

Key Data: Metropolitan Waste and Resource Recovery Implementation Plan

How much waste does metropolitan Melbourne currently manage?

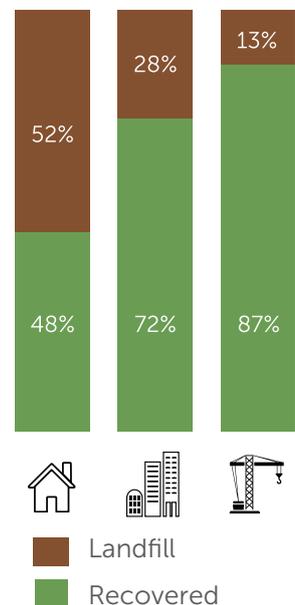
Over 10.4 million tonnes of waste are managed in Melbourne every year, including waste that flows into Melbourne from other Victorian regions. Melbourne's overall recycling rate is 73%, leaving 27% of waste going to landfill. Of the 2.8 million tonnes of waste disposed to landfill, almost half is municipal solid waste, reflecting its low recycling rate compared to commercial and industrial as well as construction and demolition waste.

Figure 1: Total waste volumes landfilled and recovered.

| | Source | Recovered (tonnes) | Landfilled (tonnes) | Total (tonnes) |
|---|---------------------------------|--------------------|---------------------|-------------------|
|  | Municipal solid waste | 1,223,000 | 1,300,000 | 2,523,000 |
|  | Commercial & industrial waste | 2,397,000 | 926,000 | 3,322,000 |
|  | Construction & demolition waste | 3,972,000 | 617,000 | 4,589,000 |
| | Total | 7,591,000 | 2,842,000 | 10,433,000 |



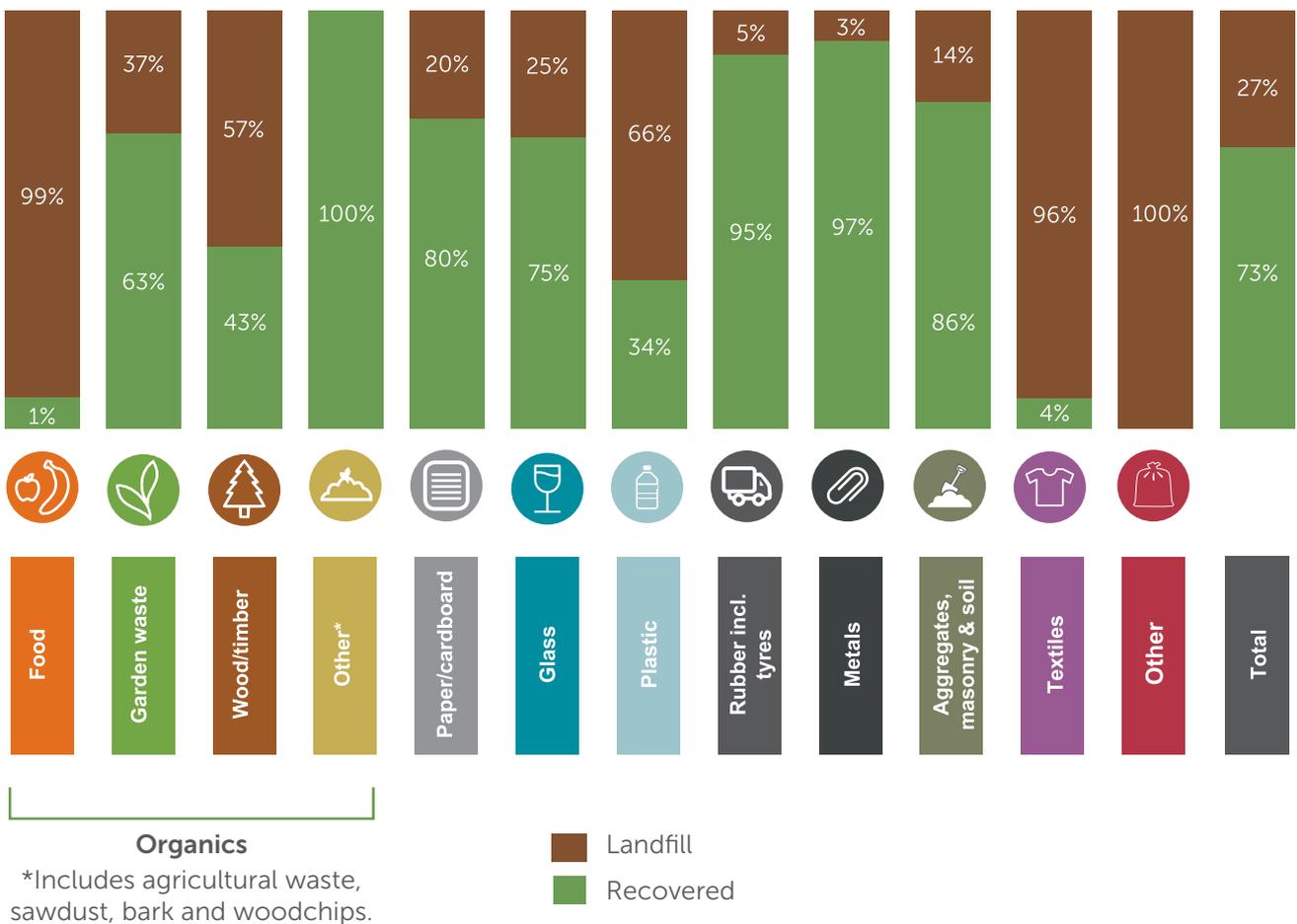
Figure 2: Percentages of waste landfilled and recovered



What types of materials are managed?

