

**Thirty-sixth Meeting of
the Business Facilitation Advisory Committee**

***Agenda Item 2 : Implementation Arrangements
for Municipal Solid Waste Charging***

Purpose

This paper briefs members of the Business Facilitation Advisory Committee on the proposed implementation arrangements for municipal solid waste (“MSW”) charging in Hong Kong.

Background

2. Quantity-based waste charging aims to create financial incentives to drive behavioural changes in waste generation and thus reducing the overall waste disposal. In Taipei City and Seoul, MSW disposal dropped by some 30% in the initial period after a quantity-based waste charging was introduced. On the basis of majority support revealed in the public consultation completed in 2012, the Government affirmed the direction of introducing a quantity-based MSW charging system as a key policy tool to achieve waste disposal reduction.

3. Based on the recommendations made by the Council for Sustainable Development subsequent to a public engagement process completed in 2014, the Environment Bureau (“ENB”)/ Environmental Protection Department (“EPD”) formulated the proposed implementation arrangements for MSW charging for release in March 2017. Following the announcement, ENB/EPD held over 70 liaison sessions, meetings, seminars and forums to brief the community and various stakeholders on the proposed arrangements and solicited their views. While the proposed implementation arrangements were found generally agreeable, there were some suggestions on how certain aspects of the arrangements could be improved. In October 2017, ENB/EPD announced the proposed modifications to the implementation arrangements for MSW charging.

The Proposed Charging Framework

4. In order to minimize the impacts on environmental hygiene, the charging mechanism is proposed to be built upon the existing MSW collection and disposal system. There would be two primary charging modes of (a) charging by pre-paid designated garbage bags and (b) charging by weight-based gate-fee. The charging mode applicable to a waste producer would depend on the waste collection service he or she uses.

Pre-paid designated garbage bags

5. For MSW being collected by the Food and Environmental Hygiene Department (“FEHD”) through their refuse collection vehicles (“RCVs”), refuse collection points (“RCPs”) and bin sites, as well as MSW being collected by private waste collectors (“PWCs”) using RCVs with rear compactors, charging would be imposed through requiring the use of pre-paid designated garbage bags. The MSW would have to be properly wrapped in the pre-paid designated garbage bags before disposal. This charging mode is applicable to most residential buildings, village houses, street-level shops, and institutional premises, accounting for some 80% of the daily MSW disposed of at landfills.

6. Having considered relevant factors including affordability, acceptability and effectiveness in driving behavioural changes, etc., the per-litre charge for pre-paid designated garbage bags is proposed to be set at \$0.11 in the first three years of implementation. At this price level, if a three-member household uses a 10-litre designated garbage bag for daily disposal of MSW, it will have to pay around \$1.1 per day or \$33 per month. To ensure the effectiveness of the MSW charges in achieving the objective of waste reduction, we will review the charging level after the first three years of implementation.

7. The designated garbage bags will be of nine different sizes¹ from 3-litre up to 100-litre, and in two different designs of t-shirt and flat-top to cater for the need of different users. Sample designs of the bags are at **Annex A**. On technical specifications, designated garbage bags would be oxo-biodegradable and contain about 50% recycled materials. Each designated garbage bag would bear an anti-counterfeit label to deter forgery. To facilitate monitoring and reduce carbon

¹ 3-litre, 5-litre, 10-litre, 15-litre, 20-litre, 35-litre, 50-litre, 75-litre and 100-litre.

footprint, we plan to outsource the manufacturing of the designated garbage bags locally, while a separate contractor would be procured for serving as the manufacturing, inventory and distribution coordinator for designated garbage bags. Making reference to the distribution network adopted in other cities, we plan to establish some 4 000 sales points at supermarkets, convenience stores, gas stations and post offices, etc. In addition, we would also consider putting up vending machines in rural areas and RCPs as appropriate.

8. While the maximum size of designated garbage bags of 100-litre should be able to cater for the disposal need of most users, there are some oversized waste that cannot be properly wrapped into a designated garbage bag, e.g. chair, dining table, and sofa, etc.. Making reference to the practices adopted in other cities where waste charging is in place, we propose to charge for their disposal through oversized waste labels. While such charges can be set with reference to weight or volume of the waste, to enhance convenience for the public, a single price label mechanism would be adopted. Regardless of its size and weight, a uniform rate of \$11 per piece would be charged. This is calculated with reference to the retail price of the largest size of designated garbage bag of 100-litre. The oversized waste labels could be purchased at the sales points and vending machines for selling the designated garbage bags. A sample design of the oversized waste label is at **Annex B**.

