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## **ACE Paper 2/2024**

***For discussion on 5 February 2024***

# **Proposal to Establish a Common Legislative Framework for Producer Responsibility Schemes**

## **PURPOSE**

This paper seeks Members' views on the Product Eco-responsibility (Amendment) Bill 2024 which seeks to amend the Product Eco-responsibility Ordinance (Cap. 603) ("PERO") and Waste Disposal Ordinance (Cap. 354) ("WDO") to establish a common legislative framework for producer responsibility schemes ("PRSs") applicable to different products ("regulated products") with a view to implementing PRSs more efficiently, and to ensure proper treatment and disposal of waste regulated products.

## **BACKGROUND**

2. The Government announced the *Waste Blueprint for Hong Kong 2035* ("Waste Blueprint") on 8 February 2021, setting out the vision of "Waste Reduction · Resources Circulation · Zero Landfill". The medium-term goal set out therein is to gradually reduce the per capita municipal solid waste ("MSW") disposal rate by 40% to 45% and raise the recovery rate to about 55% through implementing MSW charging and other waste reduction and recycling initiatives.

3. PRS is one of the key policy tools in the waste management strategy in Hong Kong. Based on the principle of "polluter-pays" and the concept of "eco-responsibility", the PRS requires relevant stakeholders, including manufacturers, importers, wholesalers, retailers and consumers, to share the responsibility for the collection, recycling, treatment and disposal of waste products with a view to avoiding and reducing environmental impacts caused by such products. Since the passage of the PERO by the Legislative Council ("LegCo") in July 2008, the Government has fully implemented the PRSs for three types of products, including plastic shopping bags, waste electrical and electronic equipment and glass beverage containers.

4. Previously, in order to implement each of the existing PRSs, various details were prescribed individually in the PERO, rendering the legislative process relatively time consuming. In fact, there are many common elements among the PRSs. In view of this, the Chief Executive stated in his 2023 Policy Address that the Government would introduce a bill into the LegCo in 2024 to establish a common legislative framework applicable to PRSs on different products in order to launch PRSs in a more effective and efficient way, and formulate relevant subsidiary legislation to gradually implement the PRSs on five types of products starting from 2025, including plastic beverage containers, beverage cartons, electric vehicle batteries, vehicle tyres and lead-acid batteries.

## **THE COMMON LEGISLATIVE FRAMEWORK**

5. The common legislative framework will set out the general operational mechanism for individual PRSs, the responsibilities of relevant stakeholders, etc., while the operational details applicable to individual regulated products will be prescribed in the respective subsidiary legislation. This approach can speed up the legislative process and implementation of each PRS. The PRS on plastic beverage containers and beverage cartons (**Annex I**) will be the first PRS to be implemented under the common legislative framework. We will gradually implement other PRSs on electric vehicle (“EV”) batteries (**Annex II**), vehicle tyres (**Annex III**) and lead-acid batteries (**Annex IV**).

6. The current PRSs for waste electrical and electronic equipment and glass beverage containers are under a “government-led approach”, where the Government collects recycling levy directly from manufacturers or importers in order to cover the expenses for the recycling and treatment of these wastes, including the appointment of service providers, construction of relevant facilities, etc. With reference to the experience in other places, we intend to implement new PRSs based on a “market-led approach”, allowing the relevant stakeholders (such as manufacturers, importers, retailers, collectors and recyclers) to play more active roles in the PRSs, thereby enhancing the efficiency and cost-effectiveness of the recycling arrangement. The role of the Government under this arrangement is to formulate the legislative framework, determine the qualifications and responsibilities of relevant stakeholders, monitor the effectiveness of the operations of the schemes, and ensure compliance with legal requirements by relevant parties. Unless necessary, the Government will not collect recycling levy from stakeholders or proactively engage service providers. Stakeholders can fulfill their relevant legal responsibilities through different market-led arrangements (e.g. to engage qualified service providers in the market for the recycling service).

7. The general operation of the PRSs and the responsibilities of relevant stakeholders under the common legislative framework are summarised in the following paragraphs.

