Euro V	336	480	274
	Euro VI	39	30	47
	Electric bus	0	3	0
	Total	375	515	321
Central (junction of Des Voeux Road Central and Pedder Street)	Euro IV*	0	0	0
	Euro V	456	487	249
	Euro VI	72	34	40
	Electric bus	0	3	3
	Total	528	524	292
Mong Kok (junction of Nathan Road and Lai Chi Kok Road)	Euro IV*	0	0	0
	Euro V	916	225	161
	Euro VI	70	16	35
	Electric bus	0	0	0
	Total	986	241	196

Remarks: Some low emission buses operate in more than 1 FBLEZ.

* Including Euro II and III buses retrofitted with SCRs and DPFs.

(c) and (d)

Apart from setting up the FBLEZs, the Government has also implemented various vehicle emission control measures in recent years, including adopting an incentive-cum-regulatory approach to progressively phase out about 82 000 pre-Euro IV diesel commercial vehicles (DCVs)⁴ on a mandatory basis by the end of 2019; retrofitting of Euro II and Euro III buses with SCRs; and deploying roadside remote sensing equipment to identify liquefied petroleum gas and petrol vehicles emitting excessively to control the emissions from these vehicles so as to improve the overall roadside air quality.

⁴ In view of the economic downturn in the past few months, some transport trades were not able to complete the necessary procedures and submit applications for ex-gratia payment by the original deadline due to operational difficulties. Hence, the EPD has extended the deadline by 6 months to 30 June 2020.

Despite improvements in roadside air quality as mentioned above in part (a), the roadside NO₂ concentration is still at a relatively high level. The Government will strive to cope with this major challenge and plans to implement the following measures to further reduce the air pollutants emitted from vehicles.

- The Government is proceeding to amend the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J), with a target of implementing Euro 4 emission standards on first registered motorcycles starting from 1 October 2020, and implementing Euro VI emission standards on first registered light buses (design weight of more than 3.5 tonnes) and buses (design weight of not more than 9 tonnes) starting from 1 March 2021.
- Making reference to the scheme of phasing out pre-Euro IV DCVs, the Government plans to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs by the end of 2027 and cease issuing licences for the relevant vehicles after the specified deadlines. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.
- The Government has proposed to earmark \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial of about 12 months. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in mid-2023.
- The Government has completed a review of the funding scope of the Pilot Green Transport Fund (PGTF), and proposed injecting an additional \$800 million into the PGTF for extending its scope.
- The EPD is now working with the Transport Department and the FBCs in drafting the technical specifications of retrofitting Euro IV and V double-deck franchised buses with enhanced SCR systems and detailed arrangements of the trial. The trial scheme is expected to commence in 2020.

We have no plan to set up additional high pollution restricted areas or extend the scope of restriction in the LEZs to cover other vehicle types. However, by the time the above new measures are fully implemented, the vehicle emissions of all districts in Hong Kong will be further improved.

- End -

CONTROLLING OFFICER'S REPLY

ENB262

(Question Serial No. 6164)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Bureau has stated that there would be a reduction in emission of about 1 380 tonnes of nitrogen oxides and 80 tonnes of respirable suspended particulates in 2025 when all double-deck diesel franchised buses were replaced with double-deck electric buses in Hong Kong. The 36 single-deck franchised electric buses subsidised by the Government have commenced operation progressively since the end of 2015. At present, 26 battery-electric buses and 6 supercapacitor buses have commenced operation. Please advise this Committee on the following:

- (a) Please set out in tabular form the information of the above 32 electric buses, including the commencement dates of operation, route numbers, brands and models, frequency and dates of maintenance with reasons, charging facilities and their locations, information on the electricity storage device and charging requirements, the fuel cost-effectiveness, as well as the monthly average number of on-road breakdowns, bus availability (in per cent) and emission benefits, etc.
- (b) What are the franchised bus companies that own the remaining 4 electric buses that have not commenced operation, their relevant specifications and the reasons why they have not commenced operation?
- (c) Early in 2010, the Government said that "the ultimate policy objective is to have zero-emission buses running across the territory". What are the measures and progress of achieving the objective? What is the specific timetable?

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 63)

Reply:

Electric buses do not have exhaust emissions. Successful replacement of conventional diesel franchised buses with electric buses in Hong Kong can improve roadside air quality. The Government has allocated \$180 million to fully subsidise the franchised bus companies (FBCs) to purchase a total of 36 single-deck electric buses for conducting a two-year trial to test out their operational performance, reliability and economic feasibility in local conditions. At present, 33 electric buses have commenced operation. The remaining 1 supercapacitor bus, which is planned to be deployed on Route 5M of Kowloon Motor Bus

Company (1933) Limited (KMB), is expected to commence the trial in 2020. As for the remaining 2 battery-electric buses of New Lantao Bus Company (1973) Limited (NLB), as the bus supplier whose tender had been accepted previously withdrew its offer, NLB has to conduct a re-tendering process. The re-tendering was completed in 2019 and the 2 battery-electric buses are expected to commence the trial in 2020. Details of the trial scheme and the operational performance are provided at the **Annex**.

The feasibility of deploying electric buses throughout Hong Kong depends very much on the maturity of development of electric bus technologies, their prices and suitability for use in Hong Kong. It is incumbent upon us to fully test and prove that the relevant technology is suitable for the local environment and the actual modus operandi of the public transport sector before introduction of electric buses on a large scale.

There are about 6 200 franchised buses in Hong Kong. About 95% of them are double-deckers and the remaining are single-deckers. Currently, the technology of double-deck electric buses is still developing and there are very few models available in the international arena. Single-deck electric buses are already used in many places, but the suitability for use in Hong Kong is subject to further tests. We will continue to monitor the performance of electric buses on trial and collect and analyse the trial data. Upon completion of all the trials, we will report the trial findings to the Panel on Environmental Affairs of the Legislative Council. The Government will also promote wider use of electric buses by the FBCs, taking into account the affordability of the FBCs and passengers.

Trial of single-deck electric franchised buses**Table 1: Information of single-deck electric buses which commenced/completed the trials and the corresponding charging facilities (as at 30 September 2019)**

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information on electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[iii]	
KMB							
7 supercapacitor buses ^[iii] Model: JNP6122UC Manufacturer: China Youngman Automobile Group Company Limited (Youngman) Origin: China	Trials commenced in phases in March 2017 and November 2018	284 (4 buses) [Sha Tin Central - Ravana Garden (Circular)] Total distance of 5.7 km	Sha Tin Central Bus Terminus (for top up charging during operation)	2 (about 49 m ² each)	750 V / 200 A (DC) Supercapacitor Capacity of 53 kWh About 20 minutes for a full charge	0.07 time(s) 56.3	
			Shatin Depot (for overnight charging)	2 (about 49 m ² each)			
	Trials commenced in phases in February and July 2019 ^[iii]	5M (3 buses) [Kai Tak (Tak Long Estate) - Kowloon Bay Railway Station (Circular)] Total distance of 6.6 km	Kai Tak Shing Kai Road Bus Stop (for top up charging during operation)	1 (about 49 m ²)			0.08 time(s) 48.4
			Kowloon Bay Bus Maintenance Depot (for overnight charging)	2 (about 49 m ² each)			

Notes:

[i] Breakdowns only include failure of passenger-carrying buses which necessitate passenger evacuation.

[ii] The outages unrelated to malfunctions (such as monthly inspections, routine maintenance/checking, cleaning, etc.) are excluded.

[iii] The remaining 1 supercapacitor bus is expected to commence the trial in 2020.

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information of electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[ii]
KMB						
10 battery-electric buses Model: K9R Manufacturer: BYD Auto Industry Company Limited (BYD) Origin: China	July/September 2017 ^{[iv][v]}	203C (4 buses) [Tai Hang Tung - Tsim Sha Tsui East (Mody Road)] 8.8 km both for departure and return	Lai Chi Kok Bus Maintenance Depot Yuet Lun Street Depot (Both depots support Routes 203C and 43M)	4 (about 44 m ² each) 2 (about 44 m ² each)	380 V / 126A (AC) Lithium iron phosphate battery Battery capacity of 324 kWh About 4 hours for a full charge	0 time(s) 76.6
	January 2018 ^{[iv][v]}	43M (2 buses) [Kwai Fong Station - Cheung Ching (Circular)] Total distance of 9 km				0 time(s) 86.5
	July 2017 ^{[iv][v]}	7M (2 buses) [Lok Fu - Chuk Yuen Estate (Circular)] Total distance of 3.1 km	Kowloon Bay Bus Maintenance Depot	4 (about 44 m ² each)		0.02 time(s) 75.9
	November 2017 ^{[iv][v]}	11D (2 buses) [Lok Fu - Kwun Tong Ferry] 8.9 km both for departure and return				0 time(s) 80.8

Notes:

[iv] The original trial routes were 5C [Star Ferry Pier - Tsz Wan Shan (Central)], 6C [Mei Foo - Kowloon City Ferry], 35A [Tsim Sha Tsui East - On Yam], 42A [Jordan (To Wah Road) - Cheung Hang] and 603 [Ping Tin - Central (Central Ferry Piers)]. Starting from 28 September 2018, the trial routes are adjusted.

[v] As the performance of some of the electric buses have to be further evaluated, the Government has extended their trial period after assessment.

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information of electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[ii]
Long Win Bus Company Limited (LWB)						
4 battery-electric buses Model: K9R Manufacturer: BYD Origin: China	July 2017	S64 (2 buses) [Tung Chung (Yat Tung Estate Public Transport Terminus) - Airport (Passenger Terminal Building) (Circular)] Total distance of 22.5 km	Siu Ho Wan Bus Maintenance Depot	4 (about 44 m ² each)	380 V / 126A (AC) Lithium iron phosphate battery Battery capacity of 324 kWh About 4 hours for a full charge	0 time(s) 74.2
	February 2018	E31 (2 buses) [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tsuen Wan (Discovery Park Bus Terminus)] 33.9 km for departure from Tsuen Wan 33.5 km for departure from Tung Chung				0 time(s) 66.3

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information of electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[ii]
Citybus Limited (CTB)						
6 battery-electric buses Model: K9R (3 buses) Manufacturer: BYD Origin: China ----- Model: LS-130-116 (3 buses) Manufacturer: Great Dragon International Corporation Limited (Great Dragon) Origin: China	The trial of 3 BYD buses commenced in December 2015 and completed in May 2018.	11 (1 BYD and 1 Great Dragon) [Central (Central Ferry Piers) - Jardine's Lookout (Circular)] Total distance of 15.7 km	Chai Wan Depot	BYD: 3 (about 70 m ² each) Great Dragon: 3 (about 70 m ² each)	BYD: 380 V / 126A (AC) Lithium iron phosphate battery Battery capacity of 324 kWh About 4 hours for a full charge	BYD: 0.56 time(s) 75.9 Great Dragon: 0.5 time(s) 62.6
	The trial of 3 Great Dragon buses commenced in June 2017 and completed in May 2019.	12 (1 BYD and 1 Great Dragon) [Central (Central Ferry Piers) - Robinson Road (Circular)] Total distance of 7.5 km		BYD: 0.04 time(s) 73.4 Great Dragon: 0.25 time(s) 67.2		
	The current routes are different from the initial ones ^[vi] .	25A (1 BYD and 1 Great Dragon) [Wan Chai (Hong Kong Convention & Exhibition Centre Extension) - Braemar Hill (Circular)] Total distance of 11.4 km		Lithium iron phosphate battery Battery capacity of 315 kWh About 4 hours for a full charge	BYD: 0.6 time(s) 77.5 Great Dragon: 0.5 time(s) 65.2	

Note:

[vi] Starting from 25 May 2019, BYD and Great Dragon battery-electric buses are deployed to Route 11 of CTB.

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information of electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[ii]
New World First Bus Services Limited (NWFB)						
4 battery-electric buses Model: K9R (2 buses) Manufacturer: BYD Origin: China ----- Model: LS-130-116 (2 buses) Manufacturer: Great Dragon Origin: China	The trial of 2 BYD buses commenced in December 2015 and completed in May 2018.	78 (1 BYD and 1 Great Dragon) [Wong Chuk Hang Station - Wah Kwai Estate (Circular)] Total distance of 8.9 km	Wong Chuk Hang Depot	BYD: 1 (about 70 m ²) Great Dragon: 1 (about 70 m ²)	BYD: 380 V / 126A (AC) Lithium iron phosphate battery Battery capacity of 324 kWh	BYD: 0.16 time(s) 82.4 Great Dragon: 0.46 time(s) 67.7
	The trial of 2 Great Dragon buses commenced in June 2017 and completed in May 2019. The current routes are different from the initial ones ^[vii] .	81 (1 BYD and 1 Great Dragon) [Lai Tak Tsuen - Chai Wan (Hing Wah Estate)] 11.2 km for departure from Lai Tak Tsuen 10.5 km for departure from Hing Wah Estate	Chong Fu Road Depot	BYD: 1 (about 70 m ²) Great Dragon: 1 (about 70 m ²)	About 4 hours for a full charge ----- Great Dragon: 700 V / 100A (DC) Lithium iron phosphate battery Battery capacity of 315 kWh About 4 hours for a full charge	BYD: 0.4 time(s) 77.3 Great Dragon: 0.83 time(s) 52.7

Note:

[vii] Starting from 25 May 2019, BYD and Great Dragon battery-electric buses are deployed to Route 13 [Central (City Hall) to Kotewall Road] of NWFB.

Number, model, manufacturer and origin of buses	Date of commencement of trial	Service route [origin and destination]	Location of charging facilities	Number of charging facilities and the site area (including parking space)	Information of electricity storage device and charging requirement	Monthly average number of on-road breakdowns ^[i] and bus availability (%) ^[iii]
NLB ^[viii]						
2 battery-electric buses Model: K9R Manufacturer: BYD Origin: China	The trial commenced in July 2018	38 (2 buses) [Tung Chung (Yat Tung Estate Public Transport Terminus) - Tung Chung Station Bus Terminus (Circular)] Total distance of 4.2 km	Yat Tung Estate Public Transport Terminus, Tung Chung	2 (about 37 m ² each)	380 V / 126A (AC) Lithium iron phosphate battery Battery capacity of 324 kWh About 4 hours for a full charge	0 time(s) 74.1

Note:

[viii] The re-tendering process for the remaining 2 battery-electric buses was completed in 2019 and they are expected to commence the trial in 2020.

Table 2: Summary of preliminary observations on the trial of single-deck electric buses (as at 30 September 2019)

Franchised bus company/ Type of electric bus/ Manufacturer	Number of buses undergoing or completed the trial (Number of buses under trial)	(a) Total mileage (km) ^[i]	(b) Average energy consumption rate (kWh/km)	(c) Emission benefit (NO _x / PM ₁₀) ^[ii] (g/km)	(d) Average electricity cost (\$/km)	(e) Average number of on-road breakdowns per month ^[iii]	(f) Daily bus availability (%) ^[iv]	(g) Projected driving range ^[v] (km)
KMB/Supercapacitor Buses / Youngman	7 ^[ix] (8)	151 741	1.90	NO _x : 2.59 PM ₁₀ : 0.11	2.74	0.07	52.9	22
KMB/LWB/Battery-electric buses/BYD	14 (14)	245 617	1.27		1.59	0.00	76.7	204
CTB/NWFB/Battery-electric buses/BYD ^[vi]	5 (5)	362 100	1.36		1.77	0.35	77.3	191
CTB/NWFB/Battery-electric buses/Great Dragon ^[vii]	5 (5)	142 696	1.86		2.36	0.51	63.1	119
NLB/Battery-electric buses/ BYD	2 (2)	51 167	1.36		1.72	0.00	74.1	191
NLB/Battery-electric buses ^[viii]	0 (2)	Not Applicable						

- Notes:
- i. From trial commencement to 30 September 2019.
 - ii. NO_x- Nitrogen oxides; PM₁₀- Respirable suspended particulates
The emission reduction is based on the assumption that electric buses replaced the Euro V single-deck diesel buses running on the same routes. Emissions from the power companies for the use of electric buses are not counted.
 - iii. Breakdowns only include failure of passenger-carrying buses which necessitate passenger evacuation.
 - iv. The outages unrelated to malfunctions (such as monthly inspections, routine maintenance/checking, cleaning, etc.) are excluded.
 - v. The projected driving range is calculated from usable battery capacity (80% of the highest battery capacity for Youngman and BYD, and 70% of the highest battery capacity for Great Dragon as recommended by the manufacturers) divided by average energy consumption rate.
 - vi. The trial was completed in May 2018.
 - vii. The trial was completed in May 2019.
 - viii. The re-tendering process for the remaining 2 battery-electric buses was completed in 2019 and they are expected to commence the trial in 2020.
 - ix. The remaining 1 supercapacitor bus is expected to commence the trial in 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB263

(Question Serial No. 6165)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Steering Committee on the Promotion of Electric Vehicles led by the Financial Secretary was set up by the Government in April 2009 to study and promote the use of electric vehicles. Please set out in tabular form various manpower expenditures involved, the establishment, number of meetings convened in each of the past 5 years; policies and measures implemented, as well as a breakdown of the expenditure for and the effectiveness of the implementation of the measures.

Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 64)

Reply:

The Steering Committee on the Promotion of Electric Vehicles (the Committee) chaired by the Financial Secretary was established in 2009. The Committee has been providing valuable recommendations on the strategies and specific complementary measures to promote the use of electric vehicles (EVs). The number of electric private cars (e-PCs) in Hong Kong has increased from 70 in 2010 to 13 890 as at the end of February 2020, accounting for about 2.2% of the total number of private cars (PCs) in Hong Kong and ranking second among major Asian cities in terms of the proportion of registered e-PCs in the total number of PCs.

The Government has consulted the Committee on various measures regarding the promotion of the use of EVs in recent years. Over the past 5 years (2015-2019), a total of 10 meetings were convened. The strategies and measures discussed by the Committee, and the Government's progress and expenditure on implementing relevant measures are as follows:

Strategies discussed by the Committee	Government's progress on implementing relevant measures	Details of expenditure
Roadmap on the popularisation of EVs	The Government is actively preparing to formulate the roadmap on the popularisation of EVs. Based on the preliminary estimation, the relevant work will be completed in the first half of 2021.	The expenditure and manpower required will be absorbed by the existing resources of the Environmental Protection Department (EPD).
Facilitation of the installation and enhancement of charging facilities, including technical support	<p>The Government decided in 2012 to first install 500 EV chargers at the government car parks managed by the Transport Department (TD) and the Government Property Agency and continue to install and enhance government charging facilities subsequently.</p> <p>The Government also allocated \$120 million last year for extending the public EV charging networks at government car parks in the coming 3 years. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800.</p>	Projects such as installation of medium charging posts at outdoor car parks, upgrade of standard chargers to medium chargers and addition of medium chargers involved a total expenditure of about \$9.82 million from 2015-16 to 2019-20.
Pilot scheme for electric public light buses (e-PLBs)	The Government engaged a consultant in March 2019 to study and take forward the pilot scheme for e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.	The Government has proposed in the 2020-21 Budget to earmark \$80 million to launch the scheme.

Strategies discussed by the Committee	Government's progress on implementing relevant measures	Details of expenditure
Pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings	The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.	The Government has proposed in the 2020-21 Budget to earmark \$2 billion to launch the scheme.
Pilot Green Transport Fund (PGTF)	<p>As at the end of February 2020, the PGTF has approved 183 applications, including 110 on electric commercial vehicles, 65 on hybrid commercial vehicles and 8 on technologies applicable to conventional buses or ferries.</p> <p>The Government has completed a review of the scope of the PGTF and proposes to inject an additional \$800 million into the PGTF for extending its scope.</p>	<p>As at the end of February 2020, the total amount of approved subsidy was about \$154 million.</p> <p>The Government has proposed in the 2020-21 Budget to inject an additional \$800 million into the PGTF for extending its scope.</p>
Promotion of the use of EVs in public transport	The Government is fully subsidising the franchised bus companies to purchase a total of 36 single-deck electric buses for conducting a two-year trial running on various routes. At present, 33 electric buses have commenced operation. The remaining 3 electric buses are expected to commence operation in 2020.	The Government has allocated \$180 million for this measure.

Strategies discussed by the Committee	Government’s progress on implementing relevant measures	Details of expenditure
Provision of financial incentives to promote the use of EVs	The Government has waived the first registration tax (FRT) for EVs since 1994 ^[1] , and has allowed enterprises which procure EVs to have full profits tax deduction for the capital expenditure on the vehicles in the first year of procurement since 2010.	<p>Regarding the new arrangement of FRT concessions for e-PCs announced in the 2017-18 Budget and the “One-for-One Replacement” scheme implemented from 28 February 2018 to 31 March 2021, the TD has been allocated additional resources to undertake the additional work involved. The posts created and the expenditure involved are as follows:</p> <ul style="list-style-type: none"> ● 2017-18 and 2018-19: 2 non-civil service contract posts with the annual expenditure of about \$210,000. ● 2019-20: 2 non-civil service contract posts and 2 post-retirement service contract posts with the expenditure of about \$750,000.
Organisation of the International Competition on Second Life for Retired Batteries from Electric Vehicles	The International Competition on Second Life for Retired Batteries from Electric Vehicles was organised in June 2017.	The organisation of the International Competition on Second Life for Retired Batteries from Electric Vehicles and other relevant seminars and exhibitions involved a total expenditure of about \$2.46 million.

