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ACE Paper 20/2023 For discussion on 6 November 2023

### 2023 Policy Address Policy Measures of Environment and Ecology Bureau: Environmental Protection

#### PURPOSE

This paper sets out the major policy measures of the Environment and Ecology Bureau (EEB) (Environment Branch) in relation to the environmental protection and relevant issues in the 2023 Policy Address.

#### **KEY POLICY MEASURES**

#### **Striving Towards Carbon Neutrality**

#### Energy Conservation and Decarbonisation

#### Amending Buildings Energy Efficiency Ordinance

2. Buildings account for 90% of Hong Kong's electricity consumption, and over 50% of our carbon emission is attributable to generating electricity for our buildings. Improving energy efficiency of buildings will reduce the demand for power consumption and generation, which will not only reduce carbon emission, but also lessen the financial burden on the public for the increased use of clean fuels for electricity generation. To promote energy saving and decarbonisation in buildings, we will consult relevant trades and organisations by the end of this year on the proposal of amending the Buildings Energy Efficiency Ordinance, including extending the scope of regulation to more types of buildings, such as data centre, and requiring more types of buildings to conduct regular energy audits; mandating the disclosure of information in the energy audit reports to allow the public to look up the energy performance of relevant buildings; and shortening the interval of energy audit from the current 10 years to 5 years. The target is to finalise the proposed amendments and commence the legislative work next year.

#### Renewable energy

3. To strive to increase the share of renewable energy in the fuel mix for electricity generation from less than 1% at present to 7.5% to 10% by 2035, and further increase it to 15% subsequently, we will develop a large-scale floating solar system with a generating capacity of 5 megawatts at Plover Cove Reservoir, which is expected to supply 6 million kilowatt-hour of electricity per annum upon its completion in 2026 for direct use by the nearby waterworks facilities.

#### Carbon audit for government infrastructure

4. Government buildings account for about 50% of the total energy consumption arising from Government's operation. Currently, maior Government buildings are required to conduct annual carbon audits to systematically collect and compile carbon emission data with a view to identifying carbon reduction opportunities. To further enhance the Government's carbon management efforts, we will progressively extend the carbon audit practice to Government infrastructure, such as fresh water pumping stations, sewage treatment works and road lighting systems. The EEB will provide support to relevant bureaux and departments (B&Ds) to conduct carbon audits on selected typical major government infrastructure. These carbon audits are expected to commence in Q1 2024 for completion in Q3 2025. Outcomes of the carbon audits will not only help B&Ds formulate carbon reduction strategies for the infrastructure in question as well as other similar infrastructure, but also facilitate B&Ds in establishing the mechanism and guidelines for conducting carbon audits for other infrastructure in the future.

#### Green Transport

#### Formulate a green transformation roadmap for public buses and taxis

5. With the rapid technological development and maturity of electric vehicles (EVs), including commercial EVs, we will formulate in the first half of 2024 a citywide green transformation roadmap and timetable for public buses and taxis. The aim is to progressively phase out diesel buses and liquefied petroleum taxis, with a view to achieving zero vehicular emissions by 2050. The roadmap will set forth the strategies and policies for the development of the relevant supporting facilities. In the short and medium term, we will make reference to the technology and experience of international and Mainland cities leading in new energy transportation, and provide support to realise our goal of introducing about 700 electric buses and about 3 000 electric taxis by end-2027.

#### Promote the use of electric private cars

6. The Government has been striving to promote the use of EVs to reduce the emission of air pollutants. Various measures have been implemented in recent years to encourage citizens switching to EVs. An example is the first registration tax concession arrangement for EVs. Hong Kong has made notable progress in promoting the popularisation of EVs in recent years. The percentage of electric private cars among all newly registered private cars had soared from 6.3% in 2019 to 64.3% in the first eight months of this year. Meanwhile, the Government strives to expand the network of charging facilities, and aims to increase the number of public and private parking spaces with charging infrastructure to about 200 000 by mid-2027. About 140 000 parking space of residential buildings are covered by the "EV-Charging at Home Subsidy Scheme". The Government has also encouraged the provision of EV charging-enabling infrastructure for parking spaces in new private buildings by means of granting of gross floor area concession, and has approved more than 78 000 related parking spaces. To expedite the expansion of private charging network, the Government will, starting from the end of this year, marketise the free charging services currently provided in government carparks. The Government will also refine the land lease conditions for petrol filling stations (PFS) with a view to offering incentives to retrofit EV charging facilities in the stations, and convert PFS into green energy refuel stations in the longer run. To this end, the Government will invite tender for the conversion of two vacant PFS sites in Kowloon East and New Territories East to charging stations in the first quarter of 2024.

