

WESTERN AUSTRALIAN GOVERNMENT SUBMISSION
SENATE ENVIRONMENT AND COMMUNICATIONS REFERENCES
COMMITTEE INQUIRY

WASTE AND RECYCLING INDUSTRY IN AUSTRALIA

The Environment and Communications References Committee is undertaking an inquiry into the waste and recycling industry in Australia.

Introduction

The Western Australian Government is committed to improving the State's waste performance to protect the environment and support investment and job creation.

The Minister for Environment, through the Department of Water and Environmental Regulation (DWER), administers the key waste legislation in Western Australia including the *Waste Avoidance and Resource Recovery Act 2007* (WARR Act), *Waste Avoidance and Resource Recovery Levy Act 2007* (WARR Levy Act) and *Environmental Protection Act 1987* (EP Act).

The Western Australian Government recognises the significant opportunities to work closely with other jurisdictions including the Australian Government.

The following information is provided in direct response to the Committee's Terms of Reference.

a. The quantity of solid waste generated and the rate of diversion of solid waste for recycling

Waste and recycling data are presented in annual *Recycling Activity in Western Australia* reports available at www.wasteauthority.wa.gov.au/programs/data/.

The overall landfill diversion rate in Western Australia has increased from 31 per cent in 2010-11 to 49 per cent in 2015-16. Western Australia's estimated waste generation went from 6.5 million tonnes to 5.42 million tonnes between 2010-11 and 2015-16, a reduction of 17 per cent.

Waste generation is estimated from the difference between the quantity of waste diverted from landfill and the quantity of waste disposed to landfill.

Generation estimates exclude stockpiled unprocessed waste, illegally dumped waste and reused waste.

The waste levy applies to waste generated in the Perth metropolitan region that is disposed to landfill and Perth metropolitan waste landfilled outside the metropolitan region. The waste levy and programs to promote better waste management are expected to drive further increases in landfill diversion.

b. The accreditation and management of landfills

The Department of Water and Environmental Regulation (DWER) regulates emissions and discharges from prescribed premises, including landfills, under Part V Division 3 of the *Environmental Protection Act 1986*. Prescribed premises are defined in Schedule 1 of the *Environmental Protection Regulations 1987*.

DWER is developing waste legislative reforms, including to landfill regulation. DWER's paper *Waste reform project: Proposed approaches for legislative reform* (available at www.der.wa.gov.au/our-work/consultation/452-waste-reform-project) analyses the current legislative framework for waste management and identifies opportunities to improve both the waste levy framework and the environmental protection regime as they apply to waste generation, storage and disposal. In developing reform proposals, DWER considered the waste management approaches of other jurisdictions.

DWER is also developing regulations under the *Waste Avoidance and Resource Recovery Act 2007* to require annual reporting and record-keeping of waste and recycling data by local governments, waste recyclers and licensees of major regional landfills (for more information see www.der.wa.gov.au/our-work/consultation/69-closed-consultations/385-proposed-amendments-to-the-waste-avoidance-and-resource-recovery-regulations-2008-to-require-record-keeping-and-annual-reporting-of-waste-and-recycling-data).

Waste and recycling data is collected annually from local government and the waste industry in Western Australia to assess the State's performance against the landfill diversion targets and to report against budget key performance indicators. Through its administration of the waste levy, DWER collects data on metropolitan waste disposed to landfill. Data is also provided voluntarily through the Waste Authority's annual Local Government Waste and Recycling Census; and the Recycling Activity Review, an annual survey of businesses that recycle materials. The provision of the waste and recycling data on a voluntary basis has resulted in an incomplete dataset due to variable response rates.

c. The extent of illegal landfilling

The Department of Water and Environmental Regulation (DWER) is currently progressing amendments to prescribed premises landfill categories under Schedule 1 of the *Environmental Protection Regulations 1987* to ensure that clean (raw, natural) fill and uncontaminated fill that meets environmental and health standards can be used for development, without the requirement for a licence or attracting the levy.

These amendments address the findings of Justice Beech in *Eclipse Resources Pty Ltd v The State of Western Australia [No 4]* (2016) WASC 62.

Amendments are proposed to apply the waste levy to a broader range of waste disposal methods, parties and premises. The proposed reform is intended to provide certainty for industry, create a level playing field and facilitate more effective functioning of the waste levy.