Strategies discussed by the Committee	Government's progress on implementing relevant measures	Details of expenditure
Promotion and publicity	<p>The Government has organised a number of promotion and publicity activities since 2009. The EPD also established a dedicated team and a service hotline in 2011 to provide information and technical support on installation of charging facilities. Besides, to encourage existing private housing estates to install EV charging facilities, the EPD organised 10 seminars and workshops in the past 5 years to encourage building owners, property management companies and owners' corporations to support installation of EV charging facilities in existing buildings. The Government will continue to strengthen its efforts in communication, publicity and education, and provide technical assistance to relevant stakeholders regarding the installation of EV charging facilities.</p>	<p>Various manpower and expenditures involved in the relevant measures each year are absorbed by the existing resources of the EPD. There is no separate breakdown of the expenditure in this regard.</p>

- ^[1] The current FRT concession arrangements for EVs are as follows:
- a) Electric commercial vehicles (including goods vehicles, buses, light buses, taxis and special purpose vehicles), electric motor cycles and electric motor tricycles: their FRT continues to be waived in full from 1 April 2018 to 31 March 2021;
 - b) Electric private cars (e-PCs): a tiered structure is implemented –
 - i) except for eligible PC owners (see b) ii) below), FRT for e-PCs continues to be waived up to \$97,500 from 1 April 2018 to 31 March 2021.
 - ii) a “One-for-One Replacement” Scheme is launched from 28 February 2018 to 31 March 2021, allowing PC owners who arrange to scrap and de-register their own eligible old PC (PC with an internal combustion engine or e-PC) and then first register a new e-PC to enjoy a higher FRT concession up to \$250,000.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3518)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to monitor and enhance the operation of the Recycling Fund”, will the Administration advise on the following:

- What were the parties, manpower and resources involved in the past 3 years?
- What are the work details?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 133)

Reply:

The \$1 billion Recycling Fund (the Fund) was launched by the Government in October 2015. In the past 3 years (i.e. the financial years from 2017-18 to 2019-20 (as at 29 February 2020)), the Fund approved 241 projects. Among them, excluding 19 which have been withdrawn by the applicant organisations, a total of 222 projects have been or will soon be commenced, involving a total funding of about \$220 million.

The Environmental Protection Department (EPD) and the Advisory Committee on Recycling Fund have kept under review the operation of the Fund and actively listened and responded to the recycling industry's views and aspirations through various channels such as meetings, seminars and briefing sessions, so as to introduce different facilitation measures timely to meet the needs of the industry in its operation, upgrading and transformation. We completed the mid-term review of the operation of the Recycling Fund in early 2019 and have immediately introduced a number of enhancement measures. They include expanding the scope of eligible fund applicants, increasing the rental subsidies related to recycling operations, and simplifying the reporting and fund disbursement procedures, etc. Further enhancement measures were introduced in November 2019, which include raising the cumulative maximum funding amount as well as the maximum number of approved projects for each enterprise and extending the project period under the Enterprise Support Programme. In addition, the overall operational period of the Fund, originally from 2015 to 2022, has been extended to 2026. The new measures were generally welcomed by the recycling industry and the number of applications received by the Fund in the 2019-20 financial year (as at 29 February 2020) was 319, which was 1.2 times higher than the 143 applications received in the 2018-19 financial year.

Managing and monitoring the implementation of the Recycling Fund and undertaking the work to enhance the Recycling Fund are part of the work of the Waste Reduction and Recycling Division of the EPD, and are absorbed by the existing resources. In addition, the Secretariat of the Recycling Fund (i.e. the Hong Kong Productivity Council) has a dedicated team for project management and technical assessment to offer inputs on general application procedures to applicant organisations, accept and process applications, monitor the progress of approved projects and check on compliance with the funding conditions, etc. Since the preparation for the establishment of the Recycling Fund in September 2015 till March 2019, the Secretariat's expenditure on processing applications, monitoring approved projects and checking on compliance for the Recycling Fund was about \$38 million (not including the in-kind contribution of about \$13 million from the Hong Kong Productivity Council).

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3519)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding taking forward the Community Green Stations (CGSs), will the Administration advise on the following:

- What were the manpower and resources involved since the launch of the CGSs?
- What are the anticipated details of work in future?
- It was pointed out that the CGSs failed to facilitate the participation of the public in environmental protection and recycling activities due to their remote locations. What are the Administration's considerations in site selection? Is there any mechanism to review the effectiveness of the CGSs? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 134)

Reply:

The Environmental Protection Department continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation was about \$31 million in 2019. At present, a total of 18 posts are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In addition, the sites for the 3 CGSs in Sai Kung, Wan Chai and Wong Tai Sin respectively have been confirmed and these CGSs are in different planning or construction stages. As for the remaining 6 districts (including Kowloon City, Southern District, North District, Central and Western District, Tsuen Wan and Yau Tsim Mong), we are continuing with site search and other associated preparatory work.

Regarding site selection for a CGS, we have, as far as practicable, been identifying sites that are conveniently located to facilitate visits by local residents. At the same time, we hope the site area should be in general no less than 1 500 square metres to meet the need for daily operation. Although it is quite challenging to identify suitable sites in densely populated areas, we will still avoid setting up the CGS in remote area of the district. Many of the CGSs currently in service or under planning and construction are located near housing estates and commercial and industrial buildings in the districts. Moreover, the CGS operators send collection vehicles to pick up recyclables in housing estates within their respective districts and often set up mobile collection points in the districts to facilitate residents nearby to participate in recycling and to publicise the message of clean recycling, with a view to supporting recycling work in the districts.

Since their inception, the CGSs have been running smoothly. They have generally been well received by the local community and have been making good progress in providing support for community recycling. The Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS and the Yuen Long CGS, which were the first to commence operation, all exceeded the designated requirements in the respective service contracts of the quantity of recyclables to be recovered and those relating to the organisation of educational activities during the period of their first service contracts while the 4 follow-on contracts also commenced smoothly. As for the Sham Shui Po CGS, the Tuen Mun CGS, the Kwai Tsing CGS and the Tai Po CGS, which are still operating in the period of their first service contracts, we will continue to monitor compliance of their operation performance with the contractual requirements. Moreover, we will take into account views from various stakeholders and make suitable adjustments to the work of the CGSs on environmental education and recycling support as and when necessary.

- End -

CONTROLLING OFFICER'S REPLY

ENB266

(Question Serial No. 3520)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is mentioned by the Administration that it will continue to promote reduction of food waste under the Food Wise Hong Kong Campaign (the Campaign). In this connection, will the Administration advise on:

- the manpower and expenditures involved in the Campaign in the past 3 years; the number of participating organisations and the total quantity of food waste recovered annually;
- whether the effectiveness of the Campaign is reviewed regularly; if yes, on the details; if no, on the reasons?
- whether there is any plan to widen the scope of the Campaign; if yes, on the details and timetable; if no, on the reasons?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 135)

Reply:

- a) The Food Wise Hong Kong Campaign (the Campaign) has been promoting a food wise and waste less culture and encouraging behavioural change to reduce food waste at source in the community through various schemes and activities since its launching in 2013. The manpower involved in the implementation of the Campaign was absorbed by the existing establishment. The expenditures of the Campaign in the past 3 years are shown in the table below:

Description	Expenditure 2017-18	Expenditure 2018-19	Estimated expenditure 2019-20
	(\$m)	(\$m)	(\$m)
Advertising for the Campaign (including those on television, public transport systems, printed materials and electronic platforms, etc.)	2.1	4	1.6
Establishing a supporting website for the Campaign, organising “Food Wise” talks	0.8	0.5	0.7
Organising publicity activities to promote the “Food Wise” message (including the Campaign Roving Exhibitions and the Food Wise Eateries Scheme)	1.1	1.8	1.7

The details and major deliverables of the Campaign include:

- The Food Wise Charter – As at February 2020, about 870 organisations have signed the Food Wise Charter and are committed to reducing food waste at source. The signees include public organisations and public utilities, commercial and industrial (C&I) sectors, food and beverage sectors, hotel sector, property development and management sectors, higher education institutions, secondary schools, primary schools and kindergartens, etc.
- The Food Wise Eateries Scheme – The Scheme aims to encourage the food and beverage sectors to reduce food waste at source together with customers through offering food in different portion sizes and adopting food waste reduction measures. As at February 2020, about 330 and 580 eateries have been awarded with gold class and silver class status respectively.
- “Food Wise” Talk – As at February 2020, 123 “Food Wise” talks were held by the Government with a total of over 11 400 participants. The talks helped promote the “Food Wise” messages and mainly introduced the food waste issues, reduction of food waste at source, treatment of food waste, food waste separation and recycling, promotion of using less disposable plastic tableware, etc.

- “Food Wise” Roving Exhibition – As at February 2020, a total of 22 roving exhibitions were held by the Government at various districts in Hong Kong to bring the message of food wise and waste less to the community, as well as encourage the public to reduce food waste at source and avoid and reduce food wastage. The roving exhibitions featured display panels with food waste reduction tips, including Food Wise Recipes, tactics of food storage and purchase management, etc., and let the public share their “Food Wise” wishes and opinions on the exhibition board. These exhibitions attracted over 30 000 visitors in total.
- The “Big Waster” Facebook and Instagram pages – The “Big Waster” symbolising food wastage in the Campaign has strengthened interaction with the public, through the Facebook and Instagram pages in which relevant information, including details about food waste reduction, is provided. Up to February 2020, the “Big Waster” Facebook has received more than 65 000 “likes” and there are over 9 200 “followers” on Instagram.
- Publicity activities – To publicise messages related to reduction of food waste and promotion of using less disposable plastic tableware through television and radio stations, “Big Waster” posters, leaflets and slogans.

Regarding the total quantity of food waste recovered annually by organisations joining the Campaign, as food waste is currently recycled by the organisations themselves, no specific figures on this are available.

- b) According to the reports on “Monitoring of Solid Waste in Hong Kong” compiled by the Environmental Protection Department (EPD), the average daily quantity of food waste disposed of at landfills was 3 565 tonnes in 2018, which was 2.6% lower than that of 2017. It was mainly driven by the decrease of C&I food waste. The Organic Resources Recovery Centre Phase 1 (O • PARK1) has started receiving and treating food waste from C&I sectors since July 2018, which has helped reduce waste disposal and promote recovery. The per capita disposal rate of domestic food waste has remained at 0.32 kg per day. On this basis, we will continue with the implementation of the Campaign and promotion of a food wise and waste less culture in the community to encourage behavioural change of the public to reduce food waste.
- c) The O • PARK1 was completed and commissioned in July 2018, with a daily food waste treatment capacity of 200 tonnes. To tie in with the development of the O • PARK1, the Campaign has entered a new stage. Besides promoting the food wise and waste less culture, it is committed to promoting the on-site/off-site recycling of unavoidable food waste and encouraging avoidance of the use of disposable plastic tableware. Among which, to encourage the C&I sectors to recycle food waste properly and achieve the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection on 1 July 2018 to separate and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the O • PARK1 for recovery. In addition, the EPD has been collecting food waste generated from school lunch

suppliers for primary and secondary schools and food left uneaten by students after lunch, and delivering such food waste to the O • PARK1 since February 2019.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases starting from the second half of 2020, which will extend the service to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale markets under the Agriculture, Fisheries and Conservation Department, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have participated in the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund (ECF) or with experience in food waste separation at source.

Besides, to cultivate the “Food Wise” culture on campus and bring the message of food wise and waste less to the schools, the Campaign has earmarked \$5 million under the ECF in 2018 and rolled out the Pilot Programme on Provision of Small Food Waste Composters at School to provide 90 primary and secondary schools with small food waste composters, education kits and information for educational activities, with the aim of assisting primary and secondary schools to cultivate the “Food Wise” culture among teachers and students, and demonstrating the recycling of food waste into compost for use in planting on campus. The installation of food waste composters was completed in June 2019.

- End -

CONTROLLING OFFICER'S REPLY

ENB267

(Question Serial No. 3521)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to raise public awareness of and enhance community participation in clean recycling and proper source separation of waste”, will the Administration advise:

- on the parties, manpower and resources involved in the past 3 years;
- on the details of such work;
- whether records of the percentage of clean recycling among the recyclables collected currently through the Environmental Protection Department are available; if yes, on the details; if no, on the reasons;
- whether regular reviews of the effectiveness of such efforts are conducted; if yes, on the details; if no, on the reasons?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 136)

Reply:

The Environmental Protection Department (EPD) has been encouraging the public to practise source separation of waste for recyclables at home or at workplace through continuous promotion of the Source Separation of Waste Programme (the Programme). As at early 2020, over 2 200 housing estates, some 700 rural villages and over 1 000 commercial and industrial (C&I) buildings have participated in the aforesaid Programme. We have now placed about 17 000 sets of recycling bins at housing estates and C&I buildings which have participated in the Programme, government office buildings, schools, country parks, and other public places, covering over 80% of the places where Hong Kong people live and work. We will continue to review the design of recycling bins in public places and further collect views from the stakeholders as and when appropriate to facilitate waste reduction and recycling by the public.

To strengthen on-site recycling support, the EPD started to establish outreaching teams in late 2018 to collaborate closely with community partners to educate the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. The

outreaching teams have kick-started pilot outreaching service in 3 pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin). We will extend the outreaching service to the whole territory in phases starting from 2020 according to our outreaching experience in the pilot districts. The staffing of the EPD for implementing the outreaching service will be gradually increased to 74 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and 142 non-civil service contract staff.

As single block buildings in older districts usually do not have a property management company for implementing and managing waste recycling programmes or there is even lack of space for setting up waste recovery facilities, the EPD has provided funding support through the Environment and Conservation Fund (ECF) to non-government organisations (NGOs) to set up Community Recycling Centres (CRCs) in various districts to facilitate residents living in these buildings to separate waste for recovery and to promote waste reduction and recycling activities at the community level. The ECF currently provides funding support to a total of 17 CRCs and 2 mobile community recycling projects (community recycling vehicles) in various districts. Moreover, there are 50 recyclable collection points operated by NGOs in the community to provide recycling services to the public. In the past 3 years (2017 to 2019), the total amount of approved funding to the CRCs and community recycling vehicles was about \$110 million. To further strengthen community recycling support, the EPD will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of CRCs to all 18 districts across the territory from 2020-21, and for maintaining their sustained development. The estimated expenditure for the 2020-21 financial year is about \$100 million. Such work is undertaken by 8 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades).

Moreover, the EPD also continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. In the past 3 years (2017 to 2019), the CGSs received more than 1 100 000 visitors and organised more than 4 000 environmental educational activities. The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation in the past 3 years (2017 to 2019) was about \$72 million. At present, a total of 18 non-directorate professional posts (including Environmental Protection Officer and Environmental Protection Inspector grades) are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

The EPD has collaborated with the Environmental Campaign Committee (ECC) to take forward a Clean Recycling Campaign with funding from the ECF since mid-2015 to promote behavioural change towards clean recycling, thereby increasing the quality, value and recyclability of recyclables. The Clean Recycling Campaign disseminates the message on clean recycling through various channels, including Announcements in the Public

Interest, posters, leaflets, the free mobile application “Waste Less” and new designs on the front panel of public recycling bins. Moreover, from 2016 to 2019, the ECC engaged NGOs through the funding from the ECF to carry out educational and promotional activities on clean recycling at more than 230 private housing estates. Through interactions with the residents, the NGOs would enhance their understanding about clean recycling and educate them about the correct recycling procedures. The NGOs also provide support and training for residents’ associations, frontline staff of property management companies and cleansing contractors. The total expenditure on these activities was about \$5 million.

Regarding co-operation with the District Councils (DCs), the EPD, the ECC and the Home Affairs Department have worked with the 18 DCs on the “Community Participation Programme in Environmental Protection” since 2012 to jointly promote environmental education, waste reduction at source and recycling at the district level to further inculcate the “Use less, Waste less” culture in the community. In the past 3 years (2017 to 2019), the total estimated expenditure on the relevant activities was \$10.8 million.

The ECF has also approved funding for local non-profit-making organisations to implement many Environmental Education and Community Action Projects on waste reduction and clean recycling. In the past 3 years (as at 31 December 2019), the funding involved amounted to about \$18 million.

The EPD has been keeping in view closely the progress of the above work, and has reviewed its effectiveness and made appropriate adjustments. In response to the Mainland’s gradual tightening of requirements on imports of recyclables since January 2018, the EPD launched a new round of Clean Recycling Campaigns from 2018, focusing on encouraging the public to practise clean separation and recycling of waste paper and waste plastics, so as to tie in with the subsequent recycling processes and meet the export requirements. As the recyclables are collected through different channels and there is no fixed standard for clean recycling, which is only a general description of the relative degree of cleanliness of the recyclables, we do not keep records on the percentage of the recyclables that had undergone clean recycling.

- End -

CONTROLLING OFFICER'S REPLY

ENB268

(Question Serial No. 3522)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to expand outreaching teams with a view to gradually reaching out to the community in practising proper waste source separation and clean recycling”, will the Administration advise:

- on the parties, manpower and resources involved in the past 3 years;
- on the numbers of housing estates that had received support or assistance in the past 3 years;
- whether regular reviews of the effectiveness of the outreaching teams are conducted; if yes, on the details; if no, on the reasons?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 137)

Reply:

To strengthen on-site support to recycling, the Environmental Protection Department (EPD) started to establish outreaching teams in late 2018 to collaborate closely with community partners to educate the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. The outreaching teams have kick-started pilot outreaching service in 3 pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin), and have strived to establish and maintain a direct communication network with different stakeholders such as property management companies (PMCs), cleansing workers, residents’ organisations, members of local community, etc. As at the end of 2019, the outreaching teams have conducted about 4 600 visits, covering about 4 000 public and private residential buildings and 45 villages, the residential population of which accounted for over 95% of the total population of the 3 pilot districts. During the visits, the outreaching teams have contacted the PMCs and resident and village representatives/organisations, and conducted on-site assessment for the aforesaid buildings and villages to understand their waste handling and recycling practice, and provided improvement recommendations according to actual circumstances, including participating in this department’s waste reduction and recycling programmes, increasing the number of recycling bins and improving the process, identifying proper outlets for recyclables, etc.

Besides visiting housing estates/residential buildings and villages to provide technical support, the outreaching teams have also conducted over 340 educational and promotional activities of different forms, which included promoting the proper use of recycling bins and clean recycling through on-site demonstrations/game booths, etc., introducing the various waste reduction and recycling policies/programmes (including waste charging) of this department, and providing training to frontline staff of PMCs and cleansing contractors. Over 25 000 people have been attracted to participate in the relevant educational and promotional activities.

We will extend the outreaching service to the whole territory in phases starting from 2020 according to our outreaching experience in the pilot districts and future manpower arrangements. The staffing of the EPD for implementing the outreaching service will be gradually increased to 74 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and 142 non-civil service contract staff. The expenditures on salaries in 2018-19 and 2019-20 were about \$16 million and \$45 million respectively.

- End -

CONTROLLING OFFICER'S REPLY

ENB269

(Question Serial No. 3523)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to offer free collection service for all types of waste plastics from non-commercial and non-industrial sources”, will the Administration advise on:

- the parties, manpower and resources to be involved;
- the details of the work?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 138)

Reply:

The Environmental Protection Department is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since late January 2020. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020. Having regard to the experience and effectiveness of the Pilot Scheme, as well as the details and progress of development of the producer responsibility scheme on plastic beverage containers to be launched later, we will extend the service to the whole territory progressively. The Pilot Scheme is undertaken by 17 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades) and the estimated total expenditure in 2020-21 is about \$50 million.

- End -

CONTROLLING OFFICER'S REPLY

ENB270

(Question Serial No. 3524)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “the introduction of a pilot scheme to collect food waste generated from commercial and industrial sources”,

- What are the parties, manpower and resources expected to be involved?
- What are the work details?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 139)

Reply:

The Organic Resources Recovery Centre Phase 1 (O • PARK1) was completed and commissioned in July 2018, with a processing capacity of 200 tonnes of food waste per day. To tie in with the development of the O • PARK1, including encouraging the commercial and industrial (C&I) sectors to recycle food waste properly and achieving the target of turning waste into energy, the Government launched phase 1 of the pilot scheme on free food waste collection on 1 July 2018 to separate and collect food waste generated from 40 public markets and cooked food venues managed by the Food and Environmental Hygiene Department (FEHD), as well as 9 shopping centres and wet markets managed by the Hong Kong Housing Authority (HA) on a daily basis and deliver such food waste to the O • PARK1 for recovery. In addition, the Environmental Protection Department (EPD) has been collecting food waste generated from lunch suppliers for primary and secondary schools and food left uneaten by students after lunch, and delivering such food waste to the O • PARK1 since February 2019.

The EPD is actively preparing for the launch of phase 2 of the pilot scheme on free food waste collection in phases starting from the second half of 2020, which will extend the services to other public markets, cooked food venues and shopping centres under the FEHD and the HA and other facilities (e.g. more wholesale markets under the Agriculture, Fisheries and Conservation Department, restaurants at government facilities and hospitals under the Hospital Authority, etc.), shopping centres under the LINK, restaurants of tertiary institutions, non-governmental organisations (e.g. rehabilitation homes and care centres in the social welfare sector that provide catering services), as well as housing estates that have

participated in the Food Waste Recycling Projects in Housing Estates funded by the Environment and Conservation Fund or with experience in food waste separation at source. As at the end of February 2020, 260 units have agreed to participate in phase 2 of the pilot scheme, their distribution by type of organisation is set out in Annex 1.

