FACTSHEET – JURISDICTIONAL WASTE PROFILES

QUEENSLAND (QLD)

Policy framework

Legislation

The primary legislation governing waste management and resource recovery in Queensland is the *Waste Reduction and Recycling Act 2011*. This Act is supported by the Waste Reduction and Recycling Regulation 2011. Other legislation governing waste management in Queensland:

- *Environmental Protection Act 1994*
- Environmental Protection Regulation 2008
- Environmental Protection (Waste Management) Regulation 2000.

The *Waste Reduction and Recycling Act 2011* establishes the waste and resource management hierarchy in legislation, along with guiding principles including the user pays principle, the proximity principle and product stewardship principles. The Waste Act also requires the preparation of a waste strategy and a review of the strategy by the end of October 2013 and subsequently every three years after.

Policies/strategies

Queensland's Waste Reduction and Recycling Strategy 2010–2020 is currently undergoing review. The key goals of this strategy are to:

- reduce waste
- optimise recovery and recycling
- develop sustainable waste industries and jobs.

The Queensland Government is working with waste generators, the waste sector, local government and environment and community groups to develop a new industry-led waste strategy. The review will help inform development of this new strategy.

Waste diversion targets

While the targets will also be subject to review, the Strategy currently contains the following broad targets:

- reduce waste to landfill
- reduce greenhouse gas emissions
- increase the recovery and recycling of resources across all waste streams
- reduce generation of waste
- reduce the amount of and the environmental impacts from, litter and illegal dumping.

The milestone targets for 2014 are currently:

Key targets and dates		
Target	**2008 baseline**	**By 2014**
Reduce waste disposal to landfill, compared to business-as-usual projections	Business-as-usual – no strategy	Reduce landfill disposal by 25% - 4.6 million tonnes of avoided landfill disposal since 2010
Increase recycling of construction and demolition waste	35%	50%
Increase recycling of commercial and industrial waste	18%	40%
Increase recycling of regulated waste	30%	35%
Increase recycling of municipal solid waste Target 150: increase recycling of household waste to 150kg per person per year	23% 64kg per person per year	50% 80kg per person per year
Reduce waste generation	2.4 tonnes per person per year	5% reduction 2.3 tonnes per person per year.

Levies

The *Waste Reduction and Recycling Act 2011* commenced on 28 October 2011 and provided the head of power for the introduction of a waste levy. The levy commenced on 1 December 2011.

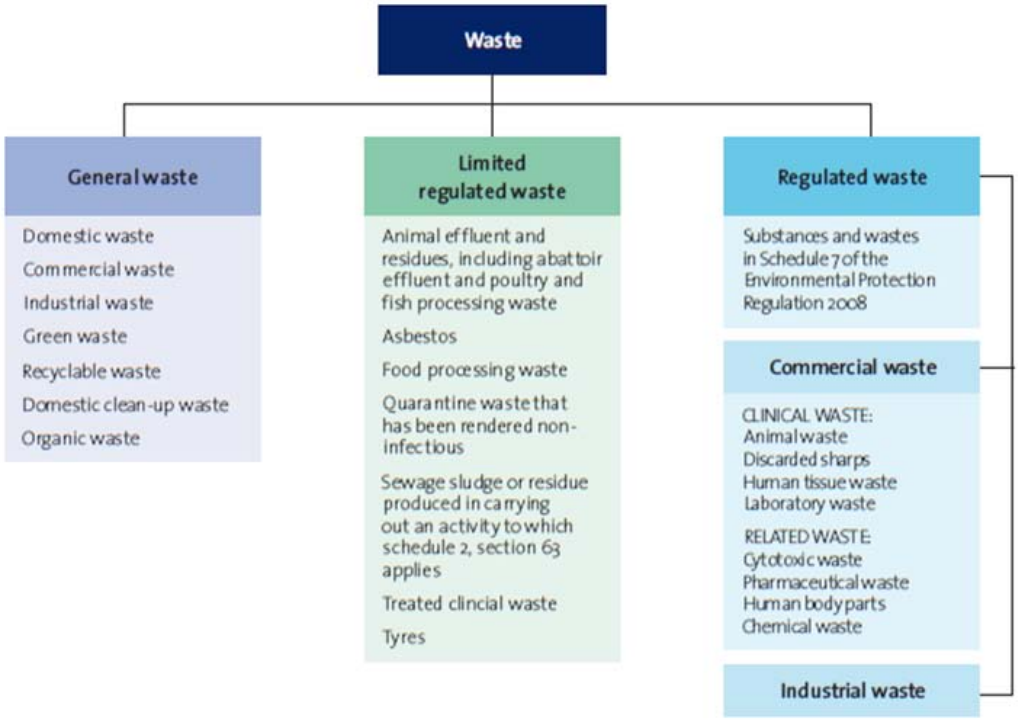
A levy of $35 per tonne applied to commercial and industrial, construction and demolition wastes and some regulated wastes. A differential levy rate applied to low and high hazard regulated wastes of $50 and $150 per tonne respectively. A nil levy rate applied to municipal solid waste. Specific exemptions were provided for eligible charity waste, disaster management waste and biosecurity waste disposal.

