

Ms Joanne Chong
Presiding Commissioner
Productivity Commission Inquiry
Opportunities in the Circular Economy

25 April 2025

Dear Commissioner Chong,

Submission on the Interim Report – Australia's Circular Economy: Unlocking the Opportunities

Introduction

The Consumer Electronics Suppliers Association (**CESA**) appreciates the opportunity to provide input on the recommendations and reform directions outlined in the Productivity Commission's interim report into Australia's opportunities within the circular economy (the "**Interim Report**"), released on 5 March 2025.

CESA is a peak industry body representing a number of manufacturers and retailers of consumer electronics, home appliances, and other electrical equipment in Australia. Our members include major brands owners and suppliers of a wide range of household electrical products including televisions, home entertainment systems, computers, monitors, whitegoods, cooking appliances, small appliances, accessories, and air conditioning units.

CESA members are committed to supporting circular economy initiatives and have established various environmental, social, and governance (ESG) programs including:

- Participation in a range of product stewardship schemes
- Provision of repair services and replacement parts.
- Establishment of sustainability targets and reporting on these targets.
- Adoption of circular design principles.

To facilitate Australia's transition to a more sustainable future, it is crucial to acknowledge the vital role of cohesive policies and robust infrastructure in strengthening the circular economy. The following points outline key areas where government collaboration, industry engagement, and effective governance are essential for fostering meaningful change, streamlining compliance, and enhancing consumer education within the context of the global consumer electronics market:

• A cohesive policy environment is essential for enabling a stronger circular economy and driving meaningful change. Governments must collaborate across agencies and jurisdictions to minimise regulatory conflicts and barriers.



- Strong collaboration between government and industry is necessary to develop pragmatic
 regulations that streamline compliance taking into account that the consumer electronics
 sector operates within a global market, where local distributors have limited influence on
 product development and design.
- Government must play a central role in providing governance, waste management infrastructure, and consumer education.

We believe that the above points align well with the Commission's analysis summarised on page 2 of the Interim Report.

In this submission, CESA offers industry input concerning the recommendations and reform directions outlined in Chapter 9 of the Interim Report, highlighting the barriers faced by businesses in the consumer electronics sector as they work to implement more circular practices.

CESA's Response



Recommendation 9.1

Introduce a product labelling scheme for household appliances and consumer electronics

To better inform consumer purchasing decisions, the Australian Government should develop a product labelling scheme that provides consumer information about durability and repairability for household appliances and consumer electronics, as recommended in the PC's Right to Repair inquiry (2021).

CESA supports the principle of providing consumers with essential information to assist them in making informed purchasing decisions regarding sustainable products. However, we urge that further consideration be given to alternative disclosure methods and the need for alignment (in terms of the product scope and assessment criteria) with other markets whilst have regard to the characteristics of the Australian market. Careful risk analysis must be undertaken of "trade-offs" to ensure that these do not undermine the broader sustainability efforts.

1. Alternative Disclosure Methods:

Currently, there are existing labelling schemes for energy, water, and product standards that already occupy much of the available space on certain appliances, such as front-load washing machines. Adding another label may not be practical in all circumstances and could result in increased material usage and a larger carbon footprint due to the production/disposal of additional printed labels. Instead, CESA recommends that information regarding the durability and repairability of products be made available on online resources, such as online product



specifications. This approach would provide consumers with readily accessible information without the need for additional physical labels, thereby enhancing sustainability while still ensuring that vital product information is available.

2. Harmonisation with Global Programs:

Other than in relation to the disclosure method, it is crucial that any scheme for household appliances and consumer electronics in Australia aligns with those operating in major global markets and leverages insights from established schemes, such as the Repairability Index in France.

Given that most consumer products supplied in Australia are imported, and considering Australia's relatively small market size, local distributors often have limited influence on design of product. Aligning the scope and assessment criteria with major global markets facilitates easier access to information across borders, streamlines compliance for manufacturers operating in global markets, reduces trade barriers, and promotes a competitive environment. Additionally, aligning with global standards is more conducive to encourage overseas manufacturers to adopt design principles focused on durability and repairability, contributing to a more sustainable production landscape.

