## For Discussion on 25 February 2015

## LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

## Framework Proposal for Implementation of Municipal Solid Waste Charging

## **Purpose**

Based on the feedback collected during a four-month public engagement as well as its subsequent deliberation, the Council for Sustainable Development ("SDC") has recently published a report setting out its recommendations on how to implement quantity-based municipal solid waste ("MSW") charging in Hong Kong. This paper aims to –

- (a) set out the Government's framework proposal on the way forward in response to the SDC's report; and
- (b) seek Members' views on a staffing proposal to create two supernumerary directorate posts at the ranks of Administrative Officer Staff Grade B ("AOSGB") (D3) and Administrative Officer Staff Grade C ("AOSGC") (D2) for three years in the Environmental Protection Department ("EPD") for the implementation of this framework proposal, and for dealing with the upsurge in workload on waste management, upon approval by the Finance Committee ("FC") [1].

## **Background**

2. Quantity-based charging can create financial incentive to drive behavioural changes in waste generation 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 charging system was in place.

In addition to the proposed creation of two supernumerary directorate posts, eight non-directorate posts will be created in EPD and three non-directorate posts in the Food and Environmental Hygiene Department ("FEHD") for three years from 2015-16 for the implementation of the framework proposal.

In Hong Kong, the Construction Waste Disposal Charging Scheme was implemented in January 2006 and has resulted in a dramatic reduction in construction waste disposal at landfills (by 37% in the first year of implementation and by about 56% up to 2013). At present, a charge is payable by private waste collectors for MSW delivered to refuse transfer stations ("RTSs") which was originally imposed to enable the Government to recover at least the marginal cost for handling the waste delivered there by the private waste collectors. Other than that, no charge is required for MSW disposed of at landfills. Similarly MSW can be handed over to FEHD for disposal free of charge through its direct collection service by refuse collection vehicles ("RCVs") or at refuse collection points ("RCPs").

3. We conducted an extensive public consultation in 2012 and, on the basis of majority support obtained, affirmed the introduction of a quantity-based MSW charging in Hong Kong, which is also featured as one of the major waste reduction initiatives under *Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022* ("*The Blueprint*") published in May 2013. Notwithstanding the majority support, views collected during the 2012 public consultation were fairly mixed about the charging mechanism particularly in the case of household waste charging. Amongst other things, the multi-storey and multi-tenant building setting in Hong Kong has posed a lot of operational challenges. Therefore, in December 2012, we invited the SDC to conduct a second-stage public engagement on the implementation framework of the MSW Charging Scheme.

## **Latest Development**

## The SDC's Public Engagement and Recommendations

4. The SDC adopted a bottom-up and stakeholder-led approach to identify the priority areas and issues relevant for public deliberation on the implementation of MSW charging in Hong Kong. In September 2013, on the basis of the views collected during the preparatory stage <sup>[2]</sup>, the SDC published an Invitation for Response ("IR") document, which covers four key issues including (i) charging mechanism; (ii) coverage of

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A Support Group for the public engagement comprising representatives from relevant sectors was formed in early 2013. The SDC also held seven focus group meetings between April and May 2013 before the public engagement formally started in September 2013.

charging scheme; (iii) charging level; and (iv) recycling, and accordingly launched the public engagement. During its public engagement, the SDC conducted a total of 63 engagement events (including five regional forums across the territory) participated by around 3 300 members of the public and stakeholders in total. These engagement events also included meetings with relevant statutory and advisory bodies and District Councils ("DCs"). For the Legislative Council ("LegCo"), this Panel met twice on 25 November 2013 and 16 December 2013 to discuss and receive deputation on the IR Document and related matters.

- 5. The public involvement stage of the SDC's engagement ended in January 2014. After further deliberation, the SDC published its report on 16 December 2014, detailed recommendations of which are summarized at Annex A. First the SDC recommended that for equity and in line with the principle of "polluter pays", MSW charging should be implemented across the board for all sectors in one go. Secondly, regarding the charging mechanism, the SDC considered that it should be built upon the existing MSW collection and disposal system so as to minimize adverse impacts on environmental hygiene. The level of charges should be directly related to the quantity of waste disposed of by MSW producers. In summary, the SDC has recommended the following framework for the charging mechanism
  - (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". Residential buildings that already have the appropriate conditions may implement "by household by bag" charging from the start;
  - (b) Notwithstanding (a), some residential buildings using FEHD's direct collection service may require time for residents to reach a consensus on the implementation details of waste charging. A transitional period should be established to allow these residential buildings to adopt a charging mechanism on the basis of "by volume of waste disposed by the building";
  - (c) for MSW disposal at RCPs, residents must use pre-paid designated garbage bags for disposing waste at RCPs by themselves or through their hired cleaners. Waste in non-designated garbage bags shall be rejected for disposal at RCPs; and

(d) for MSW disposal through private waste collectors at landfills or RTSs, a "gate fee" will apply such that charging will be based on the weight of waste disposed of. Individual private waste collectors would work out with their clients on how the latter would pay for the MSW charges on the basis of their waste load.