The waste levy was repealed on 1 July 2012 through an amendment to the Waste Reduction and Recycling Regulation 2011 to provide for a nil levy rate on all waste.

The repeal was finalised on 14 March 2013 through amendments to the *Waste Reduction and Recycling Act 2013* to remove the head of power for the levy and redundant levy provisions, including levy calculations, verification methods and payment options.

Classification trees

Figure 1 Queensland's waste classification system



Infrastructure

In 2011 a Waste Site Characterisation Survey was conducted across Queensland. The survey was aimed at identifying all waste facilities, including landfills and waste transfer stations, and their on-site operations, processes and infrastructure. The survey located 265 landfills (14 private sector operated) and 236 transfer stations. At the time of the survey, 41 sites had operational weighbridges and the Department of Environment and Heritage Protection provided funding to facilitate the installation of a further 11 weighbridges.

Following the local government amalgamation process, many councils reviewed the operation of their facilities. Some landfills have been closed, and some have been converted to transfer stations. Two metropolitan councils have recently stopped landfilling waste at their facilities and now export waste to other councils/private landfills for disposal.

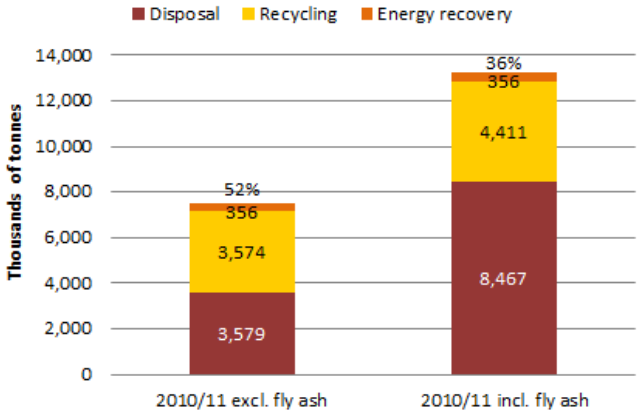
The department has incomplete data on recyclers and organic processors. It is working to improve the coverage of the waste recovery industry in its annual waste surveys. While organic processors are more widely distributed throughout the more developed parts of the state, most recycling and waste treatment takes place in south-east Queensland. This limits the economic viability of recycling for particular materials in a large part of the state.

Waste and recycling data

Per capita waste generation and resource recovery rate

In 2010-11, per capita waste generation for Queensland was 1.7 tonnes (see Figure 2), which was the third lowest in Australia, above the Northern Territory and Tasmania. This follows the pattern of lower waste generation in jurisdictions that have lower per capita incomes and less urbanised populations.

