



4 Apr 2024

Senate Standing Committees on Environment and Communications
via ec.sen@aph.gov.au

To the Senate Standing Committee,

Re: Inquiry into waste reduction and recycling policies

Veolia is a global leader in water, waste and energy management. The group has close to 220,000 employees worldwide, including 6,500 employees in Australia and New Zealand. Our solutions contribute to the sustainable development of communities and industries. Through our three complementary business activities, Veolia helps to develop access to resources, to preserve available resources and to replenish them.

This submission puts to the committee the biggest opportunities for driving Australia towards a circular economy – and the risks that threaten this ambition. It reflects learnings from Veolia’s operations around the world, and the impacts of circular economy policies, in terms of what works, what doesn’t, and what’s easiest to deploy.

As the largest environmental services provider in the country, we would welcome any opportunity to help Australia fast-track progress towards a circular economy.

Recycling export regulations

In 2021-22, Australia exported about 4.41 Mt of recovered materials with a value of \$4.36 billion,¹ playing an essential role in the world’s circular economy.

Global trade of quality recyclates creates buoyancy and security for end markets. Exported recyclates sold to accredited and legitimate overseas recyclers return to Australian shores as packaging for imported foods and other goods – showing the circular economy in action. Without that export capacity, the Australian recyclates market loses buoyancy, declines in value, and most devastatingly sees high-quality recycling commodities go to landfill.

The commencement of the plastics ban in July 2022 caused major disruptions to the recycling industry with months of unsold inventory including reports across the industry of plastic stockpiles, and price drops of up to 84% as local plastic processors took advantage of the sudden absence of global competition.

With the upcoming implementation of the paper and cardboard ban, similar impacts are expected on the paper and cardboard recycling industry which has otherwise operated

¹ [Australian exports of waste and recovered materials in 2021-22](#) (DCCEEW)



as a successful circular economy for decades. The paper and cardboard ban will not demonstrate social or environmental benefits to Australia or Australians. Instead, it will:

- **increase costs** to households and businesses during a cost-of-living crisis, to the tune of **\$257 million annually**, by interfering with market competition and driving increased recovery costs. This is essentially a recycling tax on households, paid through rates, burdening Australians during already challenging times.
- **be worse for the environment** by leading to more stockpiling, landfilling and higher greenhouse gas emissions where export is no longer a viable commercial option. It will make it even harder to meet Australia's national waste plan targets.
- **not build Australian recycling processing capacity**. There are no import regulations so the ban merely drives packagers to lower-priced imported products. With no plans to build a paper mill in Western Australia, paper products there will have no home.

The federal government's 2020 Waste Export Ban Decision Regulation Impact Statement concluded there was **no public interest in including paper and cardboard as part of any export restriction** based on a net societal loss of \$257 million to Australia.²

In its essence, a tax is being imposed on recycling activities, thereby discouraging a practice we should be promoting for both economic and environmental benefits. This policy risks significantly reducing or even eliminating recycling efforts, which would be detrimental to Australia's economy and natural environment.

Progress on circular economy deliverables

Australia is highly unlikely to meet its three most important national waste targets with 2030 deadlines:³

- Reduce total waste generated by 10% per person by 2030
- Recover 80% of all waste by 2030
- Halve the amount of organic waste sent to landfill by 2030

Australia's landfill capacity is running out in parts of NSW, Victoria, and Queensland by 2030. NSW alone creates around one-third of Australia's total waste with volumes forecast to grow from 21 Mt in 2021 to nearly 37 Mt by 2041.⁴

² Economic Cost of Australia's Paper and Cardboard Waste Export Restrictions (National Waste and Recycling Industry Council, October 2022)

³ DCCEEW: [National Waste Policy](#)

⁴ [NSW State of Environment Report 2021](#)



Each year, billions of dollars of Australian resources are being lost to landfills. CSIRO estimates include:⁵

- **Plastic:** Australia loses \$419 million every year by not recycling PET and HDPE plastics.
- **Paper:** cost savings from sending paper fibre to landfill is around \$70 per tonne. With 1,642 kilotonnes sent to landfill each year, that's \$115 million.
- **Lithium:** sending lithium from batteries to landfill results in a lost economic opportunity of up to \$2.5 billion by 2036.

