

ACE Paper 1/2021
For discussion on 8 March 2021

# Public Consultation on the Producer Responsibility Scheme on Plastic Beverage Containers

#### **PURPOSE**

The Government launched a three-month public consultation on 22 February 2021 to consult the public on introducing a producer responsibility scheme (PRS) on plastic beverage containers (PPRS) for the proper and effective management of waste plastic beverage containers. This paper seeks Members' views on the proposed scheme.

## **BACKGROUND**

- 2. In Hong Kong, around 2 320 tonnes of waste plastics were disposed of at landfills daily in 2019, accounting for about 21% of total municipal solid waste. Out of these waste plastics, around 5% (i.e. 106 tonnes per day) were plastic beverage containers (equivalent to over 200 bottles per capita a year). This type of mono-material plastic beverage containers is relatively easy to handle and has a higher recycling value. They can be turned into useful resources more effectively if they are properly separated at source for collection and treatment after their service life.
- 3. The Government has just released the *Waste Blueprint for Hong Kong 2035* setting out the vision of "Waste Reduction Resources Circulation Zero Landfill". The blueprint outlines the strategies, goals and measures to tackle the challenge of waste management up to 2035, by leading the advancement of various policies and measures as well as promoting circular economy and sustainable living environment. As one of the key initiatives on "Waste Reduction", the Government launched a three-month public consultation on 22 February 2021 to consult the public on the introduction of PPRS. The Consultation Paper is at **Annex**.
- 4. PRS is a key policy tool of waste management. The Product Ecoresponsibility Ordinance (PERO) (Cap.603) was enacted in July 2008 to provide a legal framework for PRSs and other measures to minimise the environmental

impact of certain types of products. Since then, we have progressively implemented PRSs for different products, including plastic shopping bags, waste electrical and electronic equipment and glass beverage containers.

#### **JUSTIFICATIONS**

- 5. In our daily lives, plastic-bottled beverages are usually consumed on-the-go, and the waste plastic containers so generated are dumped everywhere scattering throughout the territory. The existing collection system can hardly achieve a high recovery rate. We need more effective waste management strategies and measures to collect this type of material.
- 6. To facilitate the proper management of single-use plastic beverage containers, it is common in other places to have dedicated systems to handle and collect these containers separately from other waste plastics for recycling, more often by means of PRS, which seek to get the relevant stakeholders along the supply chain, including manufacturers, importers, retailers and the public involved and jointly share out the eco-responsibilities for the collection, treatment, recycling and proper disposal of end-of-life products with a view to avoiding and minimising the environmental impacts caused by such products.

#### THE PROPOSALS

- 7. We propose introducing a PPRS comprising the following key elements-
  - (a) Application of Reverse Vending Machines (RVMs), as appropriate, to enhance the recovery efficiency and facilitate the provision of rebate:
  - (b) Certain retail stores selling pre-packaged beverages to serve as designated return points;
  - (c) A rebate arrangement to be set up to encourage the public to return plastic beverage containers;
  - (d) A levy to be imposed on the beverage supplier level to fund the operations of PPRS; and
  - (e) Licensing control on the operation of recycling facilities to ensure proper recycling and treatment of waste plastic beverage containers.

## **Proposed framework of the PPRS**

8. There will be a "PRS Operator" to oversee the operations of the PPRS, including the operation of the rebate system and the collection and preliminary processing of waste plastic beverage containers. The collected containers will be

<sup>&</sup>lt;sup>1</sup> PRS Operator can either be the Government or a Government-appointed organisation through open tender as appropriate.

supplied to local recyclers on a commercial basis, turning the waste into resource saleable in local or international markets. A rebate will be provided to the public to incentivise them to return used plastic beverage containers to designated return points for proper recycling. The PRS Operator will engage a "Rebate System Administrator" to set up and operate the entire rebate system and related administrative arrangement, and act as central transaction clearing house for the rebate system. It will also engage multiple "Return Network Operators" to set up and manage return points according to geographical demarcation and arrange collection and handling of plastic beverage containers for supplying to the local recycling market. The overall operation of the PPRS is summarised in a diagram on page 26 of the Consultation Paper.

## Scope of coverage

9. We propose that the PPRS shall cover all plastic-bottled beverage products with volume ranging from 100mL to 2L distributed in Hong Kong, subject to proposed exclusion of certain types of beverage products, such as beverages in refillable plastic containers, drink pouches, etc., as listed in paragraphs 3.7 to 3.9 of the Consultation Paper. For sake of consistency, the PPRS will adopt the same definition of "beverage" for the PRS on glass beverage containers as provided in the PERO as amended by the Promotion of Recycling and Proper Disposal (Product Container) (Amendment) Ordinance 2016, i.e. a ready-to-serve drink (e.g. soft drink or milk), or a product that is a liquid or consists of liquid and is commonly served as a drink after being diluted or reconstituted (e.g. concentrated fruit juice or nectar). In addition, the plastic containers of the beverage products under the PPRS have to be airtight and sealed by machine or with the aid of a tool.