## **Suppliers**

8. Suppliers generally refer to manufacturers and importers who engage in the business of distributing regulated products in Hong Kong. Save for suppliers who fulfill exemption provisions, any supplier must register as a “registered supplier” before distributing regulated products in Hong Kong. A registered supplier is required to submit periodic returns to the Environmental Protection Department (“EPD”) with detailed information on regulated products distributed. A registered supplier is also required to appoint an independent auditor to conduct annual audit so as to ensure the accuracy of the information submitted. Relevant information and records must also be properly kept for future inspection.

9. The Government will set recovery targets for individual regulated products as necessary. Under the “market-led approach”, suppliers can choose to arrange self-recovery by themselves to recycle waste regulated products in order to meet the recovery target (including setting up return point network, collecting waste regulated products and arranging for proper recycling), or to engage registered scheme operators from the market at their own costs for carrying out recovery services and meeting recovery target on their behalf. Suppliers who carry out self-recovery and registered scheme operators are required to submit periodic returns to the EPD with detailed information on the quantities of waste regulated products recovered. They are required to submit annual audit reports with the information and calculation of recovery rate for recycling waste regulated products in the year. They are also required to appoint independent auditors to conduct annual audits in order to ensure the accuracy of the information submitted. Relevant information and records must also be properly kept to facilitate future inspection. The Government will stipulate the requirements of returns and audit reports in the subsidiary legislation on each regulated product.

## **Exemption**

10. In relation to individual regulated products, the Government may stipulate exemption provisions in the corresponding subsidiary legislation. Considerations for exemption include, but are not limited to, exempting registration requirement for some exhibitors who only distribute a small amount of regulated products for business promotion purpose, and exempting the requirement of submitting producer responsibility plans for small suppliers in order to avoid increasing their operational burden.

## **Registered Scheme Operators**

11. Under the “market-led approach”, a company or an organisation (be it a supplier, recycler, non-profit organisation, etc.) that is interested in providing recovery service for waste regulated products can apply to the EPD for being a registered scheme operator based on its own business strategy and commercial consideration. At the same time, the applicant is required to submit a producer

responsibility plan to the EPD for approval. A registered scheme operator must fulfill the obligations on behalf of the suppliers who engage them, including meeting the recovery target, as well as submitting to the EPD periodic returns and annual audit reports on the recovery of waste regulated products. If a registered scheme operator fails to comply with the relevant conditions of the approved producer responsibility plan, or is convicted of contravening the relevant parts of the PERO (e.g. failure to provide the appropriate number of return points in accordance with the plan, failure to arrange for proper recycling of collected waste, etc.), the Director of Environmental Protection (“Director”) may consider revoking its registration.

### **Producer Responsibility Plan**

12. A producer responsibility plan is a document to be prepared by an organisation interested in providing recovery services for waste regulated products. It sets out the detailed plan and operational arrangement for the recovery of waste regulated products, including waste collection and disposal arrangement, the related budget, the calculation of recycling fees, etc. A person interested in becoming a registered scheme operator is required to submit a producer responsibility plan to the EPD for approval. In addition, suppliers who carry out self-recovery of waste regulated products are also required to submit a producer responsibility plan to the EPD for approval unless they are exempted, and can only distribute regulated products upon approval of his producer responsibility plan. The Director may impose terms and conditions on an approved producer responsibility plan. A registered scheme operator or supplier who carries out self-recovery of waste regulated products is required to comply with the terms and conditions.

### **Penalty**

13. With reference to the penalties for other offences under the PERO, we propose imposing fines at level 5 (i.e. \$50,000) and level 6 (i.e. \$100,000) for non-compliance of various procedural obligations under the common legislative framework. More importantly, if a supplier/registered scheme operator fails to meet its recovery target or if a supplier distributes regulated products without registration (i.e. evading the requirements under the PRS altogether), we are considering imposing on them a recycling levy with an additional cost at a level that may create sufficient deterrence against such more serious non-compliance.