## The Framework Proposal for Implementation

- The Government welcomes the SDC's recommendations and is committed to adopting the framework in mapping out the implementation Of the various recommendations of the SDC, it will be most challenging to put in place a full system for charging all MSW producers This charging system must be broadly compatible with the collection and disposal system which is highly complex and is heavily The necessary preparatory work will involve complex loaded. operational issues that cut across the responsibilities of Bureaux and Departments. In addition, continuing public education is critical to shape behavioral change in the community to promote compliance. Group has been convened by EPD comprising senior representatives of EPD, FEHD, Housing Department ("HD") and Home Affairs Department to steer and co-ordinate the preparatory work. Where necessary, representatives from other relevant departments may also be co-opted. The Working Group will give due consideration to the interface issues between the proposed mandatory MSW charging and other public services such as efficiency of waste disposal/collection for environmental hygiene, public housing management, and balancing effective enforcement of the charging scheme with privacy considerations and compliance costs.
- 7. In broad terms, there are four key areas of preparatory work
  - (a) formulating effective implementation plans to give effect to the charging mechanism at the various types of MSW reception points, namely FEHD's RCVs and RCPs and EPD's landfills and RTSs so that they would continue to be operated efficiently while appropriate MSW charges are collected;
  - (b) development of relevant complementary systems, including
    (i) modification at the MSW reception points, where
    necessary, for example for monitoring of the depositing
    activities, facilitation of recycling, (ii) review of the design

of refuse collection bins and their distribution, (iii) installation of appropriate technical systems for keeping record and collecting charges of the quantity of MSW disposal, and (iv) development of technical specifications for the "designated garbage bags" and procurement of the manufacturing and distribution services;

- (c) stepping up of public education and community involvement programmes so as to broaden community understanding on avoidance of waste generation, polluter pays principle, and supporting clean recycling in order to minimize waste disposal, and
- (d) drafting of the enabling legislation to provide the legal basis for implementation of the MSW charging system.

An outline of our work plan in the next steps is set out below for Members' reference. As for the other recommendations of the SDC, the Government's position/work plan is summarized at <u>Annex B</u>.

## Effective Implementation Plans at MSW Reception Points

EPD's Landfills and RTSs: MSW Disposed of by Private Waste Collectors

8. Due to privacy and practical resource considerations, implementation of MSW charging will primarily be based on the activities at the MSW reception points, which are FEHD's RCVs and RCPs and EPD's landfills and RTSs. At present, commercial and industrial ("C&I") establishments engage private waste collectors to collect their waste. Some residential buildings also hire private collection services. These private waste collectors deliver about 3 800 tonnes per day ("tpd") of MSW to landfills or RTSs direct. For such MSW, charging arrangements would be made through "gate-fees" and could be implemented in a relatively straightforward manner. On the other hand, there would be concerns of fly-tipping, which will demand stepping up of enforcement actions and resources.

FEHD's RCVs: MSW from Residential Buildings managed by Property Management Companies ("PMCs")

9. FEHD manages a collection fleet of RCVs providing direct collection service at its RCPs and refuse collection chambers in residential buildings and public institutional premises. It serves most residential

buildings managed by the PMCs including the public housing estates and various institutional premises and collects some 3 700 tpd of MSW. such premises, MSW is often collected centrally by the PMC concerned who acts as a service agent for handing the waste over to FEHD and the waste will then be conveyed by FEHD's RCVs to either a landfill or an If new laws are enacted to implement charging "by household using pre-paid designated garbage bags", the PMCs will play a pivotal role in facilitating the migration to a successful charging system where individual households pay as they throw. The PMCs will have to engage their residents to consider suitable response measures, including for instance whether and how to adjust their refuse collection arrangements for effective monitoring of compliance, whether or not to discontinue the existing provision of free garbage bags by the PMCs, need of new house rules to sanction against free-riders, how to enhance recycling support within the premises and whether or not to opt for the interim option of "by volume of waste disposed by the building" etc. Accordingly, we will closely and comprehensively engage the property management sector (including HD) to ascertain their plans and will work with the stakeholders to develop necessary facilitating measures for transition to ultimately disposal by pre-paid designated bags by households.

## FEHD's RCPs: MSW from "3-nil" Buildings and Rural Villages

10. FEHD's direct collection service does not however cover residential buildings and village houses that are not readily accessible by RCVs (mainly single-block buildings in old districts or remote areas) and the rural sector. Households in these residential buildings and village houses are instead served by a network of RCPs which also handle street waste collected by street cleaners and other trade waste (usually from street level shops) subject to a 100-litre disposal limit with a total usage of about 1 600 tpd of MSW. These buildings do not normally hire property management services and some so-called "3-nil" buildings might not have even proper building management. This has presented unique challenges in mobilizing the residents to follow the charging scheme. Most RCPs, in particular those in rural areas, are unmanned [3] thus leading to additional constraints on effective enforcement. There must be comprehensive engagement and suitable strategy to deter non-compliance. Otherwise we will be expecting prevalent free-riding behaviour in these

Only some 150 out of over 3 160 are permanent facilities and attended by workman of FEHD or its contractor; the others are small concrete or metal structures or simply bin-sites which are unattended.

sectors for whom MSW charging is unlikely to achieve its intended results in reducing waste.