3. Environmental Considerations:

Ensuring the accessibility and availability of spare parts may necessitate manufacturers to expand their supply chain facilities or alter inventory systems. Consideration should be given to unintended consequences associated with its implementation including:

- a) **Increased Energy Consumption:** Expanding warehousing facilities to accommodate additional inventory will result in higher energy usage for lighting, heating, cooling, and machinery operations.
- b) **Higher Greenhouse Gas Emissions:** Increased shipping / transport activities, both from overseas suppliers and within Australia, can elevate greenhouse gas emissions, thereby increasing the carbon footprint associated with logistics operations.
- c) Greater Waste Generation: Maintaining a larger inventory may lead to surplus unused or outdated parts. If these parts are not utilised, they contribute to increased e-waste, landfill usage, and pollution.

The combination of these factors can undermine broader sustainability efforts and impact businesses climate-related reporting.

Providing consumers with information about durability and repairability is helpful in promoting sustainability and encouraging responsible purchasing decisions. However, the design of the scheme must take into account and address challenges related to compliance, product design,



and market dynamics. To ensure the successful development of this scheme, collaboration among manufacturers, government, and other stakeholders will be essential.



Recommendation 9.2

Include reuse and repair targets in the NTCRS and increase the use of tracking devices

The Australian Government should amend the NTCRS to include reuse and repair within annual targets, as previously recommended in the PC's Right to Repair inquiry (2021). The NTCRS should also increase its use of e-waste tracking devices to better monitor co-regulatory bodies and their downstream recyclers.

The potential introduction of reuse and repair targets within the National Television and Computer Recycling Scheme (NTCRS) warrants careful consideration due to its associated complexities and limited potential benefits.

4. Reuse and Repair Targets in the NTCRS

The introduction of reuse and repair targets within the National Television and Computer Recycling Scheme (NTCRS) may not yield substantial benefits and could raise unnecessary complexities in operationalising and administering such initiatives.

Televisions disposed via the NTRCS are typically units that have faults which are uneconomical or unrepairable. Salvageable units are generally repaired and resold through seconds dealers by manufacturers and retailers and do not enter the NTCRS waste stream. This raises questions about the effectiveness of implementing reuse and repair targets.

NTCRS collection points and processing facilities may not possess the necessary technical skills or equipment to accurately determine whether a fault is repairable or to undertake the repair itself. The risks associated with incorrect repairs can lead to damaged products and diminished performance, as well as significant safety hazards, including electrical shocks, fires, and damage to property.

Therefore, the complexity and expertise necessary to perform repairs safely and effectively underscore the challenges of integrating repair and reuse targets within the NTCRS effectively.

In light of these considerations, it is crucial to approach the introduction of reuse and repair targets into NTCRS with a clear understanding of the practical implications and to ensure that any initiatives are supported by adequate resources and training for both collection points and processors.



5. E-Waste Tracking

While e-waste tracking can provide enhanced accountability and resource recovery, it also gives rise to increased risks including:

- a) **Implementation Costs:** Establishing and maintaining e-waste tracking systems can be costly, requiring investments in technology, infrastructure, and staff training.
- b) **Complexity:** Implementing tracking systems can add complexity to waste management processes, particularly if various stakeholders—such as manufacturers, retailers, and recyclers—are involved.
- c) **Data Privacy Concerns:** E-waste tracking systems may collect personal data regarding consumers and businesses, raising potential privacy and security issues.

Balancing the risks and benefits of using tracking devices is crucial to developing a comprehensive e-waste management strategy that improves sustainability and addresses the above risks.

