

Opportunities in the circular economy

Interim report

7 April 2025

Australian Government Productivity Commission

Inquiry into opportunities in the circular economy

Via online portal: <https://www.pc.gov.au/inquiries/current/circular-economy/make-submission#lodge>

Re: Opportunities in the circular economy: Interim report

Summary: To achieve a circular economy, we need to position our regulatory system to encourage this business model, incentivise it, and make it the best financial option. This means co-ordinating landfill levies, waste policy frameworks and mandatory producer responsibility schemes across geographies, as products, services and trade are ultimately global. Australia is in a good starting position to replicate and adapt global best practice in Europe and other overseas jurisdictions to ensure Australia reaps the productivity gains provided by a circular economy.

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. Through our three complementary business activities, Veolia helps to develop access to resources, to preserve available resources, and to replenish them. In line with our goal of Ecological Transformation, our solutions contribute to the sustainable development of communities and industries.

Veolia supports the federal government's desire to reform waste and resource recovery in Australia and turbocharge Australia's transition to a circular economy. As evidenced by the recent National Waste and Resource Recovery Report¹, we agree with the Commission's interim findings that, despite recent efforts, Australia's progress towards a more circular economy has been slow. Ambitious incentives and regulatory instruments are required if Australia is to meet national waste targets and circular economy goals.

Veolia and many other large companies are poised to invest in Australia's sustainable future, with Veolia's 2024-2027 'GreenUp' strategy particularly targeted towards significantly increasing

¹ Blue Environment for the Australian Government DCCEEW. (2025). National waste and resource recovery report 2024. <https://www.dcceew.gov.au/sites/default/files/documents/national-waste-and-resource-recovery-report-2024.pdf>.

investment in Australia's circular economy. With the right policies in place - including a harmonised higher landfill levy across the states, product stewardship, adoption of energy from waste (EfW) and streamlined and timely approvals processes across government departments - Veolia believes Australia can achieve its 2030 waste targets and see the sustainable impacts of those investments amplified into the future.

However, if private sector investment like ours is going to have a meaningful impact, there needs to be some form of government support at scale, as there has been, for example, for renewable energy. In summary, we believe that the following two policy levers, in combination, are the most effective way to promote circular economy outcomes and should be prioritised:

- higher and nationally consistent landfill levies, to incentivise investment in recycling and resource recovery and reduce levy avoidance; and
- economy-wide product stewardship legislation, to ensure products have a viable end-of-life recovery route that will see materials reused, repaired, recycled and not sent to landfill.

Please find below our response to relevant questions in the Commission's interim report.

Reform direction 5.2: Recognising the benefits of biogas in carbon reporting

Veolia aims to maximise biogas recovery in the form of biomethane, and to increase global production including in Australia. We believe that bioenergy should be derived from waste sources, for example food and garden waste and wastewater sludge, in accordance with the waste hierarchy and to prevent feedstock competition with essential food production.

Nationally recognised certificates for biogas should be fully tradable and subject to a market-based accounting approach under the National Greenhouse and Energy Reporting (NGER) scheme to allow emissions reduction benefits to flow to the buyer of the biogas where the gas is supplied via shared infrastructure.

Whilst Veolia supports recognition of biogas from anaerobic digestion in carbon schemes, a much more significant and immediate issue is that of ensuring optimal and equitable treatment of carbon emissions from landfills. The largest landfills in Australia have performed best in capturing and reducing methane emissions, via capturing landfill gas for flaring and/or conversion to electricity. As an example, together the largest landfills only make up 3% of the total landfill sector emissions, while accepting 17% of the country's waste. These large landfills will be subjected to the Safeguard Mechanism and will incur costs from their carbon emissions, while smaller landfills are excluded altogether. The perverse outcome is that the gate fees at these large landfills will likely increase to meet the costs of carbon credits, while smaller landfills with poorer gas capture efficiency (which produce 97% of emissions) will not have to pay for those emissions. The government needs to set a

level playing field by applying a price on carbon emissions that is the same across all landfills regardless of size.

Reform direction 5.3: Reforming regulations to support the recovery of value from organic waste

Veolia believes that mandating the separation and collection of organic waste at its source across the nation, with gradual enforcement of regulations where infrastructure additions by industry are required, will reduce waste disposed in landfills and significantly contribute to circular economy outcomes. Organics recovery can be supported by increasing and harmonising landfill levies, which act as a powerful regulatory tool to improve recycling and recovery rates. Currently, waste levies remain too low and are inconsistently applied across Australia's states and territories.

Reform direction 8.2: Establish the foundations of a robust end-of-life electric vehicle battery industry

Veolia is a leader in electric vehicle battery recycling in Europe. This industry is underpinned by European legislation mandating inclusion of recycled raw materials in the production of new batteries:

- 2025: mandatory declaration of the percentage of recycled content
- 2031: 16% for cobalt, 6% for lithium and nickel
- 2036: 26% for cobalt, 12% for lithium and 15% for nickel.