The failure to recover valuable used lithium batteries is particularly unfortunate given the fire risk these items present to facilities, trucks and workers. Bold action is urgently needed. The following policy recommendations will give Australia a passing shot at achieving circular economy deliverables by 2030:

1: Reform landfill levies

Waste or landfill levies can act as a powerful regulatory tool to improve recycling and recovery rates. However, regional and inter-state variations in levy rates have led to a levy avoidance industry, where waste is improperly disposed of in areas with low or no levies. This results in increased stockpiling and illegal dumping and greenhouse gas emissions rise when waste is transported unnecessarily long distances.

The effectiveness of a landfill levy also depends on how the generated funds are allocated. A 2019 review by National Waste and Recycling Industry Council (NWRIC) found the portion of levy funds allocated to waste and recycling activities ranged from as low as 20% in NSW to 77% in Queensland.⁶

When states allocate a low percentage of levy funds to waste and recycling activities, it diminishes the intended goal of improving waste management and resource recovery. But when levies are invested in innovative technologies and infrastructure, such as Energy from Waste facilities, Australia builds its resource recovery capacity.

2: Build Energy from Waste (EfW)

Federal government should lead on prioritising EfW facilities across the nation, including at the national environment ministers meetings. Globally, EfW facilities recover valuable energy from material that would otherwise be disposed of in landfills. By converting waste into heat and electricity through combustion, as well as enabling recycling of metals and reuse of aggregates, EfW facilities

⁵ [CSIRO'S Circular Economy Roadmap charts path to triple job creation](#)

⁶ [NWRIC White Paper – Review of Waste Levies in Australia](#)



manage waste immediately rather than leaving it in landfills for future generations to manage.

Modelling commissioned by Veolia⁷ shows that to meet the national waste plan target of an 80% average recovery rate from all waste streams by 2030, at least 12 gasification, pyrolysis and energy recovery facilities with a capacity of 250,000 tons will be required, generating 600 jobs.

As of April 2024, there are no EfW facilities in operation in Australia, although several projects are in the works. This year, Veolia will be responsible for the operation and maintenance of Australia's first EfW facilities: the Kwinana Waste to Energy Project and East Rockingham Resource Recovery Facility, in WA. Our Woodlawn Advanced Energy Recovery Centre (NSW) and Maryvale Energy from Waste Facility (Vic) project proposals are also progressing. Veolia successfully operates over 100 EfW facilities globally.

Governments must expedite the approval process for EfW projects through a cohesive technology policy to meet the national waste target of recovering 80% of all waste by 2030. Additionally, industry leaders should play a greater role in the Circular Economy Ministerial Advisory Group to drive progress and ensure a coordinated approach.

Woodlawn Advanced Energy Recovery Centre

In NSW, Veolia is proposing to develop and operate the [Woodlawn ARC](#), an EfW facility located at Veolia's existing Woodlawn Eco Precinct on Collector Road in Tarago. The project will deliver on the NSW Government's NSW Waste and Sustainable Materials Strategy 2041 which includes building large-scale energy recovery facilities.

However, delays in approval currently threaten the development of this project.

Building on Veolia's existing waste management activities at the precinct, the new facility will be an important part of our continued investment in regional NSW, **creating over 340 jobs including during construction:**

- The ARC will **divert 380,000 tonnes of waste from landfill** per year
- This waste will be turned into **30 MW of electricity generation**, enough

⁷ MRA Consulting Group: Australian Waste and Resource Recovery Industry & the Circular Economy (2022)



to power 40,000 homes a year

- The **74,000 tonnes of avoided greenhouse gas emissions**, is equivalent to removing 32,400 cars from the road
- In addition, **over 20% of the recovered waste will be reused or recycled.**

3: Accelerate food and organics (FOGO) recycling

The federal government should take a national leadership position in encouraging slower states to implement FOGO mandates. Currently, only NSW and Vic have 2030 FOGO mandates. Mandating the separation and collection of organic waste at its source across the nation, with strong enforcement of regulations, will reduce waste going to landfills.

