Panel on Environmental Affairs

Meeting on 30 October 2017

Updated background brief on introduction of municipal solid waste charging in Hong Kong prepared by the Legislative Council Secretariat

Purpose

This paper provides updated background information on the introduction of municipal solid waste ("MSW") charging in Hong Kong. It also gives a brief account of the views and concerns expressed by Members when the subject was discussed by relevant committees of the Legislative Council ("LegCo").

Background

Municipal solid waste disposal and collection

2. MSW comprises domestic, commercial and industrial solid waste, and excludes construction and demolition waste, chemical waste and other special waste. According to the waste statistics published by the Environmental Protection Department ("EPD"), 15 102 tonnes of solid waste were landfilled each day in 2015, of which around 67% (10 159 tonnes) were MSW.¹

3. At present, the Food and Environmental Hygiene Department ("FEHD") and its contractors manage a fleet of about 250 refuse collection vehicles to provide direct waste collection services for most residential buildings managed by property management companies, including public housing estates and various institutional premises. Waste collected from these sources is conveyed

to landfills or refuse transfer stations ("RTSs") without any charges levied on
the waste producers. Commercial and industrial ("C&I") establishments are not
served by FEHD. Their waste, as well as that of some residential buildings, is
collected and delivered to landfills or RTSs by private waste collectors
("PWCs"). A charge is payable by PWCs for MSW delivered to RTSs.2

Public engagement exercises on municipal solid waste charging

4. Based on the findings of a public consultation in 2012, the
Administration affirmed that quantity-based MSW charging should be the broad
direction in pursuing MSW reduction. In 2013, the Council for Sustainable
Development ("SDC") conducted a second-stage public engagement exercise on
the implementation framework of MSW charging.3 In its report, SDC
recommended that (a) for equity and in line with the "polluter pays" principle,
MSW charging should be implemented across the board for all sectors in one go;
(b) the charging mechanism should be built upon the existing MSW collection
and disposal system so as to minimize adverse impacts on environmental
hygiene; and (c) the level of charges should be directly related to the quantity of
waste disposed of by MSW producers.

Proposed implementation arrangements

5. The Administration had adopted SDC's recommendations and proposed
in February 2015 the following implementation framework for MSW charging:

(a) for MSW disposal through FEHD's direct collection service, the
ultimate goal is to implement charging "by household using
pre-paid designated garbage bags";

(b) a transitional period will be provided during which residential
buildings using FEHD's direct collection service can opt to adopt a
charging mechanism on the basis of "by volume of waste disposed
of by the building" initially;

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2 The charge, currently in the range of $30 – $110 per tonne, was originally imposed to
enable the Government to recover at least the marginal cost for handling waste delivered
to RTSs by PWCs. Other than that, no charge is required for MSW disposed of at
landfills. Separately, individual charging schemes are in place for the disposal of
chemical waste, construction waste and clinical waste in Hong Kong.

3 SDC was established by the Chief Executive as a forum for exchanging views on key
issues related to Hong Kong's long-term sustainability. Members of SDC are appointed
by the Chief Executive and include people with experience and expertise in the
environmental, social and business sectors, as well as senior government officials.
(c) for residential buildings and village houses not covered by FEHD's direct collection service, residents must use designated garbage bags for disposing of MSW at refuse collection points; and

(d) for MSW disposal through PWCs, a gate fee based on the weight of waste disposed of will apply at landfills and RTSs.

Charging levels and charging arrangements

6. For charging by designated garbage bags, the Administration proposed in March 2017 to set the per-litre charge at $0.11 in the first three years of implementation. The charging level will be reviewed thereafter to ensure its effectiveness in achieving waste reduction. The Administration has also proposed that the designated garbage bags be of nine different sizes from 3-litre up to 100-litre to cater for the needs of different users. For oversized waste that cannot be wrapped into a garbage bag, it has been proposed that an oversized waste label will be provided at a uniform rate of $11 per label.