Figure 2 Per capita waste generation by management by jurisdiction, 2010-11



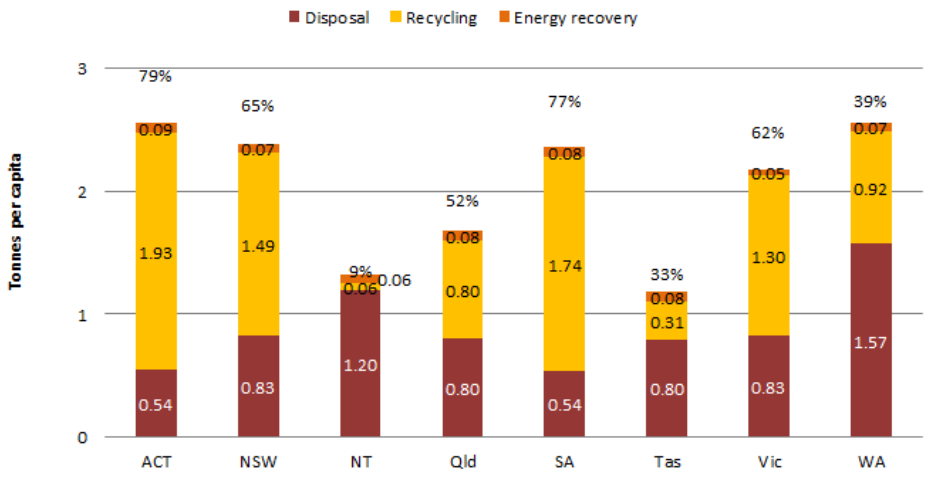
Queensland also had Australia's third lowest resource recovery rate at around 52 per cent, which is 8 percentage points below the national average and reflects:

- large transport distances that make recovery of some waste types cost-prohibitive
- the absence of a landfill levy (except for a six-month period in 2011-12)
- less developed resource recovery infrastructure.

Total waste generated

Total waste generation in Queensland for 2010-11 was around 7.5 Mt excluding fly ash and 13 Mt including fly ash (see Figure 3). This is the third highest of Australia's jurisdictions, consistent with Queensland's ranking in relation to population and GSP. The almost 6 Mt of fly ash generated in Queensland is around 40 per cent of Australia's total fly ash generation, reflecting the large number of coal-fired power stations in Queensland.

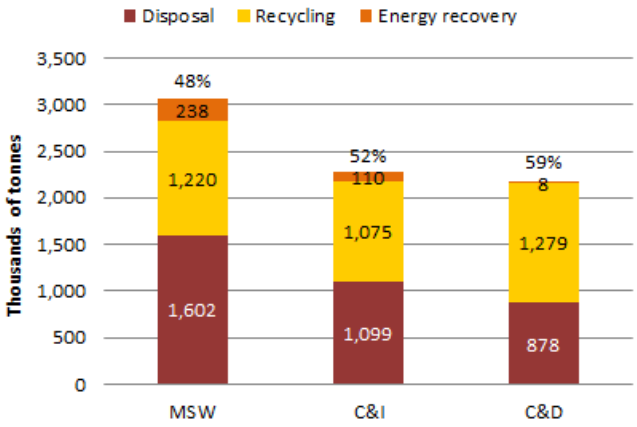
Figure 3 Queensland total waste generation by management, 2010–11



Waste streams (municipal solid waste(MSW), commercial and industrial(C&I) and construction and demolition (C&D)) by material type

Waste streams

Figure 4 Queensland total waste generation by waste stream and management, 2010–11