### **Amendment to the Schedule of Regulated Products**

14. Apart from plastic beverage containers, beverage cartons, EV batteries, vehicle tyres and lead-acid batteries, the Government will review from time to time the need for implementing PRSs for other products. In general, we will take into account the necessity, the recycling situation for such product, outlets of recycled materials, its priority of recycling, and in particular, whether the local recycling trade is readily equipped with the technology and capacity for transforming the

waste into materials with market value, as well as the environmental impacts caused by the product and its burden on landfills in assessing the implementation of PRS for a specific product. We propose that, under the common legislative framework, the Secretary for Environment and Ecology, may amend the Schedule of regulated products by notice published in the Gazette to add, delete or revise the regulated products.

## **WDO AMENDMENTS FOR PROPER TREATMENT OF WASTE REGULATED PRODUCTS**

15. To complement the implementation of various PRSs, we propose amending the WDO concurrently under the same amendment bill to (a) introduce licensing control for the disposal facilities for waste regulated products to ensure their proper treatment; (b) implement import and export control for certain waste regulated products; and (c) prohibit disposal of waste vehicle tyres at landfills.

### **Licensing Control for Disposal Facilities in Handling Waste Regulated Products**

16. We propose introducing licensing control under section 16 of the WDO to regulate the disposal facilities for waste plastics, waste liquid cartons (covering beverage cartons and other liquid cartons mainly for containing food) and waste vehicle tyres. The operations of the waste disposal facilities concerned should comply with various environmental pollution control legislation. A disposal facility is required to demonstrate that its disposal or recycling process is operated in an environmentally sound manner before being granted the licence. This proposal will help enhance the standard of the recycling trade in the long run, and will be conducive to the sustainable development of the related trades and the development of the local circular economy. Further licensing control on waste lead-acid batteries would not be required since waste lead-acid batteries are chemical wastes under the WDO and their disposal facilities are already regulated by the WDO and the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C).

17. As for waste EV batteries, they are also chemical wastes and their disposal facilities are already subject to the control under the relevant legislation. However, due to the rapid development of the materials and manufacturing technology of EV batteries, there is a possibility that the EV batteries in future may not fall within the definition of chemical waste under the WDO. Therefore, we also propose introducing a licensing control under section 16 of the WDO to regulate the disposal facilities for EV batteries to ensure that waste EV batteries, be they chemical wastes or not, will be properly treated and recycled.

## **Import and Export Control of Waste Regulated Products**

18. At present, the import and export of waste lead-acid batteries, waste EV batteries and regulated waste plastics as defined under the Basel Convention (e.g. mixed or contaminated waste plastics, or waste plastics that cannot be recycled in an environmentally sound manner) are regulated by a permit system under the WDO. As for waste plastics that are not regulated by the Basel Convention, unless they are uncontaminated and their import and export are for the purpose of processing, recycling, or reuse in the importing country, a permit must also be obtained. To further control the transboundary movement of waste regulated products, we propose regulating the import and export of waste liquid cartons and waste vehicle tyres by application of permits under the WDO. We will ensure that the waste liquid cartons and waste vehicle tyres can be properly recycled at the places of import before granting export permits. Similarly, import permits will be issued only when we can confirm that the waste liquid cartons and waste vehicle tyres to be imported will be properly treated or recycled by local licensed disposal facilities.

## **Prohibition of Disposal in Landfills**

19. At present, waste lead-acid batteries and waste EV batteries, which are defined as chemical wastes, must be transported to designated chemical waste disposal facilities for treatment, rather than to landfills for disposal. As the proposed PRS on vehicles tyres would be able to provide proper recycling outlets for the waste product, we propose to amend the Waste Disposal (Designated Waste Disposal Facility) Regulation (Cap. 354L) to provide that landfills no longer accept the disposal of waste vehicle tyres upon the implementation of the PRS. This will further enhance the recycling rate of waste vehicle tyres by diverting them from the waste disposal facilities to suitable recycling facilities.

