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To whom it may concern

Household Waste and Recycling service standard

On behalf of the Australian Council of Recycling (ACOR), we welcome this opportunity to comment on DEECA's proposed Household Waste and Recycling service standard.

ACOR is the peak industry body for the resource recovery, recycling, and remanufacturing sector in Australia. Our membership is represented across the recycling value chain, and includes leading organisations in advanced chemical recycling processes, CDS operations, kerbside recycling, recovered metal, glass, plastic, paper, organic, tyre, textile, oil and e-product reprocessing and remanufacturing, and construction and demolition recovery. Our mission is to lead the transition to a circular economy through the recycling supply chain.

1 Overview

Recycling is an integral gear within the circular economy, delivering significant social, economic and environmental value. The Australian recycling industry contributes almost \$19 billion in economic value, while delivering environmental benefits such as resource efficiency and diversion of material from landfill.

One job is supported for every 431 tonnes of material recycled in Australia. The industry operates across our homes, businesses, factories and construction sites. It collects, sorts and reprocesses material, and makes new products with recycled content, creating more jobs for Australians. The recycling sector is poised to deliver broader economic, environmental and social benefit; however, current policy and regulatory settings must be addressed to realise this potential.

The Australian Government's move to enact mandatory packaging regulation is a welcome launching point for broader circular economy systems and to boost end markets for Australia recycled commodities. At the same time, existing container deposit schemes—product stewardship success stories—should now be harmonised and brought up to best practice standards.

The community must be engaged by building confidence in recycling and reducing contamination in recycling streams, through the innovative recycling program Recycle Mate.

It must be recognised that the recycling system is essentially comprised of three key elements: collection, processing, and end markets. Each of these elements is vital for real recycling outcomes—and each must be economically viable. A most pressing priority for recyclers is access to dynamic markets, without which the entire recycling system cannot be viable.

2 Harmonisation with national standards and services

Recyclers have long urged for greater packaging sustainability and its role in building an Australian circular economy, and welcomed the Environment Minister's Meeting [June 2023 communique](#) announcing the Australian Government will regulate packaging design. Not only will this support the delivery of a circular system for packaging in Australia, but it will also form a launching point for broader circular economy systems across other priority products.

This regulation is currently being developed, supported by the National Packaging Design Standards Working Group, the interjurisdictional Government Packaging Design Standards Working Group and other stakeholders. ACOR is very pleased to be part of the National Design Standards Working Group to advance recycling priorities in the Australian Government's proposed packaging regulation.

The National Packaging Design Standards should support:

- the mandated use of Australian-made recycled content
- designing for recyclability (e.g. mono material packaging)
- moving away from problematic materials, such as composite formats, expanded polystyrene and rigid PVC, as stipulated by [APCO's action plan to phaseout problematic and unnecessary single-use plastic packaging](#).

In advancing packaging regulation, the following issues must be addressed:

- prioritisation of domestically produced recycled content
- verified provenance of recycled content
- community engagement and contamination in recycling streams
- capability of existing collection and sorting systems
- national harmonisation, noting the fragmented framework of State and Territory regulation
- dumping of recycled materials on the Australian market

The work being undertaken towards national packaging standards should align with standardised approaches to kerbside recycling. Once design standards for recyclability are regulated, the Australasian Recycling Label should be mandated to verify whether or not an item is suitable for kerbside recycling.

Any further decisions relating to kerbside standards should be paused until National Packaging Design Standards are finalised.

Additionally, the introduction of the Victorian container deposit scheme is changing the way Victorians engage with kerbside recycling systems. It is important to allow sufficient time for this scheme to fully stabilise before mandating other major changes to collection systems.

Any mandated collection system change should be subject to an independent economic, environmental and social assessment to determine its viability, especially in the context of the National Packaging Design Standards and container deposit schemes. This assessment should include:

- alignment with the National Packaging Design Standards
- national harmonisation considerations for Victoria's CDS to expand to include wine and spirit bottles, aligning with Queensland and under consideration in other jurisdictions
- local government service costs and support for the service

3 Contamination and community engagement

The kerbside recycling system is a successful model with potential for further resource recovery and efficiency. However, it is a valuable resource that must be safeguarded. Contamination is a critical issue that threatens the integrity of the recycling system.

When improperly sorted and non-recyclable materials are placed in recycling bins, they compromise the quality of the recyclable materials being processed. This contamination can lead to higher operational costs for Materials Recovery Facilities (MRFs), reduce the value of the recyclable materials, and increase the risk of loads being diverted to landfill; resulting in lost public trust which could further jeopardise current capabilities and future opportunities.

ACOR urges the Victorian Government to leverage the service standards to more effectively address contamination in recycling bins. Reducing contamination in kerbside recycling bins should be a key objective outlined in Section 1.5 of the draft Service Standard.