Phase 2 of the pilot scheme will adopt the following recommendations based on the actual situation and environment in Hong Kong so as to enhance the collection efficiency and minimise hygiene and odour nuisance:

- Having regard to the public concerns about hygiene and odour problems, it was suggested that proper means to be adopted to contain food waste for disposal. It will be necessary to carry out pilot programme to test the use of different means such as reusable containers, transparent, semi-transparent plastic bags or waste newspaper to containerise food waste with a view to choosing the options that best serve different needs and situations in Hong Kong;
- The domestic households or users/tenants from C&I buildings can bring their food waste to the central refuse room, where property management companies can arrange collection services by food waste collectors;
- Smart food waste collection bins are suggested to be used to facilitate food waste collection. With IT technologies embedded, smart bins may help monitor contaminated food waste, track participation rate, arrange on-time collection services, and minimise odour and hygiene problems;
- Food waste should be collected and removed daily and at non-peak hours;
- Direct haul to food waste recycling facilities is recommended, rather than transferring food waste to interim transfer stations for compressing into containers since food waste in general decomposes quickly and this could avoid odour and hygiene problems;
- Tanker trucks are preferred to tail-lift vehicles for food waste collection because of higher payload, prevention of spillage of leachate and better efficiency during the unloading operation at food waste recycling facilities;
- Voluntary approach to implement food waste collection by phases is recommended, with waste generators producing food waste of large quantities and low level of contamination (that is, the C&I sectors) which is relatively easier to collect, as the initial targets; and
- Free collection services are recommended to encourage food waste generators to join the services.

In 2020-21, the estimated expenditure for the implementation of the pilot scheme on free food waste collection services is about \$40 million. The relevant work will be absorbed by the existing establishment of the EPD.

**Type of organisations that agreed to participate in phase 2
of the pilot scheme on food waste free collection**

Type of organisation	Estimated number of food waste collection points*
Food and Environmental Hygiene Department	53
Hong Kong Housing Authority	18
Agriculture, Fisheries and Conservation Department	8
Restaurants at government facilities	14
Hospital Authority	28
Shopping centres under the LINK	50
Tertiary institutions	14
Non-governmental organisations	45
Private and public housing estates	20
Lunch suppliers	10
Total	260

*As at February 2020

- End -

CONTROLLING OFFICER'S REPLY

ENB271

(Question Serial No. 3525)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “the promotion of Community Recycling Centres (CRCs)”, will the Administration advise on:

- the parties, manpower and resources involved in the past 3 years;
- the average quantity of recyclable food waste processed by the CRCs per day since they came into operation?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 140)

Reply:

As single block buildings in older districts usually do not have a property management company for implementing and managing waste recycling programmes or even lack of space for setting up waste recovery facilities, the Environmental Protection Department (EPD) has provided funding support to Community Recycling Centres (CRCs) in various districts through the Environment and Conservation Fund (ECF) to facilitate residents living in these buildings to separate waste for recovery and to promote waste reduction and recycling activities at the community level. The ECF currently provides funding support to 17 CRCs and 2 mobile community recycling projects (community recycling vehicles) in various districts. In the past 3 years (2017 to 2019), the total amount of approved funding to the CRCs and the mobile community recycling projects was about \$110 million. To further strengthen community recycling support, the EPD will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of CRCs to all 18 districts across the territory from 2020-21, and for maintaining their sustained development. The tendering exercise is in progress and the estimated expenditure for the 2020-21 financial year is about \$100 million.

The CRCs funded by the ECF mainly recover waste plastics, waste glass and small waste electrical and electronic equipment (WEEE), excluding food waste. Since the CRCs came into operation, an average of about 260 kilograms of waste plastics, 30 kilograms of waste glass and a small amount of small WEEE are processed by the CRCs per day.

- End -

CONTROLLING OFFICER'S REPLY

ENB272

(Question Serial No. 3526)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “to implement the various landfill extension projects”, will the Administration advise on the following:

- What are the parties, manpower and resources involved in the coming 3 years?
- Will the Government continue to consult the stakeholders? If yes, what are the details? If not, what are the reasons?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 141)

Reply:

- 1) The implementation of various landfill (i.e. South East New Territories Landfill, North East New Territories Landfill and West New Territories Landfill) extension projects is mainly undertaken by relevant staff of the Environmental Infrastructure Division of the Environmental Protection Department. We do not have a separate breakdown for the manpower resources required for individual tasks.
- 2) We understand the concerns of the local community about the extension of the 3 landfills and have set up a district liaison group in Tuen Mun and Yuen Long, North District and Sai Kung respectively, in order to listen to the views from local residents and stakeholders, and respond to their concerns about the environmental issues of the landfills. To facilitate a better understanding of the landfills and other major waste management facilities, we have arranged a number of field visits to provide explanations on the operation of the relevant facilities, future development direction and enhancement plans. We will continue to maintain a close liaison with the stakeholders in the districts and follow up on the needs and concerns of individual districts to further improve the environment.

- End -

CONTROLLING OFFICER'S REPLY

ENB273

(Question Serial No. 3527)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “continue to implement various air quality improvement measures outlined in *A Clean Air Plan for Hong Kong*”, will the Administration advise on:

- the parties, manpower and resources involved in the past 3 years;
- the progress;
- the implementation timetable?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 142)

Reply:

The Environmental Protection Department (EPD) will continue to implement a range of measures outlined in *A Clean Air Plan for Hong Kong* to reduce emissions from various sources such as road vehicles, vessels, power plants, industrial activities, etc. with a view to improving air quality. The manpower and resources involved in the implementation of various air quality improvement measures in the past 3 years were mainly absorbed by the existing establishment of the EPD. Please refer to the Annex for the implementation progress of the related measures.

Details of the implementation of various measures outlined in *A Clean Air Plan for Hong Kong* by the EPD in the past 3 years

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>1. Encouraging the use of environment-friendly (EF) commercial vehicles</p>	<p>Since April 2008, the Government has launched the Tax Incentives Scheme for EF Commercial Vehicles to encourage vehicle owners to choose EF commercial vehicles with exhaust emissions that out-perform the prevailing statutory emission standards.</p> <p>The qualifying standards for EF commercial vehicles are reviewed and updated annually in the light of vehicle technological advancement such that the tax incentive is available only to vehicles of outstanding environmental performance.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>From the launch of the Tax Incentives Scheme for EF Commercial Vehicles to the end of December 2019, the number of newly registered EF commercial vehicles was about 67 500 and the amount of first registration tax concession was about \$1.8 billion.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>2. Pilot Green Transport Fund (PGTF)</p>	<p>The PGTF has been put in place since March 2011 for application by the public transport sectors, goods vehicle operators and charitable/non-profit making organisations to try out green innovative transport technologies.</p> <p>To further promote wider use of green innovative transport technologies by the transport sector, the EPD has completed a review of the scope of the PGTF. We propose renaming the PGTF to the “New Energy Transport Fund”, enhancing the detailed conditions of subsidy and extending the scope of the PGTF.</p>	<p>As at the end of February 2020, the total amount of subsidy approved was about \$154 million.</p> <p>An injection of an additional \$800 million into the PGTF is proposed for extending its scope.</p> <p>The overall workload will be absorbed by the existing resources of the EPD and undertaken by 2 time-limited non-directorate posts to be created for a period of 5 years.</p>	<p>As at the end of February 2020, the PGTF has approved 183 trial applications, including 110 on electric commercial vehicles, 65 on hybrid commercial vehicles and 8 on technologies applicable to conventional buses or ferries.</p> <p>The results of the review and the relevant recommendations received support from the PGTF Steering Committee and the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo) in January 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
3. Trial of electric buses	To fully subsidise the franchised bus companies (FBCs) to purchase 36 single-deck electric buses for conducting a two-year trial on different routes.	Funding of \$180 million was approved in 2012 for conducting the trial. The relevant workload has been partly absorbed by the existing resources of the EPD and the Transport Department (TD). The EPD and the TD have created 3 two-year time-limited posts (until end of March 2014; including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Motor Vehicle Examiner I) to undertake the relevant work. The TD has further created a time-limited Transport Officer I post to cope with the relevant work of the trial and other emission reduction measures related to franchised buses.	At present, 33 electric buses have commenced operation. The remaining 3 electric buses are expected to commence operation in 2020.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>4. Phasing out pre-Euro IV diesel commercial vehicles (DCVs)</p>	<p>The EPD launched an incentive-cum-regulatory scheme in March 2014 with the aim of progressively phasing out some 82 000 pre-Euro IV DCVs by the end of 2019.</p> <p>Moreover, the EPD has also set a limit on the service life of DCVs newly registered on or after 1 February 2014 at 15 years.</p>	<p>Funding of about \$11.4 billion was approved for implementation of the ex-gratia payment scheme.</p> <p>The relevant workload has been partly absorbed by the existing resources of the EPD and the TD. Moreover, the EPD has created 3 time-limited posts (from 2013-14 to 2019-20), including 1 Senior Environmental Protection Officer, 1 Environmental Protection Officer and 1 Environmental Protection Inspector, to implement the ex-gratia payment scheme. In addition, the TD has created in phases a maximum of 25 time-limited posts (reduced to 6 in 2020-21, including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 1 Clerical Officer, 2 Assistant Clerical Officers) according to the progress of the scheme to handle the applications and relevant work for the ex-gratia payment scheme.</p>	<p>As at end of February 2020, about 77 900 DCVs have been granted an ex-gratia payment, accounting for about 95% of the eligible vehicles, and involving a subsidy amount of about \$10.5 billion.</p> <p>In view of the economic downturn in the past few months, some transport trades were not able to complete the necessary procedures and submit applications for ex-gratia payment by the original deadline due to operational difficulties. Hence, the EPD has extended the deadline by 6 months to 30 June 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>5. Phasing out Euro IV DCVs</p>	<p>To continuously improve roadside air quality, the EPD plans, by making reference to the scheme of phasing out pre-Euro IV DCVs, to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue the licences of relevant vehicles after the specified deadlines.</p> <p>We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia payment of 15% of the average vehicle body price for goods vehicles assembled with additions.</p>	<p>It is proposed that \$7.1 billion be earmarked for implementing the ex-gratia payment scheme.</p> <p>The relevant workload has been partly absorbed with the existing resources of the EPD and the TD. Moreover, the EPD will create 3 four-year time-limited posts (from 2020-21 to 2023-24), including 1 Environmental Protection Officer, 1 Senior Environmental Protection Inspector and 1 Environmental Protection Inspector, to implement the ex-gratia payment scheme. In addition, the TD will create 6 time-limited posts (including 1 Senior Executive Officer, 1 Executive Officer I, 1 Executive Officer II, 1 Clerical Officer, 1 Assistant Clerical Officer and 1 Motor Vehicle Examiner I) in the above years to handle the applications and relevant work for the ex-gratia payment scheme.</p>	<p>The details of the scheme received support from the EA Panel of the LegCo in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that this scheme will be launched in the second half of 2020.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>6. Strengthening the control of emissions from petrol and liquefied petroleum gas (LPG) vehicles</p>	<p>The EPD has been using roadside remote sensing equipment to identify petrol and LPG vehicles emitting excessively since 1 September 2014. For any vehicle found emitting excessively, the EPD will issue an Emission Testing Notice to its owner. The owner is required to rectify the excessive emission problem and send the vehicle to a Designated Vehicle Emission Testing Centre for an emission test with the aid of a chassis dynamometer within 12 working days so as to confirm the rectification of the excessive emission problem. If the owner fails to send the vehicle to the testing centre, or the vehicle fails to pass the emission test, the licence of the vehicle concerned will be cancelled by the TD.</p>	<p>This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.</p>	<p>As at the end of February 2020, the EPD has monitored some 4.23 million vehicle counts using roadside remote sensing equipment and issued 22 262 Emission Testing Notices requiring the owners to repair and to rectify the excessive emissions of their vehicles. During the above period, the licences of a total of 251 vehicles were cancelled for failing the emission test. Another 1 075 vehicles were scrapped by their owners voluntarily. The percentage of petrol vehicles emitting excessively has reduced from about 10% to less than 3%, while the percentage of LPG vehicles emitting excessively has reduced from about 80% to 16% from 2014 to 2019.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
7. Setting up franchised bus low emission zones (FBLEZs)	<p>To improve roadside air quality and protect public health, the Government set up FBLEZs at the busy road sections in Causeway Bay, Central and Mong Kok at the end of 2015, allowing only low emission franchised buses (including buses of Euro IV or above, or Euro II and III buses retrofitted with selective catalytic reduction (SCR) devices and diesel particulate filters) to run in these zones.</p> <p>To further improve roadside air quality within the FBLEZs, we have tightened the emission requirements of low emission buses in the 3 FBLEZs to Euro V emission standards starting from 31 December 2019.</p>	This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.	3 FBLEZs were set up at the end of 2015. According to the reports submitted by the FBCs, as of December 2019, the overall compliance rate was about 99.8%. In case of traffic congestion, vehicle breakdowns and traffic accidents, etc., the FBCs may need to deploy non-low emission buses to run in the FBLEZs occasionally in order to maintain normal bus services.
8. Implementing Euro VI emission standards for first registered vehicles	The Government has tightened in phases by vehicle type the emission standards for first registered vehicles to Euro VI starting from 1 July 2017, and has tightened the emission standards for first registered diesel private cars to California LEV III starting from 1 October 2017.	This is part of the EPD's routine work on improving air quality. There is no separate breakdown for the expenditure involved.	Compared with their Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less nitrogen oxides (NOx) and 50% less respirable suspended particulates (RSP) while Euro VI light duty diesel vehicles emit about 55% less NOx.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vehicles			
<p>9. Trial on retrofitting Euro IV and V double-deck franchised buses with enhanced SCR systems</p>	<p>The Government plans to fully subsidise FBCs to conduct a trial on retrofitting Euro IV and V double-deck franchised buses of the dominant bus models with enhanced SCR systems (the Trial), so as to establish the technical feasibility of the retrofitting work in Hong Kong, and to confirm the emission reduction performance of the enhanced SCR systems from different suppliers under the local driving and operation conditions. The Trial is expected to commence in 2020.</p>	<p>The estimated expenditure of the Trial is about \$38 million.</p> <p>The relevant workload is partly absorbed by the existing resources of the EPD and TD. The EPD has created 2 additional two-year time-limited posts (until end of March 2021, including 1 Environmental Protection Officer and 1 Environmental Protection Inspector) to undertake and follow up on the relevant trial.</p> <p>The TD has also created 2 two-year time-limited posts (until end of March 2021, including 1 Transport Officer II and 1 Motor Vehicle Examiner I) to undertake the relevant work.</p>	<p>A Task Force comprising the EPD, the TD, FBCs and local experts has been set up to draw up technical specifications and detailed arrangements for the Trial, and monitor and evaluate the operational performance and emission reduction performance of the buses retrofitted with the enhanced SCR systems.</p> <p>If the Trial is successful, the Government will consider fully subsidising the FBCs to retrofit Euro IV and V diesel double-deck buses of qualified models (bus models that have passed the Trial) with enhanced SCR systems to reduce their emissions before their retirement.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Vessels			
10. Controlling the sulphur content of locally supplied marine light diesel	The sulphur content of locally supplied marine light diesel has been capped at 0.05% since 1 April 2014.	This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.	The EPD conducted a total of 14 inspections in the past financial year. The sulphur content of all samples complied with the regulation.
11. Requiring vessels to use compliant fuel	The Air Pollution Control (Fuel for Vessels) Regulation has been in force since 1 January 2019, requiring vessels to use compliant fuel (including low sulphur fuel with sulphur content not exceeding 0.5%) within Hong Kong waters to dovetail with the control of the marine emission control areas in Mainland waters. The Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation which had been implemented since 1 July 2015 was repealed on 1 January 2019.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	During the period when the Air Pollution Control (Ocean Going Vessels) (Fuel at Berth) Regulation was in effect, the EPD conducted surprise inspections of 383 vessels, and initiated 6 prosecutions successfully. In the past financial year, the EPD conducted surprise inspections of 172 vessels, and initiated 3 prosecutions successfully during the enforcement of the Air Pollution Control (Fuel for Vessels) Regulation. The inspection results showed that most vessels complied with the regulation and had switched to use low-sulphur marine fuel before entering Hong Kong waters.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Other emission sources			
<p>12. Controlling the emissions from the power sector</p>	<p>The EPD has formulated Technical Memorandums (TMs) in accordance with the Air Pollution Control Ordinance to stipulate air pollutant emission caps for the power sector.</p> <p>Since 2010, the EPD has successively promulgated 8 TMs to progressively tighten the emission caps of sulphur dioxide (SO₂), NO_x and RSP for the power sector.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>The latest Eighth TM was issued in November 2019 and the emission caps stipulated in it will come into effect in 2024. Compared with the emission caps stated in the First TM, the annual emissions of SO₂, NO_x and RSP will be reduced by 87%, 71% and 69% respectively.</p> <p>To meet the emission caps stated in the TM, the power plants have to maximise the use of low-emission coal and electricity generated by renewable energy facilities, etc. In addition, the 2 power companies have each completed the construction of a new gas-fired generating unit and are planning to construct 3 more new gas-fired generating units to increase the proportion of gas-fired electricity generation and replace the coal-fired generating units which are to retire. After all the new gas-fired units commence operation, the percentage of local gas-fired electricity generation will be raised to about 55% in the total fuel mix for electricity generation.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Other emission sources			
<p>13. Controlling the emissions from non-road mobile machinery (NRMM)</p>	<p>Starting from 1 June 2015, NRMM (including regulated machines and non-road vehicles) newly sold or leased for use in Hong Kong have to comply with the statutory emission standards. NRMM that had been in use in Hong Kong when the legislation came into effect is exempted from compliance with the new requirements.</p>	<p>This is part of the EPD's routine work on improving the air quality. There is no separate breakdown for the expenditure involved.</p>	<p>Starting from 1 December 2015, all NRMM to be used in construction sites, airport, container terminals and other specified locations are required to bear approval or exemption labels issued by the EPD. As at the end of January 2020, labels were issued to a total of around 53 600 NRMM.</p> <p>Currently, the statutory emission standards for regulated machines and non-road vehicles are EU Stage IIIA and Euro VI standards (or their equivalent standards) respectively. The Government has tightened the statutory emission standards for some non-road vehicles to Euro VI in phases starting from 1 January 2019 to tie in with the latest emission standards for newly registered road vehicles.</p>

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
14. Mid-term review study on the 2015 and 2020 air pollutant emission reduction targets	The progress on emission reduction of major air pollutants in the Pearl River Delta (PRD) region has been reviewed in order to provide a robust scientific basis for concluding the emission reduction results of the two places for 2015 and finalising the emission reduction targets for 2020.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	Hong Kong (HK) and Guangdong (GD) governments set the 2015 emission reduction targets and the 2020 emission reduction ranges for the PRD region in November 2012, and rolled out various emission reduction measures under the Pearl River Delta Regional Air Quality Management Plan (RAQMP). The two sides commenced the joint mid-term review study in February 2015 and released the results of the study at the end of 2017, which concluded the achievements of the 2015 emission reduction targets and finalised the emission reduction targets for 2020.
15. Collaboration on post-2020 regional air pollutant emission reduction	To further improve regional air quality, the HKSAR Government and GD Provincial Government are working together to formulate a regional air pollutant emission reduction plan beyond 2020.	The relevant work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the expenditure involved.	HK and GD established a joint science team in 2018 and launched a study on post-2020 regional air pollutant emission reduction targets and concentration levels, with a view to formulating an emission reduction plan beyond 2020.
16. Guangdong-Hong Kong-Macao Joint Regional PM _{2.5} (fine suspended particulates) Study	The Study aims to understand the formation mechanisms and control of PM _{2.5} pollution in the PRD Region, so as to provide a scientific basis for the formulation of strategies to tackle regional air pollution problems.	The HK side commissioned a consultant to conduct sampling, analysis and computer modelling, etc. The total expenditure was about \$9 million. There is no separate breakdown for the manpower resources and expenditure involved in the Study.	The Study began in late 2014. GD, HK and Macao completed the concurrent field monitoring programmes, sample analysis, air quality modelling and integrated analysis, etc. as scheduled. The Study was completed in 2018.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
17. Pearl River Delta (PRD) Regional Air Quality Management Plan (RAQMP)	HK and GD have implemented a host of emission reduction measures targeting at key emission sources, including power plants, vehicles, vessels and industrial facilities, etc., as well as regional air quality monitoring.	The RAQMP is undertaken by the EPD with its existing manpower and resources. There is no separate breakdown for the manpower resources and expenditure for the work.	<p>The RAQMP has been an ongoing collaboration initiative drawn up since December 2003. The annual average levels of SO₂, nitrogen dioxide and RSP measured by the PRD Regional Air Quality Monitoring Network (the Network) in 2018 recorded a decrease by 81%, 28% and 36% respectively as compared with 2006. This indicates that the emission reduction measures implemented by GD and HK in recent years have been effective.</p> <p>The Network was enhanced by GD, HK and Macao in September 2014 to provide real-time air quality information of the PRD Region.</p>
18. Cleaner Production Partnership Programme (the Programme)	Launched in April 2008, the Programme encourages and facilitates Hong Kong-owned factories in GD and HK to adopt cleaner production technologies and practices through funding support and technology promotion activities, thereby improving the regional air quality. The current phase of the Programme ended in March 2020. The Government has proposed to earmark \$311 million for extending the Programme for 5 years until March 2025.	<p>The Government's total expenditure for implementing the Programme from 2008 to 2020 was around \$293 million.</p> <p>This is part of the EPD's routine work. There is no separate breakdown for the expenditure involved.</p>	As at March 2020, about 3 300 funded projects were approved and more than 560 awareness and technology promotion activities were organised under the Programme.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
19. Routine monitoring of volatile organic compounds (VOCs) in the PRD Regional Air Quality Monitoring Network	HK and GD have adopted a progressive approach to include routine monitoring of VOCs in the PRD Regional Air Quality Monitoring Network in 3 phases from 2017 to 2020. VOCs contribute to the formation of ozone. The monitoring data can help investigate the causes of ozone formation in the PRD region.	The EPD appointed a contractor to undertake the daily operation and maintenance work of the above VOCs monitoring stations established in Phase 2. The expenditure on the operating contract in 2018-2020 is \$1.1 million per year.	HK and GD completed the work in Phase 1 in 2017, of which included considering the distribution and locations of stations for routine VOCs monitoring, selecting the parameters to be monitored and determining the monitoring methods, compiling the standard operating procedures and the quality assurance/quality control protocol. Both sides also completed the pilot of online VOCs monitoring and commenced preliminary data analysis in Phase 2 in 2019. Both sides are now reviewing the experience gained in Phase 2 comprehensively, including monitoring equipment operation, expenditure, data quality and preliminary analysis results, etc., and by making reference to relevant national standards and guidelines, both sides will fine tune the monitoring plan and increase the number of VOCs routine monitoring stations in the region progressively.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Regional Collaboration			
20. Regional air quality forecasting	Targeting at the heavily polluted weather in the PRD region, GD and HK are conducting air quality forecasting meetings at the technical level to jointly forecast the development of heavily polluted weather in the region, analyse and identify the causes so as to formulate and adopt appropriate preventive measures in advance.	The study is undertaken by the EPD with its existing manpower and resources. There is no separate breakdown for the manpower resources and expenditure for the study.	GD and HK are currently increasing technical exchanges and trainings in air pollution forecasting and are beginning to conduct forecasting meetings at the technical level to jointly enhance their forecasting capability of atmospheric pollution in the PRD region.

