Research Office Legislative Council Secretariat



ISSH08/16-17

## Municipal solid waste

Figure 1 – Annual solid waste disposed of at landfills

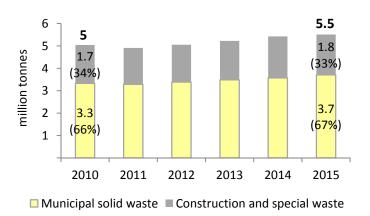


Figure 2 – Sources of municipal solid waste disposed of at landfills in 2005 and 2015.

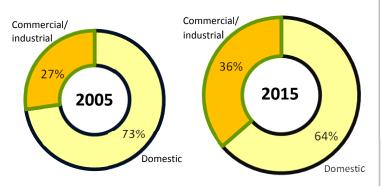
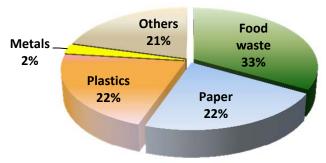


Figure 3 – Composition of municipal solid waste disposed of at landfills



2015: 3.7 million tonnes

	Food waste	Paper	Plastics	Metals	Others
Million tonnes	1.2	0.8	0.8	0.1	0.8

## **Highlights**

- Waste management is a key environmental challenge for Hong Kong with increasing amount of waste disposed of at the landfills. Between 2010 and 2015, the amount increased at an average rate of 1.9% per year, outpacing population growth of 0.8% but slower than economic growth of 2.9%. A majority of the 5.5 million tonnes of solid waste discarded at landfills in 2015 was municipal solid waste (i.e. waste from domestic, commercial and industrial sectors), accounting for 67% of the total (Figure 1).
- A majority of the municipal solid waste came from domestic sector (i.e. waste generated by households). However, its respective share has declined from 73% in 2005 to 64% in 2015. By contrast, the share of waste from commercial and industrial sector rose from 27% to 36% during the same period (Figure 2).
- In 2015, Hong Kong discarded
  1.2 million tonnes of food waste in
  landfills. Food waste is also the
  largest waste category in municipal
  solid waste, accounting for 33%.
  Paper and plastics are the second
  and third largest components of
  municipal solid waste disposed of at
  landfills (Figure 3).

## Municipal solid waste (cont'd)

Figure 4 — Recycling of selected types of municipal solid waste

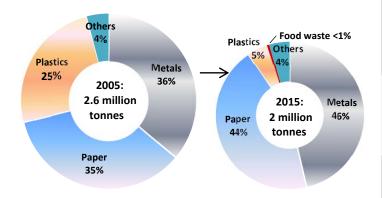


Figure 5 — Comparison of municipal solid waste treatment options in selected places

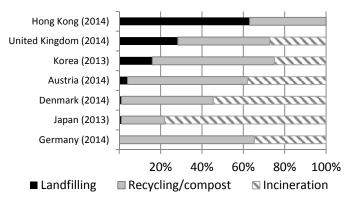


Figure 6 – Management options for municipal solid waste in selected places

	Separate collection of waste	Waste charging	Landfill ban	Landfill tax	Producer responsibility scheme
Hong Kong	×	×	×	×	✓
United Kingdom	✓	×	✓	✓	✓
Korea	✓	✓	✓	×	✓
Austria	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓	✓
Japan	✓	✓	×	×	✓
Germany	✓	✓	✓	×	✓

Note: Some of the options listed in the table may be taken by some municipalities of the country only and implemented in different forms. For instance, waste charging is not introduced across Japan, but only in some areas. This applies similarly to Germany, Austria and Denmark.

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## **Highlights**

- In 2015, Hong Kong recycled 2 million tonnes of municipal solid waste, down by about 23% compared with 2005. This sharp decrease was due to the drop in plastics recycling caused by fluctuations in plastic waste import and export. Food waste accounts for less than 1% of the recycled materials (Figure 4).
- With limited treatment options in Hong Kong, 63% of the municipal solid waste ended up in landfills, with the rest being recycled. This is in sharp contrast to other advanced economies such as Japan and Germany which are much less dependent on landfills. Instead, waste incineration or recycling played a major role in waste management in these places (Figure 5).
- In addition to treatment options, some of the selected places tend to have more policy options adopted than Hong Kong, such as separate collection of waste, quantity-based waste charging and landfill ban on certain waste (Figure 6). This may help explain the findings shown in Figure 5.

Data sources: Latest figures from Environmental Protection Department, Annual Digest of Census and Statistics, and OECD website.

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