## **LEGISLATIVE AND IMPLEMENTATION TIMETABLE**

20. We consulted the Panel on Environmental Affairs of the LegCo on the proposed establishment of a PRS common legislative framework on 28 November 2023, and members generally supported the proposal. We aim to introduce the amendment bill into the LegCo in 2024. After the passage of the amendment bill, we will introduce the subsidiary legislation for each regulated product into the LegCo. Our target is to implement the PRSs for the five regulated products gradually starting from 2025.

**ADVICE SOUGHT**

21. Members are invited to provide comments on the above legislative proposals.

**Environmental Protection Department  
January 2024**

## **PRS on Plastic Beverage Containers and Beverage Cartons**

### **Waste Management Challenge in Hong Kong**

Plastic beverage containers and beverage cartons are the two most common types of beverage packaging in the Hong Kong beverage market, accounting for the majority of the market. At present, most of the plastic beverage containers and beverage cartons are disposed of at landfills, and quite a large number are dumped as litter in country parks, rivers, seas, etc., causing damages to the ecosystem. Yet, most of the plastic beverage containers and beverage cartons are made of materials that are recyclable. If they are properly separated at source for collection and treatment, they can be turned into useful resources and their impact on the environment can be minimised.

### **Experience in Other Places**

2. To facilitate proper management of single-use beverage containers, it is a common practice in other places (e.g. Europe, North America and Australia) to adopt a dedicated system (usually by means of PRS) to handle and collect beverage containers separately from other waste for recycling, with the provision of financial incentive to encourage the public to return used beverage containers to designated return points. Reverse vending machines (RVMs) are also commonly used in other places to collect used beverage containers, thereby improving the efficiency and quality of recycling. In most PRSs, beverage suppliers are responsible for the recycling of their beverage containers. Whether required by law or on a voluntary basis, retailers selling related beverage products will serve as return points for beverage containers to provide convenient services to the public. By doing so, retailers may also benefit from the increased customer flow in return.

### **Public Consultation**

3. The Government conducted a public consultation from February to May 2021 on the introduction of a PRS on plastic beverage containers, during which over 4,600 submissions were received. Among them, more than 95% of the submitted views supported the implementation of the PRS on plastic beverage containers. Having considered the views received, the experience in other places and the development of the local recycling market, the Government intends to adopt a “market-led approach” for the implementation of this PRS, and will include beverage cartons in the scheme, which in turn will help enhance the efficiency and cost-effectiveness of the recycling arrangement.



## **Scope and Operational Details of the PRS on Plastic Beverage Containers and Beverage Cartons**

4. The scheme will cover beverage products with volume ranging from 100 millilitre to 2 litres that are carried in plastic beverage containers or beverage cartons, but does not cover refillable plastic containers (e.g. carboys), beverages that are filled and sealed immediately before sale for takeaway at retail outlets (e.g. bubble tea packaged in plastic cup sealed with a plastic film) and drink pouches.

5. The recovery services of plastic beverage containers and beverage cartons (including the setting up of return point network, collection of plastic beverage containers and beverage cartons, provision of rebates and proper recycling arrangement) will be provided by the market. Registered beverage suppliers have to meet the statutory recovery target set by the Government. To this end, registered beverage suppliers will have to either carry out the recovery of plastic beverage containers and beverage cartons for proper recycling by themselves, or engage registered scheme operators with recovery services from the market by paying them a recycling fee (with rebates included). Any persons (for example, a supplier, recycler or non-profit organisation, etc.) interested in providing the relevant services in the market can apply to the Government for registration as registered scheme operators, based on their own business strategy and commercial consideration.

6. The operational details of the proposed scheme, which will be prescribed in the subsidiary legislation, are mainly as follows:

- (1) The Government will set statutory recovery targets for plastic beverage containers and beverage cartons;
- (2) Registered beverage suppliers have to meet the recovery targets set by the Government;
- (3) Registered beverage suppliers may arrange recovery on their own, or engage registered scheme operators with recovery services from the market and pay them a recycling fee;
- (4) Registered suppliers or registered scheme operators are required to provide rebates to incentivise the public to return used plastic beverage containers and beverage cartons to designated return points to increase recovery rate; and
- (5) Retailers selling beverages in plastic containers and cartons with certain operation scale (e.g. those retail stores with a retail floor area of 200 m<sup>2</sup> or above) must serve as designated return points and provide takeback and rebate services.