Information request 9.1: Barriers to greater reuse and repair

6. Unmet Demand for Reuse and Repair Services

CESA members are committed to providing adequate repair and reuse services through their inhouse capabilities and contracted providers, with this commitment being primarily driven by market demand. Over the years, advancements in manufacturing processes have led to a significant reduction in defect rates, which in turn has diminished the need for reuse and repair services for many products. As a result, the current capabilities and capacities in the market are generally sufficient to meet consumer needs.

However, we have observed that consumers often neglect the general service and maintenance required to maximise the lifespan of their consumer electronics and home appliances. This lack of engagement can lead to premature failures that may become unrepairable.

To address this issue, we believe that greater emphasis should be placed on consumer awareness and education regarding proper product care, thereby extending the life of products and promoting more sustainable consumption practices.

7. Barriers to Supply of Reuse and Repair Services

A key barrier to the availability of repair services in Australia is the inherent limitations within the Australian Consumer Law (ACL), which prioritises refunds and replacements over repairs as the primary remedy. Under the ACL, goods are considered to have a major failure if a reasonable consumer would not have purchased the product had they been aware of the nature and extent of the failure. The amendment made in December 2020 broadened the definition of "major



failure" to include multiple minor failures, regardless of whether these faults are repairable. Consequently, when a major failure is identified, consumers are entitled to reject the goods and seek a refund or replacement, even when a repair is feasible.

To promote a more effective repair culture, CESA recommend that Government conducts a review of the ACL to adopt a "repair first" approach, allowing replacement or refund remedies only in cases where repairs are uneconomical, or the fault is irreparable.

The financial feasibility of repairing products with highly integrated components can often be challenging; for instance, the complexity and cost associated with certain repairs can render them impractical. Whilst other faults such as a sealed system leak in a refrigerator, cannot be repaired.

Obstacles also arise in relation to the reuse market, where refurbished products tend to be less reliable, feature inferior components, and are often priced higher than what consumers are willing to pay.

Additionally, when developing regulations regarding the provision of repair services, safety must be a top priority due to the potential risks associated with incorrect repairs. Major household appliances, such as refrigerators and air conditioners, often contain flammable refrigerants and necessitate the services of licensed repair technicians. Moreover, many products require careful disassembly, complex electronic reconstruction, and rigorous testing to ensure proper functionality and safety, especially those connected to mains voltage. Certain repairs may also require specialised tools or processes, such as degassing, re-pressurisation, or waterproofing. Therefore, it is essential that service repairs are undertaken by properly trained and qualified repair professionals to maintain safety and effectiveness.

8. Government's Role in Addressing Barriers

Government plays a crucial role in addressing the barriers to repair and reuse services including:

- a) Skills and Accreditation: Specialised skills required for repairs are primarily provided by suppliers. To enhance the overall skill set available in the workforce, government entities could fund and facilitate basic training programs through institutions like TAFE. This would prepare more technicians to carry out repairs on various electronic products.
- b) Public Awareness and Consumer Education: There is a need for better coordination and information dissemination regarding access to electronic repair services and promotion of proper product care. This is especially pertinent for individuals receiving social benefits, as greater access to repair services could support equitable access to technology. Consumer education is critical; without consumer demand, circular economy programs will struggle to



gain traction. Governments are well-positioned to lead educational initiatives that enhance public understanding of circular economy principles.

c) Regulatory Simplification and Harmonisation: The extensive regulations across States and Territories, particularly those inhibiting repair based on perceived safety requirements, present significant barriers. The proliferation of differing regulations can create confusion and hinder the repair process. Therefore, simplification and standardisation of these regulatory frameworks should be a goal for the Federal government.

As noted above, addressing the friction with the consumer guarantees regime is necessary to foster a culture of repairs over alternative remedies. Encouraging repairs instead of immediate replacements or refunds will yield environmental advantages by reducing waste and promoting circular economy by slowing material loops. Government should undertake a review of the ACL to rectify systemic flaws within the current consumer guarantee regime to prioritise repairs.



Reform direction 9.3

Product stewardship for small electronics, including embedded lithium-ion batteries

The PC supports the Australian Government's intention to establish a co-regulatory product stewardship scheme for small electronics and is seeking further information on how the scheme could be designed and implemented to support materials productivity and economic outcomes.