7. At the same time, the Administration proposed that during a three-year transitional period after commencement of MSW charging, residential buildings can choose to adopt a charging mechanism based on the number of waste collection bins collected by FEHD's waste collection fleet, and charges payable by individual buildings will be based on the total number of bin tippings recorded on a monthly basis. To encourage early migration to charging by designated garbage bags, the Administration has then proposed that the per-bin charge level be 30%, 40% and 60% higher than that of designated garbage bags ($0.11 per litre) in the beginning of the first, second and third year of implementation respectively.

8. For MSW disposal through PWCs, the Administration has proposed that the gate fee be set at $395 per tonne at the four urban RTSs and North West New Territories Transfer Station, and $365 per tonne at other RTSs and landfills, on a full cost recovery basis. A hybrid registration system has been proposed under which both PWCs and waste producers can be registered as

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4 At this price level, if a three-member household uses a 15-litre designated garbage bag for daily disposal of MSW, it will have to pay around $1.7 per day.

5 According to the Administration, this is calculated with reference to the retail price of the largest size of designated garbage bag of 100-litre.

6 This will translate into $34, $37 and $42 for a 240-litre bin, and $94, $100 and $115 for a 660-litre bin for the first three years of implementation respectively.

7 The Administration plans to maintain the gate fee at the same level for the first three years of implementation.
account holders for paying the gate fee.\(^8\)

**Enforcement**

9. The Administration intends to put in place a six-month phasing-in period after commencement of MSW charging. During this period, frontline staff of FEHD at waste reception points will conduct visual screening, and reject any waste that has not been properly wrapped in designated garbage bags or attached with oversized waste labels. Warnings will be issued in non-compliant cases and enforcement actions will be taken if necessary.

10. After the phasing-in period, strict enforcement actions will be taken. Frontline staff of FEHD will continue with the visual screening at the waste reception points and reject non-compliant waste. EPD and FEHD will, based on complaints and reports on non-compliance, conduct surveillance and enforcement actions at different waste reception points. Fixed penalty tickets at $1,500 each will be issued to offenders intercepted on the spot, and prosecution by way of summons will be taken against serious or repeated offenders.\(^9\) EPD will also draw up a list of "black spots" in private buildings based on the intelligence and complaints received, and focus on enforcement work at the black spots identified.

**Director of Audit's Report No. 65**

11. In October 2015, the Director of Audit completed a review of the Administration's efforts in managing MSW, and the relevant report was published in the Director of Audit's Report No. 65 ("Audit Report"). The Public Accounts Committee of LegCo noted from the Audit Report that the Administration had failed to meet the original time target for putting in place an MSW charging scheme, and urged for expeditious implementation of the initiative, with a view to meeting the waste reduction targets set out in the

\(^8\) This proposed arrangement aims to address the concerns of PWCs about potential cash flow and bad debt problems which may arise if they are required to pay the gate fee upfront, but their clients fail to repay them in time.

\(^9\) For prosecution by way of summons, a person would be liable to a fine at level 4 (i.e. $25,000) and to imprisonment for six months for the first conviction, and to a fine at level 5 (i.e. $50,000) and to imprisonment for six months for the second or subsequent conviction. The penalty levels for fixed penalty tickets and summons for the first conviction are pitched at the same levels as the offence of littering in public places under the Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK) having regard to their similar nature.
"Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022".¹⁰

Major views and concerns expressed by Members

12. The Panel on Environmental Affairs ("EA Panel") discussed MSW charging with the Administration and SDC at various meetings since January 2011, and received public views at the meeting on 29 May 2017 on the implementation arrangements proposed in March 2017. The Establishment Subcommittee and Finance Committee also discussed related issues when they considered a staffing proposal for the implementation of MSW charging on 23 June 2015 and 20 November 2015 respectively. The Public Accounts Committee held two public hearings on 7 and 29 December 2015 to receive evidence on the findings and observations of the Audit Report. The major views and concerns expressed by Members are summarized in the ensuing paragraphs.