7. To encourage the public to return their used plastic beverage containers and beverage cartons for recycling, the Government will set a minimum rebate level on a per-container basis (proposed to be \$0.1), and the public can receive rebate at designated return points. Apart from providing cash rebate, registered scheme operators may provide rebate in other forms (e.g. cash coupon of supermarkets or shopping centres) for the public, or provide higher level of rebate to the public to boost the recovery rate when necessary.

8. In addition, we propose introducing licensing control on disposal facilities for plastic waste and liquid carton waste, and import and export control on liquid carton waste so as to ensure that the plastic beverage containers and beverage cartons collected under the scheme can be properly treated. A consultation forum for the recycling trade was held in September 2023 to introduce the proposed control measures and to seek the trade's views. The recycling trade responded positively to the relevant proposal in general.

### **Implementation Timetable**

9. We are actively preparing for the implementation of the PRS on plastic beverage containers and beverage cartons and have consulted the public and relevant trade stakeholders. After the passage of the amendment bill on the common legislative framework, we will introduce a subsidiary legislation to the LegCo. Subject to the progress of the legislative process and the relevant preparatory work, we expect to implement this PRS in 2025 at the earliest.

## **PRS on Retired EV Batteries**

### **Current Status of Retired EV Batteries**

The Government promulgated “The Hong Kong Roadmap on Popularization of Electric Vehicles” in 2021, which announced no new registration of fuel-propelled private cars and hybrid private cars in Hong Kong by 2035. Fuel-propelled private cars and hybrid private cars will be replaced by electric private cars gradually, and the number of retired EV batteries will be increased.

2. According to the Transport Department, electric private cars accounted for 25% of newly registered private cars in 2021 and about half in 2022. As of end November 2023, the total number of EVs in Hong Kong exceeded 73,000, accounting for 8.0% of all vehicles in Hong Kong. The move to EVs has the potential to reduce carbon emissions and air pollution. However, the transition also brings associated environmental challenges with the need for efficient recycling systems to tackle the retired EV batteries.

3. At present, retired EV batteries are chemical wastes and are required to be properly handled according to the WDO (Cap. 354) and its subsidiary Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). The Government further proposes introducing a mandatory PRS on retired EV batteries, allowing all stakeholders in the supply chain to share responsibilities so as to ensure that retired EV batteries are properly handled.

4. We propose introducing a licensing control under Section 16 of the WDO to regulate disposal facilities for retired EV batteries. The proposed licensing requirements are to ensure that the operations of the relevant waste disposal facilities comply with the various environmental pollution control legislations. A disposal facility is required to demonstrate that its disposal or recycling process is operated in an environmentally sound manner before being granted the licence. This proposal will help enhance the standard of the recycling trade in the long run, and will be conducive to the sustainable development of the related trades, as well as promote the local circular economy.

### **Scope and Operation of the PRS on Retired EV Batteries**

5. The scheme will cover all retired batteries from pure EVs, plug-in hybrid EVs, and electric commercial vehicles. The types of batteries that will be included for recycling are traction batteries in the above vehicles, of which lithium ion batteries are the most common. The operational details of the proposed scheme, which will be prescribed in the subsidiary legislation, are proposed to be mainly as follows:

- (1) Suppliers (including EV suppliers and vehicle maintenance workshops that provide one-on-one replacement service for retired EV batteries) who introduce the regulated products to the local market are required to register with the EPD, and they must undertake the necessary arrangement for the collection, proper treatment and recycling of the retired EV batteries, and bear the related cost. They have the option to establish self-recovery services or engage the services of registered scheme operators from the market by paying them a service fee;
- (2) Suppliers (or their engaged registered scheme operator(s)) are required to set up return points to facilitate end users to drop off their retired EV batteries;
- (3) Return point operators are required to register as chemical waste producers under the WDO. They need to engage a licensed chemical waste collector to deliver the collected retired EV batteries to a recycler (i.e. a licensed chemical waste disposal facility) for proper disposal; and
- (4) Recyclers are responsible for the proper recycling and disposal of the retired batteries. For retired batteries that are further repurposed for second-life use and sold locally, upon future disposal, users may return the retired second-life batteries to the recyclers for recycling under the chemical waste control scheme.

### **Stakeholder Consultation**

6. EPD has conducted consultations from June to October 2023 on the detailed proposal of the “PRS on Retired EV Batteries”, with about 50 companies or organisations participating (including EV suppliers, The Motor Traders Association of Hong Kong, EV maintenance workshops, EV owners associations and EV battery recyclers, etc.). We have taken note of the views from the trade that as the lifespan of EV batteries is relatively long and the recycling cost is quite high, a levy is proposed to be collected by the Government to guard against the possible scenario in which stakeholders (including suppliers or scheme operators) may fail to fulfill their producer responsibilities down the road as a result of the closing down of their business. We will consider the views and further liaise with the trade and relevant stakeholders in order to fine tune the regulating proposal. We will make reference to the development in the Mainland and the European Union, and consider incorporating arrangements suitable for the PRS in Hong Kong, with a view to introducing a subsidiary legislation to the LegCo in 2024.

## **PRS on Vehicle Tyres**

### **Current Status of Vehicle Tyres and Handling of Waste Vehicle Tyres**

Based on the figures of the import and export of merchandise, it is estimated that an average of approximately 1.8 million vehicle tyres of various types remained in the local consumer market every year in the period between 2012-2021; the percentages of small tyres<sup>1</sup> and large tyres are approximately 84% and 16%, respectively.

2. In 2021, around 27,600 tonnes of waste vehicle tyres were generated in Hong Kong, of which around 20,000 tonnes were cut and disposed of at landfills, and the remaining 7,600 tonnes were retreaded and reused or recycled, with the percentages being approximately 85% and 15%, respectively.

3. At present, the main recycling process of waste vehicle tyres involves cutting, shredding and grinding waste vehicle tyres to recover metal scraps and crumb rubber. Crumb rubber can be further processed, for example, to produce rubberised bitumen for road paving works and fuel substitutes. Crumb rubber can also be used to produce shock-absorbing rubber pads, reclaimed rubber, etc.

### **Scope and Operation of the PRS on Vehicle Tyres**

4. The scheme will cover vehicle<sup>2</sup> tyres which are sold in local market and are intended for use on vehicles that are registered for road use. Registered importers or dealers are required to recycle a certain proportion of waste vehicle tyres based on the number of new tyres sold. Registered importers or dealers can engage registered scheme operators to discharge their duty for proper recycling of waste vehicle tyres so to achieve recovery target. Scheme operators are required to arrange for the delivery of waste vehicle tyres to relevant licensed recycling facilities. Also, downstream recycling facilities are required to operate in accordance with their licence conditions.

5. We also propose that waste vehicle tyres will no longer be allowed to be disposed of and handled in landfills. This will help divert waste vehicle tyres from the waste stream to recycling facilities, allowing importers or scheme operators to achieve recovery targets more efficiently, thereby enhancing the recycling rate of waste vehicle tyres.

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<sup>1</sup> Small tyres generally refer to tyres suitable for light vehicles including private cars, light goods vehicles, taxis and motorcycles, etc. Large tyres generally refer to tyres suitable for medium and heavy vehicles including trucks, buses, trailers, etc.

<sup>2</sup> Including the classes of vehicle that are listed in Schedule 1 of the Road Traffic Ordinance (Cap. 374), except rickshaw.

