

- 7.1** In order to navigate through the complex considerations that pertain to the implementation of MSW charging in Hong Kong, we should first develop a community consensus on our objectives and priorities. We set forth below broad guiding principles for this purpose and discuss how we might adapt the experiences of other selected jurisdictions in implementing a charging scheme in Hong Kong.

The Guiding Principles

Create Effective Economic Incentives to Reduce Waste

- 7.2** First and foremost, we **propose** that if implemented, MSW charging in Hong Kong should primarily seek to create economic incentives for waste reduction and recovery. It should not be taken as a means to raise revenues for the Government.

Maintain Effective Waste Collection System in line with the Clean City Objective

- 7.3** Whereas the current handling of MSW (as described in paragraphs 5.2 to 5.5) is efficient and serves us well, we also **propose** that the charging mechanism should as far as reasonably practicable be built upon the existing waste management system, including practices, infrastructure and waste reduction and recovery schemes. While it should be designed to drive behavioural change towards waste reduction and recovery, disturbance to the existing waste management practices and compromise of the existing hygiene standards should be minimized as far as possible as a matter of principle. This approach will facilitate us in preserving our existing system which has been a proven success. It will also commit us to properly managing any changes that might affect the lifestyle of our people and minimizing possible impact on the livelihoods of certain stakeholders.

Be Practicable, Cost Effective, Enforceable and Acceptable to the Public

- 7.4** With the unique challenges facing Hong Kong as analyzed in paragraphs 6.9 to 6.13, we **propose** that the charging mechanism should be drawn up with due regard to its practicability, cost effectiveness and enforceability. There should be a fair and equitable basis for levying any charge. Effective enforcement should be organized against illegal dumping and other attempts to circumvent the system. On the one hand, the charges should reflect the “polluter pays” principle. On the other hand, we should also ensure that MSW charging is also acceptable to the community as a whole.

Wider Considerations

Partial Charging for C&I Waste

- 7.5** If MSW charging were to be introduced in Hong Kong, there would be benefits in charging both the domestic and C&I sectors as it would be most consistent with the spirit of shared responsibility in which all waste producers contribute their part. Yet the experience of some jurisdiction is to apply charging to some specific sectors first. This alternative approach, “partial charging” as discussed in Chapter 4, would allow us to gain some charging experience before extending MSW charges to other waste producers under our complex waste management system. Indeed, in the other jurisdictions that we have reviewed, waste producers in the C&I sector are commonly held responsible for engaging their own private waste collectors. Singapore is an example.
- 7.6** In Hong Kong, private waste collectors now collect the majority of C&I waste and they could be charged a gate fee at disposal facilities for that waste. The gate fee is quantity-based and could create an economic incentive for waste collectors and encourage them to practice waste reduction and recovery. Some of them might work with waste producers at source, thus magnifying the impact. While this has advantages, it is not foolproof. For instance, domestic and C&I waste in some places is collected through a mixed system. If there is no charge for domestic waste, fly-tipping of C&I waste in domestic premises might emerge as a problem. An alternate charging mechanism would also need to be developed for C&I waste not collected by private waste collectors (e.g. disposed of at RCPs). The issue is more complicated when C&I waste is mixed and disposed of alongside domestic waste, as they are hard to distinguish and it would be difficult to enforce charges and act against illegal dumping.

Mandatory Source Separation

- 7.7** MSW charging is not the only way to promote waste reduction and recycling at source. As mentioned in Chapter 1, we have achieved certain results through the Programme on Source Separation of Domestic Waste which is implemented on a voluntary basis. A similar programme is being extended to the C&I sectors. We are also stepping up publicity and promotional efforts about our higher MSW recovery target.
- 7.8** Internationally, some cities have implemented mandatory source separation which requires households to remove recyclables from the waste stream, thereby achieving waste reduction on the one hand and promoting the recycling industry on the other. Mandatory source separation is not a necessary condition for the successful implementation of MSW charging, but the two are not mutually exclusive. Our analysis is that waste reduction and recovery works best if there are appropriate economic incentives to help drive the requisite behavioural change. Such economic incentives are a feature of MSW charging, but not mandatory source separation of waste.
- 7.9** It follows that in order for mandatory source separation of waste to quickly take effect, there should be effective enforcement to create adequate deterrence against non-compliance. In the context of Hong Kong, ensuring compliance in buildings with a multi-storey, multi-tenant setting would be a challenge – similar to the case of MSW charging. Cities like Seoul and Taipei City where mandatory source separation has been implemented, have addressed the challenge through neighbourhood surveillance, checking of MSW at the point of disposal and rejection of non-compliant wastes. But issues of privacy, neighbourhood relations, fly-tipping and environmental hygiene might cause major concerns if such measures were implemented in Hong Kong.