## Enforcement against Non-compliance of MSW Disposal

11. On the whole, for the mandatory requirement to wrap MSW in designated garbage bags, we envisage that non-compliance cases would occur more at RCPs (particularly those unmanned) than at refuse collection chambers in residential buildings served by FEHD's collection fleet. FEHD's workmen at RCPs may help turn away people who intend to deposit MSW not wrapped in pre-paid designated garbage bags. Likewise, FEHD's collection fleet may reject the reception of MSW that is not wrapped in pre-paid designated garbage bags. Other additional measures will be needed to deter non-compliance or free-riders, which the Inter-departmental Working Group will develop in consultation with relevant parties.

## **Development of Complementary and Other Technical Systems**

## Modifications at the MSW Reception Points

- 12. During the transitional period, residential buildings using FEHD's refuse collection service may adopt an interim charging mechanism on the basis of "by volume of waste disposed of by the building", i.e. in practice counting the number of garbage collection bins used to contain the MSW disposed of. With the support of FEHD and the Electrical and Mechanical Services Department, EPD will conduct a small-scale trial to test out the technical feasibility of an automated bin-counting system in Hong Kong starting tentatively from July 2015. We will consider the way forward based on the experience gained from the trial.
- 13. We tried out charging "by volume of waste disposed of by the building" in the pilot scheme for PMC-managed residential buildings started in April 2014. It was found that reliance on manual procedures (such as measurement and recording) in the charging system would lead to a lot of operational challenges, for instance, the additional time and human error in recording and taking measurements of each waste bin. For the purpose of a statutory charging scheme, a manually operated system would also open up loopholes for abuses. Installing an automated system onto FEHD's RCVs to support charging will help address the operational issues identified. When fully implemented, the automated system will also operate in conjunction with necessary software to support the registration of and billing to those users of FEHD's direct collection

services who have opted for this charging mechanism.

14. Separately, we will take stock of the practical situation in all RCPs and accordingly consider scope of improvement for say facilitating enforcement and enhancing recycling support. To tie in with the implementation of MSW charging, FEHD will review the overall provision of litter bins placed in public places and the design of such litter bins. EPD will correspondingly review the need of enhanced provision of collection facilities for various types of recyclables in public places.

#### Installation of Appropriate Technical Systems

15. For the purpose of collecting an MSW gate fee at EPD's landfills and RTSs, all these facilities have already been equipped with weigh-bridges. However certain software and hardware upgrade will be needed for billing systems. In addition, there should be a proper distribution network through which users (including households, PMCs, and C&I establishments and even cleansing workers) procure the designated garbage bags conveniently. This may or may not include an online portal.

## Design of "Designated Garbage Bags"

16. A huge number of designated garbage bags will be consumed in everyday MSW disposal through FEHD, either RCVs or RCPs. We will draw up the technical specifications for such bags taking into account feedback received during past and future trials and develop an efficient system to manufacture these bags. For instance, we have received different views on the size (now ranging from family-sized at 5 to 15-litre to industrial-sized at 30 to 70-litre), shape (i.e. flat-top or t-shirt, with or without gusset) and other physical characteristics (e.g. translucency and toughness) of the bags. There are also suggestions about the chemical content of the bags, e.g. whether they can be made from uncontaminated plastic shopping bags locally recovered in Hong Kong or other bio-degradable materials.

#### Public Education and Community Involvement Projects

17. The SDC's recommendation for MSW charging to be implemented in all sectors in one go will directly impact on over 2.2 million domestic households in all kinds of residential settings, a wide range of different C&I establishments and other institutions or community service units. We need to adequately inform them of the new initiative

and prepare them for the expected behavioural change in response to charging. Throughout the preparation period, we will also need to extensively engage relevant stakeholders such as general members of the public (as domestic MSW producers), chambers of commerce, professional bodies, private waste collectors, cleansing contractors and property management *etc*.

#### Community Green Stations ("CGSs")

18. As announced in the 2014 Policy Address, we are progressively developing CGSs in each of the 18 districts. These stations will be operated by non-profit-making organizations and the Government will provide funding for their operation. At this stage, we have confirmed the sites for 11 CGS projects after DC consultations. The first facility will commence operation in Sha Tin District in early 2015 and the second in Eastern District by mid-2015. Apart from enhancing the logistics support for local recycling initiatives, progressive CGS development will also enhance our capacity in environmental education and community engagement in support of MSW charging and other waste reduction initiatives.