CESA supports the establishment of an effective product stewardship scheme for small electronics within existing schemes preferably the NTCRS emphasising the necessity of addressing infrastructure barriers, considering a staged approach, and ensuring compliance and enforcement measures.

Information request 9.2: Product stewardship for small electronics, including embedded lithium-ion batteries

9. Barriers to Collection and Recycling of Small Electronics

CESA collaborates with product stewardship organisations and supports their initiatives. We identify infrastructure as a critical barrier currently limiting the collection and recycling of small electronics. It is imperative to support expansion of product stewardship for small electronics State and Federal governments will need to invest in establishing waste collection and recycling facilities and provide drop off points suitable for small electronics. Addressing infrastructure



deficits will significantly enhance the collection and recycling rates of various electronics across different product categories.

10. Benefits of Including Small Electronics in Product Stewardship Schemes

Estimating the precise environmental, economic, and social benefits of including different types of small electronics in stewardship schemes is beyond the scope of CESA. That said, recognising the potential for reduced e-waste and improved resource recovery can help highlight the importance of these initiatives.

11. Costs and Benefits of Expanding Existing Schemes

CESA believes that expanding existing product stewardship schemes can yield both costs and benefits, provided that the expansion plan is well designed, practical, cost-effective, and align with current operational frameworks. Leveraging existing infrastructure helps minimise implementation costs while enhancing access to recycling facilities. CESA recommends the expansion of the co-regulatory National Television and Computer Recycling Scheme (NTCRS), as this would lead to efficiencies of scale and maximise the utilisation of the existing collection network where feasible.

However, we do not consider the B-cycle scheme's operational framework suitable for small electronics. The B-cycle scheme primarily focuses on loose batteries and does not adequately address the complexities associated with small electronics. The stewardship requirements and infrastructure for handling these battery products differ significantly from those needed for loose batteries. For instance, the collection network and bin systems utilised by the B-cycle scheme are not appropriate for the diverse range of small electronic products and larger battery formats. Furthermore, the transport, processing, and material recovery methods for small electronic equipment and larger batteries vary markedly from those employed for loose batteries, highlighting the need for a tailored approach to stewardship in this sector.

12. Staged Approach for Inclusion in Product Stewardship Schemes

Given the complexity and costs associated with implementing product stewardship schemes and the need to increase existing infrastructure, a staged approach is advisable. Prioritising products with higher safety and environmental impacts, such as vapes and products containing embedded batteries, is recommended.

13. Minimum Threshold for Inclusion in Stewardship Schemes

CESA recommends that the inclusion of products in stewardship schemes should not be based solely on minimum value thresholds but rather on the assessment of safety and environmental impacts, particularly for products such as vapes and lower-value items containing embedded



batteries. These products present significant risks and should be prioritised for stewardship due to their adverse effects on safety and the environment.

Establishing minimum value thresholds could inadvertently create loopholes that allow freeriders to evade responsibility, and such thresholds may fail to capture products sold through online channels effectively. Therefore, a focus on the safety and environmental implications of products will ensure a more comprehensive and effective stewardship framework.

14. Compliance and Enforcement Arrangements

To facilitate the successful adoption of a co-regulatory scheme and effectively address potential 'free rider' behaviour, robust government intervention is essential. This may involve implementing fines for non-compliance or removing non-compliant goods from the market.

Establishing strong enforcement mechanisms will help create a level playing field, encouraging all stakeholders to actively and meaningfully participate in the stewardship program. Such measures are critical for ensuring compliance and maximising the effectiveness of the initiative.

15. Supporting Circularity in Product Life Cycles

While promoting sustainable design for reuse and repair in small electronics is crucial, it is important to recognise that such practices often incur additional production and distribution costs, which can lead to increased carbon emissions.

Although goods with superior sustainability qualities should be encouraged, there should not be direct support for products solely based on these claims without careful consideration of overall lifecycle impacts.



