

By post and by email at [pprs@epd.gov.hk](mailto:pprs@epd.gov.hk)

21 May 2021

Environmental Protection Department  
Waste Management Policy Group  
Room 1501, 15/F  
Chinachem Exchange Square  
1 Hoi Wan Street  
Quarry Bay, Hong Kong  
[Attn: Ms Cindy S C TAM]

Dear Ms TAM

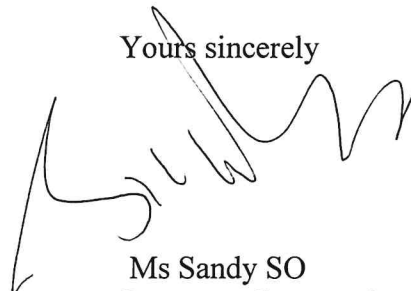
**Views from The Hong Kong Institution of Engineers  
on the Producer Responsibility Scheme on Plastic Beverage Containers**

On behalf of the Institution, I am pleased to present to you our views and suggestions as set out in the enclosure for your kind consideration on the captioned subject.

With our expertise and experience, the Institution welcomes the opportunity to work with the Government on the area of concern if and when it is needed.

Thank you.

Yours sincerely



Ms Sandy SO  
Manager – Corporate Communications

CKH/SS

**Enclosure**

**Views from The Hong Kong Institution of Engineers  
Regarding the Public Consultation on  
Producer Responsibility Scheme on Plastic Beverage Containers**

The Hong Kong Institution of Engineers (HKIE) would like to provide the following views and suggestions regarding the consultation on Producer Responsibility Scheme on Plastic Beverage Containers for the Environmental Protection Department (EPD)'s consideration:

2. Plastics are light, malleable, corrosion resistant and well insulated. Naturally, therefore plastics are widely used in our daily lives. Starting in the 1950s, approximately 6.3 billion tonnes of waste plastics were produced worldwide with around 320 million tonnes of plastics produced every year. Of the approximately 6.3 billion tonnes of waste plastics, only around 9% of the plastics produced were recycled and around 12% incinerated, while the majority of the waste plastics ended up in either landfills or the natural environment, and there were an estimated 100 million tonnes of plastics entered the ocean<sup>1</sup>. The waste plastics require considerable years to decompose and some would break into small fragments and enter the ecosystem, thus threatening our living environment.

3. In 2019, Hong Kong disposed of about 2,320 tonnes of waste plastics per day (tpd) which was about 21% of the 11,057 tpd of overall municipal solid waste (MSW) in all landfills. Of all the waste plastic, 33% were plastic bags, 9% were plastic dining utensils and containers, and 5% were plastic beverage containers. It is noted that the waste plastics disposed of in landfills in Hong Kong increased by 36% from 2009 to 2019.

4. In the past, some waste plastics were exported to factories outside Hong Kong for recycling. However, following the tightened import and export controls on waste plastic materials imposed both regionally and internationally, the export rate of waste plastic materials worldwide has been greatly affected. Also, the light-weight and

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<sup>1</sup> Public Consultation document for Producer Responsibility Scheme on Plastic Beverage Containers published by Environmental Protection Department – February 2021

bulky nature of plastic wastes results in high logistic costs making exporting for recycling not cost-effective.

5. In 2009, the Product Eco-responsibility Ordinance (Cap. 603) was enacted in Hong Kong to introduce the framework of a Producer Responsibility Scheme (PRS) through legislation. Subsequently the Government introduced the Plastic Shopping Bag Charging Scheme, and a PRS on Waste Electrical and Electronic Equipment and Glass Beverage Containers. The community and the key stakeholders including manufacturers, suppliers, retailers and consumers have shown support for the PRS.

6. In 2019, there were 191 tonnes of plastic containers were disposed of daily in landfills of which 106 tonnes were plastic beverage containers<sup>1</sup>. Most of them were made of polyethylene terephthalate (PET), which is relatively easy to recycle and has a higher recycling value. In this light, the Institution supports the introduction of a mandatory PRS for the recycling of plastic beverage containers, i.e. the Producer Responsibility Scheme on Plastic Beverage Containers (PPRS) to encourage better plastic waste management.

7. The Institution agrees that the definition of glass beverage containers can also be applied to plastic beverage containers. The PPRS should cover pre-packaged beverage products within the volume range of 100mL to 2L irrespective of the plastic materials used but excluding composite materials.

8. In order to encourage the return of plastic beverage containers, the Institution supports the incentive measures of giving rebates under the proposed PPRS. To encourage the return of a plastic beverage container, a rebate of 50 cents per container will be a better incentive to increase the return rate of plastic containers. Besides, the rebate should be in a flat rate regardless of the beverage container's size and shape in order to streamline the administrative procedures.

9. In addition, a convenient collection network should be implemented with reasonably convenient return points and a rebate redemption service to facilitate the return of used plastic beverage containers. The network could include residential estates, public facilities, public transport facilities, retail stores and supermarkets and shopping centres. Retailers selling beverages in plastic containers should be mandated

to provide a take-back and rebate redemption service. However, the Institution suggested that the take-back requirement should only be applied to stores of a certain operational scale, i.e. those with retail floor areas of not less than 200 m<sup>2</sup>. At these return points, a combination of manual and via reverse vending machines (RVM) take-back should be provided.

10. The Institution also supports the collecting of a recycling levy by beverage suppliers (mainly local beverage manufacturers and importers) to fund the operation of the PPRS. It is also agreeable that a moderate reduction of the payable recycling levy should be allowed based on the number of containers collected and recycled on the suppliers' own initiatives meeting certain environmental requirements to encourage their recycling practice.

11. To ensure that the waste plastic beverage containers collected are properly treated, the Institution also supports imposing licensing requirement on recycling facilities for handling the waste plastic beverage containers collected under the proposed PPRS. For environmental conservation, replacing plastic bottles with paper bottles for the beverage container will also be one of the possible methods as paper bottles can be recycled and thus reducing the emission of CO<sub>2</sub>.

12. As concerted effort by the Government, the business sector and the general public is required to reduce the use of plastics, the Government should make use of the Recycling Fund to support the waste recycling industry in setting up local factories to facilitate the development of a circular economy by turning waste into reusable resources.