#### Stakeholder Forums

19. In addition, we are preparing for the establishment of a platform for stakeholders to be engaged in the development of MSW charging on an on-going basis. We are inclined to organize relevant parties into four to five stakeholder forums, each of which will focus at the implementation of MSW charging in/for (i) PMC-managed residential buildings, (ii) residential buildings without proper building management, (iii) rural or less densely populated areas, (iv) businesses and (v) institutions and community service units. The stakeholder forums will be interactive and participatory by nature. They are expected to contribute to the Government's preparatory work by (i) reflecting views from within the stakeholder groups on relevant operational issues, (ii) sharing examples of best practices and contributing to the development of practicable guidelines for wider promulgation in the stakeholder groups and (iii) mobilizing the stakeholder groups in the engagement of the wider community for conducting trials to prepare for the full implementation of MSW charging.

## An Enabling Legislation for Necessary Legal Basis

20. Finally, MSW charging has to be implemented by legislation.

EPD will take the lead in preparing the legislative proposals which will amongst other things (i) mandate proper wrapping of MSW using pre-paid designated garbage bags for disposal through FEHD's RCVs or RCPs, (ii) provide for an alternative, interim charging mechanism for MSW handed over to FEHD's RCVs during the transitional period, and (iii) enable the charging of an MSW gate fee at EPD's landfills and RTSs. There will also be specific fee proposals which will be drawn up after giving due considerations to the "polluter pays" principle and the SDC's findings about community acceptability [4].

## The Staffing Proposal

21. In EPD, the policy development on MSW charging has been undertaken by the Waste Management Policy Division ("WMD") which is led by Assistant Director of Environmental Protection ("ADEP") (Waste Management Policy) (an AOSGC post) under the supervision of the Deputy Director of Environmental Protection ("DDEP") (2) (an AOSGB post). Amongst the policy responsibilities of WMD, quite a number of new initiatives have been added or reaching key implementation stages which require extensive attention. These initiatives include (i) extension of plastic shopping bag charging and the two new mandatory producer responsibility schemes ("PRSs") on waste electrical and electronic equipment and glass beverage bottles; (ii) development of 18 CGSs to enhance environmental education and help collect different types of recyclables in the local community, with a view to promoting green living at the community level; and (iii) review of construction waste charging In view of the complexity and volume of work involved in developing the implementation details of the MSW charging scheme, it is no longer practical for WMD to continue absorbing the workload while taking on the other on-going policy development tasks.

#### The Proposed New AOSGC Post

22. In order to ensure adequate staffing for the implementation of MSW charging, a new division to be designated as the Waste Management (Special Duties) Division ("SDD") and led by an AOSGC, to be designated as ADEP (Special Duties), is proposed to be set up in EPD

Based on the feedback received during the public engagement, the SDC noted that it should be generally acceptable to the public if a three-member household will have to pay around \$30 to \$40 per month and charging through a gate fee between \$400 and \$499 per tonne.

through redeployment of existing manpower and creation of time-limited posts for three years from 2015-16 to 2017-18. The new division will comprise a staff of 21 members of different disciplines including the Administrative Officer, Executive Officer, Environmental Protection Officer, Environmental Protection Inspector, Engineer and other general grades. The existing functions of WMD relating to MSW charging will be transferred to SDD which will also be responsible for other evolving preparatory work. For enhanced synergy, SDD will temporarily take over from WMD duties relating to the policy on surplus fill management and the review of the Construction Waste Disposal Charging Scheme.

#### Alternatives Considered

- 23. Under the current establishment of EPD, in addition to WMD, there are three other divisions responsible for waste management but our assessment is that none of them will be able to absorb the manpower requirement arising from the implementation of MSW charging
  - (a) the Environmental Infrastructure Division led by ADEP (Environmental Infrastructure) (a post at the rank of ADEP (D2)) is fully loaded with the management of the three strategic landfills, the RTS network, chemical waste treatment facility *etc*, planning of the landfill extensions, aftercare and after-use schemes of 13 restored landfills and management of the Sludge Treatment Facility ("STF");
  - (b) Nature Conservation and Infrastructure Planning Division led by **ADEP** (Nature Conservation Infrastructure Planning) (an AOSGC post) is over-stretched with the nature conservation policy and programme and country park enclave matters, the long-term planning of future waste treatment and transfer facilities, the planning and development of the integrated waste management facility ("IWMF") and organic waste treatment facilities ("OWTFs") as well as the Food Wise Hong Kong Campaign and the food waste management programme; and
  - the Waste Reduction and Recycling Division was established in April 2014 with redeployment of existing manpower and creation of time-limited posts (including the supernumerary ADEP (Waste Reduction & Recycling) (an ADEP post)) for three years starting from 2014-15 to oversee the Government's waste reduction and recycling policy. Its

main duties include co-ordinating inter-departmental efforts in implementing measures endorsed by the Steering Committee to Promote the Sustainable Development of the Recycling Industry such as enhancing infrastructural support for the recycling industry, formulating and implementing new initiatives to promote waste reduction, recycling and green procurement, developing the policy and overseeing the execution of the recycling fund to be launched, and overseeing the operation of the EcoPark.