Policies/Measures	Details and Implementation Schedules	Expenditure and Manpower Involved	Progress and Effectiveness
Review of the Air Quality Objectives			
<p>21. Review of the Air Quality Objectives (AQOs)</p>	<p>The current AQOs came into effect on 1 January 2014. According to section 7A of the Air Pollution Control Ordinance (Cap. 311), the Secretary for the Environment is required to review the AQOs at least once in every 5 years and submit a review report to the Advisory Council on the Environment (ACE).</p> <p>The AQOs Review (the Review) was conducted between 2016 and 2018. The review report was submitted to the ACE in February 2019.</p>	<p>The work is undertaken by the existing manpower and resources of the EPD. There is no separate breakdown for the manpower resources and expenditure for the study.</p> <p>Besides, the EPD commissioned a consultancy through open tender in November 2016 to assist in the Review. The consultancy contract fee was about \$7.7 million.</p>	<p>After the Environment Bureau (ENB) completed the Review in December 2018, the ENB consulted the ACE and the EA Panel of the LegCo respectively in March 2019, and conducted a public consultation from July to October in 2019.</p> <p>Taking into account the various factors and views gathered, the protection of public health and the principle of progressively tightening the AQOs to improve air quality on a sustainable basis, we recommend to tighten the 24-hour AQO of SO₂ and the annual and 24-hour AQOs of PM_{2.5} in accordance with the recommendations of the Review. We submitted the final recommendations to the EA Panel of the LegCo and the ACE in December 2019 and January 2020 respectively. We will introduce an amendment bill to the LegCo for the implementation of the new AQOs as soon as possible.</p>

- End -

ENB274

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3528)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding “the continuation of collaborating with Guangdong and Macao to include routine volatile organic compounds monitoring in the Pearl River Delta regional air quality monitoring network”, will the Administration advise on the following:

- What are the parties, manpower and resources involved in such work?
- What is the detailed work schedule?
- What is the progress of the Guangdong-Hong Kong-Macao Joint Regional PM_{2.5} (fine suspended particulates) Study?

Asked by: Hon LEE Kok-long, Joseph (LegCo internal reference no.: 143)

Reply:

The plan to include routine volatile organic compounds (VOCs) monitoring in the Pearl River Delta (PRD) Regional Air Quality Monitoring Network is divided into 3 phases. The work in Phase 1 included considering the distribution and locations of stations for routine VOC monitoring, selecting the parameters to be monitored and monitoring methods, compiling the standard operating procedures and the quality assurance/quality control (QA/QC) protocol. It was completed in 2017. Based on the VOC monitoring station distribution and the QA/QC protocol confirmed in Phase 1, both Guangdong and Hong Kong have each selected one of its stations in the regional network to carry out a pilot of online VOC monitoring and preliminary data analysis in Phase 2. Phase 2 was already completed in 2019. For Phase 3 which is being implemented, both sides will comprehensively review the experience gained in Phase 2, including monitoring equipment operation, expenditure, data quality and preliminary analysis results, etc. and by making reference to relevant national standards and guidelines, fine tune the monitoring plan and increase the number of VOC routine monitoring stations in the region progressively.

In addition, the Environmental Protection Department (EPD) appointed a contractor to undertake the daily operation and maintenance work of the above VOC monitoring station established in Phase 2. The expenditure on the operating contract for 2018-2020 is \$1.1 million per year.

The Guangdong-Hong Kong-Macao Joint Regional PM_{2.5} (fine suspended particulates) Study was completed at the end of 2018. The Study found that secondary particulates and vehicle emissions were the major sources of PM_{2.5} in Guangdong PRD region, Hong Kong and Macao and that the contribution of local pollution was generally lower than that of non-local pollution. The Study also analysed the meteorological conditions that had the greatest impact on causing serious pollution episodes. The Study helps us understand the principles of formation and control of regional PM_{2.5} pollution in the PRD region. It provides a scientific basis for the formulation of policy to address regional air pollution problems. Its Summary Report has been uploaded to the EPD's webpage.

- End -

CONTROLLING OFFICER'S REPLY

ENB275

(Question Serial No. 3670)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Chief Executive mentioned in the 2018 Policy Address that more water dispensers would be installed in government venues to inculcate a “bring your own bottle” culture. With regard to this work, will the Government advise this Committee on:

1. the numbers of public water dispensers in government venues in the past 3 years, and the estimated number of additional public water dispensers to be installed in the coming year (broken down by department responsible for management of the venues), as well as the expenditures involved in the installation of additional public water dispensers each year;
2. the Administration’s initiatives in the past 3 years and the coming year to inculcate the “bring your own bottle” culture and the expenditures involved?

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 29)

Reply:

Currently, there are about 2 700 water dispensers serving the public in government venues, which are mostly installed at the active leisure facilities under the Leisure and Cultural Services Department, such as sport centres, sport grounds and swimming pools, etc. To inculcate a living culture of “bring your own bottle” in the public, the Government is progressively installing 500 more water dispensers in government venues and the target is to increase the number of water dispensers to about 3 200 units by 2022 for public use in government venues. Subject to the actual work progress, it is expected that 200 additional water dispensers will be installed in 2020-21. The Government has earmarked some \$82 million and \$32 million respectively for the costs of installing 500 new water dispensers and procuring the five-year maintenance service.

Since 20 February 2018, sale of plastic bottled water measuring 1 litre or less has been progressively ceased in automatic vending machines (AVMs) in government venues. Over 80% of about 1 600 AVMs installed in government premises have put in place the above stop-sale arrangement. The remaining AVMs will gradually implement the stop-sale arrangement by renewing existing relevant contracts, lease/tenancy agreements or permissions, etc. Besides, the Environmental Protection Department will launch a pilot

scheme to encourage students to inculcate a living culture of “bring your own bottle”. We will provide smart water dispensers with their exteriors designed by students to about 80 primary and secondary school campuses via contractors, and support the schools to carry out relevant education and experiential activities, such as signing a charter to cease the sale of bottled water, for conveying green messages such as waste reduction at source and clean recycling to students in an interactive approach. Our preliminary objective is to complete the tendering exercise within 2020 before proceeding to the exterior design activities and installation works, as well as continuing to carry out relevant education and experiential activities. The estimated total expenditure of this project is about \$25 million.

- End -

CONTROLLING OFFICER'S REPLY**ENB276****(Question Serial No. 4422)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (2) AirControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

The Department stated in the Budget of the previous year that it would continue with the trial of electric light buses. Furthermore, the Environment Bureau will also allocate \$80 million to launch a pilot scheme for electric light buses this year. Please advise on the following:

- a. What were the number, expenditure and relevant details of the electric light buses on trial in the past 3 years? What is the estimated expenditure for this year?
- b. How was the performance of the electric light buses on trial in the past 3 years? Please reply in the tables below.

Brand of electric light bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

Brand of diesel light bus	Number of maintenance days	Operation downtime	Utilisation rate	Level of subsidy	Average fuel economy	Average fuel cost	Average total operating cost

- c. How will the Department evaluate the results of the trial of electric light buses? Does the Department have any indicators to evaluate the relevant scheme?
- d. How many licence applications for low-floor light buses did the Department receive in the past 3 years? Please provide the details of the applications.

Date of application	Brand of low-floor light bus	Number of vehicles	Date of licence issued	Vehicle price	Reasons for not issuing licences

Asked by: Hon MO Claudia (LegCo internal reference no.: 94)

Reply:

(a) to (c) The Government has put in place the \$300 million Pilot Green Transport Fund (PGTF) since March 2011 to encourage the transport sector to try out green innovative transport technologies. As at the end of February 2020, the PGTF has tested 3 electric light buses (e-LBs) and the interim or final trial reports were completed. The results of these trials are as follows:

The performance of the 2 e-LB models under trial varied. The average total operating cost of 1 model was 54% higher than that of diesel light buses due to the need for numerous maintenance, while the total operating cost of another model was 91% lower than that of diesel light buses.

In order not to hinder successful applicants from obtaining competitive bids during the tender exercise, we will not announce the subsidy amounts for individual approved trials.

However, all the e-LBs that are currently trialled under the PGTF are not used as public light buses (PLBs). According to the trial results, the e-LBs in the current local market, after a full charge which takes 4 hours, have a driving range lower than the daily mileage of a typical PLB and are yet to be able to cope with the requirements of the local PLB trade in respect of driving range and charging time.

To promote the development of electric public light buses (e-PLBs) and encourage manufacturers to manufacture e-PLBs that suit the local environment, the Government has proposed to earmark \$80 million to launch a pilot scheme for e-PLBs and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green PLBs will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, the daily operation of e-PLBs can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements for e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and

using e-PLBs. The study will be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.

E-LBs do not have exhaust emissions. They will help improve the roadside air quality and promote Hong Kong's image as a green city. Under the pilot scheme for e-PLBs, we will collect data to assess the performance of this green means of transport in terms of operation and environmental effectiveness.

- (d) The details of the applications for first registration of low-floor light buses received by the Transport Department in the past 3 years are as follows:

Date of application	Brand of low-floor light bus	Number of vehicles	Date of first issue of vehicle licence	Price (Published retail price + First Registration Tax) (\$ million)	Reasons for not issuing licences (Note 1)
2018 (Note 2)	OP-OPTARE SOLO	1	23 January 2018	1.84	Successfully registered and licensed
2 May 2018	OP-OPTARE SOLO	1	8 May 2018	1.84	Successfully registered and licensed

(Note 1) According to the Road Traffic (Registration and Licensing of Vehicles) Regulations, any application for vehicle registration that complies with the requirements under Section 5 of the Regulations will be processed.

(Note 2) As the relevant application form has been destroyed in accordance with the established procedure, we cannot provide the actual date of application.

- End -

CONTROLLING OFFICER'S REPLY

ENB277

(Question Serial No. 4442)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department has pointed out that it would continue to encourage the transport sector to make use of the Pilot Green Transport Fund to try out green innovative transport technologies. How effective is the fund? Please reply in the table below:

Name of trial	Product on trial	Trial period	Project cost	Average fuel economy	Average fuel economy of the vehicle for comparison	Average fuel cost (\$/km)	Average fuel cost of the vehicle for comparison (\$/km)

Asked by: Hon MO Claudia (LegCo internal reference no.: 114)

Reply:

The Government has put in place the \$300 million Pilot Green Transport Fund (PGTF) in March 2011 to encourage the transport sector to try out green innovative transport technologies. As at the end of February 2020, the PGTF has approved 183 trials, including 110 on electric commercial vehicles (e-CVs), 65 on hybrid commercial vehicles and 8 on technologies applicable to conventional buses or ferries, with a total subsidy of about \$154 million.

As at the end of February 2020, a total of 73 interim and final trial reports were completed and uploaded to the Environmental Protection Department's website. The results of the vehicle trials are tabulated below:

Technology under trial	No. of models	Fuel economy	Fuel saving (%)
Electric light goods vehicle (a total of 41 vehicles)	3 (No longer available in the market)	1.1 – 5.5 km/kWh	52 - 90*
			79^
	2 (Still available in the market)	3.5 – 5.6 km/kWh	72– 90*
			83 – 91^
Electric taxi (3 vehicles)	1	3.3 – 3.8 km/kWh	31 – 40&
Electric single-deck bus (4 vehicles)	2	0.58 - 0.64 km/kWh	69 - 76*
Electric light bus (3 vehicles)	2	1.4 - 1.6 km/kWh	69 – 76*
Hybrid light goods vehicle (31 vehicles)	2	3.0 - 7.5 km/L	3 -29*
Hybrid medium goods vehicle (15 vehicles)	2	4.6 – 6.9 km/L	5 - 32*
Hybrid single-deck bus (1 vehicle)	1	2.9 km/L	12*
Hybrid light bus (7 vehicles)	1 (No longer available in the market)	4.3 – 4.5 km/L	≤4*
	1 (Still available in the market)	2.7 – 4.9 km/L	
Solar air-conditioning system for buses (1 system)	1	7.2 km/L	10*
Electric inverter air-conditioning system for buses (4 systems)	1	2.7 – 3.0 km/L	7 – 35*

* Compared with conventional diesel counterparts

^ Compared with conventional petrol counterparts

& Compared with conventional liquefied petroleum gas counterparts

According to the current trial results, high production cost, limited service life, long charging time and/or low energy density of the batteries of e-CVs currently available in the local market are the key constraints for e-CVs to become popular. The hilly terrain in Hong Kong and the need to provide air-conditioning during summer driving also reduce the driving range of e-CV batteries. Therefore, most of the e-CVs on trial are yet to completely cope with the requirements of the local transport sector in respect of driving range and charging time.

In comparison, electric light goods vehicles (e-LGVs) are more likely to prevail and are suitable for operators who require relatively lower daily mileage and payload because batteries of these vehicles can be topped up outside operation hours. However, they might not be suitable for the transport trades requiring higher mileage. We have organised

experience sharing workshops for the transport trades suitable for adopting this vehicle type to promote the use of e-LGVs.

For ferry technologies, trials of 1 diesel-electric propulsion (DEP) system and 1 seawater scrubber were completed. Compared with the diesel system before retrofitting of the ferry, the DEP system could save about 2.4% of fuel, while operation of the seawater scrubber increased the total fuel consumption of the ferry by about 2.4%.

In order not to hinder successful applicants from obtaining competitive bids during the tender exercise, we will not announce the subsidy amounts for individual approved trials.

- End -

CONTROLLING OFFICER'S REPLY**ENB278****(Question Serial No. 6041)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (-) Not SpecifiedControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

a. Please set out the quantity, value and stock of surgical masks produced by the Correctional Services Department (CSI masks) that the Environmental Protection Department (EPD) obtained from the Government Logistics Department (GLD) each month in the past 3 years in the following table:

Month/Year	No. of CSI masks obtained	Value of CSI masks obtained	Stock of CSI masks

b. Please set out the quantity, value, stock and consumption of surgical masks that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of surgical masks obtained from GLD (value)	No. of surgical masks procured (value)	Stock	Consumption

c. Please set out the quantity, value, stock and consumption of N95 masks that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of N95 masks obtained from GLD (value)	No. of N95 masks procured (value)	Stock	Consumption

d. Please set out the quantity, value, stock and consumption of gowns that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of gowns	No. of gowns	Stock	Consumption

	obtained from GLD (value)	procured (value)		

e. Please set out the quantity, value, stock and consumption of protective coverall suits that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of protective coverall suits obtained from GLD (value)	No. of protective coverall suits procured (value)	Stock	Consumption

f. Please set out the quantity, value, stock and consumption of face shields that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of face shields procured	Value of face shields procured	Stock of face shields	Consumption

g. Please set out the quantity, value, stock and consumption of goggles that the EPD obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of goggles procured	Value of goggles procured	Stock of goggles	Consumption

h. Did the EPD supply or sell surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations in the past 3 years? If yes, please provide the relevant information, including the quantity, consumption and stock, in the following table:

Month/Year	Name of organisations	Manner of provision (e.g. sold or supplied for free)	Surgical masks	N95 masks	Face shields	Goggles	Gowns	Protective coverall suits

i. If the EPD is to supply or sell surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations, what are the departments and the ranks of the officers responsible for making such decisions? Please provide the ranks of the officers involved in each decision, the date they made the decision and other relevant information.

Asked by: Hon MO Claudia (LegCo internal reference no.: 130)

Reply:

- (a)-(g) With an upsurge in the global demand for personal protective equipment (PPE), the Hong Kong Special Administrative Region (HKSAR) Government is facing fierce competition in PPE procurement. The HKSAR Government considers it inappropriate at this stage to disclose specific information on PPE of individual departments in the past few years and recently, such as the stock, procurement quantities and value, consumption, etc., so as to avoid undermining its bargaining power in the procurement of PPE.
- (h) and (i) In the past 3 years, the Environmental Protection Department did not supply or sell any surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3608)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Administration has indicated that it would promote installation of electric vehicle (EV) charging-enabling infrastructure in car parks of existing private residential buildings to extend the EV charging network. Please advise this Committee on the following:

- (1) What were the number of EV chargers provided at government car parks in 2019-20, and the number of additional chargers planned to be provided in 2020-21 and their locations? Will alteration to the existing government parking spaces be expedited to provide EV chargers?
- (2) What were the number, location, specifications, expenditure and timetable for the Administration's installation of EV chargers at on-street parking spaces in 2019-20? Will more EV chargers be installed at on-street parking spaces and other outdoor locations in 2020-21? If yes, what are the details?
- (3) It is stated in the Budget that the Government will launch a \$2 billion pilot scheme to subsidise the installation of charging-enabling infrastructure in eligible car parks of existing private residential buildings. What are the details of the scheme, the subsidy amount of projects, the timetable and manpower? What is the estimated number of additional EV chargers to be provided at car parks of private residential buildings in Hong Kong in the coming 3 years?
- (4) Will the Administration study how to facilitate the installation of EV charging-enabling infrastructure at residential car parks in remote areas so as to achieve further popularisation of EVs?
- (5) Will the Administration set specific goals for increasing the number of EV chargers across the territory in 5 years?

Asked by: Hon MOK Charles Peter (LegCo internal reference no.: 125)

Reply:

- (1) A total of 857 government public chargers (mostly medium chargers) are currently provided at government car parks. The Government allocated \$120 million last year for extending the public electric vehicle (EV) charging networks at government car parks in the coming 3 years, including installation

of additional medium chargers at the car parks managed by the Transport Department (TD), the Government Property Agency (GPA), the Leisure and Cultural Services Department (LCSD) and the Tourism Commission (TC) which are open to the public. Over 1 000 additional public chargers are expected to be in place by 2022, bringing the total number of chargers to about 1 800. Among them, 168 medium chargers whose installation works began in 2019-20 are expected to complete the works progressively by the end of April this year. Moreover, we anticipate that about 570 and 460 medium chargers will be installed in 2020-21 and 2021-22 respectively. Please refer to the Annex for the selected sites for these chargers.

- (2) Provision of on-street parking spaces is mainly to cater for short-term parking needs, and such spaces are usually installed with parking meters to accelerate the turnover of parking spaces for use by more drivers. Taking into account the power supply and space constraints, potential impact on nearby traffic as well as related considerations such as other drivers' parking needs, the Government has to look for suitable on-street parking spaces to install charging facilities. Around 10 possible sites have initially been identified for such installation and their feasibility is under detailed study. When these sites are confirmed to be suitable for installing on-street charging facilities, the Government will study the introduction of a pilot scheme on installation of charging facilities.

In addition, the Government commissioned a consultancy study in October 2019 to look for suitable sites in 18 districts of Hong Kong to set up public quick charging stations for trial. After completion of the study, we will explore suitable options for developing quick charging stations.

- (3) and (4) The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces.

The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in December 2019. Initially, the pilot scheme will subsidise the total cost of the installation works, subject to a funding ceiling for each private residential development. The ceiling shall be \$30,000 per private parking space in the car parks, or \$15 million in total, whichever is lower.

As regards manpower, the Environmental Protection Department will establish a new team to prepare and manage the pilot scheme. The team comprises of 8 non-directorate Environmental Protection Officers/Inspectors and Electrical and Mechanical Engineers/Electrical Inspectors.

We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.

- (5) The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of EVs to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs.