Currently, there is a lack of consistent education on proper recycling practices, with many organisations running independent and varying campaigns. A more effective approach would be a unified, coordinated education campaign that directs individuals to a central source for accurate recycling information. This campaign should be implemented across communities, including schools and workplaces, and maintained as an ongoing effort.

A priority should be a comprehensive campaign that emphasises the impact of contamination and the benefits of proper recycling, alongside robust compliance measures. With some MRFs managing contamination rates as high as 35%, it is crucial for governments and industry to collaborate on reducing contamination rates to below 10%.

Recycle Mate, a government- and recycler-supported national education tool, has proven effective in addressing these challenges and should play a key role in this coordinated effort.

The Victorian Government is strongly encouraged to provide appropriate funding to foster collaboration and restore community confidence to 'recycle right' through Recycle Mate, generating higher recycling participation nationally, and delivering more data to Government on the recycling capabilities and community behaviours across the State.

4 MRF infrastructure

Any standards for kerbside recycling must consider the capabilities of MRF infrastructure and ensure there are robust, viable markets for the materials sorted by MRFs.

The capabilities of MRF infrastructure vary across Victoria. While investing in technologies such as optical sorting may be necessary to enhance quality at some facilities, further constraints must be addressed. Many sites have limited space for plant upgrades and must also ensure that these upgrades do not disrupt essential services.

MRFs have limited control over the volume or quality of incoming materials and operate within fixed storage limits, adhering to local council and environmental protection regulations while navigating volatile commodity markets.

A critical priority for MRFs is access to dynamic markets. Although the Australian Government has focused on regulating the export of unprocessed materials, there are currently no compelling measures to support the procurement of domestic recycled materials.

ACOR strongly supports increasing domestic capacity to generate high-value recycled commodities. However, this must be accompanied by measures to drive domestic demand for recycled products. Without a robust market for these materials, supply-chain bottlenecks could arise, undermining efforts to build community confidence in recycling at a time when it is crucial.

5 End markets and offtake partners

To rebuild confidence in recycling and encourage better behaviour at the bin, the community must trust that collected materials are indeed being recycled. This is particularly urgent given the [ACCC's recent emphasis on scrutinising environmental claims](#).

Innovation should be encouraged, but care must be taken to avoid collecting materials without viable markets. To address this, 'offtake arrangements' should be clearly defined within the draft service standard to ensure that there are real and viable markets for the materials listed. The standard should be amended to require at least two offtake partners downstream of MRFs, and MRFs themselves should not be considered as offtake partners.

Any consideration of broadening the range of materials accepted through kerbside recycling should be supported by fully funded product stewardship models, crucial for managing low- to negative-value materials at the end of their lifecycle and ensuring an economically viable recycling pathway.

6 Service standard lists

The service standard identifies formats, not materials. However, recyclability is determined by a combination of both.

Clarification is needed on whether the standard contents list serves as a minimum requirement, a maximum limit, or a guideline; noting the priority of diversion from landfill and maximising resource recovery.

6.1 Glass

The standard contents list for the glass recycling service is largely suitable for glass cullet production, enabling 'glass bottle-to-bottle' recycling.

Some recyclers have indicated that medicine bottles and vitamin bottles should not be accepted in the glass recycling service because they are not suitable for glass cullet production.

However, other recyclers have identified that consideration should be given to broader applications of glass, such as the manufacture of 'glass sand', which can accommodate a broader range of glass products including Pyrex, perfume bottles etc. Glass sand, for example, reduces the demand for virgin sand in infrastructure projects and other applications. Excluding these non-laminated glass products from kerbside recycling altogether risks lowering resource recovery overall.

6.2 Soft plastics

There are significant concerns regarding the collection of soft plastics through kerbside recycling, including the ability of MRFs to effectively sort this material, the current lack of scaled and viable markets for recovered soft plastics, high contamination rates within the system and the potential for increased contamination in sorted MRF/mixed paper.

Any consideration of standardising soft plastic collection across the State must be underpinned by mandatory product stewardship, to fully fund a scaled recycling value chain, including upgrades for MRFs across Victoria that are currently not configured to effectively manage this material. The product stewardship model must also support broad community education, and robust and viable markets for the recycled product derived from soft plastics.

If a decision was made to collect soft plastics through kerbside recycling bins, the following conditions would need to be met as minimum requirements:

- **Standard Contents List:** The default list for mixed recycling should exclude soft plastics until the processes, markets, and technology for recycling soft plastics are fully developed.
- **Opt-in for local governments:** Local governments should have the option to participate in soft plastic recycling programs based on their capacity, resources, available infrastructure and markets for the collected material. Community education must be a priority to ensure that this form of collection does not result in increased contamination levels in kerbside recycling.
- **Offtake Arrangements:** To ensure system resilience and competitiveness, any local government that opts into soft plastic collection must verify that there are at least two 'offtakes' for the material downstream of a MRF.
- **Material Specifications:** Only soft plastics displaying the ARL label, indicating that the material meets CEFLEX standards (specifically, polyolefins), should be accepted in soft plastic collection. Flexible PVC and PET are unsuitable for higher-value soft plastic recycling processes.
- **Opt-in for communities:** Soft plastics must be collected under 'opt-in' conditions, meaning households must sign up for soft plastic recycling schemes to participate, rather than mandated collection. An opt-in system ensures that only households committed to proper recycling practices participate, reducing the risk of contamination.
- **Presentation Requirements:** Soft plastics should be bagged in robust 'program' bags, funded through product stewardship initiatives, before being placed in kerbside recycling bins, as loose soft plastics pose a significant contamination risk for MRFs.