## The Proposed AOSGB Post

A new supernumerary AOSGB post, to be designated as 24. DDEP (4), is proposed to be created for three years from 2015-16 to 2017-18 to oversee both WMD and SDD. The new post will help ensure effective and strategic communications with stakeholders outside the Government, and expedite matters that cut across Bureaux and Departments and require high-level coordination on the development of major waste management policies. By overseeing also the work of WMD, DDEP(4) may synergize MSW charging with the progressive development of other policy initiatives such as construction waste charging and the PRSs, etc, which are aimed at promoting behavioural change for reducing waste. At the same time, this will reduce the burden on DDEP (2) who has been overstretched with the responsibility of overseeing the work of four waste management divisions, particularly as in recent years and the few years ahead, many of the tasks in these divisions will progress to critical execution stages, for example overseeing the tendering and construction of landfill extension, the IWMF and OWTF, the operation of existing waste treatment facilities including the STF which is expected to commence its operation soon, the implementation of the Recycling Fund and the Restored Landfill Revitalization Funding Scheme.

#### Alternatives Considered

25. We do not consider it a feasible option to create the proposed AOSGC post without concurrently creating the proposed AOSGB post because it will not be reasonably practicable for DDEP (2) to have the capacity to handle the span of control over five divisions, as each division will face mounting workload with high complexity and substantial co-ordination work with a great number of stakeholders within and outside the Government. We consider that with the creation of the new DDEP(4) for three years, there will be a reasonable distribution of work between

him and DDEP(2) as both will be fully occupied with complex and time critical tasks over the next few years. We have also considered the feasibility of putting the new division under the supervision of the other deputy directors but found it infeasible to do so as they are also heavily occupied in work focusing in other programmes of EPD –

- (a) At present, DDEP (1) has a wide range of responsibilities by supervising one policy development division namely the Water Policy Division, two operational divisions namely the Environmental Assessment Division and the Environmental Compliance Division and one housekeeping division namely the Corporate Affairs Division. He also oversees the work of the Community Relations Unit and the Central Prosecution Unit of EPD.
- (b) DDEP (3) on the other hand supervises the Air Policy Division and the Cross-Boundary & International Division, which are jointly working amongst other things on air quality management policies and programmes and regional and international co-operation on environmental protection. Various major initiatives are being implemented in these areas including phasing out of pre-Euro vehicles, commercial reducing marine emission. collaborating with the Guangdong Provincial Government on emission reduction of air pollutants, and extending the Cleaner Production Partnership Programme.
- 26. The above will cover the manpower requirement of EPD in the development phase. The long-term manpower requirement during the implementation phase will be reviewed at a later stage taking into account the final design of the charging mechanism, the developed enforcement strategies and other relevant factors. At this stage, the schedules of duties for the proposed supernumerary posts of DDEP (4) and ADEP (Special Duties) are at Annex C.

#### **Financial Implications**

27. It is proposed that the DDEP (4) post oversee WMD and SDD, where the newly created SDD will be underpinned by a team of 20 non-directorate posts including 13 posts redeployed from WMD and 7 other posts to be created on a time-limited basis for three years from 2015-16.

- 28. The proposed creation of the supernumerary AOSGB post will bring about an additional notional annual salary cost at mid-point of \$2,139,600. The additional full annual average staff cost, including salaries and staff on-cost, is \$2,925,000 <sup>[5]</sup>. On the other hand, the proposed creation of the supernumerary AOSGC post will bring about an additional notional annual salary cost at mid-point of \$1,843,200. The additional full annual average staff cost, including salaries and staff on-cost, is \$2,503,000 <sup>[6]</sup>. Subject to the approval by the FC of the above directorate posts, we will include sufficient provision in the draft Estimates of the relevant financial years to meet the cost of the proposal.
- 29. For the time-limited non-directorate civil service posts mentioned in paragraph 27 above, the notional annual salary cost at mid-point is \$5,307,240 and the full annual average staff cost, including salaries and staff on-cost, is \$7,502,000 <sup>[7]</sup>. In addition, a total of 3 non-directorate posts will also be created in FEHD for a three-year period starting from 2015-16. The notional annual salary cost at mid-point is \$2,111,340 and the full annual average staff cost, including salaries and staff on-cost, is \$2,477,000 <sup>[8]</sup>.

## **Implementation Timetable**

- 30. Subject to Members' views, we plan to seek the recommendation of the Establishment Subcommittee in April 2015 and approval from the FC in May 2015 for the creation of the supernumerary directorate posts. Other non-directorate posts will be created in EPD and FEHD in 2015-16.
- 31. Pending the new staffing being sought, an inter-departmental working group has started operation to oversee the preparatory work as mentioned in paragraph 6. EPD is conducting a thorough assessment of the legislative proposals or amendments required in consultation with relevant departments and aim to commence law drafting as soon as practicable. In parallel, a stock-taking trawl will be conducted to collect

The average annual staff cost after the pay adjustment will be updated in due course.

