# Chapter 3

# **An Urgent Need to Suppress Waste Generation**

3.1 As Asia's world city, Hong Kong offers a cosmopolitan quality lifestyle and abundant opportunities. Our city is running efficiently and orderly everyday. One sign of our success has been how our waste management system properly handles the waste generated by everyday living and economic activities. This is fundamental to the maintenance of public health and a quality environment. But looking ahead, the sustainability of the way we manage our waste is under threat.

## **Waste Arising in Hong Kong: Current Position**

3.2 Due to population growth and economic development, our daily MSW generation has been increasing gradually to about 19 000 tonnes. Together with other types of waste, there is about 13 800 tonnes of waste disposed of at landfills. As shown in <a href="Exhibit 2">Exhibit 2</a>, the bulk of that waste (9 100 tonnes daily, about 70% of the total) comprises MSW.

Exhibit 2: Different Types of Waste Disposed at Landfills (as at 2010)

Waste Type	Daily Disposal
Municipal Solid Waste	<b>9 100</b> tonnes
Construction Waste	<b>3 600</b> tonnes
Sludge	<b>900</b> tonnes
Other Waste	<b>200</b> tonnes
Total:	<b>13 800</b> tonnes

3.3 We have now achieved an MSW recovery rate of 52%, up from 43% in 2005, meaning that over half of the MSW generated in Hong Kong is recovered from the waste stream. We compare favourably with other international cities. Our overall MSW recovery rate is higher than Singapore (48%). Even our MSW recovery rate in the domestic sector (at 40%) compares favourably

with New York City (26%) and London (27%)<sup>1</sup>. As shown in <u>Exhibit 3</u>, although the disposal figure recorded a decline in the same period, the per capita MSW generation in 2010 was 2.69 kg per day, up by about 11% from 2.42 kg per day in 2005. These figures included both landfilled and recovered waste. We should not overlook this trend.

Exhibit 3: Per Capita MSW Generation and Disposal (2005 to 2010)

Year	<b>Generation</b> (kg / person / day)	<b>Disposal</b> (kg / person / day)
2005	2.42	1.38
2006	2.49	1.35
2007	2.44	1.33
2008	2.52	1.29
2009	2.52	1.28
2010	2.69	1.29

- 3.4 Hong Kong now relies principally on landfills to treat its waste, which is not sustainable. Our three strategic landfills are projected to be exhausted in the mid to end 2010s unless effective waste management measures are implemented in a timely manner. Given the scarcity of land resources in Hong Kong, efforts to identify land for developing new landfills or extending the existing ones have proven to be very difficult. The increasing MSW generation contributes to an emerging crisis where Hong Kong might not be able to uphold the high standard of environmental hygiene that the local and international community expects of a world city, without timely provision of adequate and appropriate waste treatment and disposal facilities.
- 3.5 While we are actively pursuing the development of advanced waste treatment facilities in Hong Kong (comprising a Sludge Treatment Facility, an Integrated Waste Management Facility and an Organic Waste Treatment Facility), their aggregate treatment capacity falls short of our current MSW disposal. This underlines the importance of a multi-pronged waste management strategy under which we are concurrently stepping up our efforts in waste reduction and recovery.

<sup>1</sup> The published statistics in New York City and London covers mainly domestic waste plus some trade waste.

### Why We Need to Consider MSW Charging

#### Reason 1: Reducing Waste Generation at Source

3.6 Hong Kong's waste generation is in general higher than that of cities of comparable economic development level, particularly in the domestic sector, before taking into account waste recovery. Our domestic waste generation now stands as high as 1.45 kg per person per day. The corresponding figure in London, Seoul, Tokyo and Taipei City are 1.45 kg, 1.08 kg, 1.03 kg and 0.88 kg per person per day respectively. Even after taking into account our accomplishments in promoting MSW recovery, domestic waste disposal in Hong Kong is only in the midstream internationally. In comparison, domestic waste disposal in Taipei City and Seoul is significantly lower (see Exhibit 4); MSW charging has been in place in these international cities.

Exhibit 4: Per Capita Domestic Waste Generation and Disposal in Selected Cities

	<b>Daily Generation</b> (kg / person / day)		<b>Daily Disposal</b> (kg / person / day)
Taipei City	0.88	Seoul	0.35
Tokyo	1.03	Taipei City	0.41
Seoul	1.08	Tokyo	0.79
Hong Kong	1.45	Hong Kong	0.87
London	1.45	London	1.04

#### Reason 2: Increasing Waste Recovery Rate

3.7 Although our current and planned programmes are helping us to reduce waste, overseas experience suggests further reduction beyond what we have projected will not be possible without a major economic incentive that changes behaviour and leads people to cut down on waste. In the absence of a major mindset and behavioural change, there is a limit as to how far our community could do in further raising the waste recovery rate by a significant margin. This has been the consensus among advocates of a greener Hong Kong.

#### Reason 3: Fostering Behavioural Changes

3.8 As mentioned in paragraph 1.4 above, currently, waste separation is largely conducted at the garbage collectors' level. The introduction of MSW charging could help foster a "think before you throw away" attitude among the people of Hong Kong. If individual Hong Kong people can lend their support to waste separation, this would add much to the effective recovery of reusable and recyclable materials out of the waste stream.

#### Other Considerations

3.9 MSW charging is a major policy that would impact on a wide cross-section of the society and the way MSW is collected. The very nature of the initiative to involve charging could give rise to concerns over the potential cost burden on households and businesses. It could also give rise to concerns over possible regressive effects on low income households. An important principle is that **such charging** should not bear a revenue-generating objective. The experience of other cities with a waste charging system is that a community consensus should first be consolidated before charging could be introduced. Implementation of charging could also lead to a series of practical issues. When consulting the public, the Government needs to engage the community and relevant stakeholders to adequately deliberate these issues and to explore practicable solutions. Such deliberation is essential to ensure public support and smooth implementation when the charging scheme commences operation. We therefore need to conduct this public consultation carefully. In addition, once consensus is reached, we also need to look into a number of operational issues in a greater detail, including appropriate mitigation measures for the needy.