The Questions

Question 1: Does Hong Kong need to introduce MSW charging?

- 7.10** Hong Kong is facing an imminent waste problem. The Government has devised a multi-pronged strategy to tackle the situation and is gradually achieving results. Still, 48% of our MSW generated (or 9 100 tonnes per day) ends up in the landfills. In order to come to a sustainable solution to the waste problem, we need to maximize our effort in raising the waste recovery rate. Experience from selected international cities suggests that MSW charging could be an effective economic incentive that changes behaviour and leads people to cut down on waste. As a rough indication, in Taipei City and Seoul where MSW charging is in place, the per capita domestic waste disposal is around half of

the figure in Hong Kong. If MSW charging could enable Hong Kong to achieve the disposal level in the two cities, the waste requiring landfill disposal would be significantly reduced⁸. More details of the problem we face and the potential benefits of MSW charging have been presented in Chapters 1 to 3.

Question 2: Should Hong Kong go for a waste charging system for all sectors or a partial charging system?

7.11 Hong Kong has experience in imposing charges on the disposal of specific waste types. But MSW charging definitely requires a system that could be more complex and might affect a wider group of stakeholders. Internationally, there are examples of partial charging (see paragraphs 4.8 and 4.9). In Hong Kong, there are benefits of first imposing the charge on the disposal of C&I waste as we have just discussed in paragraph 7.5 above. This is however subject to the community consensus in Question 1 on the need to introduce MSW charging in Hong Kong, and also the public acceptance of the potential drawbacks as discussed in paragraph 7.6. At this stage, the Government would like to hear the public's views on the pros and cons of a partial charging system.

Question 3: Should Hong Kong go for a Quantity-based system, a Proxy system or a Fixed Charge system?

7.12 This question essentially involves with a trade-off between operational challenges and waste reduction benefits. A Quantity-based system could provide a strong economic incentive to reduce waste through a direct link between the amount of waste that is generated and the cost to be paid for the disposal of such waste. But such a system could be difficult to administer and enforce. Either a Proxy or Fixed Charge system could be more easily implemented. But the effectiveness in waste reduction could as a result be discounted in view of a weakened link between the charge and the quantity of waste being generated. Our detailed analysis is contained in Chapter 4.

⁸ As an illustration, at an enhanced waste recovery target of 55%, it is estimated that about 8 500 tpd of MSW (after recovery) would require treatment. With one Integrated Waste Management Facility (at the capacity of 3 000 tpd) and one Organic Waste Treatment Facility (at the capacity of 200 tpd), it is estimated that 5 300 tpd of MSW would require landfill disposal.

If MSW charging and other waste reduction measures could achieve reduction of domestic waste disposal in Hong Kong from the current 0.87 kg per person per day to about 0.40 kg per person per day (i.e. more or less the disposal rate of Taipei City and Seoul), the estimated amount of MSW requiring treatment would be reduced to about 5 800 tpd. The estimated amount of MSW requiring landfill disposal would correspondingly be reduced to 2 600 tpd once the above treatment facilities are in place.

Question 4: Are you prepared to change your behaviour in waste disposal if an MSW charging system is introduced?

7.13 Reduction of waste at source is all about a “think before you throw” attitude and putting this attitude into practice. The MSW charging system in Taipei City and Seoul would not have been successful if the people there did not comply or simply chose to fly-tip. Take Taipei City as an illustration. If we are to implement a similar system, Hong Kong people would have to queue up to hand over MSW to designated collectors at designated hours and venues. They have to wrap MSW in designated garbage bags which would not otherwise be collected. Would our community support having to buy designated garbage bags for their waste? To what extent would our community accept the practice of collecting MSW at designated hours and venues for the purpose of putting in place a similar charging mechanism in Hong Kong? We need to ascertain how the community views these changes.

Question 5: Do you agree that the Government should introduce legislation to mandate the separation of waste at source and accordingly ban unauthorized disposal of MSW?

7.14 By a ban on unauthorized MSW disposal, we effectively refer to a mandatory source separation initiative. We have discussed the effectiveness of such a mandatory initiative in paragraphs 7.8 and 7.9. In general, mandatory source separation could work on its own or as a supplementary measure to MSW charging to drive the requisite behavioural change to achieve enhanced waste reduction. Our analysis is that it is not infeasible to implement mandatory source separation independent of MSW charging. But in that case, our community would likely see a lower starting point for the compliance rate. Publicity and public education could drive the compliance rate up, albeit through a longer process. On the whole, the way forward on MSW charging would have bearing on our position in respect of mandatory source separation; therefore we also welcome the community’s views on mandatory source separation in this exercise.