See Footnote 5.

<sup>&</sup>lt;sup>7</sup> See Footnote 5.

See Footnote 5.

comprehensive information on the actual refuse collection arrangements in all residential buildings so that the future statutory regulatory framework and best practice guidelines can cater for different scenarios.

32. Publicity, public education and community engagement through CGSs, stakeholder forums and other means will be an on-going process. We will closely engage the relevant stakeholders at different stages and will from time to time report progress to the Advisory Council for the Environment. Where there are demands, we will also consider seeking new funding support under the Environment and Conservation Fund for pilot trial in different residential settings at a suitable juncture. We will also proceed with other preparatory work under a coordinated programme such that they will be readily completed in coherence with the legislative timetable.

## **Advice Sought**

33. Members are invited to comment on the above framework proposal for implementation of MSW charging in Hong Kong.

**Environment Bureau/Environmental Protection Department February 2015** 

# The Extract of the Executive Summary of the SDC's Report on the Public Engagement Process on MSW Charging

Key Issues	SDC's Recommendations
Key Issues Charging Mechanism	<ul> <li>For waste disposal through the Food and Environmental Hygiene Department's (FEHD) refuse collection fleet (mainly residential buildings with property management companies (PMCs) that handle refuse collection and environmental hygiene of the buildings) –</li> <li>The ultimate goal is to implement charging "by household using pre-paid designated garbage bags". This allows tracing of the volume of waste disposed of by individual households and ensures fairness in implementing quantity-based charging. It also offers direct economic incentive to foster behavioural change and waste reduction of individual households;</li> <li>Residential buildings that already have the appropriate conditions may implement "by household by bag" charging from the start;</li> <li>Some residential buildings may need time for residents to reach a consensus on the implementation details of waste charging, such as the need to alter waste collection arrangements or facilities to trace waste source, so that they may institute a system for charging on the basis of "by household by bag". A transitional period should be established to allow these residential buildings to adopt a charging mechanism on the basis of "by volume of waste disposed of by the building";</li> <li>The transitional period is expected to last for a</li> </ul>
	maximum of three years and the Government should conduct a review on the effectiveness of the waste charging scheme after the first year of implementation; and

<b>Key Issues</b>	SDC's Recommendations
	During the transitional period, the Government should formulate administrative guidelines to assist property owners/residents and PMCs in devising measures to apportion waste charge among households based on the "Waste Less, Pay Less" principle. The Government should also support and encourage residents to migrate to "by household by bag" charging as soon as possible, e.g. introducing a differential charging scale of which the rate of charging "by building by volume" would be higher than "by household by bag", and with progressive annual increase in the rate for charging by building.
	<ul> <li>For waste disposal at refuse collection points (RCPs) (mainly residential buildings without PMCs, rural areas, and commercial and industrial (C&amp;I) organisations disposing of limited amount of waste) –</li> <li>Residents must use pre-paid designated garbage bags for disposing of waste at FEHD's RCPs by themselves or through their hired cleaners. Waste in non-designated garbage bags shall be rejected for disposal at RCPs;</li> <li>The Government should consider allowing C&amp;I organisations to use pre-paid designated garbage bags for the disposal of limited amount of trade waste at RCPs; and</li> <li>The Government should examine the need for retrofitting relevant facilities, and increase the manpower to enhance management and monitoring for deterring non-compliances and fly-tipping.</li> </ul>
	<ul> <li>For waste disposal through private waste collectors (mainly C&amp;I organisations and a small number of residential estates, of which the waste is transported to refuse transfer stations (RTS) or landfills) –</li> <li>Charging should be based on the weight of waste disposed of at RTS and landfills. This is the so-called "gate fee". Private waste collectors should discuss with clients on methods to apportion the waste charges among individual waste producers.</li> </ul>

Key Issues	SDC's Recommendations
	<ul> <li>Supporting measures —</li> <li>Step up efforts on education for enhancing the public's awareness on waste reduction and recycling which, from a macro perspective, would foster a greener, "waste less" lifestyle, and the sustainable development of Hong Kong;</li> <li>Explore areas for further cooperation with District Councils, Heung Yee Kuk and rural bodies, housing estates, schools, green groups, chambers of commerce, waste collectors and other stakeholders in education and publicity;</li> <li>Consider ways to facilitate the effective implementation of charging by household using pre-paid designated garbage bags in residential buildings, including enhanced monitoring, additional recycling facilities, and more recycling programmes; and</li> <li>Enhance manpower for patrol and law enforcement as well as increase the level of penalties for deterrence effect.</li> </ul>
Coverage of Charging Scheme	<ul> <li>MSW charging should be implemented in all sectors in one go; and</li> <li>The Government should consider introducing a "preparatory phase" of 12 to 18 months before the legislation comes into effect for all sectors to get prepared.</li> </ul>
Charging Level	<ul> <li>The charging level should be in line with the quantity-based and the "polluter pays" principles, and it should be effective in waste reduction but not too excessive;</li> <li>During the public engagement process, most respondents chose the lowest charging level option for C&amp;I waste (i.e. HK\$400 to \$499 per tonne). The Government should consider this as a reference;</li> <li>There should be parity between the charging levels of C&amp;I waste and domestic waste to ensure fairness;</li> <li>Most respondents chose the lowest charging level option for domestic waste, which is HK\$30 to \$44 per household</li> </ul>