Western Australia has not detected an increase in illegal landfills. There is an increase in stockpiling of material awaiting a market. The creation of a dedicated illegal dumping enforcement area has seen an increase in the number of offences detected. It appears that offences are primarily committed by individuals as a matter of convenience and to avoid landfill gate fees rather than as a means of avoiding commercial waste levy liability.

d. The role of landfill levies in determining the end destination of material, including the hypothecation of collected levies for enforcement and waste diversion purposes

The waste levy in Western Australia is established under the *Waste Avoidance and Resource Recovery Act 2007* (WARR Act), *Waste Avoidance and Resource Recovery Levy Act 2007* (WARR Levy Act) and their regulations.

The waste levy is the State's key economic policy lever to promote the diversion of waste from landfill and encourage recycling and recovery. A levy is imposed on waste disposed of to landfill in the Perth metropolitan region, or on waste generated in the Perth metropolitan region and disposed of elsewhere in the State.

The WARR Act requires that at least 25 per cent of the forecast levy amount for the financial year is paid into the Waste Avoidance and Resource Recovery (WARR) Account. The remainder is returned to the Consolidated Account. The WARR Account is administered by the Waste Authority and by the CEO of the Department of Water and Environmental Regulation for the purposes of the *Financial Management Act 2006*. Funds must be applied in a manner consistent with the current business plan or as approved by the Minister for Environment.

The annual business plan sets out programs and initiatives to achieve outcomes consistent with the Western Australian Waste Strategy: Creating the Right Environment funded through the WARR Account.

The 2016-17 business plan allocated \$17.3 million to activities - \$4.97 million for economic instruments (including funded programs and grants), \$2.44 million to encourage waste avoidance and resource recovery behaviour change, \$2.24 million to support best practice adoption and \$2.15 million for regulation activities including enforcement.

The waste levy has increased substantially since 2015 (Table 1). The rate is currently \$65 per tonne for putrescible waste and \$90 per cubic metre for inert waste. A further increase is scheduled for July 2018.

Table 1. Historical and future scheduled waste levy rates for inert and putrescible waste

Period	Putrescible rate/tonne	Approx. inert rate /tonne	Inert rate/m ³
Current to 31 December 2014	\$28	\$8	\$12
1 January 2015 to 30 June 2016	\$55	\$40	\$60
1 July 2016 to 30 June 2017	\$60	\$50	\$75
1 July 2017 to 30 June 2018	\$65	\$60	\$90
1 July 2018 to 30 June 2019	\$70	\$70	\$105
1 July 2019 onwards	\$70	\$70	\$105

There has been significant improvement in diversion from landfill for construction and demolition waste and commercial and industrial waste since 2011 when levy rates substantially increased. Municipal solid waste sector performance reflects limited change in collection and processing systems and uncertainty in investment as a result of proposed local government amalgamations.

e. The role of different incentives and collection methods in determining the quality and quantity of material collected for recycling

The Waste Strategy supports best practice approaches to waste collection and processing.

The Waste Authority is working to identify performance benchmarks, and to provide incentives to introduce best practice approaches for waste recovery.

The Western Australian Government has implemented a \$20 million Better Bins Kerbside Collection program to provide funding to local governments to encourage the use of a three bin kerbside system for general waste, co-mingled recycling and organic/green waste to support higher resource recovery.

The Waste Authority is currently developing best practice approaches to vergeside and drop off services.

The State Government and the Waste Authority strongly support source separation rather than mixed waste processing as a preferred means to achieving higher recovery. Source separation generates more homogenous waste streams which are easier to recover and represent a higher value to the recycling sector.

The waste levy acts as an incentive to divert waste from landfill. The waste levy has been particularly effective in influencing disposal behaviour in the commercial sector because this sector is most directly and immediately influenced by price signals.

There are a number of reforms proposed to ensure the more effective delivery of the principles and objectives of the waste strategy and *Waste Avoidance and Resource Recovery Act 2007*, including the waste hierarchy as outlined above.

The Western Australian Government has committed to introducing a container deposit scheme (CDS) from early 2019. Objectives of the scheme include litter reduction and improved recycling. The CDS will complement existing recycling programs and provide additional opportunities and incentives for recycling away from home. The scheme's scope, the refund amount and refund mark will be aligned with existing and proposed schemes in other jurisdictions.

