

ACE-WM Paper 2/2020 For discussion on 20 January 2020

Pilot Scheme on Collection of Waste Plastics

PURPOSE

This paper aims to brief Members on the progress of implementation of the pilot scheme on collection of waste plastics (pilot scheme).

BACKGROUND

2. Due to the low density, great variety and bulky volume of plastic materials, the costs of collection, sorting, storage and transportation of waste plastic are high. The low economic value and recyclability of waste plastic has always been a matter of concern in the community. In parallel, the Mainland authorities have gradually tightened the requirements for imported recyclables (including waste plastics¹) from early 2018 onwards. Besides, according to the latest resolution made in May 2019 at the Conference of the Parties to the Basel Convention, contaminated or mixed plastic waste will be subject to transboundary movement control similar to hazardous waste from 1 January 2021 onwards². Looking forward, the previous mode for local waste plastic recycling (i.e. collect, bale and export) cannot sustain anymore.

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¹ In July 2017, the General Office of the State Council promulgated the Implementation Plan on Advancing Reform of the Administration System on Import of Solid Wastes through Prohibiting Import of Foreign Rubbish to adjust the Mainland's policy on the import of recyclables. The import of 24 types of solid waste, including household waste plastics, unsorted scrap paper, discarded textile materials and Vanadium slag, had been banned from 31 December 2017 onwards. Also, the import of 16 types of solid waste, including industrial waste plastics, had been banned from 31 December 2018 onwards.

² According to the "BC-14/12: Amendments to Annexes II, VIII and IX to the Basel Convention" announced in May 2019, contaminated or mixed plastic waste will be subject to the transboundary movement control similar to hazardous waste from 1 January 2021, which means prior consent from the states of import is required for exporting contaminated or mixed plastic waste. Free trading of 17 types of uncontaminated plastic waste almost exclusively consisting of one polymer destined for recycling, will continue to be allowed.

3. In 2018, waste plastic accounts for about 21% of the total volume of the Municipal Solid Waste in Hong Kong. More than 850,000 tonnes of waste plastic were disposed of at landfills while about 65,000 tonnes were recovered (i.e. the recovery rate is 7%). To tackle the challenges faced by local plastic recycling, the Government is committed to subsidizing the collection of waste plastic generated from the domestic sources, with a view to enhancing the recovery rate of waste plastic as well as public confidence in the waste separation and recycling system.

THE PILOT SCHEME

- 4. To iron out the logistical issues involved in the collection of waste plastic, and to identify the most suitable mode of operation that best suits the needs of the domestic sectors, the Environmental Protection Department (EPD) will implement the plastic collection service in three pilot districts (i.e. Eastern District, Kwun Tong and Sha Tin) in the first stage. Through service contractors, the EPD will collect, free of charge, different types of plastic bottles, containers, packaging and polyfoam materials from domestic sources, including public and private housing estates, schools and public institutions, as well as the EPD's Community Recycling Centres and Community Green Stations. Also, the contractors are required to set up mobile collection points to facilitate collection of waste plastic from members of the public and premises without recycling facilities. The collected waste plastics will then be sorted, shredded and recycled into raw materials (e.g. plastic pellets or flakes) or end-products to be supplied to the local market or exported elsewhere. A flowchart illustrating the changes in recycling practices before and after the pilot scheme kicks in, is at Annex 1.
- 5. In addition, the contractors are required to collaborate with non-profit-making organisations to promote waste separation and clean recycling in the community. Taking into account the experience drawn from the pilot scheme, we will review the messages of clean and proper recycling of waste plastic and consider how best to promote the messages.

Implementation details

6. The pilot projects in the three districts will be implemented under three separate contracts, such that the operational modes adopted by different contractors can be reviewed side by side. This would be conducive to identifying the parameters of suitable collection system(s) for adoption in other districts in due course. Regarding the tender for the three pilot projects, we have adopted a

price-to-technical weighting of 30:70, with an emphasis on technical aspects to encourage competent bidders to adopt innovative ideas and new technologies in the collection and recycling of waste plastic as well as in the overall service delivery. Moreover, in his/her technical proposal, a bidder is required to propose an incentive scheme and an outreach plan to attract members of the public to practise separation and recycling of waste plastic.

- 7. To ensure that the waste plastic collection and recycling processes are carried out as specified in the contracts, the contractors are required to implement a comprehensive monitoring plan including installation of Global Positioning System (GPS) logging devices on collection vehicles, as well as electronic data recording and surveillance camera systems at processing plants. In addition, calculation of the service fees received by the contractors will be based on the weight of the recycled raw materials or products produced. Partially processed waste plastic is only allowed under specific circumstances with lower rate of payment, while wastage sorted out will not be included in the calculation of service fee. This payment mechanism would help encourage the contractors to put in efforts to ensure the waste producers would practise clean recycling as far as possible, and that the collected waste plastic would be channelled to proper recycling outlets as far as practicable.
- 8. The contract for the Eastern District was awarded in October 2019. Following a three-month preparatory period for making logistical arrangements, registering recyclable producers, setting up processing plants, etc., the collection service is anticipated to commence in late January 2020.
- 9. In parallel, the tender assessment for the contracts for Kwun Tong and Sha Tin districts is underway, and the service is expected to commence in the second quarter of 2020.

WAY FORWARD

10. Drawing from the practical experience and baseline information gained under the pilot scheme, we will gradually extend the service to cover the whole territory. We will further review the mode of collection of waste plastic bottles, having regard to the development of the producer responsibility scheme on plastic beverage containers and the use of reverse vending machines in collecting them. A public consultation on the former and a pilot scheme on the latter will be launched later this year.

11. Members are invited to note the progress of the Government's efforts in implementing the pilot scheme as one of the initiatives to strengthen the support for waste reduction and recycling.

Environmental Protection Department January 2020

Existing Mode of Waste Plastics Recycling



New Mode of Waste Plastics Recycling after Pilot Scheme