## Rebate for return of used containers

- 10. The experience of other places suggests that provision of financial incentive through a dedicated recovery system to encourage the public to return their used plastic beverage containers would in general result in a higher recovery rate (e.g. over 90% in some European countries). We therefore propose providing a rebate under the proposed PPRS to incentivise the public to return used plastic beverage containers.
- 11. It is important to set the rebate at an appropriate level that can encourage the public to participate in recycling on one hand, and not to induce fraudulent behaviour, such as using containers with counterfeit barcodes for rebate, on the other. Having regard to prevailing voluntary programmes operated by some beverage suppliers and current market price of other recyclables, we propose providing a rebate of 10 cents per container as a start.

## **Network of return points**

12. In addition to the provision of rebate, a reasonably convenient network with appropriate return points to facilitate the public to return containers and get the

rebate is also the key to increase the recovery rate under the PPRS. In other places, it is not uncommon that retailers selling pre-packaged beverages in plastic containers serve as return points for used containers, either by law or voluntarily, to ensure that the PRS provides convenient and accessible service to the public. Having considered the local situation of Hong Kong, we propose requiring retailers selling, among others, plastic-bottled beverages and operating at certain scale, say those with retail floor area not less than 200 square metres, to provide take-back and rebate redemption services. The take-back of plastic beverage containers and rebate redemption can be done either manually or automatically through the application of RVMs.

13. The Government has rolled out a one-year pilot scheme in January 2021 to test out the practical application of RVMs in Hong Kong. A total of 60 RVMs will be installed in phases at different locations such as public places and government facilities with suitable foot traffic, with provision of instant rebate via e-payment platforms to encourage the public to return their used plastic beverage containers for recycling. Members of the public can also choose to donate the rebate to designated charities to benefit the community.

## The levy

- 14. In line with the "polluter pays" principle, we propose imposing a container recycling levy, to be collected from suppliers <sup>2</sup> who distribute plastic-bottled beverages in Hong Kong, to fund the operation of the PPRS. The suppliers are required to register as "registered suppliers" and register the information of plastic-bottled beverage products to be distributed in Hong Kong, provide the required barcodes and designated recycling logos on plastic beverage containers, submit periodic returns for the amount of the distributed plastic-bottled beverage products, pay the container recycling levy calculated based on the total amount of plastic-bottled beverage products distributed, as well as to engage a qualified independent auditor to conduct annual audit and submit audit report.
- 15. The level of container recycling levy will depend on two major factors, namely, (i) the administration and operation expenditures of the PPRS, including collection and processing costs for waste plastic beverage containers (i.e. the "recycling fee"), which will be calculated based on litre-volume of the container; and (ii) the rebate, to be offered to the public on return of used containers at return points. Based on the initial guesstimates on the recycling fee projected by the consultant engaged by the Government, if the rebate level is set at 10 cents per container, the recycling levy would be around 50-65 cents per 500 mL container.

## **Proper recycling and treatment**

16. The dedicated collection network for used plastic beverage containers described above can provide a steady supply of mostly polyethylene terephthalate

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<sup>&</sup>lt;sup>2</sup> Suppliers include manufacturers and importers.

(PET) containers that have a reasonably good market value. Such high quality feedstock of plastic waste would be welcomed by the local recycling market as the recycling of such material is a self-sustainable business that does not require the financial support of the PPRS. To encourage healthy competition among local recyclers, the proposed PPRS will not cover the post-collection treatment of the waste plastic containers, which will instead be handled by the local recycling sector on market mechanism. Yet, to ensure that the waste plastic beverage containers collected are properly treated and to facilitate the development of circular economy by turning waste into reusable resource, we propose imposing licensing control under the Waste Disposal Ordinance (WDO) (Cap. 354) on any person who treats, reprocesses, and recycles regulated plastic beverage containers under the proposed PPRS.

# **Administration of the PPRS**

17. PPRS in other places adopt two common approaches: government-administered and industry-operated. The Government will take the lead and assume the role of PRS Operator in the proposed PPRS framework as outlined above. That said, we will review at suitable juncture the implementation of the PPRS and will not rule out the possibility of considering refining the operation mode in future.

## **Timetable**

18. Subject to the views collected in the public consultation, we plan to finalise the way forward within 2021 and accordingly prepare the legislation for introduction into the Legislative Council in 2022 the earliest.

#### ADVICE SOUGHT

19. Members are invited to give views on the proposed PPRS.

**Environmental Protection Department March 2021**