## **Stakeholder Consultation**

6. The Government has engaged vehicle tyre importers, vehicle tyre trade associations, waste vehicle tyre handlers and local recyclers to introduce the PRS proposal under the “market-led approach” and the roles, responsibilities and possible impacts to different stakeholders under the scheme.

7. Stakeholders generally consider that the PRS can help improve the handling of waste vehicle tyres and promote the development of the local waste vehicle tyre recycling industry, and are in support of the proposed landfill ban. The Government will take into account the views of all parties and formulate further details of the scheme, and consult the trade again in due course.

## **PRS on Lead-acid Batteries**

Around 7,000 tonnes to 8,000 tonnes of waste lead-acid batteries are generated in Hong Kong every year, mainly from vehicles and uninterruptible power supply (such as those used at data centres and those used for emergency lighting). According to the WDO (Cap. 354) and its subsidiary Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C), waste lead-acid batteries are defined as chemical waste. Their generation, collection, disposal as well as import and export are subject to control under the relevant legislations.

2. There are currently eight licensed disposal facilities for waste lead-acid batteries in Hong Kong, including:

- (1) a facility that mechanically shreds waste lead-acid batteries and sorts out different materials such as plastics, metals and acidic electrolytes for proper treatment, while the lead plates and lead paste in the batteries are smelted at high temperature and recycled into lead bullion; and
- (2) seven facilities that preliminarily process waste lead-acid batteries by sorting, insulating and packaging, before exporting them to overseas (South Korea) recycling facilities for recycling.

3. In 2022, around 760 tonnes of waste lead-acid batteries were recycled locally and, around 5,450 tonnes of waste lead-acid batteries were preliminarily processed and exported to overseas advanced facilities for recycling. To further encourage the recycling of waste batteries in related industries, the EPD has banned the disposal of waste lead-acid batteries at landfills since 2020. In addition, the Recycling Fund has subsidised different local waste lead-acid batteries recyclers in their operation and purchase of equipment to enhance their productivity, and the total amount of funding granted has been over \$8.6 million.

### **Scope and Operation of the PRS on Lead-acid Batteries**

4. The PRS on lead-acid batteries will initially cover all lead-acid batteries in the market, regardless of types and uses. Registered suppliers of lead-acid batteries are required to meet the statutory recovery target set by the Government. To this end, registered suppliers of lead-acid batteries are required to arrange for the recovery of waste lead-acid batteries on their own, or hire a registered scheme operator in the market that provides such recovery service, and pay a recycling fee. Collected waste lead-acid batteries shall be sent to licensed disposal facilities for proper recycling.

5. The operational details of the proposed scheme, which will be prescribed in the subsidiary legislation, are proposed to be mainly as follows:

- (1) The Government will set a statutory recovery target for waste lead-acid batteries;
- (2) Suppliers that import lead-acid batteries into the local market are required to register with the EPD and undertake the responsibility to collect, properly handle and recycle used batteries, and bear the relevant cost. They can opt to arrange for the recovery by themselves or pay a service fee to registered scheme operators in the market to discharge the duty;
- (3) Suppliers (or their engaged registered scheme operators) need to set up return points to facilitate end users to return waste lead-acid batteries;
- (4) Suppliers (or their engaged registered scheme operators) are required to meet the recovery target set by the Government;
- (5) Return point operators are required to register as chemical waste producers under the WDO. They are required to hire a licensed chemical waste collector to transfer the collected waste lead-acid batteries to a recycler (i.e. a licensed chemical waste disposal facility) for proper handling; and
- (6) Licensed disposal facilities are responsible for the proper recycling and disposal of waste lead-acid batteries.

### **Stakeholder Consultation**

6. The Government has been meeting with importers of lead-acid batteries as well as exporters and local recyclers of waste lead-acid batteries to introduce to them the PRS proposal under the “market-led approach”. All stakeholders generally consider that the PRS can help enhance the collection and handling of waste lead-acid batteries and promote the development of the local recycling trade of waste lead-acid batteries. The Government should consult the trade again when formulating further details of the scheme, and work with the trade together to formulate a suitable PRS on lead-acid batteries.