Reform direction 9.4 Product stewardship for small-scale PV systems

The PC supports the Australian Government's intention to establish a co-regulatory product stewardship scheme for small-scale PV systems, including legacy waste, and is seeking further information on how the scheme could be designed and implemented to support materials productivity and economic outcomes.

CESA supports a product stewardship scheme that thoughtfully addresses the inclusion of largeformat batteries and promotes sustainable practices throughout the lifecycle of solar PV systems.

We recognise the importance of developing a robust collection system to manage PV waste, particularly in regional and remote areas. Below, we outline our position on establishing such a



system through the installer network and the potential collaboration with local governments and existing initiatives.

Information request 9.3: Product stewardship for small-scale PV systems

16. Inclusion of Large-Format and Energy Storage Batteries in the Scheme

While this question is beyond the specific scope of CESA, we affirm that large-format and energy storage batteries present significant safety and environmental concerns. Therefore, they should be included in the stewardship scheme. These batteries pose risks related to overheating, potential fires, and environmental hazards if not managed properly. Including them in the scheme can facilitate the implementation of safer disposal and recycling practices, leading to better management of their end-of-life impacts.

17. Compensation for Returned PV Systems

Regarding the question of whether compensation should be provided for PV systems returned in good condition, CESA believes that market dynamics should dictate the value of used PV systems. A compensation mechanism is unnecessary, as the free market will determine an appropriate value for these systems. Efforts should focus on promoting resale and secondary markets for PV systems rather than creating a compensation framework which could be susceptible to rorting or be difficult to administer.

18. Establishing Collection Points for PV Waste

A strategic approach to the collection of PV waste involves leveraging the solar installer network to facilitate the decommissioning of systems.

As solar installers complete their work and decommission old or non-functional PV systems, they can serve as a critical link in the collection process. This model ensures that systems are handled properly at the end of their life cycle, re-used (where possible) and that waste is directed to appropriate recycling and disposal mechanisms.

19. Specific Industries Benefiting from Recovered Materials

The inquiry into which specific industries or markets in Australia could benefit from materials recovered from PV waste is also beyond CESA's focus. Nonetheless, as a general observation, it is important to note that Australian governments have overseen a decline in domestic manufacturing capabilities over the last five decades. This context suggests that the primary beneficiaries of PV waste materials may likely be exporters rather than domestic industries.



20. Supporting Circularity in the Solar PV System Lifecycle

In terms of how the stewardship scheme could support circularity earlier in the solar PV system lifecycle, it is essential to recognise that sustainable design endeavours often entail additional production and distribution costs, which can inadvertently result in increased carbon emissions.

CESA contends that while encouraging goods with superior sustainability attributes is vital, any direct support for products based on sustainability claims should be approached judiciously, considering overall lifecycle impacts.

21. Governance arrangements to harmonise regulations that pose barriers to circularity (Reform Direction 10.1)

Creating multiple state- and territory-based stewardship systems introduces complexity and inefficiency into the management process. This fragmentation could lead to inconsistent regulations and practices that hinder effective stewardship and complicate compliance for manufacturers.

CESA supports the Australian Government facilitating coordination between state and territory governments to harmonise inconsistent regulations across jurisdictions and would encourage the establishment of a new interjurisdictional body to maintain harmonised and cohesive circular economy efforts.

Conclusion

CESA believes that the above feedback collectively presents viable opportunities to enhance and strengthen Australia's circular economy. To capitalise on these opportunities, it is crucial for the government to engage with industry representatives and stakeholders to identify challenges, align objectives, and develop practical solutions.

Establishing cohesive policies that are grounded in industry capabilities and insights will help ensure that Australia's circular economy continues to grow. CESA is committed to actively participating in efforts that promote sustainable practices and looks forward to collaborating with stakeholders to advance a robust and resilient circular economy in Australia

Thank you for considering our submission.

Yours sincerely,

Evelyn Soud Chief Executive Officer