**The number and distribution of EV chargers
planned to be installed by the Government**

Department	District		Location	No. of EV chargers to be installed
TD	Southern	1.	Aberdeen Car Park	About 650 in total
	Central & Western	2.	Kennedy Town Car Park	
	Kwai Tsing	3.	Kwai Fong Car Park	
	Eastern	4.	Shau Kei Wan Car Park	
	Wong Tai Sin	5.	Sheung Fung Street Car Park	
	Wan Chai	6.	Tin Hau Car Park	
	Tsuen Wan	7.	Tsuen Wan Car Park	
	Sheung Wan	8.	Rumsey Street Car Park	
GPA	Eastern	9.	North Point Government Offices	About 200 in total
	Central & Western	10.	Queensway Government Offices	
	Sha Tin	11.	Sha Tin Government Offices	
	North	12.	North District Government Offices	
	Tuen Mun	13.	Tuen Mun Government Offices	
	Sai Kung	14.	Sai Kung Government Offices	
	Sham Shui Po	15.	Cheung Sha Wan Government Offices	
	Kowloon City	16.	Trade and Industry Tower	
LCSD	Central & Western	17.	Sun Yat Sen Memorial Park	About 310 in total
		18.	Sun Yat Sen Memorial Park Sports Centre	
	Eastern	19.	Siu Sai Wan Sports Ground	
		20.	Island East Sports Centre	
	Southern	21.	Deep Water Bay Beach	
		22.	Ap Lei Chau Waterfront Promenade	
	Wan Chai	23.	Wong Nai Chung Gap Children's Playground	
	Kwun Tong	24.	Kowloon Bay Park	
		25.	Ping Shek Playground	
		26.	Shun Lee Tsuen Park	
		27.	Lei Yue Mun Municipal Services Building	
	Sham Shui Po	28.	Lai Chi Kok Park	
		29.	Sham Shui Po Sports Ground	
		30.	Cornwall Street Park	

Department	District		Location	No. of EV chargers to be installed
	Wong Tai Sin	31.	Lung Cheung Road Lookout	
		32.	Hammer Hill Road Sports Ground	
		33.	Po Kong Village Road Park	
	Yau Tsim Mong	34.	Kowloon Park	
	Islands	35.	Tung Chung Municipal Services Building	
	Kwai Tsing	36.	Tsing Yi Southwest Leisure Building	
		37.	Tsing Yi Northeast Park	
		38.	Tsing Yi Sports Ground and Tsing Yi Swimming Pool	
		39.	Kwai Chung Sports Ground	
		40.	Hing Fong Road Playground	
	North	41.	Sheung Shui Swimming Pool	
		42.	North District Sports Ground	
		43.	Wo Hing Sports Centre	
		44.	Po Wing Road Sports Centre	
		45.	Fanling Swimming Pool	
	Sai Kung	46.	Tseung Kwan O Swimming Pool	
		47.	Tseung Kwan O Sports Ground	
		48.	Tiu Keng Leng Sports Centre	
	Sha Tin	49.	Siu Lek Yuen Road Playground	
		50.	Sha Tin Sports Ground and Yuen Wo Playground	
		51.	Sha Tin Jockey Club Swimming Pool and Yuen Wo Road Sports Centre	
		52.	Sha Tin Town Hall	
		53.	Hong Kong Heritage Museum	
		54.	Ma On Shan Swimming Pool	
		55.	Ma On Shan Sports Ground	
		56.	Yuen Chau Kok Complex	
	Tai Po	57.	Tai Po Sports Ground	
		58.	Tai Po Complex	
		59.	Kwong Fuk Park	
	Tsuen Wan	60.	Shing Mun Valley Swimming Pool	
		61.	Shing Mun Valley Sports Ground	
Tuen Mun	62.	Tuen Mun North West Swimming Pool		

Department	District		Location	No. of EV chargers to be installed
		63.	Tuen Mun Swimming Pool	
		64.	Yau Oi Sports Centre	
	Yuen Long	65.	Yuen Long Swimming Pool	
		66.	Tin Shui Wai Swimming Pool & Tin Shui Wai Sports Centre	
		67.	Tin Shui Wai Sports Ground	
		68.	Tin Yip Road Park	
		69.	Fung Kam Street Sports Centre	
TC	Kowloon City	70.	Kai Tak Cruise Terminal	About 40 in total

Remark: The number of EV chargers listed in the table is a preliminary estimate and the actual number will be affected by factors such as available electricity at venues, availability of venues and other restrictions.

- End -

CONTROLLING OFFICER'S REPLY

ENB280

(Question Serial No. 3610)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the formulation of the first roadmap on the popularisation of electric vehicles (EVs), please advise this Committee on the following:

- (1) What is the current progress of the "One-for-One Replacement" Scheme for EVs? What is the number of EVs purchased through the Scheme in 2019-20?
- (2) Currently, what are the number of electric private cars and their percentage in the total number of private cars?
- (3) Has the Government planned to set a timetable for banning the sale of fuel-driven vehicles? If yes, what are the details? If no, what are the reasons?
- (4) Will road pricing concession be offered to EV owners to increase the incentives for car owners to change to EVs? If yes, what are the details? If no, what are the reasons?
- (5) Will various sectors of the community be consulted on the roadmap on the popularisation of EVs? Will the Administration support local research and development related to EV ancillary facilities through the Smart Traffic Fund to be set up? If yes, what are the details?

Asked by: Hon MOK Charles Peter (LegCo internal reference no.: 127)

Reply:

(1)

To strike a balance between promoting the use of electric private cars (e-PCs) and not increasing the overall number of private cars (PCs), the Government introduced the "One-for-One Replacement" Scheme (the Scheme) on 28 February 2018 to encourage PC owners to choose electric vehicles (EVs) when they need to replace their cars. Purchasers of e-PCs who scrap and de-register their eligible old PCs and then first register a new e-PC can enjoy a higher first registration tax (FRT) concession of up to \$250,000.

In the 2019-20 financial year (as at the end of February 2020), the number of first registered e-PCs under the "One-for-One Replacement" Scheme was 2 310. Since the introduction of the Scheme in February 2018 until the end of February 2020, over 85% of the first

registered e-PCs have benefitted from the Scheme, and this percentage further increased to 90% in the past half year.

(2)

As at the end of February 2020, the number of e-PCs in Hong Kong is 13 890, representing about 2.2% of the total number of PCs in Hong Kong.

(3) to (5)

The Government is actively preparing to update the Clean Air Plan and formulate the roadmap on the popularisation of EVs to, among other things, further examine the measures to improve air quality, as well as the policy objectives and plans to promote the use of EVs, including the study on formulating the direction and roadmap to ban the sale of fuel-driven vehicles. The Environment Bureau and the Environmental Protection Department will take into account the views of relevant government departments and stakeholders in drawing up the details.

- End -

CONTROLLING OFFICER'S REPLY

ENB281

(Question Serial No. 6755)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

What is the progress of work on supporting the implementation of ex-gratia payment for phasing out pre-Euro IV and Euro IV diesel commercial vehicles? Has an implementation timetable for the relevant work been drawn up?

Asked by: Hon POON Siu-ping (LegCo internal reference no.: 40)

Reply:

Diesel commercial vehicles (DCVs) are a major source of roadside air pollution in Hong Kong. To improve roadside air quality and better protect public health, the Environmental Protection Department (EPD) launched an incentive-cum-regulatory scheme in March 2014 to phase out by end of 2019 progressively some 82 000 pre-Euro IV DCVs. The original application deadline for the ex-gratia payment scheme was 31 December 2019. In view of the economic downturn in the past few months, some transport trades were not able to complete the necessary procedures and submit applications for ex-gratia payment by the original deadline due to operational difficulties. Hence, the EPD has extended the deadline by 6 months to 30 June 2020. As at end of February 2020, about 77 900 DCVs have been granted an ex-gratia payment, accounting for about 95% of the eligible vehicles and involving an ex-gratia payment amount of about \$10.5 billion.

Moreover, to continuously improve roadside air quality, the EPD plans, by making reference to the scheme of phasing out pre-Euro IV DCVs, to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs (including goods vehicles, light buses and non-franchised buses) by the end of 2027 and cease to issue licences of the relevant vehicles after the specified deadlines.

We will offer an ex-gratia payment ranging from 31% to 37% of the average taxable values of new vehicles to owners who scrap and de-register their Euro IV DCVs by the specified deadlines, and provide an extra ex-gratia of 15% of the average vehicle body price for goods vehicles assembled with additions.

We have consulted the relevant trades regarding the scheme, and the trades in general welcomed the scheme. The details of the scheme received support from the Panel on Environmental Affairs of the Legislative Council in January 2020. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.

- End -

CONTROLLING OFFICER'S REPLY

ENB282

(Question Serial No. 3774)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding issues relating to plastics, please advise this Committee on the following: The Environmental Protection Department has been promoting and encouraging the reduction in the use of packaging materials since mid-2019, and is conducting a consultancy study on the feasibility, scope and mechanism of controlling or banning the use of disposable plastic tableware. What are the details of the consultancy study? What is its progress? What are the manpower and consultancy fee involved?

It is mentioned in the Matters Requiring Special Attention in 2020-21 that the Administration will consult the public on the way forward for the producer responsibility scheme on plastic beverage containers, and launch a pilot scheme on the application of reverse vending machines. When will the Administration consult the public? What are the details of the pilot scheme? What are the staffing and expenditure to be involved? When is the pilot scheme expected to commence?

Will the Administration advise on the effectiveness of the pilot scheme on free collection services of waste plastics last year? Please provide the respective quantity of all types of non-commercial and non-industrial waste plastics recovered, the relevant manpower and expenditure by different pilot district.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 43)

Reply:

The Government is very concerned about the environmental impacts brought by plastic packaging materials and disposable plastic tableware. In April 2019, the Environmental Protection Department (EPD) commenced a study on the feasibility, scope and mechanism of controlling or banning disposable plastic tableware. The consultant is currently reviewing the latest international development in controlling or banning disposable plastic tableware as well as the recommendations on the substitutes. Based on the findings of the study and analysis, the consultant will draw up a proposal to the Government that is suitable for implementation in Hong Kong in the long run. The study is scheduled for completion by the end of 2020 and the expenditure involved is about \$3 million. The EPD will carry out the relevant study with its existing manpower and a breakdown of the staff

establishment involved is not available. For plastic packaging materials, the EPD is proactively meeting the retail trade to have a better understanding of its operation for exploring practical measures to promote and encourage reduction in the use of plastic packaging materials. We aim at materialising these measures, on a voluntary basis, through collaboration with the trade in the second half of 2020.

In addition, the Government is carefully considering the recommendations of the consultancy study on the producer responsibility scheme (PRS) on plastic beverage containers for mapping out the way forward, and plans to consult the public in the second half of 2020. The EPD is also preparing for the implementation of a pilot scheme on reverse vending machines (RVMs), with a view to assessing the feasibility and cost-effectiveness of the application of RVMs in local context as well as gauging the public responses. We plan to place 60 RVMs at different locations, primarily at public places with higher foot traffic or suitable government facilities. The work relating to the tendering of the pilot scheme is in progress. Detailed arrangements for the pilot scheme will be worked out after appointment of the contractor, and the pilot scheme is expected to be rolled out in the second half of 2020. The estimated expenditure for the pilot scheme in the 2020-21 financial year is about \$9.5 million, mainly for engaging a contractor to carry out the scheme.

As for the pilot scheme on free collection services of waste plastics, the EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, Community Recycling Centres and Community Green Stations in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets, so as to ensure proper handling of the collected waste plastics. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since late January 2020. As at the end of February 2020, about 65 premises, including housing estates and buildings, have registered to participate in the Pilot Scheme for the Eastern District, and the total quantity of waste plastics recovered during this period was about 8 tonnes. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020. Having regard to the experience and effectiveness of the Pilot Scheme, as well as the details and the progress of development of the PRS on plastic beverage containers to be launched later, we will extend the service to the whole territory progressively. The Pilot Scheme is undertaken by 17 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades), together with the service contracts under the Pilot Scheme in the 3 districts, the estimated total expenditure in 2020-21 is about \$50 million.

- End -

ENB283

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3947)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Financial Secretary mentioned in paragraph 132 under “Building A Liveable City” part of the Budget Speech that to support the waste paper recycling industry, a sum of not less than \$300 million would be set aside each year starting from 2020/21 for implementing a scheme to recycle waste paper. Will the Administration advise on the details of the scheme, the manpower and expenditure to be involved and the expected outcomes? In addition, what are the criteria for engaging service contractors for the scheme?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 89)

Reply:

The Government will set aside a sum of not less than \$300 million each year starting from 2020-21 for implementing a scheme to collect and recycle waste paper. The Environmental Protection Department (EPD) will engage several service contractors through open tender to collect waste paper (including cardboards, newspapers and office papers) from their associated street corner recycling shops/mobile recyclers/frontline collectors across the territory under service contracts. The waste paper collected will be further processed, including screening, sorting and baling, before exporting to the Mainland or overseas (e.g. Southeast Asia) markets for recycling to paper products. This can turn waste into resources and ensure stable and diversified recycling outlets for local waste paper.

Under the service contract, the service contractors and their relevant partners (including street corner recycling shops and mobile recyclers) are required to provide economic incentives to purchase waste paper that meets the specified quality standard from frontline collectors at a price which is not less than the designated recovery price of waste paper (not less than 70 cents per kilogram in the first 6 months, and from then on the price will be adjusted every 3 months according to the actual export price of waste paper in the market), so as to encourage clean recycling. The monthly service fee payable to the service

contractors is calculated according to the quantity of waste paper successfully exported and sold. The scheme will help enhance the overall quality and market competitiveness of local waste paper, thereby providing support to the entire waste paper recycling industry with stabilisation of employment opportunities in the industry, including frontline collectors.

To provide more stable and diversified outlets for locally recycled waste paper and reduce the reliance on a single export market, we have indicated in the service contracts that after obtaining the consent from the EPD, service contractors are allowed to charge a higher service fee for exporting waste paper to overseas markets than to the Mainland market, so as to encourage service contractors to explore other export markets and new business opportunities.

The current situation of the waste paper recycling market and the opinions of the trade have been taken into full consideration when formulating the scheme. Existing waste paper exporters, other companies which are interested in joining the waste paper recycling market or any individuals are welcome to bid for the service contracts. Tender evaluation includes 2 parts, namely technical assessment and price assessment, and the weightings of technical and price assessments are 60% and 40% of the total score respectively. In the course of assessing the tenders, besides the tender price, the EPD will also consider factors such as the tenderers' past experience in collection and export of waste paper, capacity of processing waste paper and even innovative suggestions raised by the tenderers regarding the operation of waste paper recycling. The practice of awarding the contract to the lowest bidder will not be adopted.

The EPD conducted an open tender exercise on 28 February 2020 to invite interested contractors to bid for the service contracts and the tender closing date is 24 April 2020. There is no pre-set ceiling on the number of service contractors and the term of the service contracts will be 23 months, including the preparatory period for a maximum of 3 months and the service period for 20 months. The service is scheduled to commence in the second half of 2020 and it is expected that not less than 40 000 tonnes of waste paper will be processed each month. The scheme of waste paper collection and recycling services is undertaken by 12 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades).

- End -

CONTROLLING OFFICER'S REPLY**ENB284****(Question Serial No. 3949)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please set out the total quantities of waste treated and the relevant expenditures of the T • PARK, the WEEE • PARK and the O • PARK1 each year respectively since their establishment. In addition, what is the current work progress of the remaining phases of the Organic Resources Recovery Centres (O • PARKs)? When will the works be completed? What are the staff establishment and the relevant expenditures involved?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 91)Reply:

The total quantities of waste treated and the relevant expenditures of the T • PARK, the WEEE • PARK and the O • PARK1 each year since their establishment are tabulated below:

<u>Recycling facility</u>	<u>Total quantity of waste treated</u>		<u>Relevant expenditure</u>	
	<u>Year</u>	<u>Tonnes</u>	<u>Financial year</u>	<u>Operating expenditure (\$m)</u>
T • PARK	2015 (April to December)	249 467	2015-16	220 (actual)
	2016	418 757	2016-17	237 (actual)
	2017	386 208	2017-18	250 (actual)
	2018	392 221	2018-19	260 (actual)
	2019	384 038	2019-20	264 (revised estimate)
WEEE • PARK ¹	2017 (October to December)	930	2017-18	28 (actual)
		10 830	2018-19	165 (actual)
	2018	23 980	2019-20	229 (revised estimate)
	2019			
O • PARK1	2018 (July to December)	14 519	2018-19	11 (actual)
	2019	33 704	2019-20	47 (revised estimate)

¹The WEEE • PARK treats waste regulated electrical equipment covering air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors.

The work progress, estimated completion date, the staff establishment and the relevant expenditures involved in the food waste-to-energy facilities which are under development or planning, including the Organic Resources Recovery Centres (O • PARK2 and O • PARK3) as well as “food waste/sewage sludge anaerobic co-digestion” facilities, are tabulated below:

<u>Food waste recycling facilities under development or planning</u>	<u>Work progress</u>	<u>Estimated completion date</u>	<u>Staff establishment and relevant expenditures involved</u>
O • PARK2	The Design-Build-Operate contract of the O • PARK2 was awarded in August 2019.	The facility is scheduled for commissioning in 2022.	Absorbed by the existing staff establishment of the Environmental Protection Department (EPD). The estimated capital cost is \$2,453 million; annual operating expenditure is \$179.2 million.
O • PARK3	The study is in progress.	The facility is initially scheduled for commissioning in 2026.	Absorbed by the existing staff establishment of the EPD. The consultancy fee for the study is about \$27.9 million.
“Food waste/sewage sludge anaerobic co-digestion” trial scheme at Tai Po Sewage Treatment Works (STW)	The food waste pre-treatment facilities at the Tai Po STW commenced operation in May 2019, with a design capacity of 50 tonnes per day. As at the end of February 2020, the cumulative quantity of food waste treated was about 1 350 tonnes.	The facility commenced operation in May 2019.	Absorbed by the existing staff establishment of the EPD. The estimated capital cost is \$14.97 million; annual operating expenditure is \$10 million.
“Food waste/sewage sludge anaerobic co-digestion” trial scheme at Sha Tin STW	The EPD is preparing the consultancy contract for the study and design of the food waste pre-treatment facilities at the Sha Tin STW.	The construction of the facility is expected to be completed in 2022.	Absorbed by the existing staff establishment of the EPD. The consultancy contract will be awarded in mid-2020. The relevant consultancy fee is

			expected to be \$10.7 million.
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In addition, we are working with the Drainage Services Department to examine the extension of the application of the “food waste/sewage sludge anaerobic co-digestion” technology to other STW where sewage sludge anaerobic digestion facilities are or will be available (such as the STW in Yuen Long and Hung Shui Kiu, etc.); and examine the feasibility of upgrading the anaerobic digestion system of the Tai Po STW during its expansion project in future so as to process more pre-treated food waste.

- End -

CONTROLLING OFFICER'S REPLY**ENB285****(Question Serial No. 3951)**Head: (44) Environmental Protection DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) WasteControlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

Please provide the quantities of various types of electrical appliances and computer products recovered by recognised recyclers under the Producer Responsibility Scheme on Waste Electrical and Electronic Equipment in the past year.

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 92)Reply:

In 2019, 16 licensed recycling facilities in the territory processed a total of about 25 550 tonnes of waste regulated electrical equipment (REE) (including televisions, refrigerators, air-conditioners, washing machines, computers, printers, scanners and monitors). The breakdown is as follows:

Waste REE	Amount processed in 2019 (tonnes)
Television	1 850
Refrigerator	4 960
Air-conditioner	3 530
Washing machine	11 750
Computer products (including computers, printers, scanners and monitors)	3 460
Total	25 550

- End -

CONTROLLING OFFICER'S REPLY

ENB286

(Question Serial No. 3952)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Environmental Protection Department is currently proceeding with the South East New Territories Landfill Extension Scheme and the North East New Territories Landfill Extension Scheme approved by the Legislative Council in December 2014. Will the Administration advise this Committee on the current work progress of the schemes, the completion dates, as well as the expenditures and manpower involved?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 93)

Reply:

We are implementing the extension schemes of the 3 strategic landfills (i.e. the South East New Territories (SENT) Landfill, the North East New Territories (NENT) Landfill and the West New Territories (WENT) Landfill). The work progress is as follows:

The SENT Landfill Extension Scheme

- (i) The site involved was handed over to the contractor in 2018; and
- (ii) The basic extension works is expected to be completed in 2021 and the landfill will then start receiving construction waste.

The NENT Landfill Extension Scheme

- (i) The interfacing issues between the extended works and the existing landfill are being taken forward and implemented progressively; and
- (ii) The tendering exercise is expected to be conducted within this year.

The design and site investigation consultancy study of the WENT Landfill Extension Scheme

- (i) The review of the outline design of the project has been substantially completed;
- (ii) The study on the interfacing issues of the extension scheme with the neighbouring projects and facilities (such as the existing power plant, the WENT Landfill, the T • PARK and other government facilities under planning) is ongoing; and
- (iii) The preparatory work for the planning of the associated works is ongoing.

The estimated total expenditure on the design, studies and works of all the extension schemes above in 2020-21 is \$683 million. As the above work is mainly undertaken by relevant staff of the Environmental Infrastructure Division of the Environmental Protection Department, there is no separate breakdown for the manpower resources required for individual projects.

- End -

CONTROLLING OFFICER'S REPLY

ENB287

(Question Serial No. 3953)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Waste

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

What were the Government's measures to strengthen community recycling support and promote the development of the local recycling network in the past 3 years? What were the financial resources and manpower involved? What specific plans the Administration has in place and how much manpower will be earmarked for strengthening environmental education in the community?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 94)

Reply:

The Environmental Protection Department (EPD) has been encouraging the public to practise source separation of waste for recyclables at home and at workplace through continuous promotion of the Source Separation of Waste Programme (the Programme). As at early 2020, over 2 200 housing estates, some 700 rural villages and over 1 000 commercial and industrial (C&I) buildings have participated in the aforesaid Programme. We have now placed about 17 000 sets of recycling bins at housing estates and C&I buildings which have participated in the Programme, government office buildings, schools, country parks, and other public places, covering over 80% of the places where Hong Kong people live and work. We will continue to review the design of recycling bins in public places and further collect views from the stakeholders as and when appropriate to facilitate waste reduction and recycling by the public.