European institutions also aim to define how efficient the recycling process is, and therefore the yield from the processes used, with new mandatory targets:

- 2027: 90% for cobalt, copper and nickel, 50% for lithium
- 2031: 95% for cobalt, copper and nickel, 80% for lithium

EVs are relatively novel in Australia, and as a result, end of life batteries are not currently seen in sufficient volumes to warrant a large-scale recycling facility.

Batteries are likely to be managed in the first instance by OEM providers and as a result, Veolia and other recyclers will have to work with OEMs to provide a reuse or recycling service. It can be anticipated that undamaged batteries that have become unsuitable for use in vehicles will find a second life in static battery applications prior to making their way to recycling facilities. Given the expectation that batteries have a life of more than 10 years in vehicles, and a similar lifespan in static applications, the batteries in current use may not enter the recycling stream for twenty or more years.

Re-use of cells and higher-order recycling outcomes should be prioritised before 'black mass' recycling is undertaken.

To support any overarching scheme implemented by the Australian Government, accurate data on vehicle numbers and the fate of batteries is required, so that industry can ramp up to meet demand when sufficient volumes are available.

Reform direction 10.1: Governance arrangements to harmonise regulations that pose barriers to circularity

We believe it is unlikely that a new Federal institutional body would provide a timely solution to harmonising regulations that pose barriers to circularity. Prioritising harmonisation efforts in the existing forums (Heads of EPA/Environment Departments and Environment Ministers Meetings) is likely to deliver faster results.

We reiterate that higher, and nationally consistent, landfill levies, combined with product stewardship obligations, represent the most effective way to incentivise the reduction, reuse, repair and recycling activities that underpin a circular economy.

As discussed in our previous submission, even with a maximised circular economy, some non-recyclable residual wastes will remain and require sustainable best-practice solutions. Energy from Waste (EfW) facilities support the circular economy through a shift up the waste hierarchy, by converting waste into heat and electricity through combustion, as well as enabling recycling of metals and reuse of aggregates. However, the issue of the suitability of air emission standards remains unresolved, including inconsistencies across states, representing a significant impediment to timely implementation of EfW. The European Union (EU) has developed, over decades, the world's best practice air emission standards for EfW, and these have proven to be achievable in the operation of modern EfW facilities. Updating Australian policy settings to align with EU best practice will provide the necessary confidence for major investments in this critical waste infrastructure.

Reform direction 10.4: Improving investor confidence in the circular economy: insurance issues

Material Recovery Facilities (MRFs), Mechanical-Biological Treatment (MBT) facilities, Energy from Waste (EfW) facilities and electronic waste recycling facilities face barriers in gaining insurance, primarily due to fire risk from householders incorrectly disposing lithium-ion batteries, or appliances with embedded batteries, in kerbside bins. These facilities are underwritten only by a handful of international Insurers including Lloyds of London, and premiums are extremely expensive, with high deductibles.

Factors that affect insurance availability for waste management facilities include:

- Adequacy of fire prevention and protection systems;
- Combustibility of building material of the facilities;
- The level of engineering controls and loss prevention practices of facility operators;
- An organisation's ability to finance insurance premiums;
- An organisation's ability to structure Captive Insurance strategies.

Other issues: Packaging reform

The interim report cites 33kg per person per year disposal of textiles as a factor for the inclusion of textiles in the priority list of materials. Whilst Veolia supports efforts to reduce textile disposal, the amount of packaging disposed is much larger, at 117 kg per person per year, primarily plastic and paper/paperboard².

In the interim report, the Commission notes that Australian, state and territory Environment Ministers have agreed the need to reform packaging regulation, and that many submissions received to this circular economy inquiry argued a mandatory scheme would facilitate more equitable cost sharing for collecting, sorting and recovering packaging across industry, and provide additional funding for measures such as improving recycling infrastructure or educating households on waste sorting behaviours.

Veolia reiterates our support for a mandatory national product stewardship scheme for packaging. This is an important contributor to circular economy outcomes, as it ensures products can be recycled, repaired or reused and provides incentives that make repairing, reusing and recycling a more affordable and realistic option than disposal.

Thank you for the opportunity to provide feedback on the transition to a circular economy. If you require further information, please contact Miriam Cumming, Veolia's Policy Advisor

Yours faithfully,

RICHARD KIRKMAN

Chief Executive Officer & Managing Director

² APCO (2024). *APCO Australian Packaging Consumption and Recovery Data 2022-23*.
<https://apco.org.au/news/20Y0I00000HTRcYMAX>.

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 Australian Resources Recovery Council. In Richard's previous position at Veolia UK, he oversaw major waste infrastructure development and 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.