Charging mechanism

13. Members generally supported in principle the implementation of MSW charging in Hong Kong. Some of them opined that charging at the household level using pre-paid designated garbage bags would be more effective in driving behavioural change than charging by volume of waste disposed of by a building. In addition, some Members relayed the grave concern of PWCs about the potential cash flow and bad debt problems they might face if they were required to pay the gate fee upfront. It was suggested that the Administration should revise the charging arrangements such that all waste producers (including C&I establishments and all households) should put their waste in pre-paid designated garbage bags or designated containers to obviate the need for PWCs to pay the gate fee.

14. The Administration stressed that for MSW disposal through FEHD's direct collection service, the ultimate goal was to implement charging using pre-paid designated garbage bags. As the charging level under the mechanism of "by volume of waste disposed of by the building" would be higher, residential buildings that already had the appropriate conditions were incentivized to adopt charging by designated garbage bags as early as possible.

¹⁰ Published in May 2013, the "Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022" sets a target of reducing MSW disposal rate by 40% on a per capita basis by 2022. The introduction of MSW charging is one of the key policy tools in the Blueprint to drive behavioural changes for waste reduction.
15. As regards the proposed gate fee arrangement, the Administration advised that similar charging mechanisms were commonly adopted in other cities where MSW charging was in place. The proposed hybrid registration system would allow greater flexibility in respect of the payments of gate fees, and best practice guides would be made to assist PWCs in working out apportionment arrangements with their clients. The Administration pointed out that some types of MSW collected by PWCs, such as furniture and wood boards used in exhibitions, were not suitable for putting into designated bags or containers due to their size, weight or nature. This notwithstanding, having regard to the concerns and suggestions raised by the trade, the Administration would review whether the scope of application of designated garbage bags could be expanded.

**Use of revenue and financial impact on low-income families**

16. Members suggested that the revenue from MSW charging should be ploughed back into, among other things, assisting the development of the recycling industry; and the Administration should offer other financial incentives to individual households, such as rebates in utility charges, based on the amount of waste reduced. Some Members were concerned about the financial impact of MSW charging on low-income families, and considered that concessionary arrangements and relief measures should be worked out for the grassroots.

17. The Administration advised that the data obtained after implementation of the MSW charging scheme could be used to develop further measures to encourage waste reduction by different waste producers. While relief measures were not common in cities that had implemented MSW charging, the Administration would explore ways to relieve the financial impact of the MSW charge on people with financial hardship.

**Enforcement actions and public education**

18. Members expressed concerns about potential aggravation of fly-tipping as a result of MSW charging, and the difficulties faced by property management companies in tackling the problem. They also questioned how the Administration would overcome the possible difficulties in taking enforcement actions against non-compliance with the requirements under MSW charging.

19. The Administration recognized that there would be challenges for enforcement on different fronts. In particular, it was anticipated that intercepting offenders on the spot for prosecution, monitoring the use of refuse
chutes in residential buildings,\textsuperscript{11} and monitoring disposal of waste at unmanned refuse collection points and bin sites in rural areas would be difficult. To tackle these challenges, the Administration planned to:

(a) put in place a six-month phasing-in period after the commencement of MSW charging to allow some time for waste producers to get accustomed to the relevant requirements and change their behaviours gradually;

(b) develop good practice guides for property management companies, which would encourage them to restrict the use of refuse chutes to cleaning workers only and require cleaning workers to screen the waste before disposal; and

(c) actively explore with Heung Yee Kuk, village representatives and other relevant stakeholders on how to effectively implement MSW charging in rural areas, and strengthen ambush operation at black spots identified.

20. The Administration would adopt the slogan of "Dump Less, Save More" and launch major public education and publicity campaigns. EPD was considering setting up outreaching teams to render assistance to property management companies and residents in practicing proper source separation of waste. In addition, the Environment and Conservation Fund had earmarked $50 million since 2015 for funding community involvement projects to prepare different sectors for the implementation of MSW charging. More than 30 community involvement projects with a total funding of $33 million had been approved. The Administration would refine the implementation guidelines for MSW charging with reference to the experiences gained in these projects.

Complementary measures

21. Members generally considered that the Administration should step up efforts in promoting source separation of waste and recycling to complement MSW charging. As food waste constituted a substantial part of domestic MSW, some Members suggested that the Administration should strengthen support for recycling of domestic food waste.