<b>Key Issues</b>	es SDC's Recommendations			
	per month (based on a three-person household). The Government should take this range as a starting point for the charging level of domestic waste. It should conduct a review on its effectiveness in waste reduction after implementing the scheme for one to two years;  The needs of people with financial hardship should be addressed. The Government should explore it in-depth and work out relevant details; and  The Government should explain clearly the differences between and the underlying principles of the Rates and MSW charge in response to concerns in the community.			
Recycling	<ul> <li>Provide additional recycling facilities in residential estates and public areas with the support of PMCs, owners' corporations and other relevant organisations, and step up education efforts to promote recycling;</li> <li>Explore feasible outlets, such as to increase the types of recyclable materials for collection at recycling facilities;</li> <li>Expedite the construction of organic waste treatment facilities, and explore feasible measures to support on-site source separation of food waste;</li> <li>Explore the feasibility of installing additional recycling facilities near RCPs to provide more incentive and create a synergy that encourages residents of single block buildings to recycle;</li> <li>Examine the feasibility of gradually reducing the number of roadside litter containers or redesign them to prevent the public from using them to dispose of domestic and trade waste;</li> <li>Provide more supporting measures to the recycling industry, including land provision, facilitation for collection of recyclables, encourage technological research, increase green procurement, and promote training and development of recycling workers;</li> <li>Explore implementing measures (including the Producer Responsibility Schemes (PRS) in the long run) to increase the recycling of materials where such recyclables may not be economically viable for recycling in the market now;</li> </ul>			

Key Issues	SDC's Recommendations		
	<ul> <li>The Government should further step up the PRS; and</li> <li>Enhance the education and promotional campaigns before the implementation of MSW charging to raise public awareness and encourage waste reduction, source separation and cleaning of recyclables. Such education efforts should also be sustained in schools and the community.</li> </ul>		

# The Government's Position and Work Plan on Other Recommendations of the SDC

	Recommendations of the SDC	The Government's Position/Work Plan
	Charging Level	
1	• The charging level should be in line with the quantity-based and the "polluter pays" principles, and it should be effective in waste reduction but the level not too excessive.	the Government has affirmed the direction of
2	• During the public engagement process, most respondents chose the lowest charging level option for C&I waste (i.e. HK\$400 to \$499 per tonne). The Government should consider this as a reference.	community acceptability.
3	• There should be parity between the charging levels of C&I waste and domestic waste to ensure fairness.	
4	• Most respondents chose the lowest charging level option for the domestic waste, which is HK\$30 to \$44 per household per month (based on a three-person household). The Government should take this range as a starting point for the charging level of domestic	

		waste. It should conduct a review on its effectiveness in waste reduction after implementing the scheme for one to two years.	
5	•	The needs of people with financial hardship should be addressed. The Government should explore it in-depth and work out relevant details.	• EPD will explore whether relief measures are genuinely necessary in the case of the needy.
6	•	The Government should explain clearly the differences between and the underlying principles of the Rates and MSW charge in response to concerns in the community.	• As recommended by the SDC, EPD will clearly explain the difference between the proposed MSW charges and Rates, and that there is no double-charging between the two. The objective of quantity-based MSW charging is to create economic incentives, with a view to cultivating behavioural change for waste reduction and recycling. Rates, on the other hand, is charged on the basis of the rateable value of a property, and serves as an important source of Government revenue.
	Red	cycling	
1	•	Provide additional recycling facilities in residential estates and public areas with the support of PMCs, owners' corporations and other relevant organisations, and step up education efforts to promote recycling.	<ul> <li>On top of other efforts on separation of waste at source, EPD is progressively developing CGSs to enhance environmental education at community level and logistics support to local recycling programmes.</li> </ul>
4	•	Explore the feasibility of installing additional recycling facilities near RCPs to provide more incentive and create a synergy that encourages	
		22	