It should be noted that some in the sector are of the strong view that soft plastic collection via the mixed recycling service should not proceed as a Household Waste and Recycling Service standard.

6.3 Liquid paperboard

Gable-top cartons and long-life cartons are accepted in the proposed Standard contents list for the mixed recycling service, however, there is a lack of confidence in the recycling sector that this material has a viable and consistent offtake market.

As noted above, the collection of liquid paperboard should be contingent on verification that there are at least two 'offtakes' for the material downstream of a MRF.

6.4 PVC

Cordial bottles are not accepted in the proposed Standard contents list for the mixed recycling service, however, cordial is now predominantly sold in PET bottles. It is understood that only one major brand retains a PVC-based bottle for cordial.

The value in PET cordial bottles should be captured through kerbside recycling, and the ARL should be used to identify bottles that should be included and excluded.

6.5 Meat and deli trays (PET thermoform)

Biscuit, chocolate, fruit, vegetable trays, and punnets that are thermoformed from PET sheet are included in the proposed Standard contents list for mixed recycling services, however, the proposed Standard contents list excludes thermoformed PET meat trays—also made from PET sheet.

Industry has transitioned away from non-recyclable thermoform formats (PVC and EPS) to predominately clear thermoformed PET and PP trays, which are recyclable, and currently accepted and collected in >85% of the Australian population kerbside recycling collections.

Thermoform mono PET packaging is currently recognised as being recoverable and recyclable packaging material, carrying the recyclable ARL logo.

The Australian Government, through the Department of Climate Change, Energy, the Environment and Water, is currently working with States and Territories to establish national design standards for packaging, to enhance the circular economy. It is most likely that PET thermoforms will be recognised as recoverable and recyclable under these National Packaging Design Standards

Recycling collection, processing and manufacturing capacity exists to close the loop in this material, and meat and deli trays should be part of the Standard contents list for mixed recycling services.

6.6 Batteries and electronic items

Batteries—in loose or embedded form—are an increasingly alarming hazard in both kerbside and commercial waste and recycling streams, with over 10,000 battery-related fires a year occurring throughout waste and recycling systems.

Fires caused by batteries are widespread across material recovery facilities (MRFs), in waste and recycling trucks, and in depots—in short, at every point across collection, disposal and recovery streams. These fires pose great dangers to human health and life, and are also damaging to the environment through smoke and polluted runoff. The economic impact of these incidents is being borne by the community through rising rates, by councils through truck fires and future risk, and by industry in the loss of critical infrastructure. Electronic items—in particular, vapes—should be explicitly named in the list of items not accepted in any household waste and recycling service.

The draft standard does not adequately recognise the Government's general duty of care to establish a service standard that accounts for hazardous or noxious materials likely to be captured and/or disposed of under the standard. It should address the safety and suitability of these items as they move through the waste and recycling supply chain. This is particularly important for hazardous items known to be inherently dangerous and most likely to be disposed of inappropriately by users of waste and recycling services.

The ultimate priority must be the expedited delivery of EPR regulation for all consumer electronic products (including batteries and items containing batteries), to fully fund safe collection and, where possible, recycling—underpinned by a deposit scheme to strongly incentivise safe disposal of batteries.

However, the issue is extremely urgent, and the industry cannot wait for the delivery of EPR legislation. Immediate action must be undertaken to divert batteries from conventional waste and recycling streams, to support the delivery of the service standards:

1. Conduct a detailed gap analysis of disposal options for all loose and embedded batteries in every jurisdiction.
2. Urgently roll out a network of 'safe disposal' collection points, filling in identified gaps, to ensure there is always an easily accessible option for the community.
3. Launch a national, comprehensive awareness-raising and education campaign, to ensure that batteries are not disposed of in conventional waste and recycling streams.
4. Support industry and underwrite insurance for the waste and recycling sectors to mitigate immediate risks, and prioritise regulatory reform to address the dangers posed by batteries.

7 Conclusion

Recycling and resource recovery is a system-wide enterprise. ACOR encourages the Victorian Government to collaborate with industry, other States and Territories, and the Federal Government to develop harmonised and effective policies that maximise the economic and environmental benefits of recycling.

Yours sincerely



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