

National Waste Reporting 2013

OVERVIEW – NATIONAL ORGANIC WASTE PROFILE

Key fact: In 2010–11 an estimated 12 million tonnes (Mt) of all organic waste was recovered.

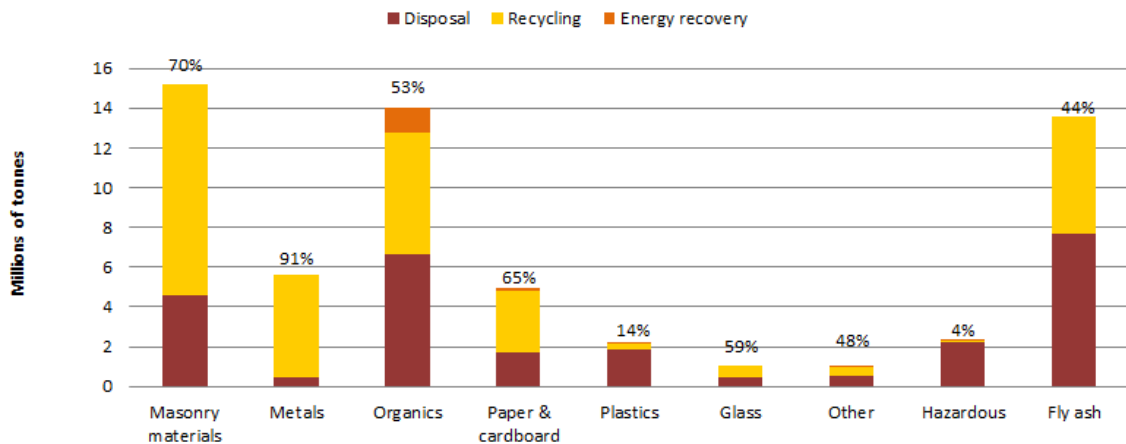
Organic waste is a component of the waste stream from plant or animal sources that is readily biodegradable, e.g. paper and cardboard, food waste, biosolids, green waste and timber. It forms a significant proportion of waste generated in Australia, and an even more significant portion of waste sent to landfill. Degradation of organics in landfill generate the potent greenhouse gas methane, and also produces potentially polluting leachate.

In 2010–11, around 14 million tonnes (Mt) of organic waste (excluding paper and cardboard and primary production wastes) was generated nationally (see Figure 1), of which:

- 6.63 Mt (47 per cent) were disposed of to landfill
- 6.14 Mt (44 per cent) were recycled
- 1.24 Mt (9 per cent) were used in energy recovery.

In addition, in 2010-11 almost 5 Mt of paper and cardboard was generated nationally, with an overall recovery rate of 65 per cent (see Figure 1). When paper, cardboard and primary production waste¹ are included in organic recovery data, the amount of organic waste recovered increases to around 12 Mt.

Figure 1 Australia 2010-11, total waste generation by material category and management²



The Recycled Organics Unit³ conducts annual surveys of the organics reprocessing industry in Australia. From 2005–06 to 2010–11 there have been consistent organics recovery in the ACT and NSW, modest increases in WA and SA and significant increases in recovery in Qld and Vic⁴. The total reported quantity of organic waste received by the industry for processing was 6.33 Mt in 2010-11 and 5.52 Mt in 2011-12⁵. The breakdown of products made from recovered organics (excluding manures and direct application to land) are shown in Figure 2.

¹ Based on publicly reported and readily available primary production waste data.

² Blue Environment and Randell Environmental Consulting, *Waste generation and resource recovery in Australia (2013)*

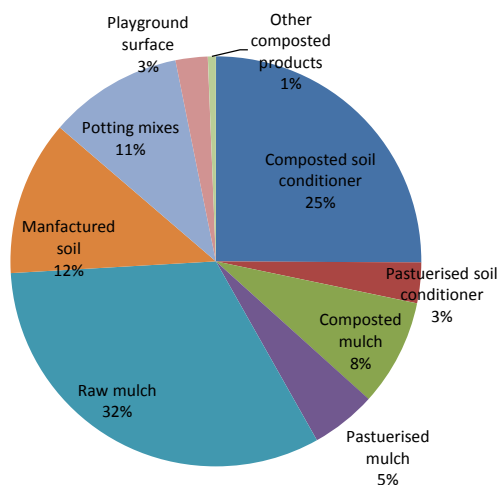
³ A partnership between the NSW Waste Boards and the University of New South Wales.

⁴ Blue Environment and Randell Environmental Consulting, *Waste generation and resource recovery in Australia (2013)*

⁵ These figures cannot be directly compared due to issues including incomplete data and changes in reporting. The figures cannot be compared to figures in *Waste generation and resource recovery in Australia*.

⁶ Recycled Organics Unit (ROU), *Organic recycling in Australia: industry statistics (2011 and 2012)*.

Figure 2 Breakdown of products made from recovered organics (excluding manures and direct application to land), 2010-11⁷



The jurisdictions that achieved resource recovery rates above the national average in 2010-11 have done so through mechanisms including well-developed resource recovery infrastructure, a well-established organics recycling industry and policy settings including resource recovery programs, targets and landfill levies.

The organic waste category presents one of the greatest opportunities for further action due to:

- the amount currently being sent to landfill. For example, the amount of food waste sent to landfill as a proportion of total reported waste was between 30 and 46 per cent for municipal solid waste and 15 per cent for commercial and industrial waste⁸
- the impact in landfill which includes the production of the potent greenhouse gas methane and potentially polluting leachate
- the potential to avoid greenhouse gas emissions. For example, it is estimated that every tonne of mixed food and garden waste or only garden waste that is recycled rather than disposed of to landfill avoids the emission of 0.25 and 0.33 tonnes of carbon dioxide equivalent respectively
- the range of possible end uses for recovered materials, including for redistribution by food charities with potential energy and water savings
- the organic recovery efforts reducing the potential for contamination of otherwise readily recyclable materials such as paper and cardboard
- the cost savings from the reduced purchase of food products that become waste e.g. [A study into commercial and industrial \(C&I\) waste and recycling in Australia by industry division](#) estimated the input costs of food waste that is then disposed of is \$8.24 billion for waste to landfill and \$2.29 billion for waste that is recycled⁹.

⁷ Blue Environment and Randell Environmental Consulting, *Waste generation and resource recovery in Australia (2013)*

⁸ These percentages are derived from New South Wales and Victoria figures for 2010–2011 in *Waste generation and resource recovery in Australia*. New South Wales and Victoria are the two jurisdictions that report against waste streams.

⁹ Based on 2010-2011 figures in [A study into C and I commercial and industrial \(C&I\) waste and recycling in Australia by industry division](#)

For more information on organics see:

- [*A study into commercial and industrial \(C&I\) waste and recycling in Australia by industry division*](#)
- Biosolids factsheet
- [*Biosolids snapshot*](#)
- [*Food and garden organics best practice collection manual*](#)
- Food waste fact sheet
- Foodbank case study
- OzHarvest case study
- SecondBite case study
- Interactive mapping tool
- *Organic recycling in Australia: industry statistics 2012*
- [*Organic recycling in Australia: industry statistics 2011*](#)
- Planet Ark's *Recycling Near You* website at <http://recyclingnearyou.com.au/>
- Jurisdictional waste profile factsheets, including the NSW Love Food Hate Waste case study
- *Waste and resource recovery in Australia*
- *Waste and resource recovery in Australia* workbooks