These mandates will also support reducing the waste sector's 10 Mt CO₂-e of annual emissions, which accounts for nearly 3% of Australia's net inventory emissions.⁸ These emissions are predominantly methane generated from anaerobic decomposition of organic matter, which is 84-87 times more potent than CO₂ over a 20-year timeframe.

The pace of investment in FOGO infrastructure has also been inconsistent amongst the states. With the exceptions of SA and ACT, no other states are capable of meeting a 95% FOGO recycling rate given current capacities.⁹ Investment must be accelerated, along with commercial incentives for off-takers, to replace existing fertiliser streams. Facilities such as anaerobic digestion can turn food waste into valuable resources, including biogas and a nutrient-rich by-product known as digestate, supporting both a circular economy and national energy security.

Progress mandated product stewardship schemes

In 2020-21, 6.74 million tonnes of packaging was placed on the market in Australia, nearly half of which ended up in landfills.¹⁰

To address unsustainable packaging practices, the Australian government accredited a product stewardship scheme administered by the Australian Packaging Covenant Organisation (APCO) until 2025. However, the volume of packaging materials in Australia has continued to rise, consistently surpassing population growth rates. APCO's

⁸ NWRIC: [GHG Emissions in Australia's Waste and Recycling Sector](#)

⁹ AORA: [Australian Organics Recycling Industry Capacity Assessment: 2022-23](#)

¹⁰ APCO: [APCO Review of the 2025 National Packaging Targets](#)



April 2023 progress update revealed that the 2025 National Packaging Targets would not be met, with two out of four targets showing minimal improvement.

Veolia welcomes several recent actions by federal government such as the new mandatory packaging rules.¹¹ However, these rules alone won't drive the change needed to meet Australia's ambitious waste plan targets. Mandatory standards may set a floor but a strong market signal is also needed to create market conditions that incentivise, reward and ultimately deliver higher and higher recovery and recycling rates.

The federal government should consider variable fees set to incentivise recyclability and recycled content use in packaging production. A critical but often overlooked aspect of packaging circularity is the importance of strong, self-sustaining end markets for recycled content. Incentivising use of recycled content in products creates demand for recycling commodities, which in turn incentivises other actors in the supply chain to establish collection, sorting and reprocessing recycling infrastructure.

We note that the House of Representatives Standing Committee on Industry, Science and Resources has commenced an inquiry into Food and Beverage Manufacturing in Australia which includes approaches to circular economy, waste reduction and decarbonising, including packaging and food waste, in its terms of reference.

Thank you again for the opportunity to provide feedback on this important issue. We would warmly welcome the opportunity to meet with the committee and answer any questions or provide clarification on our submission. Please be in touch with Monica Tan, Veolia's Policy Advisor at

Yours faithfully,

RICHARD KIRKMAN
Chief Executive Officer & Managing Director

¹¹ DCCEEW: [Reforming packaging regulation](#)



About Richard Kirkman

Dr Richard Kirkman has been CEO of Veolia Australia and New Zealand since 2020, having worked in energy and waste management for over 30 years. He is an engineer and a Board Member of the National Waste & Recycling Industry Council. Richard's last post was to build waste infrastructure in the UK, where he completed a PhD on *Infrastructure for the Circular Economy: The Role of Policy in System Change*, at Imperial College London. In the UK he was a founding member of The Department for Environment, Food and Rural Affairs (DEFRA) Council for Sustainable Business; a member of Board of the UK Plastics Pact; and Commissioner for the Green Innovation Policy Commission.