The Western Australian Government released a discussion paper on the scheme on 28 August 2017 for an eight week public comment period (www.dwer.wa.gov.au/cds).

f. The destination of material collected for recycling, including the extent of material reprocessing and the stockpiling of collected material

Of the 2.63 million tonnes of waste reported as recycled in 2015-16, 68 per cent (1.78 million tonnes) was reported to have remained in Western Australia, 31 per cent (0.82 million tonnes) was reported to have been exported overseas and one per cent (0.02 million tonnes) was sent interstate for reprocessing.

Materials that are diverted for recycling are not subject to the waste levy. This creates an incentive to stockpile. Stockpiles of recycled Construction and Demolition (C&D) waste increased by a reported 346,000 tonnes between 2014-15 and 2015-16. At the end of June 2016, it was reported that 830,000 tonnes processed C&D materials were stockpiled. An investigation into stockpiling completed in early 2016 found approximately 275,000 cubic metres of material was held in stockpiles at waste recycling facilities (of which about 41% was processed) and approximately 550,000 cubic metres was held in stockpiles at inert landfill facilities (of which about 49% was processed).

As reported in the 2015-16 census of Western Australian local government waste and recycling services, kerbside collection of waste which has been separated for recycling achieves relatively high recovery rates.

In 2015-16, local government kerbside co-mingled recycling services collected 229,000 tonnes of material of which 84 per cent (192,000 tonnes) was reported as recovered. For separated organic waste services, 39,000 tonnes of waste was collected in 2015-16 and 90 per cent (35,000 tonnes) was recovered. These recovery rates compare to a 30 per cent recovery rate across 1.01 million tonnes of waste collected across all local government kerbside services.

g. The current economic conditions in the industry, including the market for material collected for recycling

The Waste Authority has noted the impact of economic conditions, including commodity prices, on the recycling sector. In particular, Western Australia faces challenges due to its distance from recycling markets and the cost of transporting materials; the Chinese Government's stated intention to limit imports of post-consumer recyclable materials (particularly paper, cardboard and plastic); and limited recyclable reprocessing capacity in this state.

Recycling in Western Australia is dominated by three material types which accounted for 88 per cent of recycled material in 2015-16: Construction and Demolition (C&D) materials (48 per cent), metals (22 per cent) and organics (18 per cent).

C&D materials

Stockpiling of C&D material in Western Australia is a result of a weak market for recycled C&D products. This is demonstrated in the *Recycling Activity in Western Australia 2015-16* report findings, with C&D recyclers identifying a lack of demand for recycled C&D products as a major challenge. Markets for recycled C&D products were reported as poor due to low market acceptance and a slowing economy.

One of the end-use markets for recycled C&D is road sub-base and base. There are a number of barriers to the development of this market, including:

- difficulties supplying consistent product in sufficient quantities;
- a lack of product specifications and standards;
- knowledge and information gaps on the relative performance and economic advantages associated with using recycled C&D products; and
- concerns over contaminants (for example asbestos).

The Western Australian Government has provided \$10 million to fund the Recycled Construction Products Program to incentivise the use of recycled C&D products in civil construction projects.

The Western Australian Government is also developing a regulatory framework to allow for the re-use of waste-derived materials which meet environmental and health standards. This will support the diversion of waste from landfill and encourage re-use.

Metals

The *Recycling Activity in Western Australia 2015-16* indicates that 98 per cent of scrap metal collected for recycling in 2015-16 was exported overseas for processing into new products, with the majority sent to South East Asia.

Western Australian metal reprocessors reported that market conditions for all scrap metal types had been volatile and that the market for ferrous scrap metal was suppressed in 2015-16.

According to the Reserve Bank's base metal price index, international metal prices have improved more recently. International prices decreased in 2016 from 2015 levels but have recovered in 2017 to the highest levels seen since 2012. Prices are still well below pre-global financial crisis levels.

Organics

Price information for locally recycled organics products is not readily available. However, organics processors reported to the *Recycling Activity in Western Australia 2015-16* that markets were not strong in 2015-16 due to excessive supply and weak demand. They also noted that contamination of source materials had negative impacts for market demand.

h. The transportation of solid waste across state boundaries

The Western Australian Government believes that waste should be managed (collected, recycled, treated and disposed of) as close to the point of generation as possible to reduce the costs of transport and associated environmental impacts.