#### Develop hydrogen applications in Hong Kong

7. The development of zero-carbon energy has been one of the important elements of our decarbonisation strategies in pursuance of our target to achieve carbon neutrality before 2050. As a secondary carrier of energy, hydrogen energy possesses the "clean" trait of traditional renewable energy sources and has a wide range of applications, making it one of the highly regarded new energy sources. The National Development and Reform Commission and the National Energy Administration jointly issued in March 2022 the "Medium and Long Term Plan for the Development of Hydrogen Energy Industry (2021-2035)", which recognises hydrogen fuel as an important component of the national energy system in the future.

Hydrogen energy can be used in various applications such as 8. transportation, power generation and energy storage, as well as construction site equipment, etc. In the field of transportation, it is particularly relevant to the green transformation of commercial vehicles and heavy goods vehicles. It has the potential to play an important role in Hong Kong's quest for carbon neutrality. There will be a number of challenges to be met in promoting the development of hydrogen energy in Hong Kong, including the shortage of supply of green hydrogen with zero carbon emissions, and hence the high cost of such fuel compared to that of the traditional fossil fuels, as well as the fact that relevant technologies in manufacturing, storage, and application are still at the development stage. In addition, to ensure the safe application of hydrogen fuel in Hong Kong, a comprehensive regulatory framework to govern the safety and technical standards will need to be established. Successful development of the hydrogen industry requires not only the promotion by the government, but also

co-operation from the industry and the support of the public and various stakeholders. To spearhead the development of hydrogen energy in Hong Kong, we will formulate the Strategy for Hydrogen Development in Hong Kong in the first half of next year. We also plan to commence preparatory work for legislative amendments pertinent to the production, storage, transportation and application of hydrogen energy with a view to introducing an amendment bill into the Legislative Council (LegCo) in 2025.

#### Promote wheelchair-accessible electric taxis

9. While promoting the popularisation of EVs, the Government is also committed to promoting the concept of "Transport for All". To encourage the trade to adopt zero carbon emission vehicles, we propose to earmark \$50 million under the New Energy Transport Fund to subsidise the trade to purchase wheelchair-accessible electric taxis. We will also continue to encourage different suppliers to introduce electric taxis suitable for use in Hong Kong, especially wheelchair-accessible models, to help cater for the travel needs of elderly and persons with disabilities.

#### Waste Reduction and Recycling

# Establish a common legislative framework for producer responsibility schemes (PRSs)

10. Since the passage of the Product Eco-responsibility Ordinance (Cap. 603) (PERO) by the LegCo in July 2008, the Government has fully implemented three PRSs for plastic shopping bags, waste electrical and electronic equipment, and glass beverage containers. At present, the PERO stipulates the detailed provisions for the PRS for each type of products. To implement new PRSs more promptly and effectively, we propose to amend the PERO to establish a common legislative framework applicable to PRSs for different products. The amendments will set out the general operational arrangements, responsibilities of relevant stakeholders, etc., while the operational details applicable to individual products will be prescribed in subsidiary legislation.

11. We are drafting the relevant legislative proposals and aim to introduce a bill into the LegCo next year. After the passage of the bill, we will introduce the relevant subsidiary legislation for different products into the LegCo for positive vetting, with a view to gradually implementing the PRSs for five types of products starting from 2025, including plastic beverage containers, beverage cartons, EV batteries, vehicle tyres and lead-acid batteries. The PRS on plastic beverage containers and beverage cartons will be the first PRS to be implemented under the common legislative framework. We will consult the LegCo Panel on Environmental Affairs on the legislative proposal shortly.

