



The Circular Economy





The circular economy has become a key conceptual framework for global organisations seeking a model for sustainable development. These organisations include the International Solid Waste Association (ISWA) and the European Commission. Australian Governments, both federal and state, support a¹ movement towards a circular economy.

In a practical sense, industry understands the 'circular economy' to mean the progressive application of the waste hierarchy.

^{1.} The Fanceson Commission has refereive resources on the circular economic

In Australia, this movement offers a number of opportunities for the waste and recycling industry, including;

The creation of local markets for secondary products

The Council believes that governments at all levels should implement policies to procure recycled products. Important materials include concrete, glass and recovered organics. Further, government can assist in the creation of markets via new product specifications for recycled materials and education² programs.

COUNCIL POSITION

The Council supports;

- The waste hierarchy as the key guiding principle for improving the environmental performance of the waste and recycling industry.
- The use of landfill levy revenue to stimulate markets for recycled products.



Effective Product stewardship

The *Product Stewardship Act 2011*³ establishes a framework to improve recovery of problem wastes.

Products covered under the Act include e-waste, tyres and mercury containing products. The creation of mandatory product stewardship schemes, along with the expansion of the products covered creates an opportunity for higher recycling.

COUNCIL POSITION

For Extended Producer Responsibility (EPR) to operate effectively, the NWRIC submits that schemes must;

- a) Be applied uniformly across jurisdictions, to prevent cross border transport of products/ materials into and out of covered regions.
- b) Be mandatory, enforceable and enforced.
- c) Offer viable income to recyclers that reflect the real costs of recovery, and value in the global market.
- d) Consider the competitive nature of international recycling markets.



Product Stewardship for Oil (PSO)

The <u>Product Stewardship for Oil</u> (PSO) program was introduced by the Commonwealth Government in 2001 to provide incentives to increase used oil recycling. This fee is not a subsidy, but rather a 'user pays' recycling fee, which does not significantly affect the retail price of machine oils.

To date, PSO has been one of the nation's most successful recycling programs. Under the scheme, the volume of used oil being put into recycling processes to produce re-refined oil has grown from zero in 2000 to approximately 80 megalitres in 2011-12. As a result it has almost completely⁴ eliminated oil pollution from used machine lubricating oils in Australia.

COUNCIL POSITION

The Council see the PSO scheme as a leading model for extended producer responsibility, and encourage all governments to use the same regulatory framework to support the recovery of other products on the Commonwealth's priority list.⁵

⁴ Third independent review of the Product Stewardship (Oil) Act 2000. Aither, 2013.

⁵ The priority list is available from the Commonwealth Department of the Environment.



Improved design for recycling

Complex product design impedes recycling. To create a circular economy, the Council offers that products must be designed with recycling in mind.

COUNCIL POSITION

The Council supports improved design to make products more recyclable, and new source separation initiatives to improve recycling.



E-waste recovery and landfill bans

South Australia put in place bans on e-waste to landfill under the <u>Environment Protection</u> (<u>Waste to Resources</u>) <u>Policy 2010.</u> In Victoria, the Andrews Government proposed e-waste from landfill bans in 2015, with work still in progress to implement these bans.

In the absence of end markets for recycled product and high quality recovery infrastructure - the Council is concerned that landfill bans may result in stockpiling, and/or an increase in sub-standard processing. However, with the right market conditions in place, the Council supports banning e-waste from landfill (when not in mixed loads).

- For e-waste recovery to expand the NWRIC submits that programs must be created which provide economically viable collection and processing markets.
- 2. Under these conditions, the Council supports banning e-waste from landfill.

People and the Environment



The protection of workers is a critical imperative for waste management companies. This responsibility also extends to public safety. Initiatives that will mitigate risk in the waste and recycling industry include;

Shared liability for hazards

The pursuit of high safety standards must extend beyond the boundaries of the waste and recycling industry. Waste generators also have a role to play. For example, toxic products such as aerosol cans have caused injury to workers when processed at waste management facilities. This problem can be mitigated via shared liability, where both waste processors and generators are responsible for the hazards created in waste streams.

In Australia, asbestos poses a unique and lingering challenge. Based on existing evidence, it is predicted up to 25,000 Australians will die from mesothelioma over the next 40 years.⁶ Some of these deaths will be in the waste industry. Therefore, it is essential that asbestos be managed in a manner which minimises health risks, and ensures that recyclable material is not contaminated.

Reduced stockpiling for public safety

Stockpiling combustible material creates a fire risk, threatening public safety. Further, fires often result in extensive environmental damage. Therefore, it is critical that regulatory and licensing regimes actively discourage the long-term stockpiling of wastes, especially if they are combustible. Mass balance reporting and upfront levy liabilities can help to reduce unnecessary stockpiling.