\textsuperscript{11} A refuse chute is an inclined channel in which refuse can be passed down from the opening of each floor to the central refuse room on the ground floor of a building. There are currently about 4 000 residential buildings equipped with refuse chutes in Hong Kong. If individual households can dispose of their waste freely through refuse chutes, it will be difficult to monitor the households' compliance with MSW charging in these buildings.
22. The Administration assured Members that it would formulate complementary measures to tie in with the implementation of MSW charging. For instance, the number of recycling bins in private and public places would be gradually increased to facilitate source separation of waste, and the number of litter containers in public places would be reduced to discourage abusive use of them to evade MSW charges. The Administration would continue to promote the concept of "clean recycling" with a view to enhancing the recyclability and recycling value of different products. Community Green Stations were being progressively developed to strengthen support for collection of different recyclables, especially those with lower economic values.

23. The Administration also advised that "A Food Waste & Yard Waste Plan for Hong Kong 2014-2022" ("Food Waste Plan") had set out comprehensive strategies for the reduction, recovery and recycling of food waste. An important strategy under the Food Waste Plan was the development of a network of about five to six Organic Resources Recovery Centres ("ORRCs") to turn food waste into renewable energy or compost. ORRC Phases 1 and 2 were scheduled for commissioning by the end of 2017 and 2021 respectively. In accordance with the Food Waste Plan, the Administration had also rolled out various schemes to raise public awareness of food waste reduction and promote the practice of food waste source separation, such as "The Food Wise Hong Kong Campaign" and the "Food Waste Recycling in Housing Estates".

**Offsetting waste charge by corresponding reduction in government rates**

24. Some Members considered that as charges for waste collection had already been included in government rates, the rates should be reduced concurrently with the implementation of MSW charging to address the C&I sector's concern about "double charging". At the meeting on 18 December 2012, EA Panel passed three motions which respectively demanded that, if the Administration was to introduce quantity-based waste charging: (a) the rates should be lowered concurrently to avoid double charging; (b) a phased and progressive charging approach should be adopted and a "free of charge" policy should be adopted in the first phase; and (c) the charging should be based on the "revenue-neutral" principle, and the charges so collected should be rebated to those users who had succeeded in reducing waste.

25. The Administration responded that government rates were an indirect tax based on the rateable value of properties, and were unrelated to the waste quantity disposed of from the properties or government expenditures on waste collection and disposal. The proposed MSW charge, which was set at a level generally acceptable to the public, could not recover the full costs of providing waste collection and disposal services.
Council questions

26. At the Council meetings of 21 March 2012, 4 June 2014, 21 June 2017 and 12 July 2017, Hon Vincent FANG, Hon CHAN Hak-kan, Ir Dr Hon LO Wai-kwok and Hon Frankie YICK asked questions relating to MSW charging respectively. Issues covered in the questions include the public consultation conducted in 2012, the pilot scheme on MSW charging conducted in 2014, provision of recycling facilities to complement MSW charging, and charging mechanisms. The questions and the Administration's replies are hyperlinked in the Appendix.

Latest development

27. At the meeting on 30 October 2017, the Administration will brief EA Panel on the proposed modifications to the arrangements for implementing MSW charging.