### Expand food waste collection services to all public rental housing (PRH) estates

12. The 2022 Policy Address announced the initiative to launch an 18-month "Trial Scheme on Food Waste Collection in PRH Estates" (the PRH Trial) at 100 blocks of PRH estates. The PRH Trial uses smart recycling bins equipped with overflow prevention and odour abatement devices to collect food waste so as to maintain environmental hygiene, coupled with GREEN\$ points to encourage residents to actively participate in food waste recycling. We have achieved the target in September 2023, six months earlier than the original schedule, covering around 170 000 PRH residents. Overall, the PRH Trial has been well received by residents, with positive responses on smart food waste recycling.

13. To complement the implementation of Municipal Solid Waste (MSW) charging on 1 April 2024, we plan to progressively expand the installation of smart recycling bins for collecting food waste in all PRH estates (involving about 1 400 additional housing blocks) from Q4 2023 to further encourage domestic food waste recycling. We are working at full speed in collaboration with the Housing Department and the Hong Kong Housing Society to take forward the relevant work, aiming to complete the expansion within 2024.

#### Nature Conservation

#### Establishment of Sam Po Shue Wetland Conservation Park

14. The Government will establish the Sam Po Shue Wetland Conservation Park (SPS WCP) in the Northern Metropolis to conserve the wetlands and fish ponds with high ecological value, with a view to enhancing ecological quality and biodiversity to provide environmental capacity for the development of the Northern Metropolis, as well as providing quality outdoor eco-education and recreational facilities for public enjoyment. We will also promote modernised aquaculture and sustainable development of the sector through the park. The Agriculture, Fisheries and Conservation Department (AFCD) is conducting a strategic feasibility study on the development of Wetland Conservation Parks System in the Northern Metropolis, which is expected to be completed in the first half of 2024. It seeks to determine the location and area of each proposed park (including the SPS WCP), and provide recommendations on management models, etc.

#### Protection of Hong Kong's Ecosystems

15. Hong Kong has been taking forward the Biodiversity Strategy and Action Plan (BSAP) since 2016 for maintaining the diversity, stability and sustainability of Hong Kong's precious ecosystems. As of today, an array of achievements have been made, including the designation of new marine parks, establishment of the Countryside Conservation Office, phasing out of local ivory trade, development of the Long Valley Nature Park, and the rollout of the Hong Kong Biodiversity Information Hub. Based on the "Kunming-Montreal Global

Biodiversity Framework", which was passed in the 15th Meeting of the Conference of the Parties to the United Nations Convention on Biological Diversity with the successful facilitation made by China, we will appropriately update the Hong Kong's BSAP and implement the relevant measures in the light of the actual situation in Hong Kong. An example is to strengthen our efforts in restoring important coral communities for the conservation of marine ecosystems to create a better ecological environment for the public.

#### Step Up Enforcement Actions Against Feeding of Wild Pigs and Feral Pigeons

16. The Government is committed to combating the wild pig nuisance issue caused by feeding activities, and addressing public concerns on public health issue caused by feeding of feral pigeons, so as to strengthen the protection of wild animals and safeguard public health. Following the expansion of the "places at which the feeding of any wild animal is prohibited" to cover the entire territory of Hong Kong since last year, we will introduce a bill to further amend the Wild Animals Protection Ordinance (Cap. 170) into the LegCo this year to prohibit the feeding of feral pigeons<sup>1</sup>; increase the penalty on illegal feeding of wild animals (including the new prohibition on feeding feral pigeons with the relevant legislative amendments); and introduce a fixed penalty system with the penalty level set at \$5,000, with a view to strengthening deterrence and curbing illegal feeding activities.

#### WORK INDICATORS

17. Adhering to the "result-oriented" principle, we have established key indicators<sup>2</sup> to monitor the progress in implementing various policy initiatives, with a view to enabling members of the public to enjoy a real sense of effective governance.