Illegal and substandard operations

Historically, the industry has been hindered by illegal or semi-legal operators. While great progress has been made in legitimising and professionalising the industry, these fringe activities are yet to be extinguished fully. The presence of illegal (or poor quality) waste processing facilities creates a risk to public and environmental health. To protect and raise standards, ongoing enforcement of regulatory and licensing regimes is needed by State authorities.

- The Council supports initiatives that mitigate the risks associated with the collection, transport, recovery and disposal of waste materials. Initiatives which will reduce these risks include shared liability for hazards in waste streams and better regulation to reduce stockpiling.
- Further, the Council supports effective enforcement to ensure that standards are maintained, and raised, across the industry.

3 Fair Markets





The Council believes that open, transparent and competitive markets are the key to further developing Australia's waste and recycling capacity. Across Australia, local governments have a significant commercial footprint in waste management.

In most cases, local government work harmoniously with regional and national businesses to effectively administer and operate waste and recycling services. This approach has resulted in the best value for consumers, as it combines transparent tendering with market innovation.

However, in some instances local government have used their regional power to monopolise local waste and recycling services, particularly in domestic and commercial collection markets. This practise has led to increased costs and stifled innovation in some regions.



Sub-professional facilities management

Professional management is an essential ingredient for effective modern waste management and recycling services. In the past, some critical failures have been attributed to sub-professional management by local government, including fires and gas leaks.

Full cost pricing

The failure of some local governments to implement 'full cost pricing' at landfills undermines environmental protection and safety standards. This practise also creates unfunded liabilities for future generations.

- The Council believes the most effective method to develop Australia's waste and recycling capacity is via a fair and open market. This means Government tenders should be offered in a manner which maximises competition and transparency.
- All waste and recycling infrastructure should be professionally run with full cost pricing.



Free and fair markets

In some jurisdictions, local government have proposed laws which allow for commercial waste charges to be aggregated or mandated on local businesses. The Council believe this mandated, 'one size fits all' approach to waste collection stymies innovation in the marketplace. Further, many businesses have unique waste collection needs. A competitive market allows companies to tailor their services to the needs of individual businesses.

COUNCIL POSITION

Local Governments should not attempt to mandate or aggregate commercial waste collection services in a manner which reduces market choice or competition.



Hypothecation of landfill levies revenue

Across Australia, landfill levies raise almost \$1 billion per year. As levies are not 'taxes', some or all of the revenue they create should be returned to industry. For the expenditure of landfill levy revenue, the Council supports initiatives which benefit all industry stakeholders equally.

COUNCIL POSITION

Levy income should be utilised to assist in the development of the circular economy, via support for:

- · Uniform regulatory enforcement,
- Waste and recycling education,
- Better, long term infrastructure planning, and
- Initiatives which create viable long term markets for recycled products.



Hypothecation - transparency and accountability

Historically, State Governments have used landfill levy revenue to engage in extensive grants programs, often targeting local government infrastructure. Industry has concerns about this approach.

Firstly, it creates an unequal market, with governments subsidising individual organisations, and in some cases subsidising local government to compete with private industry. Secondly, where levy revenue is spent to support infrastructure and/or innovation, the Council believes measures are necessary to ensure transparency and accountability.

- Where levy revenue is given out to support infrastructure, the Council believes funds should be given out as loans rather than grants.
- This process should be transparent and accountable

Harmonisation





Waste and recycling enterprises are subject to regulation by both local and state level authorities, although they are also subject to some Commonwealth regulations, such as the Basel Convention.⁸ These regulations vary enormously across jurisdictions, and this variation produces no economic, environmental or social benefit. This variation is also adding substantial business costs to the sector.

The Council supports the establishment of a simple, integrated national system for the identification, classification, treatment, disposal and monitoring of waste materials.

While there are many priorities for harmonisation, landfill levies create the most significant market distortions. Landfill levies not only vary in price, but also in the mechanism⁹ by which they are applied, along with the definition of "leviable waste".¹⁰

In addition to landfill levies, a key barrier to a circular economy are the regulatory hurdles impeding the establishment of new waste and recycling facilities. These include planning regulations, development applications, EIS and licensing rules.

These barriers can be overcome by the introduction of simpler and faster regulatory hurdles that do not compromise safety or environmental standards. Further, the Council calls for improved state planning for waste management and recycling infrastructure. This planning will simplify and fast track development processes.

⁸ The Basel Convention

⁹ For example, NSW has recently introduced laws to make all waste management facilities liable for the levies, including MRFs and transfer stations. In other States, landfill levies are applied at the landfill gate.