Gate-fee

9. For the remaining 20% of the daily MSW disposed of at landfills, which is being collected by PWCs using waste collection vehicles without compactors (i.e. non-RCVs including grab lorries, demountable trucks, and tippers, etc.), it is proposed that charging would be subject to a gate-fee based on the weight of MSW disposed of at waste disposal facilities, i.e. landfills or refuse transfer stations (“RTSs”). Such MSW comprises largely oversized waste or waste which are irregular in shape from commercial and industrial (“C&I”) premises, e.g. large-sized metal ware and wood panels, etc, that cannot be put into a designated garbage bag.

10. Currently, PWCs have to pay \$30² per tonne for waste disposed

² The prevailing charge, if any, for use of different RTSs by private waste collectors is in the range of \$30 - \$110 per tonne. The rate is set at a level intended to be commercially viable to the trade and at the same time enable the Government to recover at least the additional cost for handling of the waste delivered by the PWCs.

of at urban RTSs but no charge at landfills. To avoid any over-capacity problem, this charging differential of \$30 per tonne between disposal at urban RTSs and landfills would be maintained after the implementation of MSW charging and be applied for Northwest New Territories Transfer Station (“NWNTTS”) (currently charged at \$38 per tonne) to simplify the structure of the charging scheme. As regards the RTSs in Ma Wan, North Lantau Island and other outlying islands, the charging level for disposal of MSW at these RTSs should remain at the same level as that at landfills considering that there is no other alternative waste disposal outlet to these RTSs. On this basis, MSW disposed of at the four urban RTSs and NWNTTS is proposed to be charged at \$395 per tonne; and MSW disposed of at other RTSs and landfills at \$365 per tonne. As with the charge for designated garbage bags, these charges are proposed to be maintained at the above-mentioned levels for the first three years and a review would be conducted after the first three years of implementation.

11. To facilitate relevant parties to discuss and agree on mutually agreeable payment arrangements, a hybrid system will be adopted to allow both PWCs and waste producers to register as account holders for paying the gate-fee. PWCs could pay the gate-fee upfront and recoup the charges from their clients. Alternatively, waster producers could register as account holders for paying the gate-fees for the disposal of their MSW direct.

Compliance Facilitation

Commencement arrangement and enforcement

12. Experiences in Seoul and Taipei City prove that public awareness and participation during the initial launch of MSW charging is critical to its smooth implementation. Intensive enforcement actions upfront across the community are not recommended bearing in mind the public needs time to adapt to this new charging scheme. Drawing on the practices adopted in these cities and the successful experience of the Environmental Levy Scheme on Plastic Shopping Bags, we plan to roll out a territory-wide partnership campaign to mobilize key local personalities and the property management sector to provide compliance assistance in individual districts and housing estates.

13. In addition, we propose putting in place a six-month phasing-in period after the commencement of MSW charging. During the

phasing-in period, warnings would be given in non-compliant cases and enforcement actions taken only if the nature and magnitude of the offence calls for enforcement, e.g. if the offender repeatedly contravenes the law despite warnings given. This will allow the community at large to get accustomed to the requirements. PWCs would be encouraged to report cases of non-compliant MSW to EPD for compiling a list of blackspots for subsequent monitoring and follow-up actions. EPD would conduct a survey to identify the kerbside collection points where the PWCs collect MSW and conduct targeted publicity and public education for relevant parties including the property management companies (“PMCs”), residents and frontline cleaners.

14. After the phasing-in period, strict enforcement actions would be taken. The frontline staff of FEHD and PWCs at the waste reception points³ would conduct cursory visual screening and reject any waste that does not comply with the requirements. Other than regular inspections, based on incident reports on non-compliance from frontline cleansing staff, waste collection contractors, PMCs and the public, the EPD and FEHD would conduct surveillance and enforcement actions at the waste reception points. Fixed penalty tickets of \$1,500 will be issued against offenders intercepted on the spot, and prosecution by way of summons will also be taken against serious and repeated offenders. Likewise, if a PWC is found to have accepted non-compliant MSW, he or she will be issued a fixed penalty ticket of \$1,500 or prosecution by way of summons may be taken.