Relevant papers

28. A list of relevant papers is set out in the Appendix.
## Appendix

**Introduction of municipal solid waste charging in Hong Kong**

**List of relevant papers**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 January 2011</td>
<td>Meeting of the Panel on Environmental Affairs (&quot;EA Panel&quot;)</td>
<td>Legislative Council Brief on &quot;Update on the progress of the key initiatives in the 'Policy Framework for the Management of Municipal Solid Waste (2005-2014)&quot; issued by the Environment Bureau/Environmental Protection Department on 4 January 2011 (File Ref: EP 86/03/175A) Minutes of meeting (LC Paper No. CB(1)1509/10-11)</td>
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<tr>
<td>19 January 2012</td>
<td>Meeting of EA Panel</td>
<td>Consultation Document on &quot;Strengthening Waste Reduction: Is Waste Charging an Option?&quot; provided by the Administration (LC Paper No. CB(1)819/11-12(01)) Administration's paper on &quot;Public Consultation on Municipal Solid Waste Charging&quot; (LC Paper No. CB(1)855/11-12(05)) Minutes of meeting (LC Paper No. CB(1)1219/11-12)</td>
</tr>
<tr>
<td>18 December 2012</td>
<td>Meeting of EA Panel</td>
<td>Administration's paper on &quot;Waste reduction through municipal solid waste charging: way forward&quot; (LC Paper No. CB(1)276/12-13(01)) Minutes of meeting (LC Paper No. CB(1)568/12-13)</td>
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<td>Administration's follow-up paper (LC Paper No. <strong>CB(1)591/13-14(01)</strong>)</td>
</tr>
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| 16 December 2013 | Meeting of EA Panel                  | Minutes of meeting (LC Paper No. **CB(1)1103/13-14**)
| 25 February 2015 | Meeting of EA Panel                  | Administration's paper on "Framework proposal for implementation of municipal solid waste charging" (LC Paper No. **CB(1)560/14-15(08)**) Minutes of meeting (LC Paper No. **CB(1)726/14-15**)
| 23 June 2015     | Meeting of the Establishment Subcommittee | Administration's paper on "Proposed creation of two supernumerary posts of one Administrative Officer Staff Grade B (D3) and one Administrative Officer Staff Grade C (D2) in the Environmental Protection Department for three years with immediate effect upon approval by the Finance Committee to lead a new Waste Management (Special Duties) Division" (EC(2015-16)3) Minutes of meeting (LC Paper No. **ESC110/14-15**)
| 20 November 2015 | Meetings of the Finance Committee    | Minutes of meetings (LC Paper No. **FC163/15-16**)
|                  |                                      | (LC Paper No. **FC164/15-16**)


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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 January 2017</td>
<td>Meeting of EA Panel</td>
<td>Administration's paper on &quot;2017 Policy Address – Policy initiatives of Environment Bureau: Environmental protection&quot; (LC Paper No. CB(1)451/16-17(01))</td>
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<tr>
<td></td>
<td></td>
<td>Minutes of meeting</td>
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<tr>
<td></td>
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<td>(LC Paper No. CB(1)683/16-17)</td>
</tr>
<tr>
<td>27 March 2017</td>
<td>Meeting of EA Panel</td>
<td>Administration's paper on &quot;Implementation arrangements for municipal solid waste charging&quot; (LC Paper No. CB(1)697/16-17(01))</td>
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<td></td>
<td></td>
<td>Minutes of meeting</td>
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<tr>
<td></td>
<td></td>
<td>(LC Paper No. CB(1)1268/16-17)</td>
</tr>
<tr>
<td>29 May 2017</td>
<td>Special meeting of EA Panel</td>
<td>Administration's paper on &quot;Implementation arrangements for municipal solid waste charging&quot; (LC Paper No. CB(1)697/16-17(01))</td>
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Hyperlinks to relevant documents:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Bureau</td>
<td><a href="#">Hong Kong Blueprint for Sustainable Use of Resources 2013-2022</a></td>
</tr>
<tr>
<td>Council for Sustainable Development</td>
<td><a href="#">Invitation for Response Document entitled &quot;Waste Reduction by Waste Charging · How to Implement?&quot;</a></td>
</tr>
<tr>
<td></td>
<td><a href="#">Report on the Public Engagement Process on Municipal Solid Waste Charging</a></td>
</tr>
</tbody>
</table>
Hyperlinks to relevant Council Questions:

<table>
<thead>
<tr>
<th>Date</th>
<th>Council Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 March 2012</td>
<td>Press release on Council question (written) raised by Hon Vincent FANG</td>
</tr>
<tr>
<td>4 June 2014</td>
<td>Press release on Council question (written) raised by Hon CHAN Hak-kan</td>
</tr>
<tr>
<td>21 June 2017</td>
<td>Press release on Council question (oral) raised by Ir Dr Hon LO Wai-kwok</td>
</tr>
<tr>
<td>12 July 2017</td>
<td>Press release on Council question (written) raised by Hon Frankie YICK</td>
</tr>
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