Landfill and recovery rates vary for different waste materials that are managed in the metropolitan region and are shown below.

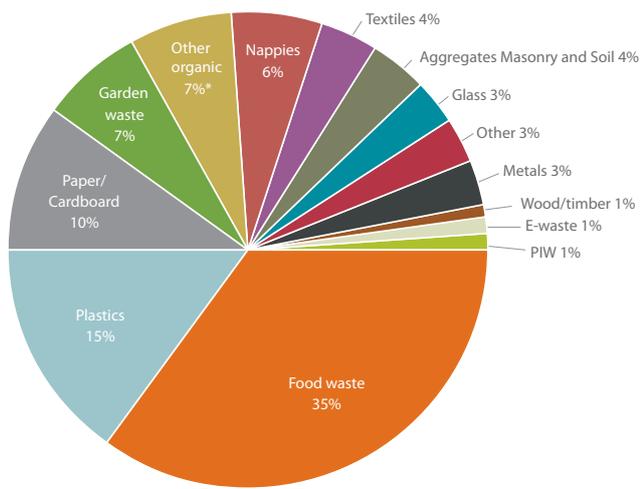
Figure 3: Materials managed in the metropolitan region



Which materials go to landfill?

Audits of municipal solid waste and commercial and industrial waste streams highlight the large amounts of recyclable materials (organics, plastics, paper/cardboard) going to landfill (see figure, below).

Figure 4: The composition of material entering landfill from municipal, commercial and industrial sources



* includes rubber and contaminated/soiled paper

What waste and recycling infrastructure will we need in the future?

By 2051 Melbourne's population is projected to grow from 4.4 million to 7.8 million people, and waste volumes will grow too. By 2042 it is projected waste volumes will grow from 10.4 million to 16.5 million tonnes each year (a 63% increase).

Our plan aims to significantly increase resource recovery and reduce the need for landfills. We will do this by establishing a suite of new, improved and expanded infrastructure right across the metropolitan Melbourne region, including organics facilities, improved transfer stations and advanced technologies to recover value from residual waste.

Which landfills service Metropolitan Melbourne?

There are currently 21 landfills operating in Melbourne. Ten landfills are expected to close during the next 10 years, with 16 in total closing over the 30 year life of this plan.

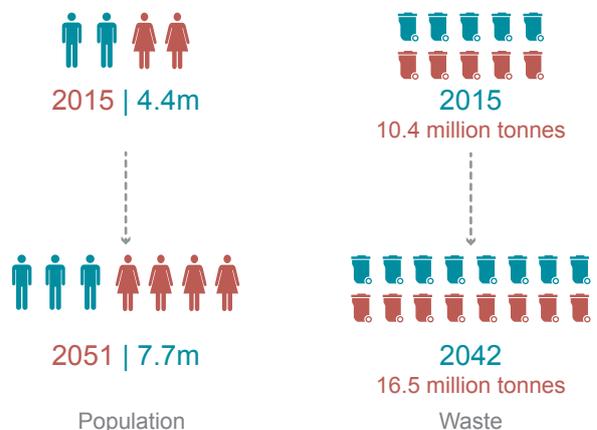
Five (significant) landfills are designated as hubs of state importance:

- SUEZ Hallam
- SUEZ Lyndhurst
- Cleanaway MRL Ravenhall Landfill
- Hanson Wollert
- Werribee Landfill

Figure 5: Landfill Disposal Sites



Figure 6: Melbourne's population and waste projections



What are the future needs and challenges of resource recovery infrastructure?

Resource recovery facilities

Resource recovery facilities accept a range of waste and recyclables and sort them into separate material streams. These streams are consolidated and transported to either reprocessing facilities or landfills. Resource recovery facilities include resource recovery centres/transfer stations, drop off facilities and material recovery facilities.

Resource recovery centres/transfer stations and drop off facilities provide important links in the waste and resource recovery infrastructure network.

- Spare capacity exists across the network (498,000 tonnes p.a. for resource recovery centres/transfer stations, and 35,000 tonnes p.a. for drop off facilities).
- Future challenges include responding to landfill closures in the south east, and the need to accept and recover resources from a greater range of materials such as organics, e-waste and hard waste such as mattresses.

Material Recovery Facilities receive and sort commingled recycling from municipal and commercial and industrial waste streams collected by local governments or private contractors.

- Spare capacity exists across the network of 328,000 tonnes p.a.
- Future needs and challenges include minimising contamination and sorting valuable materials from an increasing range of products.

Reprocessing facilities

Reprocessing facilities receive separated recyclable materials and from that manufacture either end products (such as compost) or materials to be used in other manufacturing processes (such as crumbed rubber being used in road construction).

Figure 7: Reprocessing facilities: future needs and challenges