To strengthen on-site recycling support, the EPD started to establish outreaching teams in late 2018 to collaborate closely with community partners to educate the public on the importance of waste reduction at source and assist them to practise proper waste separation at source and clean recycling, and to identify proper outlets for recyclables. The outreaching teams have kick-started pilot outreaching service in 3 pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin). We will extend the outreaching service to the whole territory in phases starting from 2020 according to our outreaching experience in the pilot districts. The staffing of the EPD for implementing the outreaching service will be gradually increased to 74 non-directorate professional staff (including Environmental

Protection Officer and Environmental Protection Inspector grades) and 142 non-civil service contract staff.

As single block buildings in older districts usually do not have a property management company for implementing and managing waste recycling programmes or there is even lack of space for setting up waste recovery facilities, the EPD has provided funding support through the Environment and Conservation Fund (ECF) to non-governmental organisations (NGOs) to set up Community Recycling Centres (CRCs) in various districts to facilitate residents living in these buildings to separate waste for recovery and to promote waste reduction and recycling activities at the community level. The ECF currently provides funding support to a total of 17 CRCs and 2 mobile community recycling projects (community recycling vehicles) in various districts. Moreover, there are 50 recyclable collection points operated by NGOs in the community to provide recycling services to the public. In the past 3 years (2017 to 2019), the total amount of approved funding to the CRCs and community recycling vehicles was about \$110 million. To further strengthen community recycling support, the EPD will regularise the funding support for engaging eligible non-profit-making organisations under contracts to expand the operation of CRCs to all 18 districts across the territory from 2020-21, and for maintaining their sustained development. The estimated expenditure for the 2020-21 financial year is about \$100 million. Such work will be undertaken by 8 non-directorate professional staff (including Environmental Protection Officer and Environmental Protection Inspector grades).

Moreover, the EPD also continues to proactively take forward the development of the network of Community Green Stations (CGSs) to strengthen the support for waste reduction and recycling as well as environmental education at the district level, instilling a green living culture in the community. As at the end of 2019, 8 CGSs have been in operation, including the Sha Tin CGS, the Eastern CGS, the Kwun Tong CGS, the Yuen Long CGS, the Sham Shui Po CGS, the Tuen Mun CGS and the Kwai Tsing CGS which commenced operation from 2015 to 2018; and the Tai Po CGS which commenced operation in 2019. The Islands CGS is expected to be in operation in 2020. The total cost for capital works of all CGSs is estimated to be about \$400 million. The total operating expenditure of the CGSs that have commenced operation in the past 3 years (2017 to 2019) was about \$72 million. At present, a total of 18 non-directorate professional posts (including Environmental Protection Officer and Environmental Protection Inspector grades) are tasked with implementing and monitoring the operation of the CGSs, including 16 permanent posts and 2 time-limited posts.

To ensure proper handling of the collected waste plastics, the EPD is rolling out a two-year Pilot Scheme on Collection and Recycling Services of Plastic Recyclable Materials (the Pilot Scheme) in 3 different districts (i.e. Eastern District, Kwun Tong and Sha Tin) respectively, through which contractors are engaged under service contracts to provide free collection service of non-commercial and non-industrial waste plastics from public and private housing estates, schools, public institutions, CRCs and CGSs in the districts, etc. for further processing and production of recycled raw materials or products for export or supply in local markets. Through open tendering, the services under the Pilot Scheme in Eastern District have progressively commenced since January 2020. We are assessing the tenders for the Pilot Schemes in Kwun Tong and Sha Tin districts and such services are expected to commence in the second quarter of 2020. The Pilot Scheme is undertaken by 17 non-directorate professional staff (including Environmental Protection Officer and

Environmental Protection Inspector grades) and the estimated total expenditure in 2020-21 is about \$50 million.

In addition, the ECF also promotes recycling in the local community through Community Waste Reduction Projects, Community Involvement Projects for Waste Reduction Through Quantity-based Municipal Solid Waste Charging, Food Waste Recycling Projects in Housing Estates, On-site Meal Portioning Projects in Schools, etc. The Environmental Campaign Committee (ECC) also provides recycling bins free of charge to schools, as well as housing estates and C&I buildings which have participated in the Source Separation of Waste Programme. In the past 3 years (2017 to 2019), the total amount of funding approved by the ECF to the relevant projects was about \$320 million.

Regarding co-operation with the District Councils (DCs), the EPD, the ECC and the Home Affairs Department have worked with the 18 DCs on the “Community Participation Programme in Environmental Protection” since 2012 to jointly promote environmental education, waste reduction at source and recycling at the district level to further inculcate the “Use less, Waste less” culture in the community. In the past 3 years (2017 to 2019), the total estimated expenditure on the relevant activities was \$10.8 million.

- End -

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3954)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

It is stated in the Matters Requiring Special Attention in 2019-20 that the Administration will introduce new initiatives for further improving air quality. What are the specific initiatives? What are the staffing and expenditure to be involved? In addition, to reduce emissions from ferries, the Government plans to earmark \$350 million for launching a pilot scheme for electric ferries serving ferry routes in Victoria Harbour. What are the details of this scheme? How is it different from those implemented for green government vessels in the past?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 95)

Reply:

The Environmental Protection Department (EPD) will continue to implement various air quality improvement measures outlined in *A Clean Air Plan for Hong Kong* under the 2020-21 "Air" Programme. The major new measures are set out below:

- The Government is preparing for a \$2 billion pilot scheme to subsidise the installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings, so that owners of individual parking spaces can install chargers according to their own needs in future. It is estimated that the pilot scheme will run for about 3 years to cover roughly 60 000 private parking spaces. We are proceeding with the preparatory work for the pilot scheme and plan to launch the pilot scheme in the second half of 2020.
- The EPD plans, by making reference to the scheme of phasing out pre-Euro IV diesel commercial vehicles (DCVs), to adopt an incentive-cum-regulatory approach to progressively phase out about 40 000 Euro IV DCVs by the end of 2027 and cease to issue the licences of relevant vehicles after the specified deadlines. We are proceeding with the preparatory work for the implementation of the ex-gratia payment scheme and anticipate that the scheme will be launched in the second half of 2020.

- The Government has proposed to earmark \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial for 12 months. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in around mid-2023.
- As at the end of February 2020, the Pilot Green Transport Fund (PGTF) has approved a total of 183 applications. The Government has completed a review of the scope of the PGTF and proposes to inject an additional \$800 million into the PGTF to extend its scope.

In addition, the Government also proposes to launch a pilot scheme for electric ferries in in-harbour ferry routes with a view to testing the technical viability of adopting electric ferries in Hong Kong, and exploring whether conventional ferries could be replaced by new energy ferries in the long run.

Currently, there are altogether 4 franchised or licensed ferry operators running 7 passenger ferry routes in Victoria Harbour. We initially propose that the pilot scheme will subsidise each ferry operator for the construction of an electric ferry and associated charging facilities to serve a dedicated in-harbour ferry route. This arrangement enables the ferry operators to acquire experience in operating electric ferries and the Government to understand the performance of electric ferries under different operating conditions.

The Government established an Inter-departmental Working Group in 2018 to work out the details of the pilot scheme and oversee its implementation. Given the limited global application of electric passenger ferries, we will engage an independent consultant to advise on the design of electric ferries and assist the ferry operators to prepare open tenders for the construction of electric ferries and the associated charging facilities. Taking into account the lead time for the construction of the electric ferries and the associated charging facilities, we anticipate that the trial operation will start in 2022-23 for a period of 24 months. We estimate the total expenditure of the pilot scheme at about \$350 million. The actual expenditure will depend on the results of the open tenders for the electric ferries. The Government will also create 9 time-limited non-directorate posts for a period of 7 years to cope with the additional workload of the pilot scheme.

At the time of ordering new vessels, the Government will consider using green technologies, such as vessels powered by electric and hybrid propulsion systems, when the operational needs of individual departments can be met. However, these vessels do not include passenger ferries.

- End -

CONTROLLING OFFICER'S REPLY

ENB289

(Question Serial No. 3955)

Head: (44) Environmental Protection Department

Subhead (No. & title): (-) Not Specified

Programme: (2) Air

Controlling Officer: Permanent Secretary for the Environment / Director of Environmental Protection (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Administration stated that it would earmark \$80 million to launch a pilot scheme for electric public light bus (e-PLB) under which green public light buses (PLBs) running on fixed routes would pioneer the switch to electric vehicles. In this connection, will the Administration advise this Committee on the following:

In the estimation of the Administration, how many e-PLBs will be purchased? What is the estimated price of each light bus?

In the estimation of the Administration, how many charging facilities will be constructed for use by e-PLBs? What are the details?

What are the details of the fixed routes run by the green PLBs?

When is the pilot scheme anticipated to commence? What are the respective manpower and expenditure to be involved?

Asked by: Hon QUAT Elizabeth (LegCo internal reference no.: 96)

Reply:

The Government has proposed to earmark \$80 million to launch a pilot scheme for electric public light buses (e-PLBs) and subsidise about 40 e-PLBs running on various routes for a trial of about 12 months. We expect to trial e-PLBs and charging facilities from different suppliers, so as to test their operations under local environment and compare their performances.

Initially, green public light buses (PLBs) will be the major participants in the pilot scheme as they are running on relatively short routes, requiring a relatively lower driving range and charging power, and more suitable for trial. As they are running on fixed routes, their daily operation can be supported by installing charging facilities at the PLB termini, public transport interchanges or other designated places where they operate.

The Government engaged a consultant in March 2019 to study and take forward the pilot scheme, including developing the basic specifications and requirements of e-PLBs and the associated charging facilities that suit Hong Kong's operating environment, identifying

suitable PLB routes for trial under the pilot scheme and consulting the PLB trade about their intention of joining the pilot scheme and using e-PLBs. The study is expected to be completed in the first half of 2020. Routes for the trial will be determined subject to the recommendations of the study report and the views of the trade. Taking into account the lead time for manufacturers to develop and manufacture e-PLBs and the associated charging facilities, we anticipate that the pilot scheme can commence in mid-2023.

The overall workload of the pilot scheme will be absorbed by the existing resources of the Environmental Protection Department and undertaken by 3 time-limited non-directorate posts to be created for a period of 7 years.

- End -

CONTROLLING OFFICER'S REPLY**ENB290****(Question Serial No. 4979)**Head: (60) Highways DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Capital WorksControlling Officer: Director of Highways (Jimmy P M CHAN)Director of Bureau: Secretary for the EnvironmentQuestion:

In the coming year, the Administration will continue to oversee the retrofitting of noise barriers on Tuen Mun Road (Town Centre Section) and Tai Po Road (Sha Tin Section). To this end, please advise this Committee on: (1) the total expenditure of the project and the works progress of each item as of today; and (2) regarding the claims arising from the construction of various items of the route so far, please provide the following information in table form:

Scope of works	Contract No.	Contract sum	Contractor	No. of claims	Amount claimed	Amount awarded

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 802)Reply:

The retrofitting of noise barriers on Tuen Mun Road (Town Centre Section) commenced in December 2015 and was completed in March this year. The project mainly involves the retrofitting of noise barriers on Tuen Mun Road (Town Centre Section) between Rose Dale Garden and Lakeshore Building to mitigate the impact of traffic noise on neighbouring residents. Up to end March 2020, the cumulative expenditure of the project is about \$523.9 million. It is expected that the project will be completed within the approved project estimate of \$826.5 million.

Moreover, the Highways Department has entrusted the Civil Engineering and Development Department (CEDD) to take forward the noise barriers retrofitting works on Tai Po Road (Sha Tin Section), which commenced in July 2018 and is anticipated to be completed in September 2023. The project mainly involves the retrofitting of noise barriers on Tai Po Road (Sha Tin Section) near Scenery Court and Wo Che Estate to mitigate the impact of traffic noise on neighbouring residents. Up to end March 2020, the cumulative expenditure of the project is about \$42 million. It is expected that the project will be completed within the approved project estimate of \$851.8 million.

Generally speaking, it is the responsibility of the contractor to complete the works within the specified time and cost required in the contract. In the event of any unforeseen circumstances, the contractor may lodge claims in accordance with the terms of the contracts and substantiate with sufficient justification and information regarding the claims. The consultant appointed by the managing department will carefully and independently assess the claims and then submit the assessment to the managing department for consideration. The managing department will scrutinise the assessment of the contractor's claims in order to ensure that every claim is handled strictly based on the terms of the contract.

As at end February 2020, there are 6 claims with claimed amount lodged by the contractor in relation to the retrofitting of noise barriers on Tuen Mun Road (Town Centre Section). The total amount claimed is about \$17.9 million while the total awarded amount is about \$5.6 million. According to the relevant terms of the works contracts, the Government cannot divulge information on individual claims without the consent of the contractors. According to the CEDD, there is no claim received regarding the noise barriers retrofitting works on Tai Po Road (Sha Tin Section).

- End -

CONTROLLING OFFICER'S REPLY**ENB291****(Question Serial No. 4989)**Head: (60) Highways DepartmentSubhead (No. & title): (-) Not SpecifiedProgramme: (1) Capital WorksControlling Officer: Director of Highways (Jimmy P M CHAN)Director of Bureau: Secretary for the EnvironmentQuestion:

Regarding the retrofitting of noise barriers on Tuen Mun Road (Fu Tei Section) which was completed last year, will the Administration inform this Committee of the following:

- (1) The final expenditure of the noise barriers retrofitting project;
- (2) Regarding the claims arising from the construction of various items under the noise barrier retrofitting project so far, please provide the following information in table form:

Scope of works	Contract No.	Contract sum	Contractor	No. of claims	Amount claimed	Amount awarded

- (3) Please list in table form the various over-budget items of works, the expenditures under the original approved project estimates, the projected amount of cost overrun and the actual amount of cost overrun under the noise barrier retrofitting project.

Asked by: Hon KWOK Ka-ki (LegCo internal reference no.: 812)Reply:

The retrofitting of noise barriers on Tuen Mun Road (Fu Tei Section) was completed on 31 December 2019. The project mainly involves the retrofitting of noise barriers on Tuen Mun Road (Fu Tei Section) between the Fung Tei Station footbridge and Lam Tei Raw Water Pumping Station to mitigate the impact of traffic noise on neighbouring residents. It is expected that the project will be completed within the approved project estimate of \$786.2 million. The final expenditure can only be ascertained after the project account is finalised.

Generally speaking, it is the responsibility of the contractor to complete the works within the specified time and cost required in the contract. In the event of any unforeseen circumstances, the contractor may lodge claims in accordance with the terms of the contracts and substantiate with sufficient justification and information regarding the claims. The consultant appointed by the managing department will carefully and independently assess the claims and then submit the assessment to the managing department for

consideration. The managing department will scrutinise the assessment of the contractor's claims in order to ensure that every claim is handled strictly based on the terms of the contract.

As at end February 2020, there are 12 claims with claimed amount lodged by the contractor in relation to the retrofitting of noise barriers on Tuen Mun Road (Fu Tei Section). The total amount claimed is about \$11.9 million while the total awarded amount is about \$1.7 million. According to the relevant terms of the works contracts, the Government cannot divulge information on individual claims without the consent of the contractors.

- End -

CONTROLLING OFFICER'S REPLY

ENB292

(Question Serial No. 5602)

Head: (100) Marine Department
Subhead (No. & title): (603) Plant, vehicles and equipment
Programme: (2) Port Services, (3) Local Services
Controlling Officer: Director of Marine (Agnes WONG)
Director of Bureau: Secretary for the Environment

Question:

What are the estimated expenditures and work plans for the new items, namely “807 replacement of refuse scavenging vessel ‘SEA CLEANER 4’”, “811 replacement of refuse scavenging vessel ‘SEA CLEANER 5’” and “813 replacement of refuse scavenging vessel ‘SEA CLEANER 6’”? Why the funding for them has to be sought in the context of the Appropriation Bill rather than by seeking approval from the Finance Committee of the Legislative Council on its own, even though they are not new initiatives?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 809)

Reply:

The estimated cost of the refuse scavenging vessels “SEA CLEANER 4”, “SEA CLEANER 5” and “SEA CLEANER 6” is \$106.67 million each. Open tender for construction of the 3 new vessels will be invited by the Marine Department in end 2020, and construction of the new vessels will commence after the award of contract in 2021. The new vessels are expected to be commissioned in 2023.

The arrangement to include in the draft Estimates funding proposals for creating commitments or increasing expenditure ceilings for approved commitment items under the General Revenue Account for scrutiny and approval by the Legislative Council in the context of the Appropriation Bill is in line with the requirements under sections 5 and 6 of the Public Finance Ordinance. The Government explained the relevant arrangements to the Finance Committee in early 2015. We have included the necessary provision for these proposals under the respective head and sub-head of expenditure to facilitate Members’ consideration.

- End -

CONTROLLING OFFICER'S REPLY**ENB293****(Question Serial No. 4324)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (2) PowerControlling Officer: Permanent Secretary for the Environment (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

1. With regard to the renewable energy projects undertaken for the Government and public bodies, please provide information according to the format below:

	Names of Government Departments/ Public Bodies	Buildings/ Facilities Involved	Electricity and Cost Savings	Reduction in Carbon Emission
2017-2018				
2018-2019				
2019-2020				

2. With regard to the energy-saving projects undertaken for the Government and public bodies, please provide information according to the format below:

	Names of Government Departments/ Public Bodies	Buildings/ Facilities Involved	Electricity and Cost Savings	Reduction in Carbon Emission
2017-2018				
2018-2019				
2019-2020				

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 290)Reply:

1. Currently, the types of renewable energy (RE) adopted in government buildings and facilities include photovoltaic systems, solar water heating systems, wind power systems, waste-to-energy systems, biogas and hydropower systems, etc.

The table below sets out the RE systems installed in the buildings and facilities of the government departments and public bodies from 2017 to 2019:

Years of System Completion	Names of Government Departments/ Public Bodies	Buildings/ Facilities Involved	Estimated Annual Electricity Saving[#] (kWh)	Estimated Reduction in Carbon Emission (tonnes)
2017	Environmental Protection Department, Water Supplies Department, Highways Department (HyD), Drainage Services Department (DSD), Civil Engineering and Development Department, Hospital Authority, Leisure and Cultural Services Department (LCSD), Immigration Department (ImmD), Customs and Excise Department (C&ED), Correctional Services Department (CSD), Home Affairs Department (HAD), Social Welfare Department (SWD), Government Property Agency (GPA), Judiciary, Education Bureau (EDB), Security Bureau (SB) and Development Bureau.	Schools, hospitals, parks, sports centres, playgrounds, government quarters, community halls, government complexes, government offices, departmental offices, Justice Place, border control points and associated facilities, waste-to-energy plants, water treatment works, reservoirs, sewage treatment works, pumping stations and public piers, etc.	21.47 million ^{&}	15 030
2018			7.6 million [^]	5 320
2019			2.2 million [@]	1 545

The figure denotes the estimation of annual power generation made during the design stage of the RE installations. As we have not collected the electricity tariff data from departments, the information on electricity bill savings is not available.

& The figure includes the potential power generation of the “Landfill Gas Utilisation Project” at the South East New Territories Landfill in 2019 (about 18.08 million kWh). The project turned landfill gas into synthetic natural gas for utilisation and was not actually generating power. The projection method for its potential power generation made reference to the technical information of other landfill gas power generation projects.

^ The figure includes the actual power generation of the O-PARK1 in 2019 (about 7 million kWh).

@ The figure includes the power generated by the second combined heat and power generation system of the Sha Tin Sewage Treatment Works from June to December 2019 and by the “Food Waste/Sewage Sludge Anaerobic

Co-digestion” Trial Scheme of the Tai Po Sewage Treatment Works from September to December 2019 (about 1.22 million kWh).

In addition, the Government has set aside a sum of \$2 billion from the 2017-18 financial year to present to set up small-scale RE systems in existing government buildings, venues and facilities. Up to now, 81 projects have been approved with an estimated annual power output of about 7.65 million kWh. The Electrical and Mechanical Services Department (EMSD) and the Architectural Services Department (ArchSD) will continue to invite departments to submit plans for their RE projects according to the established procedure.

2. The table below sets out the energy-saving projects undertaken by the EMSD for various government departments and public bodies from 2017-18 to 2019-20:

Project Years	Names of Government Departments/ Public Bodies	Buildings/ Facilities Involved	Estimated Annual Electricity Saving# (kWh)	Estimated Reduction in Carbon Emission (tonnes)
2017-18	C&ED, Civil Aviation Department (CAD), Civil Aid Service (CAS), Commerce and Economic Development Bureau, CSD, Department of Health (DH), DSD, EDB, EMSD, Food and Environmental Hygiene Department (FEHD), Fire Services Department (FSD), Government Flying Service, Government Laboratory (GL), GPA, Hong Kong Observatory, Hong Kong Police Force (HKPF), Independent Commission Against Corruption (ICAC), ImmD, Judiciary, LCSD, Marine Department (MD), Radio Television Hong Kong (RTHK) and SB.	Arts and cultural venues, court houses, cooked food centres, clinics, department headquarters, fire stations, ambulance depots, government offices, government quarters, municipal services buildings, parks and playgrounds, police stations, correctional institutions, border control points, recreation centres, schools, sports centres, swimming pools, ferry terminals, crematoria and sewage treatment works, etc.	5.7 million	3 990
2018-19			13.3 million	9 310
2019-20			5.8 million	4 060

#Note: As we have not collected the electricity tariff data from departments, we are not able to work out the electricity bill savings.