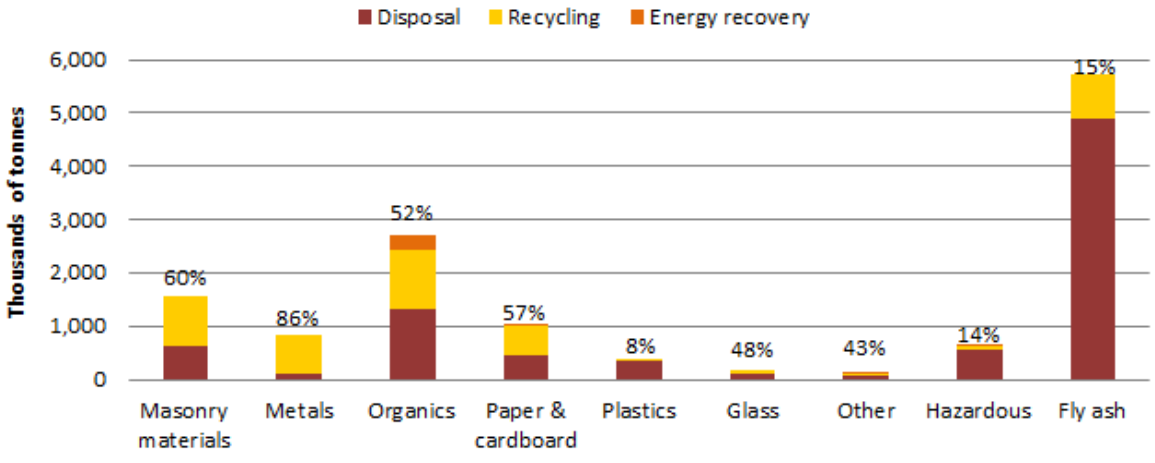
- MSW generation was around 2.0 Mt with a resource recovery rate of 48 per cent, which is 3 percentage points below the Australian average.
- C&I waste generation was around 2.3 Mt with a resource recovery rate of 52 per cent, which is 7 percentage points below the Australian average.
- C&D waste generation was around 2.2 Mt with a resource recovery rate of 59 per cent, which is 7 percentage points below the Australian average.

See the overview on national waste stream profiles for more information on the MSW, C&I and C&D waste streams.

Material categories

In Queensland, the waste categories that make up the bulk of waste generation are fly ash, organics, masonry materials, paper and cardboard, and metals. The resource recovery rates for most material categories are below the national average. The exceptions being hazardous wastes with a resource recovery rate 10 percentage points higher than the national average.

Figure 5 Queensland total waste generation by material category and management, 2010–11



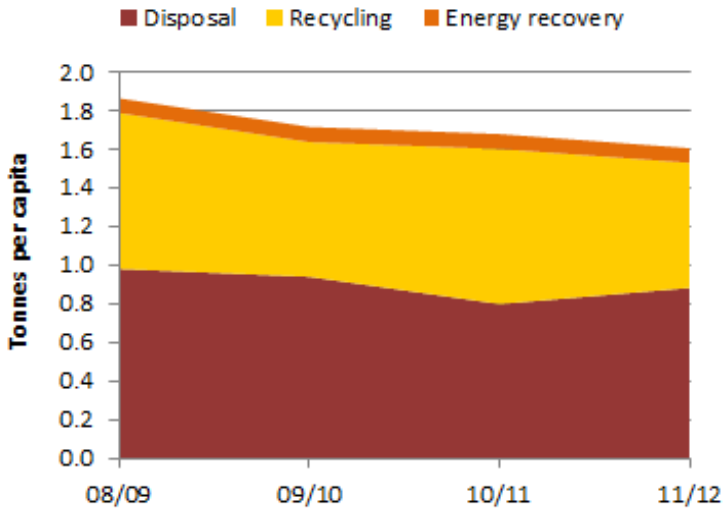
Trends in waste generation and management 2008–09 to 2011–12

Over the four-year period, Queensland's population increased by 1.4 percent and GSP increased by an average of 3.2 per cent per year. The Queensland data suggest a reduction in waste generated of about 10 per cent over the four years. An increasing population and GSP and decreasing total waste generation is inconsistent with trends identified in the other jurisdictions and internationally. The Queensland data (see accompanying Excel workbook) indicate that the decrease in waste is due mainly to decreasing disposal of MSW, C&D and contaminated soils. Large fluctuations in contaminated soils tonnages are not unusual. Other decreases in waste generation for Queensland over the four-year period suggest that reporting to the Queensland Government, and/or collation methods may have varied over the period. The Queensland Government noted the following in relation to the unusual trends in the data:

- MSW was increasing till 2008-09 and has trended downwards since.
- councils may be recording landfill waste more accurately in recent years. Earlier estimates may have sometimes included garden organic wastes for recycling.
- the Queensland *Waste Recycling and Reduction Act 2011* now requires reporting by local governments, landfills, recyclers and potentially waste generators, so future data should be of high quality.
- in 2011–12 the annual survey of organic waste processing was conducted by the government instead of the usual private organisation. This is likely to have resulted in a higher rate of reporting.
- garden waste quantities are weather dependent and volatile. Cyclones can cause big peaks.
- metal recycling rates have been trending downwards and could be linked to the Australian dollar. Glass recovery has also been slow and trending downwards.

Figure 6 shows the **per capita** trends in waste generation and management for the period 2008–09 to 2011–12. There were insufficient data to report on the 2006–07 period[1]. Queensland was the only jurisdiction to provide 2011–12 data for reporting.

Figure 6 Qld trends in per capita waste generation and management 2008-09 to 2011-12



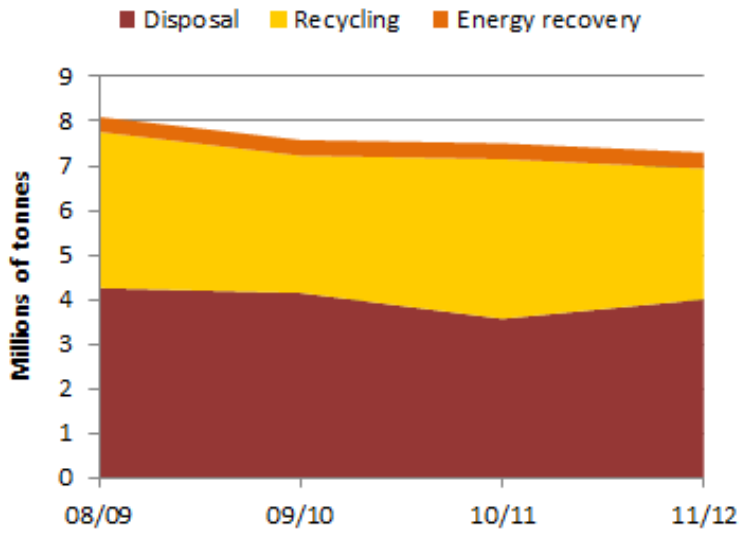
[1] *Waste and Recycling in Australia 2009* reported 2006/07 data for Qld but it was not possible to harmonise the data set with the more recent data.

Over the four-year period from 2008-09 to 2011-12, the following **per capita** trends are illustrated:

- waste generation fell by 14 per cent
- the resource recovery rate decreased from 47 per cent to 45 per cent between 2007–2008 and 2011–12
- recycling decreased by 20 per cent
- waste tonnages used for energy recovery remained virtually unchanged
- waste disposal decreased by 10 per cent.

Figure 7 shows the trends in total waste generation and management in Queensland for the period 2008-09 to 2011-12.

Figure 7 Queensland trends in total waste generation and management 2008-09 to 2011-12



Over the four-year period the following trends are illustrated in relation to total waste tonnages:

- waste generation decreased by 10 per cent
- recycling decreased by 16 per cent
- waste tonnages used for energy recovery increased by 16 per cent
- disposal decreased by six per cent.

Sourcing of data

Information on policy frameworks and infrastructure were provided by the government department responsible for waste management and resource recovery in their state and territory.

Unless otherwise specified, waste generation and resource recovery data for this factsheet were sourced from Blue Environment and Randell Environmental Consulting's *Waste Generation and Resource Recovery in Australia* (2013). It is important to note that the data (from this report) will not always reconcile with publicly reported data from the states and territories. The differences in data result from differences in scope, method of compilation, and assumptions used in *Waste generation and resource recovery in Australia.* The workbooks provide transparency so that differences between the reported data sets can be reconciled if necessary.