		residents of single block buildings to recycle.	
2	•	Explore feasible outlets, such as to increase the types of recyclable materials for collection at recycling facilities.	Various on-going or new initiatives under <i>The Blueprint</i> will contribute to the development of the local recycling system. Amongst other things —  a Recycling Fund will be established to upgrade the
6	•	Provide more supporting measures to the recycling industry, including land provision, facilitation for collection of recyclables, encourage technological research, increase green procurement, and promote training and development of recycling workers.	operational capabilities of the recycling industry, increase the quantity of the recyclables recovered, raise the quality of treated materials and establish a stable outlet for recycled materials;  The Steering Committee to Promote the Sustainable Development of the Recycling Industry chaired by the Chief Secretary for Administration will continue to explore and formulate complementary measures such as promotion of manpower training, green procurement, and encouraging research and development of technology and products.
3	•	Expedite the construction of Organic Waste Treatment Facilities ("OWTFs"), and explore feasible measures to support on-site source separation of food waste.	The first OWTF is already under construction at Siu Ho Wan (North Lantau) and will cater for 200 tpd of food waste. We will also explore feasible measures to support on-site source separation of food waste with due consideration of the available treatment capacity of OWTFs.
5	•	Examine the feasibility of gradually reducing the number of roadside litter containers or redesign them	To tie in with the implementation of MSW charging, FEHD will review the overall provision of litter bins

		to prevent the public from using them to dispose of domestic and trade waste.	placed in public places and the design of such litter bins.
7	•	Explore implementing measures (including the Producer Responsibility Schemes ("PRS") in the long run) to increase the recycling of materials where such recyclables may not be economically viable for recycling in the market now.	<ul> <li>As pledged in <i>The Blueprint</i>, EPD is progressively putting in place various PRSs to promote waste reduction and recycling –</li> <li>full extension of plastic shopping bag charging will take place on 1 April 2015.</li> <li>the PRS for waste electrical and electronic</li> </ul>
8	•	The Government should further step up the PRS.	equipment ("WEEE") will be introduced into the LegCo later in this legislative session and EPD is seeking funding approval for the development of a local WEEE treatment facility.  the PRS on glass beverage bottles is also under preparation.  we are also supporting a number of trade-led recycling programmes for recovery of compact fluorescent lamps and rechargeable batteries.
9	•	Enhance the education and promotional campaigns before the implementation of MSW charging to raise public awareness and encourage waste reduction, source separation and cleaning of recyclables. Such education efforts should also be sustained in schools and the community.	• Please see paragraphs 17 to 19 on the Government's work plan in relation to publicity, public education and community engagement.

## Main Duties and Responsibilities for the Proposed Supernumerary Directorate Posts

## **Deputy Director of Environmental Protection (4) ("DDEP (4)")**

- *Rank*: Administrative Officer Staff Grade B ("AOSGB") (D3)
- *Responsible to*: Permanent Secretary for the Environment/ Director of Environmental Protection ("PSE/DEP")
- Main Duties and Responsibilities:
  - 1. To steer the department's work on promoting the proper management of municipal solid waste ("MSW") and construction waste through charging, including the implementation of Producer Responsibility Scheme.
  - 2. To steer the initiation, development and finalization of appropriate policies, strategies and programmes for the attainment of relevant policy goals for sustainable management of MSW and construction waste through charging.
  - 3. To ensure the effective deployment of professional and technical staff on appropriate research and technical investigation so as to facilitate the policy development process in relation to MSW and construction waste charging.
  - 4. To assist PSE/DEP in liaising and negotiating at a senior level within the Government and with private sector organizations and companies on any matter relating to the department's interests or the Government's environmental policies, in relation to MSW and construction waste charging.
  - 5. To assist PSE/DEP in presenting the Government's policy on MSW and construction waste charging through news media and other channels.
  - 6. To steer the Government's community and trade engagement

programmes in support of the policy development process in relation to MSW and construction waste charging, including the progressive development and implementation of community green stations.

- 7. To represent PSE/DEP on senior level government and private sector committees.
- 8. To assist PSE/DEP in overseeing the department's liaison activities with its counterparts in Mainland China and other countries, in relation to public fill management.
- 9. To assist PSE/DEP in the discharge of all her duties relating to MSW and construction waste charging.
- 10. To deputize PSE/DEP as necessary.

# Assistant Director of Environmental Protection (Special Duties) ("ADEP (SD)")

- *Rank*: Administrative Officer Staff Grade C ("AOSGC") (D2)
- *Responsible to*: DDEP (4)
- Main Duties and Responsibilities:
  - 1. To direct the work of Waste Management (Special Duties) Division ("SDD") in developing appropriate policies, strategies and management programmes for MSW and construction waste charging.
  - 2. To initiate, develop and recommend appropriate policy goals for the sustainable management of construction and demolition ("C&D") materials in Hong Kong.
  - 3. To oversee the policy on the export of C&D materials.
  - 4. To initiate, develop and recommend appropriate policies, strategies, programmes and implementation plans for the attainment of Hong Kong's waste management policy goals in relation to the collection and disposal of C&D materials and the reduction, reuse and recycling of C&D materials.

- 5. To represent PSE/DEP at appropriate forums and attend, as necessary, meetings of advisory and statutory bodies including the Town Planning Board, the Legislative Council, the Advisory Council on the Environment, District Councils and various high level government policy forms/steering committee meetings.
- 6. To keep abreast of developments in relevant professional, technical and scientific fields relating to MSW and construction waste charging.