The table below sets out the energy-saving projects undertaken by the ArchSD for various government departments and public bodies from 2017-18 to 2019-20:

Project Years	Names of Government Departments/ Public Bodies	Buildings/ Facilities Involved	Estimated Annual Electricity Saving[#] (kWh)	Estimated Reduction in Carbon Emission (tonnes)
2017-18	Existing venues managed by ArchSD, C&ED, CAD, CAS, DH, EDB, EMSD, FEHD, FSD, GL, Government Logistics Department, GPA, HyD, HAD, HKPF, ICAC, ImmD, Judiciary, LCSD, MD, RTHK, SWD and Transport Department, etc.	Arts and cultural venues, court houses, clinics, community centres, department headquarters, government offices, laboratories, libraries, municipal services buildings, parks and playgrounds, police stations, border control points, sports centres, swimming pools and ferry terminals, etc.	4.1 million	2 870
2018-19			2 million	1 400
2019-20			1.7 million	1 190

#Note: As we have not collected the electricity tariff data from departments, we are not able to work out the electricity bill savings.

- End -

CONTROLLING OFFICER'S REPLY

ENB294

(Question Serial No. 4461)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (-) Not Specified
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Regarding the work in relation to the Code on Access to Information, will the Administration advise this Committee on the following:

1) Concerning the requests for information under the Code on Access to Information received by the Environment Bureau (ENB) from October 2018 to present for which only some of the required information was provided, please state in table form: (i) the content of the requests for which only some of the required information was provided; (ii) the reasons for providing some of the information only; (iii) whether the decision on withholding some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application); (iv) whether the decision on withholding some of the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application)? If yes, please provide the details of how the requests were handled eventually.

From October to December 2018

(i) Content of the requests for which only some of the required information was provided	(ii) Reasons for providing some of the information only	(iii) Whether the decision on withholding some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision on withholding some of the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

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2019

(i) Content of the requests for which only some of the required information has been provided	(ii) Reasons for providing some of the information only	(iii) Whether the decision on withholding some of the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision on withholding some of the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

2) Concerning the requests for information under the Code on Access to Information received by the ENB from October 2018 to present for which the required information was not provided, please state in table form: (i) the content of the requests refused; (ii) the reasons for refusal; (iii) whether the decision on withholding the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application); (iv) whether the decision on withholding the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application)? If yes, please provide the details of how the requests were handled eventually.

From October to December 2018

(i) Content of the requests refused	(ii) Reasons for refusal	(iii) Whether the decision on withholding the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	(iv) Whether the decision on withholding the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

2019

(i) Content of	(ii) Reasons	(iii) Whether the	(iv) Whether the decision on
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the requests refused	for refusal	decision on withholding the information was made at the directorate (D1 or D2) level (according to paragraph 1.8.2 of the Guidelines on Interpretation and Application)	withholding some of the information was made subject to a “harm or prejudice test”, i.e. whether the public interest in disclosure of such information outweighs any harm or prejudice that could result from disclosure (according to paragraph 2.1.1 of the Guidelines on Interpretation and Application). If yes, please provide the details.

3) Any person who believes that a department has failed to comply with any provision of the Code on Access to Information may ask the department to review the situation. Please advise this Committee in each of the past 5 years, (i) the number of review cases received; (ii) the number of cases, among the review cases received in the year, in which further information was disclosed after review; (iii) whether the decisions on review were made at the directorate (D1 or D2) level.

Year in which review cases were received	(i) Number of review cases received	(ii) Number of cases, among the review cases received in the year, in which further information was disclosed after review	(iii) Whether the decisions on review were made at the directorate (D1 or D2) level
2015			
2016			
2017			
2018			
2019			

4) With reference to the target response times set out in paragraphs 1.16.1 to 1.19.1 of the Guidelines on Interpretation and Application of the Code on Access to Information, please advise this Committee on the following information by year in table form (with text descriptions).

(a)

Within 10 days from date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the information requested could not be provided	Number of requests for which the information requested could not be provided since the requests had to be transferred to another department which held the information under request	Number of requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information	Number of applications for which the applicants indicated that they did not wish to proceed with the application and withdrew the application since they did not accept the charge
2020					
2019					
2018					
2017					
2016					

Within 10 to 21 days from date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the information requested could not be provided	Number of requests for which the information requested could not be provided since the requests had to be transferred to another department which held the information under request	Number of requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information	Number of applications for which the applicants indicated that they did not wish to proceed with the application and withdrew the application since they did not accept the charge
2020					
2019					
2018					
2017					
2016					

Within 21 to 51 days from date of receipt of a written request:

	Number of requests for which the information requested was provided	Number of requests involving third party information for which the	Number of requests for which the information requested could not be	Number of requests for information which were refused under the	Number of applications for which the applicants indicated that they did not wish to

		information requested could not be provided	provided since the requests had to be transferred to another department which held the information under request	exemption provisions in Part 2 of the Code on Access to Information	proceed with the application and withdrew the application since they did not accept the charge
2020					
2019					
2018					
2017					
2016					

(b) cases in which information could not be provided within 21 days from date of receipt of a request in the past 5 years:

Date	Subject of information requested	Specific reason

(c) cases in which information could not be provided within 51 days from date of receipt of a request in the past 5 years:

Date	Subject of information requested	Specific reason

5) Among the requests for information which were refused under the exemption provisions in Part 2 of the Code on Access to Information in the past 5 years, please state in table form the number of those on which the Privacy Commissioner for Personal Data was consulted when they were being processed. For cases on which advice had been sought, was it fully accepted in the end? For cases where the advice of the Privacy Commissioner for Personal Data was not accepted or was only partially accepted, what are the reasons?

Date	Subject	Particular exemption provision in Part 2 of the Code on Access to Information under which requests for information were refused	Whether the advice of the Privacy Commissioner for Personal Data was fully accepted	Reasons for refusing to accept or only partially accepting the advice of the Privacy Commissioner for Personal Data

Asked by: Hon CHAN Tanya (LegCo internal reference no.: 366)

Reply:

- 1 and 2) From October 2018 to December 2019, among the cases of requests for information under the Code on Access to Information handled by the Environment Bureau (ENB), there were no cases for which only some of the required information was provided or the request for information was refused.
- 3) No requests for review were received by the ENB from 2015 to 2019.
- 4) (a) From 2016 to 2019, the ENB could provide the required information within 21 days from the date of receipt of the written requests. The numbers of such requests are as follows:

	Within 10 days	Within 11 to 21 days
2019	2	0
2018	5	1
2017	2	0
2016	1	0

In the above years, there were no cases of those mentioned in the Question for which the information requested could not be provided, or the request for information was refused, or the applicant withdrew the request. No requests for information have been received by the ENB in 2020 (as at 29 February).

- 4)(b and c) The ENB did not receive any cases of those mentioned in the Question in the past 5 years.
- 5) In the past 5 years, the ENB did not consult the Privacy Commissioner for Personal Data on cases where requests for information were refused.

- End -

CONTROLLING OFFICER'S REPLY**ENB295****(Question Serial No. 5717)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please inform this Committee:

- (a) of the number of complaints against light pollution received by the Administration in the past year and set out the numbers for 18 districts in tabular form;
- (b) whether the Administration received participants' requests for withdrawal from the Charter on External Lighting (the Charter) in the past year; if yes, of the details; and
- (c) of the promotion plans for the Charter and the Guidelines on Industry Best Practices for External Lighting Installations; and the manpower and resources to be allocated by the Administration.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 544)

Reply:

The numbers of complaint cases against external lighting received by the Environmental Protection Department (EPD) in the past 3 years are shown below. Over 30% of these cases were related to lighting installations for safety, security and operational purposes, and the remaining ones are installations for decorative, promotional and advertising purposes.

District	2017	2018	2019
Year			
Central and Western	30	44	43
Wan Chai	51	41	53
Eastern	28	37	32
Southern	5	25	9
Yau Tsim Mong	53	56	58
Sham Shui Po	19	36	27
Kowloon City	39	33	66
Wong Tai Sin	8	5	7
Kwun Tong	10	16	18

District	2017	2018	2019
Year			
Tsuen Wan	1	23	16
Tuen Mun	13	24	17
Yuen Long	17	28	23
North	8	13	3
Tai Po	8	16	6
Sai Kung	27	32	13
Sha Tin	14	15	21
Kwai Tsing	20	28	9
Islands	4	5	15
Total	355	477	436

Upon receipt of complaints against light nuisance caused by external lighting, the EPD would relay the complainants' concerns and requests to the persons responsible for the lighting installations in question, and if applicable, advise them to refer to the Guidelines on Industry Best Practices for External Lighting Installations and take appropriate measures to minimise the impact of the lighting installations on the residents in the vicinity. Most of the persons responsible for the lighting installations would, upon receipt of complaints, adopt measures to minimise light nuisance as far as practicable.

Since the Charter on External Lighting (the Charter) took effect in April 2016, about 5 000 participants from different sectors have signed the Charter, only a minority of participants withdrew from the Charter. For instance, about 5% of participants withdrew from the Charter in 2019, mostly because their businesses had been closed or relocated. Although the Charter is a voluntary document, most of the participants take their pledge seriously. Our on-site compliance checks conducted in the past 3 years show that nearly 99% of the participants had been able to follow the switch-off requirement.

The Environment Bureau (ENB) has been liaising with the various trade associations and non-governmental organisations to invite owners or responsible persons of external lighting installations to sign the Charter and to encourage other business partners to sign the Charter. In addition, the ENB has published a list of participants on the Charter's website and has distributed labels and certificates to participants for display at their properties/shops to raise public awareness of the Charter. We hold award ceremonies from time to time to commend participants who have fulfilled the switch-off pledge.

To review the effectiveness of the Charter, the Working Group on External Lighting (WGEL) appointed by the Government is now engaging consultancies through the ENB to conduct an opinion survey, to measure the changes of illumination level in different districts in Hong Kong, and to look into regulatory arrangements adopted by other cities for external lighting installations. The WGEL plans to report their work progress to the Panel on Environmental Affairs of the Legislative Council and listen to the views of the panel members shortly.

The publicity work for the Charter is undertaken by the existing staff of the ENB. As the staff members concerned are also responsible for other duties, we do not have a separate breakdown for the various duties. In 2020-21, the estimated expenditure for implementing and promoting the Charter is about \$1.7 million, and the estimated expenditure for reviewing the effectiveness of the Charter is about \$1.5 million.

- End -

CONTROLLING OFFICER'S REPLY**ENB296****(Question Serial No. 5718)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the records management work of your Bureau and the departments under your purview over the past year:

- (1) Please provide information on the number and rank of officers designated to perform such work. If there is no officer so designated, please provide information on the number of officers and the hours of work involved in records management duties, and the other duties they have to undertake;
- (2) Please list in the table below information on programme and administrative records which have been closed pending transfer to the Government Records Service (GRS) for appraisal;

Category of records	
Years covered by the records	
Number and linear metres of records	
Retention period approved by GRS	
Whether they are confidential documents	
Reasons for not having been transferred	

- (3) Please list in the table below information on programme and administrative records which have been transferred to GRS for retention; and

Category of records	
Years covered by the records	
Number and linear metres of records	
Retention period approved by GRS	
Whether they are confidential documents	
Reasons for not having been transferred	

- (4) Please list in the table below information on records which have been approved for destruction by GRS.

Category of records	
Years covered by the records	
Number and linear metres of records	
Retention period approved by GRS	
Whether they are confidential documents	
Reasons for not having been transferred	

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 545)

Reply:

- (1) Records management duties in the Environment Bureau and the Environmental Protection Department are overseen by a Departmental Records Manager and an Assistant Departmental Records Manager. They are officers at the rank of Chief Executive Officer and Senior Executive Officer respectively. They are assisted by about 310 secretarial and clerical staff whose duties may include records management. The proportion of their time engaged in records management varied according to different operational functions.
- (2) Information on the programme and administrative records which have been closed pending transfer to the Government Records Service (GRS) for appraisal in the past year is provided in the table below:

Category of records	Years covered by the records	Number and linear metres (LM) of records	Retention period approved by GRS	Whether they are confidential documents	Reasons for not having been transferred
Administrative	1994-1999	2 nos. 0.08 LM	3 years	No	Pending approval by GRS
	1994-1999	4 nos. 0.16 LM	Retained until the records are obsolete and to be referred to GRS for appraisal	No	Pending approval by GRS

- (3) Information on the programme and administrative records which have been transferred to the GRS for retention in the past year is provided in the table below:

Category of records	Years covered by the records	Number and LM of records	Retention period approved by GRS	Whether they are confidential documents	Reasons for not having been transferred
Administrative	2002-2012	64 nos. 3.2 LM	5 years	Yes	Not applicable

- (4) Information on records which have been approved for destruction by the GRS in the past year is provided in the table below:

Category of records	Years covered by the records	Number and LM of records	Retention period approved by GRS	Whether they are confidential documents	Reasons for not having been transferred
Administrative	1962-2017	17 634 nos. 67.99 LM	6 months to 7 years	No	Not applicable
	1996-2001	5 nos. 0.2 LM	3 years	Yes	Not applicable
Programme	1971-2012	25 240 nos. 118.1 LM	5 to 15 years	No	Not applicable

- End -

CONTROLLING OFFICER'S REPLY**ENB297****(Question Serial No. 5719)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please give details of the Department's meetings, visits or exchanges with relevant Mainland authorities in the past year and set out in chronological order the following information for each visit: (a) purpose and place of visit; (b) titles of officials met; (c) size of entourage and post titles; (d) days of visit; and (e) total expenditure involved, including expenses on (i) transportation (air tickets and local transportation); (ii) accommodation; (iii) meals; (iv) banquets or entertainment; (v) gifts.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 546)

Reply:

Information on duty visits to the Mainland carried out by officers of the Environment Bureau on environmental protection, energy and related matters in the past year is provided below:

Year	Purposes of visits	Places	No. of days	No. of visits	No. of officials (Note 1)	Transportation (not including local transportation) (\$)	Total expenditure (Note 2) (\$)
2019-20 (Up to mid-March)	Experience sharing and liaison on environmental protection, energy and related policies.	Beijing, Shanghai, Suzhou, Ningbo, Chengdu, Guangzhou, Dongguan, Taishan, Fuzhou, Foshan, Shenzhen	1-5 days for each visit	18	27	80,455 (Note 3)	90,640 (Note 3)

Note 1: Officers of different ranks per duty visit and led by the Secretary for the Environment or senior officials.

Note 2: Expenses include travelling and accommodation fees, subsistence allowance for duty outside Hong Kong and sundry expenses (where applicable).

Note 3: Information is provided up to mid-March 2020 and it does not include the remaining expenditure.

- End -

CONTROLLING OFFICER'S REPLY

ENB298

(Question Serial No. 5720)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

Regarding the monitoring of the two power companies, please advise on the expenditure and establishment for the past financial year as well as the budget and establishment for the next financial year in respect of the review of the regulatory framework for the electricity market.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 547)

Reply:

The Environment Bureau (ENB) has completed the review of the future development and regulatory framework for the electricity market, and conducted a public consultation in 2015. Having regard to the views collected during the public consultation, the ENB entered into the new Scheme of Control Agreements (SCAs) with the two power companies in 2017, and the SCAs have taken effect since 2018. The ENB does not have any expenditure or estimates for 2019-20 and 2020-21 in respect of the review of the regulatory framework for the electricity market.

- End -

CONTROLLING OFFICER'S REPLY**ENB299****(Question Serial No. 5721)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please give details of the Secretary's and the Under Secretary's duty visits in each of the past 5 years and set out in chronological order the following information for each visit: (a) purpose and place of visit; (b) titles of officials met; (c) size of entourage and post titles; (d) days of visit; and (e) total expenditure involved, including expenses on (i) transportation (air tickets and local transportation); (ii) accommodation; (iii) meals; (iv) banquets or entertainment; and (v) gifts.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 548)

Reply:

The information of the Secretary for the Environment's and the Under Secretary for the Environment's duty visits in each of the past 5 years is listed as below:

Year (Number of visits)	Purposes	Places	Individuals met	Number of entourage members (Note 1)	Days of visit	Expenses (\$)				
						Flight tickets (Note 2)	Accommodation (Note 2)	Banquets or entertainment	Others (Note 2, 3&4)	Total expenditure
2015-16 (16 times)	Meetings and exchanges on environmental protection, energy and related policies; attending international conferences	Mainland China, France, Italy, Philippines, Germany, Macao	Met with different individuals, including local officials, professional organisations and local personalities according to the purpose of visit	0-3 persons	1-10 days	629,000	187,000	400	196,000	1,012,400
2016-17 (20 times)	Same as above	Mainland China, Japan, Mexico, USA,	Same as above	0-2 persons	1-8 days	580,000	92,000	0	227,000	899,000

Year (Number of visits)	Purposes	Places	Individuals met	Number of entourage members (Note 1)	Days of visit	Expenses (\$)				
						Flight tickets (Note 2)	Accommodation (Note 2)	Banquets or entertainment	Others (Note 2, 3&4)	Total expenditure
		Turkey, Denmark, France, Spain, Macao								
2017-18 (14 times)	Same as above	Mainland China, France, Germany	Same as above	0-2 persons	1-5 days	386,000	74,000	0	112,000	572,000
2018-19 (13 times)	Same as above	Mainland China, Macao, Japan, USA	Same as above	0-2 persons	1-6 days	230,000	83,000	0	162,000	475,000
2019-20 (18 times) (As at mid-Marc h 2020)	Same as above	Mainland China, Singapore, Denmark, Korea	Same as above	0-3 persons	1-8 days	215,000	44,000	0	171,000	430,000

Note 1: Number of accompanying officers from the Director of Bureau's Office.

Note 2: Expenses include those of accompanying officers from the Director of Bureau's Office.

Note 3: Other expenses include meals, local transportation and other miscellaneous expenses.

Note 4: In line with the Government's green policy, public officers should as far as possible refrain from bestowing gifts/souvenirs to others during the conduct of official activities. According to the existing guidelines, where bestowal of gifts/souvenirs is necessary or unavoidable due to operational, protocol or other reasons, the gift/souvenir items should not be lavish or extravagant and the number should be kept to a minimum. Also, the exchange of gifts/souvenirs should only be made from organisation to organisation. The Environment Bureau has always adhered to such principle when handling bestowing gifts/souvenirs and the expenditure involved is minimal. We do not have the separate figures for the relevant expenditure as it has been counted in the column of other expenses.

- End -

CONTROLLING OFFICER'S REPLY

ENB300

(Question Serial No. 5722)

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (3) Sustainable Development

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the studies (if any) commissioned by the Bureau and the departments under its purview for the purpose of formulating and assessing policies, please provide information in the following format.

(a) Using the table below, please provide information on studies on public policy and strategic public policy for which funds were allocated in the past 2 financial years:

Name of Consultant	Mode of award (open auction/ tender/ others (please specify))	Title, content and objective of the project	Consultancy fee (\$)	Start date	Progress of the study (under planning/ in progress/ completed)	The Administration's follow-ups to the study reports and their progress (if any)	For completed studies, have they been made public? If yes, through what channel(s)? If no, why?

(b) Are there any projects for which funds have been reserved for conducting internal studies this year? If yes, please provide the following information:

Title, content and objective of the project	Start date	Progress of the study (under planning/in progress/completed)	The Administration's follow-ups to the study reports and their progress (if any)	For studies that are expected to be completed this year, is there any plan to make them public? If yes, through what channel(s)? If no, why?

(c) Are there any projects for which funds have been reserved for conducting consultancy studies this year? If yes, please provide the following information:

Name of Consultant	Mode of award (open auction/tender /others (please specify))	Title, content and objective of the project	Consultancy fee (\$)	Start date	Progress of the study (under planning/in progress/completed)	The Administration's follow-ups to the study reports and their progress (if any)	For completed studies, have they been made public? If yes, through what channel(s)? If no, why?

(d) What are the criteria for considering the award of consultancy projects to the research institutions concerned?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 549)

Reply:

(a) Information on the studies on public policy and strategic public policy undertaken in 2018-19 and 2019-20 is provided in the table below:

Name of Consultant	Mode of award (open auction/ tender/ others (please specify))	Title, content and objective of the project	Consultancy fee (\$)	Start date	Progress of the study (under planning/in progress/ completed)	The Administration's follow-ups to the study reports and their progress (if any)	For completed studies, have they been made public? If yes, through what channel(s)? If no, why?
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Independent analysis of the public views received during the Public Engagement on Long-term Decarbonisation Strategy conducted by the Council for Sustainable Development (SDC)	940,000	May 2018	In progress	The project is in progress.	Not applicable
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Production of formal records of the public interaction events organised during the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	230,000	October 2019	In progress	The project is in progress.	Not applicable
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Production of a digital compendium for the independent report of the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	87,500	November 2019	In progress	The project is in progress.	Not applicable

- (b) The Sustainable Development Division has no plan for the time being to conduct internal studies in 2020-21.
- (c) For projects for which funds have been reserved for conducting consultancy studies in 2020-21, the details are provided in the table below.

Name of Consultant	Mode of award (open auction/ tender/ others (please specify))	Title, content and objective of the project	Consultancy fee (\$)	Start date	Progress of the study (under planning/in progress/ completed)	The Administration's follow-ups to the study reports and their progress (if any)	For completed studies, have they been made public? If yes, through what channel(s)? If no, why?
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Independent analysis of the public views received during the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	940,000	May 2018	In progress	The project is in progress.	Not applicable
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Production of formal records of the public interaction events organised during the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	230,000	October 2019	In progress	The project is in progress.	Not applicable
Social Sciences Research Centre, The University of Hong Kong	By quotation procedures	Production of a digital compendium for the independent report of the Public Engagement on Long-term Decarbonisation Strategy conducted by the SDC	87,500	November 2019	In progress	The project is in progress.	Not applicable

- (d) The quotation procedures, selection and award of studies are carried out according to the relevant procedures as set out in the Stores and Procurement Regulations with due consideration of the technical criteria including expertise and experience of consultants and resources to be committed for the study by the consultants.