¹⁰ As levies become more complex, fraud becomes more available. For example, differential levies on different waste streams (such as C&D and C&I) create an incentive to mis-label waste. Such behaviour harms companies which play by the rules.



Landfill Levies

Regulatory variation between states and territories creates a cost to business, without creating environmental or social benefit. Some regulations create perverse outcomes, such as the unnecessary long distance haulage of wastes resulting from the significant variation in State landfill levies.

COUNCIL POSITION

The Council believes State Governments should collaborate on an immediate solution to prevent the unnecessary interstate transport of waste materials. Potential solutions could include the harmonisation of landfill levies across Australia, or legal provision to make levy liability 'portable' across State borders.

Recycling



Across diverse material streams, and despite substantial technical and commercial challenges, Australia's recycling rates are increasing. To maintain this momentum, it is critical that governments ensure that new and existing regulations do not undermine investments and innovation in recycling.

Common instruments used to promote resource recovery include landfill levies, landfill bans, the promotion of source separation, product stewardship schemes and direct subsidies. However, the government policy with the most significant effect on recycling rates is landfill levies. A careful balance on landfill levies is necessary to effectively support recycling.¹¹

Government procurement policies that preference recycled materials is another key action needed to support recycling.



Export markets

Where commodities are exported onto an international market, domestic companies must compete with international competitors in simpler and lower cost regulatory environments. Therefore, domestic regulators need to consider how new and existing regulations will affect the international competitiveness of domestic businesses.

- The Council believes that Australia's resource recovery rate can be improved through the creation of local markets, investment in technology and preferential procurement by government agencies.
- Recycled products should be considered objectively in procurement decisions.
- Also key to this transformation is private investment into recycling infrastructure.
 Critical to these large capital investments are protected sites and a stable regulatory environment.
- Domestic regulations need to address the international recycling market.

Emissions





Australian environmental standards are increasing quickly. Over the last two decades, industry has made a strong contribution to reducing emissions - through landfill gas utilisation, anaerobic digestion and the manufacture of alternative fuels. Further, a large environmental benefit is created from the recovery of the embodied energy in recycled products.¹²

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Greenhouse gas emissions

The Australian waste industry (primarily landfill) has been subject to a number of carbon tax schemes. These include the Carbon Pollution Reduction Scheme (2010) and the Clean Energy Futures Package (2013).

Currently, landfill gas and resource recovery activities are one of the largest contributors to the Emissions Reduction Fund,¹³ Australia's leading national climate change program. Over the last two decades, Australia's waste and resource recovery industry has reduced its overall greenhouse gas emissions, despite substantial growth in waste volumes.

Between 1990 and 2008, net emissions from the waste sector declined by 20%. The waste sector's contribution to Australia's total greenhouse inventory has also declined, from 4.3% in 1990 to 2.6% in 2008. This progress makes the industry one of a very small number to achieve a lasting 'decoupling' between greenhouse emissions and economic growth.

The Emissions Reduction Fund

The Emissions Reduction Funds (ERF) was created out of the former Carbon Farming Initiative. The design of the ERF was outlined in the <u>Emissions Reduction Fund White</u> <u>Paper</u>, released in April 2014.

The scheme has now been operating for more than two years. ERF regulators undertake quarterly auctions, in which the government purchases carbon abatement, in a similar manner to the Commonwealth water buyback scheme. The objective of the ERF is to help achieve Australia's 2020 emissions reduction target of 5% below 2000 levels by 2020. The Government has provided \$2.55 billion to establish the ERF, with further funding to be considered in future budgets.

¹³ The Emissions Reduction Fund Project Register.

¹⁴ Department of Climate Change and Energy Efficiency, National Greenhouse Gas Inventory, May 2010.



The ERF has been a very successful, and Australia's waste plus recycling industry support the program and its continuation. However, certain elements of the program, such as the Safeguard Mechanism, fit poorly with the waste industry. Due to the long lag between waste being deposited in landfills, and the eventual greenhouse emissions, the Safeguard Mechanism is an inappropriate tool for regulating landfills. The Council's positions in regard to the ERF are summarised below.

- The Emissions Reduction Fund program should be extended beyond the current project terms.
- The 'Safeguard Mechanism' should not apply to landfills.
- The Council supports further diversion of organic waste from landfill. It calls on the Commonwealth to develop an 'emissions reduction method' for improving soil carbon via the application of compost.



Dust, odour & noise

Historically, regulations covering odour, dust and noise have not been applied uniformly, and were not always based on sound data. Best practise standards and a commitment to continuous improvement will help to reduce dust, odour and noise emissions from waste and recycling facilities. However, the nature of recycling means some emissions are unavoidable.