#### CONCLUSION

18. Members are invited to note the above key policy measures relating to environmental protection and provide comments. A summary of other relevant policy measures is at **Annex**.

#### **Environment and Ecology Bureau October 2023**

<sup>&</sup>lt;sup>1</sup> Since feral pigeons are domestic animals, and do not fall under the definition of wild animals as specified in the Wild Animals Protection Ordinance (Cap. 170), the act of feeding feral pigeons is not prohibited under the ordinance currently.

For details, please refer to <u>https://www.policyaddress.gov.hk/2023/public/pdf/policy/policy-annex\_en.pdf.</u>

## 2023 Policy Address Policy Measures of Environment and Ecology Bureau: Environmental Protection

Area	Policy Measures
Regulate the proper collection and handling of recyclables in residential buildings	<ul> <li>Introduce a bill in early 2024 to require property management companies and owners' organisations of housing estates with 100 or more flats in total and single-block residential buildings with 100 or more flats to collect common types of recyclables separated by residents and pass the recyclables to downstream recyclers for processing. The target is to implement the new legislation by end-2024.</li> </ul>
Expand community recycling network GREEN@COMMUNITY to PRH estates	• Further expand the community recycling network GREEN@COMMUNITY in end-2023 by developing a network of Recycling Stores in 50 PRH estates so as to strengthen community recycling support.
Identify a suitable site in the Northern Metropolis for development of an advanced waste-to-energy facility	<ul> <li>Identify a suitable site in the Northern Metropolis for development of an advanced waste-to-energy facility to provide essential waste disposal services for the local population in the long run.</li> </ul>
(b) Others	
Technological Innovation	• Continue to implement the \$400 million Green Tech Fund to support research and development projects on decarbonisation technologies with application and commercialisation potential.
Regional Co-operation	<ul> <li>To strengthen collaboration among Guangdong, Hong Kong and Macao in combating climate change as well as joint prevention and control of air pollution in the Greater Bay Area (GBA), the Government will commence a technical feasibility study for the setting up of a supersite for GBA air quality laboratory and meteorology monitoring in Tsim Bei Tsui to provide regional air pollution and meteorological monitoring and forecasting services.</li> <li>Plan to establish the Meteorological Training Centre for Belt and Road (B&amp;R) Countries to strengthen co-operation on the provision of training for the meteorological personnel of B&amp;R countries.</li> <li>Set up a new network of earthquake intensity meters over the territory in collaboration with the Guangdong Earthquake Agency to strengthen earthquake monitoring and</li> </ul>

Area	Policy Measures
	information service.
2. Nature Conservation	
Strengthen Conservation on Marine Ecology	<ul> <li>Complete the designation of the North Lantau Marine Park in 2024 to strengthen the conservation of marine life and habitats.</li> <li>Review relevant conservation ordinances and codes, and further enhance public education to strengthen the protection of wild animals, especially marine life.</li> </ul>
Promotion of Countryside Revitalisation	• Further promote countryside revitalisation through the Countryside Conservation Funding Scheme and minor improvement works, extend ecological conservation efforts in Sha Lo Tung, Lai Chi Wo and other countryside areas, as well as enhance the eco-tourism experience and improve local infrastructure in Mui Tsz Lam Tsuen in Sha Tau Kok.
Enhancement of Hong Kong's Country Parks	• Continue to enhance the existing tourism, recreational and supporting facilities of country parks, including improving or providing additional campsites and camping facilities, viewing platforms, water filling stations, toilets etc., and introducing upgraded facilities, such as treetop adventures, and transforming wartime relics as museums, etc.
Designation of Robin's Nest Country Park	• Complete the designation of Robin's Nest Country Park in 2024 to protect the natural ecology and for public enjoyment, and to form an ecological corridor with Wutong Mountain Scenic Area of Shenzhen, to promote the ecological integration between Shenzhen and Hong Kong.
Combat Illegal Feeding of Wild Pigs and Feral Pigeons	• Amend the Wild Animals Protection Ordinance (Cap. 170) to prohibit the feeding of feral pigeons, increase the maximum penalty on illegal feeding of wild animals, and introduce a fixed penalty.

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