- End -

CONTROLLING OFFICER'S REPLY

ENB301

(Question Serial No. 6778)

Head: (137) Government Secretariat : Environment Bureau
Subhead (No. & title): (-) Not Specified
Programme: (2) Power
Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)
Director of Bureau: Secretary for the Environment

Question:

What are the estimated expenditure and work plan for the new item “809 Energy-cum-carbon audit on government premises”? Why is it that the funding for this new item has to be sought in the context of the Appropriation Bill? Even if this is not a new arrangement, why is the funding not sought individually from the Finance Committee of the Legislative Council?

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 804)

Reply:

The new measures on energy saving and renewable energy announced in the 2019 Policy Address include the formulation of a Green Energy Target for the Government. To achieve this target, the Government will conduct energy-cum-carbon audit on about 260 major government buildings in the coming 3 years with a view to identifying opportunities for energy saving and carbon reduction measures. The non-recurrent expenditure is estimated at \$14 million.

The arrangement to include in the draft Estimates funding proposals for creating commitments or increasing expenditure ceilings for approved commitment items under the General Revenue Account for scrutiny and approval by the Legislative Council (LegCo) in the context of the Appropriation Bill is in line with the requirements under sections 5 and 6 of the Public Finance Ordinance. The Government explained the relevant arrangements to the Finance Committee in early 2015. In this particular case, before the funding proposal was included in the draft Estimates, we provided relevant information on this measure in a paper to brief the LegCo Panel on Environmental Affairs on the Policy Address in October 2019, and outlined the relevant work plan at the meeting of that Panel on 22 January 2020. We have included the necessary provision for this proposal under the respective head and sub-head of expenditure for Members' consideration.

- End -

CONTROLLING OFFICER'S REPLY**ENB302****(Question Serial No. 6824)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (000) Operational Expenses

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please set out the monthly expenditure on the Secretary for the Environment's salary, allowances and other expenses in the past 5 years. Please also advise on the amount of his monthly pension when he retires and the total expenditure on his pension payment.

Asked by: Hon CHEUNG Chiu-hung, Fernando (LegCo internal reference no.: 1311)

Reply:

The monthly expenditure on the Secretary for the Environment's salary in the past 5 years is set out below:

Date	Monthly salary expenditure
April 2015 to June 2017	\$298,115
July 2017 to June 2018	\$333,900
July 2018 to June 2019	\$340,250
July 2019 onwards	\$348,100

Besides, the monthly expenditure on the Mandatory Provident Fund contribution for the Secretary is \$1,500.

Other than the provision of subsistence allowance for overseas duty visits comparable to that for civil servants of equivalent rank, we do not have any expenditure on other allowances payable to the Secretary for the Environment. According to the remuneration package for Politically Appointed Officials of the SAR Government, the Secretary for the Environment is not entitled to pension benefits except for the Government's contribution to the Mandatory Provident Fund.

- End -

CONTROLLING OFFICER'S REPLY

ENB303

(Question Serial No. 6150)

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

The Office of the Secretary for the Environment is responsible for providing support to the Secretary for the Environment (SEN) in undertaking political work, providing administrative support, the planning and co-ordination of all arrangements for the Secretary's public, media and community events, etc. Will the Administration provide the following:

(a) Based on the events that were announced in the press releases, please set out the details of the local events attended by SEN from 2013/14 to 2019/2020:

	Name of work	Nature/details	Date/time	Breakdown of expenditure	Current progress	The then SEN
1.						
2.						
3.						

(b) Please set out the details of SEN's overseas duty visits from 2014/15 to 2019/20:

	Name of public/media/community event	Purpose of attending the event/duties	Date/time	The then SEN	Entourage members (names/post titles)	Breakdown of expenditure of each person (including but not limited to 1. expenses on flight tickets/2. flight ticket class/ 3. flight time of each journey/ 4. hotel accommodation expenses/5. name of residing hotel/6. local transportation expenses)
1.						

2.						
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Asked by: Hon KWOK Wing-hang, Dennis (LegCo internal reference no.: 59)

Reply:

The Secretary for the Environment (SEN) attends a wide range of local events from time to time to liaise with different sectors of the community, listen to different views and explain government policies to promote the overall environmental protection and sustainable development of Hong Kong. These are long term and continuous works. Expenses (if any) incurred by SEN's attendance at such events have already been reflected in the overall operational expenses of the Environment Bureau. We have not compiled separate statistics on the expenditures and other details of such events.

The details of SEN's overseas duty visits from 2014-15 to 2019-20 are as follows:

Year (Number of overseas duty visits)	Purposes	Places	Individuals met	Number of entourage members (Note 1)	Days of visit	Expenses (\$)			
						Flight tickets (Note 2)	Accommodation (Note 2)	Others (Note 2 and Note 3)	Total expenditure
2014-15 (9 times)	Meetings and exchanges on environmental protection, energy and related policies; attending international conferences	Mainland China, USA, Macao	Met with different individuals, including local officials, professional organisations and local personalities according to the purpose of visit	1-2 persons	1-8 days	288,000	60,000	94,000	442,000
2015-16 (7 times)	Same as above	Mainland China, France, Italy, Philippines, Germany, Macao	Same as above	1-3 persons	1-10 days	494,000	173,000	177,000	844,000
2016-17 (10 times)	Same as above	Mainland China, Japan, Mexico, USA, Macao	Same as above	1-2 persons	1-8 days	306,000	63,000	189,000	558,000
2017-18 (6 times)	Same as above	Mainland China, France, Germany	Same as above	0-2 persons	2-5 days	373,000	70,000	108,000	551,000
2018-19 (6 times)	Same as above	Mainland China, Macao, Japan, USA	Same as above	1-2 persons	1-6 days	206,000	76,000	156,000	438,000
2019-20 (7 times) (Up to mid-March 2020)	Same as above	Mainland China, Singapore, Denmark	Same as above	1-3 persons	1-5 days	204,000	39,000	133,000	376,000

- Note 1: Number of accompanying officers from the Director of Bureau's Office.
Note 2: Expenses include those of accompanying officers from the Director of Bureau's Office.
Note 3: Other expenses include meals, local transportation and other miscellaneous expenses.

- End -

CONTROLLING OFFICER'S REPLY**ENB304****(Question Serial No. 3668)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (2) Power

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Regarding the work of the Working Group on External Lighting (WGEL) and the implementation of the Charter on External Lighting (the Charter), will the Government advise this Committee on:

1. the numbers of complaint cases received about external lighting in the past 3 years (please provide a breakdown by District Council district), and the number of which involved the Charter's participants not complying with the Charter;
2. the numbers of participants signing the Charter in the past 3 years (please provide breakdowns by District Council district, public organisation, private organisation);
3. the numbers of meetings held by the WGEL in the past 3 years, and the numbers of attendance of each member;
4. the number of public engagement forums on the review of the effectiveness of the Charter organised since the establishment of the WGEL in 2018, and the number of participants in each forum;
5. the measures that the Administration put in place to encourage more organisations to sign the Charter and to further reduce nuisance caused by external lighting in Hong Kong?

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 27)

Reply:

The numbers of complaint cases against external lighting received by the Environmental Protection Department in the past 3 years are shown below. Over 30% of these cases were related to lighting installations for safety, security and operational purposes, and the remaining ones are installations for decorative, promotional and advertising purposes.

District	2017	2018	2019
Year			
Central and Western	30	44	43
Wan Chai	51	41	53
Eastern	28	37	32

District	2017	2018	2019
Year			
Southern	5	25	9
Yau Tsim Mong	53	56	58
Sham Shui Po	19	36	27
Kowloon City	39	33	66
Wong Tai Sin	8	5	7
Kwun Tong	10	16	18
Tsuen Wan	1	23	16
Tuen Mun	13	24	17
Yuen Long	17	28	23
North	8	13	3
Tai Po	8	16	6
Sai Kung	27	32	13
Sha Tin	14	15	21
Kwai Tsing	20	28	9
Islands	4	5	15
Total	355	477	436

Since the Charter on External Lighting (the Charter) took effect in April 2016, about 5 000 participants from different sectors have signed the Charter. Our on-site compliance checks conducted in the past 3 years show that nearly 99% of the participants had been able to follow the switch-off requirement.

The distribution of Charter participants in various districts is shown below. Public organisations, non-governmental organisations (NGOs), schools and tertiary institutions accounted for about 7% of all Charter participants.

District	Distribution Ratio^{Note}
Central and Western	10%
Wan Chai	10%
Eastern	8%
Southern	5%
Yau Tsim Mong	14%
Sham Shui Po	5%
Kowloon City	6%
Wong Tai Sin	3%
Kwun Tong	6%
Tsuen Wan	5%
Tuen Mun	4%

District	Distribution Ratio^{Note}
Yuen Long	6%
North	3%
Tai Po	3%
Sai Kung	3%
Sha Tin	5%
Kwai Tsing	4%
Islands	1%
Total	100%

Note: The percentages may not add up to 100 due to rounding.

The Environment Bureau (ENB) has been liaising with the various trade associations and NGOs to invite owners or responsible persons of external lighting installations to sign the Charter and to encourage other business partners to sign the Charter. In addition, the ENB has published a list of participants on the Charter's website and has distributed labels and certificates to participants for display at their properties/shops to raise public awareness of the Charter. We hold award ceremonies from time to time to commend participants who have fulfilled the switch-off pledge.

To review the effectiveness of the Charter, the Working Group on External Lighting (WGEL) appointed by the Government is now engaging consultancies through the ENB to conduct an opinion survey, to measure the changes of illumination level in different districts in Hong Kong, and to look into regulatory arrangements adopted by other cities for external lighting installations. The WGEL held 3 public engagement forums to gauge the public's views on measures to manage external lighting and their future developments, with a total of about 60 participants. The WGEL plans to report their work progress to the Panel on Environmental Affairs of the Legislative Council and listen to the views of the panel members shortly. Since its establishment in August 2018, the WGEL has held 5 meetings altogether, and the overall attendance rate was 75%.

- End -

CONTROLLING OFFICER'S REPLY**ENB305****(Question Serial No. 3736)**

Head: (137) Government Secretariat : Environment Bureau

Subhead (No. & title): (-) Not Specified

Programme: (1) Director of Bureau's Office

Controlling Officer: Permanent Secretary for the Environment (Maisie CHENG)

Director of Bureau: Secretary for the Environment

Question:

Please provide the balance, government injection amount, investment or other income and total expenditure of the following funds for 2018-19. If there are other funds within the purview of the Bureau not being listed below, please also provide information as per the items above.

1. Environment and Conservation Fund
2. Pilot Green Transport Fund
3. Sustainable Development Fund
4. Recycling Fund

Asked by: Hon MA Fung-kwok (LegCo internal reference no.: 30)

Reply:

For the 4 funds (namely Environment and Conservation Fund, Pilot Green Transport Fund, Sustainable Development Fund and Recycling Fund) under the purview of the Environment Bureau, the amount of capital injections as at 29 February 2020, the balance as at end of 2018-19, investment or other income for 2018-19, and the total expenditure are set out in the table below.

Name of fund	Total amount of capital injections as at 29 February 2020 (Note 1)	Balance as at end of 2018-19	Investment or other income for 2018-19	Total expenditure (as at 31 March 2019)
Environment and Conservation Fund	\$6.735 billion (Note 2)	\$5.923 billion	\$239 million	(Note 3)
Pilot Green Transport Fund	\$300 million	\$241 million	(Note 4)	\$59 million

Name of fund	Total amount of capital injections as at 29 February 2020 (Note 1)	Balance as at end of 2018-19	Investment or other income for 2018-19	Total expenditure (as at 31 March 2019)
Sustainable Development Fund	\$100 million	\$38 million	(Note 4)	\$62 million
Recycling Fund	\$1 billion	\$900 million	(Note 5)	\$100 million

Note 1: All capital injections are government injections. Except for the Environment and Conservation Fund, the figures shown were the capital injections at the time of the establishment of the funds.

Note 2: The amount of government injection at the time of the establishment of the fund was \$50 million. 6 additional government injections have been made subsequently. As at the end of February 2020, the total amount of capital injection was \$6.735 billion.

Note 3: In 2018-19, the total grant approved under the Environment and Conservation Fund was \$246 million.

Note 4: Balance was kept in the General Revenue Account, and the investment was not carried out by the Environment Bureau.

Note 5: Balance was kept in the General Revenue Account, and the investment was not carried out by the Environment Bureau. In addition, a small amount of interest derived from the funding for the year, which was deposited in a specific bank account for the Recycling Fund, would be appropriated to the Recycling Fund for operational use.

- End -

CONTROLLING OFFICER'S REPLY**ENB306****(Question Serial No. 6052)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (-) Not SpecifiedControlling Officer: Permanent Secretary for the Environment (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

a. Please set out the quantity, value and stock of surgical masks produced by the Correctional Services Department (CSI masks) that the Environment Bureau (ENB) obtained from the Government Logistics Department (GLD) each month in the past 3 years in the following table:

Month/Year	No. of CSI masks obtained	Value of CSI masks obtained	Stock of CSI masks

b. Please set out the quantity, value, stock and consumption of surgical masks that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of surgical masks obtained from GLD (value)	No. of surgical masks procured (value)	Stock	Consumption

c. Please set out the quantity, value, stock and consumption of N95 masks that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of N95 masks obtained from GLD (value)	No. of N95 masks procured (value)	Stock	Consumption

d. Please set out the quantity, value, stock and consumption of gowns that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of gowns	No. of gowns	Stock	Consumption

	obtained from GLD (value)	procured (value)		

e. Please set out the quantity, value, stock and consumption of protective coverall suits that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of protective coverall suits obtained from GLD (value)	No. of protective coverall suits procured (value)	Stock	Consumption

f. Please set out the quantity, value, stock and consumption of face shields that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of face shields procured	Value of face shields procured	Stock of face shields	Consumption

g. Please set out the quantity, value, stock and consumption of goggles that the ENB obtained from the GLD or procured each month in the past 3 years in the following table:

Month/Year	No. of goggles procured	Value of goggles procured	Stock of goggles	Consumption

h. Did the ENB supply or sell surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations in the past 3 years? If yes, please provide the relevant information, including the quantity, consumption and stock, in the following table:

Month/Year	Name of organisations	Manner of provision (e.g. sold or supplied for free)	Surgical masks	N95 masks	Face shields	Goggles	Gowns	Protective coverall suits

i. If the ENB is to supply or sell surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations, what are the departments and the ranks of the officers responsible for making such decisions? Please provide the ranks of the officers involved in each decision, the date they made the decision and other relevant information.

Asked by: Hon MO Claudia (LegCo internal reference no.: 141)

Reply:

- (a)-(g) With an upsurge in the global demand for personal protective equipment (PPE), the Hong Kong Special Administrative Region (HKSAR) Government is facing fierce competition in PPE procurement. The HKSAR Government considers it inappropriate at this stage to disclose specific information on PPE of the individual departments in the past few years and recently, such as the stock, procurement quantities and value, consumption, etc., so as to avoid undermining its bargaining power in the procurement of PPE.
- (h) and (i) In the past 3 years, the Environment Bureau did not supply or sell any surgical masks, N95 masks, face shields, goggles, gowns and protective coverall suits to other organisations.

- End -

CONTROLLING OFFICER'S REPLY**ENB307****(Question Serial No. 3717)**Head: (137) Government Secretariat : Environment BureauSubhead (No. & title): (-) Not SpecifiedProgramme: (-) Not SpecifiedControlling Officer: Permanent Secretary for the Environment (Maisie CHENG)Director of Bureau: Secretary for the EnvironmentQuestion:

In respect of the public relations expenditure of various government departments, please inform this Committee of the following:

(1) the total expenditure of your department for publishing advertisements, sponsored content or advertorials in newspapers registered under the Registration of Local Newspapers Ordinance in the past year as well as the relevant details:

Date of publishing (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)

(2) the expenditure of your department for sponsoring local free-to-air television stations, paid television stations and radio stations to provide information and produce programmes or materials in the past year as well as the relevant details:

Date of broadcast (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Media organisation	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)

(3) the media organisations which published or broadcast advertisements/sponsored content of your department in the past year, as well as the frequency and total expenditure involved (in descending order of amount spent):

Name of media organisation	Frequency	Total expenditure (\$)

(4) the websites/network platforms on which your department published online advertisements/sponsored content in the past year, as well as the frequency, duration (days) and the total expenditure involved (tabulated in descending order of amount spent):

Website/ network platform	Content advertisement of	Frequency	Duration (days)	Hit rate, frequency of exposure and number of viewers	Total expenditure (\$)

(5) the frequency of live broadcast conducted by your department on network platforms in the past year, as well as the duration (days) and the total expenditure involved (tabulated in descending order of amount spent):

Website/ network platform	Title of live broadcast	Frequency	Duration (days)	Hit rate, frequency of exposure and number of viewers	Total expenditure (\$)

Asked by: Hon MOK Charles Peter (LegCo internal reference no.: 156)

Reply:

(1) The total expenditure of the Environment Bureau (ENB) for publishing advertisements, sponsored content or advertorials in newspapers registered under the Registration of Local Newspapers Ordinance in 2019-20 with relevant details are as follows:

Date of publishing (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)
22 July 2019	One-off	Council for Sustainable Development (SDC)	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Headline Daily	Once	\$20,900

Date of publishing (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)
26 July 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	The Standard	Once	\$6,000
29 July 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Sky Post	Once	\$9,600
23 and 31 July 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Metro Daily Hong Kong	Once each	\$17,700
6 August 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Headline Daily	Once	\$20,900
8 August 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	The Standard	Once	\$6,000
12 August 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Sky Post	Once	\$9,600
5 and 14 August 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Metro Daily Hong Kong	Once each	\$17,700

Date of publishing (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)
3 September 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Headline Daily	Once	\$20,900
4 September 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	The Standard	Once	\$6,000
6 September 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Sky Post	Once	\$9,600
9 September 2019	One-off	SDC	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	Metro Daily Hong Kong	Once	\$17,700
11 September, 18 and 28 October 2019	One-off	ENB	To invite public engagement in the forum entitled "Review on Measures Managing External Lighting and Future Developments"	Headline Daily	Once each	\$116,900
17 September and 21 October 2019	One-off	ENB	To invite public engagement in the forum entitled "Review on Measures Managing External Lighting and Future Developments"	Sky Post	Once each	\$48,000

Date of publishing (Day/ Month/ Year)	Status (one-off/ ongoing/ done) (as at 29 February 2020)	Government or public organisation (including policy bureau/ department/ public organisation/ government advisory body)	Name and purpose of advertisement	Name of media organisation and newspaper	Frequency (as at 29 February 2020)	Expenditure (as at 29 February 2020)
13 September, 14 and 28 October 2019	One-off	ENB	To invite public engagement in the forum entitled "Review on Measures Managing External Lighting and Future Developments"	The Standard	Once each	\$67,200
23 October 2019	One-off	ENB	To invite public engagement in the forum entitled "Review on Measures Managing External Lighting and Future Developments"	AM730	Once	\$52,100

- (2) The ENB did not sponsor local free-to-air television stations, paid television stations and radio stations to provide information and produce programmes or materials in 2019-20.
- (3) The media organisations which published or broadcast advertisements/sponsored content of the ENB in 2019-20, as well as the frequency and the total expenditure involved (in descending order of amount spent) are as follows:

Name of media organisation	Frequency	Total expenditure (\$)
Headline Daily	6	179,600
The Standard	6	85,200
Sky Post	5	76,800
Metro Daily Hong Kong	5	53,100
AM730	1	52,100

- (4) The websites/network platforms on which the ENB published online advertisements/sponsored content in 2019-20, as well as the frequency, the duration (days) and the total expenditure involved (tabulated in descending order of amount spent) are as follows:

Website/network platform	Content of advertisement	Frequency	Duration (days)	Hit rate, frequency of exposure and number of viewers	Total expenditure (\$)
Website/network platform of Headline Daily	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	3	7	43 659 hits, some 2.42 million exposures, about 13 200 viewers	354,000
Website/network platform of The Standard	To promote public engagement in Long-term Decarbonisation Strategy conducted by the SDC	3	7	529 hits, some 370 000 exposures, about 8 300 viewers	42,000
Facebook Page of the Secretary for the Environment	To promote the policies on Feed-in Tariff and Solar Harvest	1	6	Number of video views: 14 137 Reach: 23 960 people	500
Facebook and Instagram	Review on Measures Managing External Lighting and Future Developments	1	40	10 381 hits, some 30.73 million exposures, about 964 091 viewers	There is no breakdown as it was included in the total expenditure of the advertising service provided by the contractor.

(5) The frequency of live broadcast conducted by the ENB on network platforms in 2019-20, as well as the duration (days) and the total expenditure involved are as follows:

Website/ network platform	Title of live broadcast	Frequency	Duration (days)	Hit rate, frequency of exposure and number of viewers	Total expenditure (\$)
Facebook Page of the Secretary for the Environment	Facebook Live with Principal Officials	1	1	Number of video views: 8 958 Reach: 36 906 people	There is no breakdown as it was undertaken by the existing staff.

Note: The above figures on expenditures have been rounded to the nearest hundred dollars.

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