For this reason, it is essential that buffers are established around facilities, and that these are protected from residential encroachment through stringent planning controls.

- Regulations and standards covering emissions should be based on sound science and be practical to implement.
- Communities should be protected from dust and noise emissions via the establishment of appropriate buffers around waste and recycling facilities. To maintain this protection, these buffers should not be encroached by sensitive development for the life of the facility.

Landfill Levies



Landfill levies vary greatly across Australia, and these variations create market distortions.

Beyond price disparity, levies vary in the mechanism of their application and the definition of leviable waste. This creates a number of undesirable consequences, including;

- A. The unnecessary movement of waste between jurisdictions to avoid levy costs. This issue has manifested most seriously in the transport of waste between metro Sydney and south east Queensland. However, this behaviour occurs everywhere there are significant price distortions.
- B. Undermining the ability of private investors to create 'bankable' recycling infrastructure proposals, due to an uncertain regulatory environment.
- C. High administrative costs, particularly for the application of complex schemes.
- D. The potential for fraud created by mislabelling waste.

Finally, very high levies can undermine steel recycling. This is because the levy on the disposal of recycling residuals reduces the competitiveness of materials sold into the international market.



COUNCIL POSITION

The Council believes the national harmonisation of landfill levies is essential in order to prevent unnecessary waste transportation (market distortions) and to provide regulatory certainty for investors.

Where landfill levies are applied; they should be stable over the long term, simplified to reduce the potential for fraud and not applied in a manner which undermines the recovery of materials destined for international export.

For clarity, the Council's support for levies is based on the following parameters

- If implemented, landfill levies should be part of a clearly articulated recycling strategy and be subject to regular performance review.
- Waste levies and their governing regulations should be put in place for at least five years, and if the regulations are to change, industry should be given a minimum of 12 months' notice.
- Landfill levies should be simplified as much as possible, to minimize administration costs and reduce the risk of fraud. This includes the reporting, administration and the payment of levies.
- 4. Waste levies should not be differentiated by waste type (other than for hazardous waste where identification can be supported by accompanying documentation) or waste origin.



- Waste levies should be consistent across the largest jurisdiction possible, and ideally be applied in a manner that minimises 'border' market distortions.
- Waste levies should be reduced by weight for all waste that is later genuinely recycled.¹⁵
- Waste levies should not be applied in a manner which makes recycling uneconomical or less economical.¹⁶
- If a levy reduction on recycling residual is applied, transparent reporting should be put in place and overviewed by the State levy administrator.
- Landfill levies should not be applied on waste volumes subject to bad debts.

Future Thinking



In a similar manner to water and sewerage, waste and recycling is an essential service. The siting, planning and development of waste and recycling facilities requires substantial investment. For this reason, effective planning is a major challenge for the industry - particularly for energy recovery, landfills and composting facilities servicing larger cities.

In some cases, residential encroachment has resulted in facilities being closed prematurely. These poor planning decisions have reduced the capacity of the industry to improve resource recovery - while undermining the confidence of private investors.

- Governments should recognise waste and recycling as a utility essential for the protection of community and ecosystem health. This means ensuring processing and landfill sites are protected by appropriate buffers distances for their entire operational lifetime.
- 2. The Council believes that governments should create a regulatory environment that fosters innovation, investment, skills development and environmental protection. In such an environment, private investors will enter the market and move Australia towards a circular economy



Planning - long term certainty

In order to improve Australia's waste management and resource recovery infrastructure, long term certainty in regard to planning is required. This means the protection of waste processing and landfill sites for the lifetime of the infrastructure. Planning and development applications also need to have the flexibility to allow for innovation consistent with the waste hierarchy.

- Waste infrastructure plans should be developed for each state and each state capital, on a both a medium term (10 year) and long term (30 year) basis. These plans should be recognised by all levels of Government, including Local Government.
- These plans should ensure appropriate and timely infrastructure development in keeping with increases in waste generation.
- These plans should recognise the lead time needed to develop new processing and disposal capacity.



A vision for industry

Over the long term, industry believes that its broader community profile needs to be raised. This includes ensuring the industry is recognised by the community and government as an essential utility.

According to research commissioned by the Victorian Government, waste management consistently rates as one of the highest performing service areas in regard to public satisfaction.¹⁷

However, the public health and environmental benefits of waste management and recycling services are sometimes poorly understood by the broader community and government regulators. Therefore, the Council believes that government investment into community waste education should continue and expand.

COUNCIL POSITION

Council supports the national harmonisation of the laws and regulations governing waste management and resource recovery across Australia. In order to create a stable and cohesive environment for private investment the Council believes there is need for continuous dialogue between the industry and regulators.