15. Hong Kong has a high concentration of multi-storey buildings. The property management sector has raised repeated concerns in identifying non-compliant waste producers who dispose of wastes on floor levels before MSW is picked up by the cleansing workers for delivery to the waste reception points. It is an offence proposed under the Amendment Bill to deposit any MSW not properly wrapped in designated garbage bags at the waste reception chambers or areas, which are on floor levels and other parts of the buildings. With some 41 000 residential buildings in the territory, conducting regular enforcement in these buildings would induce a disproportionately excessive demand on the enforcement manpower and may be viewed by the public as causing unnecessary privacy intrusion and interference. Enforcement actions and inspections at individual premises would therefore mainly be taken at “black-spots” drawn up based on incident reports from the public and

³ The waste reception points include the RCVs of FEHD, its contractors and PWCs, and RCPs and bin sites managed by FEHD.

PMCs.

Publicity and public education

16. Experiences in other cities show that public education holds the key to the successful implementation of MSW charging. We would launch a Waste Reduction and Recycling promotional campaign under the central theme of “Dump Less, Save More” to publicise the charging arrangements and promote waste reduction. The Environment and Conservation Fund has since 2015 provided a total funding support of above \$55 million for organizing different community engagement projects in different types of premises. The experiences in trying out MSW charging in actual settings will provide some useful references for developing some Best Practice Guides on implementation of MSW charging.

17. A preparatory phase of 12 to 18 months would be put in place after the passage of the legislation and before the legislation comes into effect, when the public education and publicity efforts would be further intensified. We will reach out to various stakeholders and the community so as to enhance their understanding of the operational details and better prepare them for the implementation of MSW charging. We also plan to collaborate with different stakeholder groups such as green groups, PMCs, rural villages, in our publicity and education efforts.

Support for Waste Reduction and Recycling

Support for the community

18. The introduction of MSW charging will provide financial incentives for the community to reduce waste and enhance recycling. There is a need to provide adequate resources to beef up the support for recycling. Apart from the range of measures we have embarked on to promote recycling, we would also be setting up an outreaching team in EPD to reach out to the community to provide residents and PMCs with on-site guidance and assistance to practise proper waste source separation and clean recycling. The outreaching team will also help residents prepare for the implementation of MSW charging and other waste reduction initiatives.

19. In addition, EPD plans to introduce a new service to centrally collect waste plastics bottles (“WPBs”) received by the Community

Recycling Centres and, as necessary, from the sources direct across the territory, so as to better support the collection and recycling of WPBs. We have also commissioned a feasibility study on how to implement a Producer Responsibility Scheme (“PRS”) targeting at suitable plastic bottles, mainly those carrying beverages or personal care products, while in parallel implementing the two PRSs on waste electrical and electronic equipment and glass beverage containers.

20. In terms of providing recycling bins (“RBs”) to facilitate recycling, the implementation of waste charging is usually accompanied by an increase of the number of RBs and a reduction of the number of litter containers (“LCs”) in public places to facilitate recycling and discourage abusive use of the latter to evade MSW charges. To this end, the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places (“Steering Group”), chaired by Secretary for the Environment, was set up in February 2016 to review the number, distribution and design of the RBs and LCs in public places. Based on a set of planning parameters⁴ recommended by a consultancy study conducted, the number of LCs in public places, i.e. roadside bins under the management of FEHD as well as those in indoor and outdoor venues under the management of the Leisure and Cultural Services Department, would be reduced by not less than 40% and the number of RBs be increased by at least 45% before the implementation of MSW charging. The Steering Group has commissioned a Stage 2 consultancy study to review the existing designs of LCs and RBs in public places and to recommend on new designs to prepare for the implementation of MSW charging.

21. We will also set up a dedicated Food Waste Recycling Group in the EPD to study and formulate new regulatory measures on food waste disposal such as mandatory source separation of food waste and to administer the Food Wise Hong Kong Campaign.

Support for the recycling industry

22. To enhance the capability of local recyclers in handling waste plastics so as to meet with the tightened requirements of the Mainland on importing recyclables, the Recycling Fund Advisory Committee has in

⁴ According to the planning parameters, the provision of RBs should be increased and the distance between RBs is recommended to reduce to 250m. On the other hand, it is recommended that the provision of LCs should be reduced and the distance between LCs should be increased to 150m.

September 2017 earmarked \$20 million to support recyclers to procure different types of necessary machinery, including plastics sorters, label and cap removers, washing machines, dryers, and pelletizers. In parallel, an amount of \$50 million has been earmarked to encourage recyclers to use compactor trucks to enhance their operation efficiency and to mitigate the high collection and transportation costs for local recyclables, in particular plastics and papers.