Unlike examples cited in the eastern states, general waste is unlikely to be exported in significant volumes across Western Australia's borders due to the state's geography. In Western Australia, the waste levy applies to waste disposed of to landfill in the Perth metropolitan region and metropolitan waste disposed of outside the region.

It is acknowledged that this may provide an incentive to transport waste outside of the metropolitan region to avoid the levy. The Department of Water and Environmental Regulation implements a waste levy compliance program to manage levy evasion and discourage the unnecessary transportation of general waste.

The Western Australian Government is committed to improving the waste levy regime in Western Australia to ensure that it operates to encourage recycling, recovery and diversion of waste from landfill and has commenced a review of waste levy policy.

The Western Australian government recognises that some recyclable materials (such as batteries and fluorescent lights) and some hazardous wastes are transported across state borders to specialised recycling and processing facilities. The government supports this activity where there is an overall environmental benefit in transporting materials cannot be managed locally.

The *Environmental Protection (Controlled Waste) Regulations 2004* (Controlled Waste Regulations) regulate the transport of controlled waste from a production facility through to final disposal. The Controlled Waste Regulations apply anytime a controlled waste is transported on a road in WA, regardless of the waste destination which could include storage, treatment or disposal.

Western Australia is a signatory to a national agreement to regulate the movement of controlled waste between States and Territories¹ and reports on the generation and disposal of controlled waste to meet international reporting obligations under the Basel Convention.

i. The role of the Australian Government in providing a coherent, efficient and environmentally responsible approach to solid waste management, including by facilitating a federal approach

The Western Australian Government recognises the roles of different levels of government in managing waste as established in the Constitution.

Australia's international obligations

The Western Australian Government recognises that the Australian Government is primarily responsible for ensuring that Australia's international obligations (Basel and Stockholm Conventions) are met. The Commonwealth co-ordinates activities such as waste related National Environment Protection Measures and waste data collection and reporting.

Product stewardship and extended producer responsibility

The Western Australian Government supports the use of product stewardship and extended producer responsibility as mechanisms to efficiently and effectively manage certain waste streams.

The Western Australian Government recognises that the Australian Government can drive national product stewardship initiatives under the *Product Stewardship Act 2011*.

The Western Australian Government supports the Australian Government in working constructively with other jurisdictions to develop consistent approaches to managing wastes identified as a national priority.

Harmonisation

The National Waste Policy 2009 identified opportunities for greater harmonisation of waste policy and regulation across Australian jurisdictions. Significant opportunities remain for greater harmonisation to provide more regulatory consistency and certainty to industry, and to reduce red tape.

The Australian Government can play an important role in facilitating a more harmonised approach across Australian jurisdictions to support the more efficient and effective operation of waste and recycling markets across the country.

¹ National Environment Protection (movement of controlled waste between States and Territories) Measure (Controlled Waste NEPM)

Data collection

Data supports evidence-based policies, informed decision making and investment. Reliable data are important to understanding the performance of the waste and recycling industry, measuring progress against targets and monitoring trends.

The Australian Bureau of Statistics' report *Waste management services Australia 2009-10* provided a valuable assessment of the number of businesses or organisations involved in the provision of waste management services including employment levels, income, expenses, the types of activity undertaken, the number of facilities in operation and factors hampering resource recovery. There would be value in the Bureau producing reports such as this on a more regular basis.

In addition, it is recommended that the Australian Bureau of Statistics environmental accounts include the waste sector to promote consistent national data collection standards to support waste policy and management outcomes. This could include provision of existing data collected by states and territories and the waste industry in common data standard.

j. Other related matters

On 12 September 2017, the Western Australian Government announced the ban of lightweight, single-use plastic shopping bags from 1 July 2018. The ban will bring Western Australia into line with South Australia, Tasmania, the Northern Territory, the Australian Capital Territory and Queensland. The ban will aim to be consistent, as far as possible, with plastic bag bans in other Australian States and Territories.

Plastic bags make up a relatively small portion of waste and litter in Western Australia but have significant impacts on marine wildlife and visual amenity . The plastic bag ban has the support of the local government sector, major retailers and the community.