23. Having regard to the latest needs and requirements of the recycling industry, EPD is working with the Recycling Fund on further measures for introduction in the near future, with a view to broadening the scope as well as enhancing the functions and operation of the Recycling Fund. Among other things, we would review, in the long run, whether and how we should help promote the development of local product manufacturing industries involving recyclables generated in Hong Kong, with a view to better absorbing and re-using the resources locally recovered as well as minimizing the reliance on export to dispose of local recyclables. EPD will also consider using the land resources in the EcoPark as well as the need for other incentives to this end, having regard to the views and needs of the recycling industry and other stakeholders.

Implementation Timetable

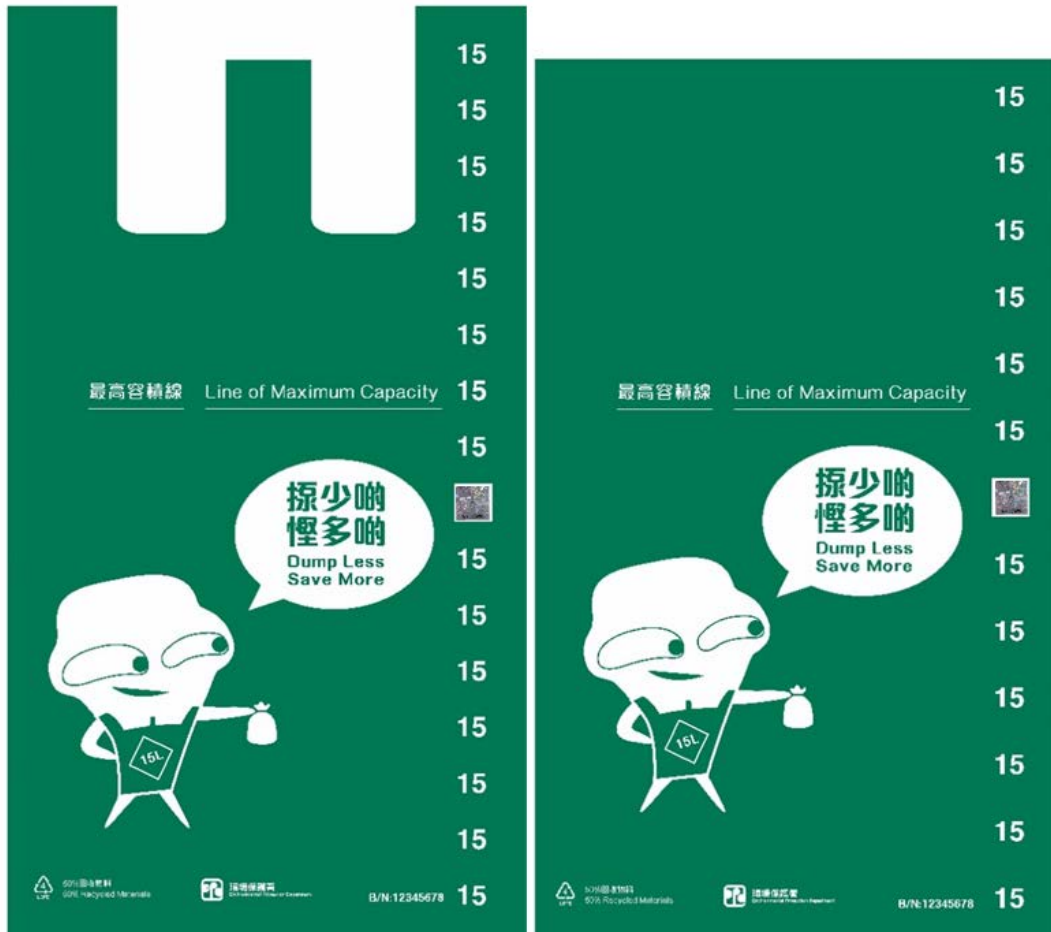
13. We plan to introduce the Amendment Bill into the Legislative Council as soon as possible. Assuming that the scrutiny of the Bill would take 12 months and a preparatory period of 12 to 18 months would be in place before the legislation comes into effect, the MSW charging would be implemented towards the end of 2019 at the earliest.

Advice Sought

14. Members are invited to note and provide comment on the proposed implementation arrangements for MSW charging.

**Environment Bureau/Environmental Protection Department
November 2017**

Sample Design of a 15-litre Pre-paid Designated Garbage Bag



T-shirt type

Flat-top type

Sample Design of an Oversized Waste Label

