
Beyond WASTE 2023: Western Australia's Waste Strategy 2025-2030.

Submission from the Product Stewardship Centre of Excellence
December 2025

Introduction

This submission is made on behalf of the Product Stewardship Centre of Excellence, an independent not-for-profit charity. The Centre exists to facilitate the avoidance and reduction of waste and create positive environmental and social outcomes through a range of product stewardship interventions including sustainable design, resource conservation, reuse, repair, and recycling. We also provide independent advice on product stewardship priorities to all levels of government. More information about the Centre can be found here: <https://stewardshipexcellence.com.au/>

Our submission seeks to highlight the critical importance of *effective product stewardship* in preventing and reducing waste, increasing recycling, reuse, repair as well as removing unsafe chemicals, conserving resources, decarbonising the economy and fast-tracking Australia's transition to a circular economy by 2030.

The Centre thanks the WA Government for the opportunity to comment on the Waste Strategy 2025 - 2030 and the Roadmap. It is a comprehensive effort that is to be commended and builds upon previous WA waste policies and strategies.

This submission provides overarching feedback on why product stewardship can directly bolster the Strategy and provides specific comments on where effort and improvements might be had, specifically in relation to the policy and practice of product stewardship and producer responsibility across the complete product lifecycle.

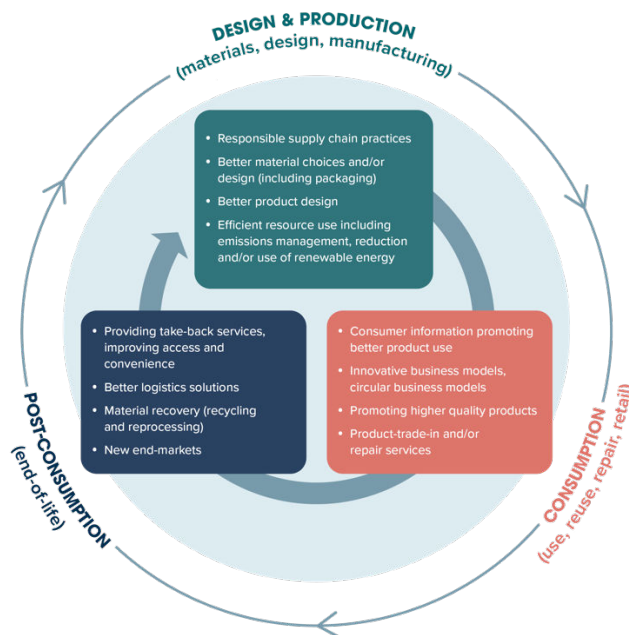
What is Product Stewardship and how does it relate to a circular economy

Product stewardship is producers¹ taking **primary** responsibility (including financial and operational) for minimising the environmental and human health impacts of products and materials they place on the market by implementing various actions across the entire product lifecycle.

Systemic change across the product lifecycle is essential for the circular economy transition. Figure 1 outlines the product stewardship actions businesses and governments can implement to deliver circular economy outcomes across the three product lifecycle stages: design and production, consumption and post-consumption. These actions can drive significant positive environmental and social benefits.

¹ Producers are those organisations placing products onto the market including brands, importers and retailers

Figure 1. Product stewardship activities across the product and material lifecycle



Importantly, product stewardship not only shifts the economic burden of the environmental and human health impacts of products away from governments and the broader community to the producer and user. It significantly increases the investment by the private sector into activities to prevent and reduce waste. As illustrated by extended producer responsibility (EPR) schemes such as the National Television and Computer Recycling Scheme, the Oil Product Stewardship Scheme and the state-based Container Deposit/Return Schemes including WA's CDS scheme. In each case the producers are investing tens to hundreds of millions of dollars per annum to collect and recycle products at end-of-life to keep materials circulating in the environment.

Producer action at just the end of a product's life is limited in effectively avoiding and reducing waste.

Product stewardship provides a clear pathway for businesses and governments to operationalise circular economy objectives to design out waste and pollution, keep products and materials circularity in the economy and restore the environment, and goes beyond the typically nebulous language that accompanies claims and pledges about circularity. Product stewardship is also a very specific and practical solution to ensuring that ESG is applied at the product level.

The Need for Systems Thinking Applied to the Waste Strategy and Product Stewardship

Authentic and effective product stewardship squarely places responsibility and accountability for the environmental and social impacts of products across their entire lifecycle on the producers the brands. It is not the diluted notion of shared roles, which often fails to delineate who owns these impacts, be they solid and hazardous wastes at end of life, carbon emissions, or the specification of unsafe chemicals, finite resources or non-renewable inputs at the design and production stage.

The Centre's extensive experience across industries and sectors, as well as our applied research findings underscore the relevance and role of product stewardship. Policy-makers and some industries are realising that an effective product stewardship approach on-the-ground, needs to place environmental and human health objectives at the centre of how we develop, implement and monitor initiatives and schemes. When executed well, product stewardship delivers a wide variety of benefits and positive impacts including:

- *Environmental* — eliminating hazardous materials, conserving resources and materials, preventing and reducing waste, and reducing greenhouse gas emissions
- *Social* — improving workers' health and safety across the supply chain, and increasing accessibility to repair services and collection points for recycling
- *Economic* — job creation, upskilling, reskilling, and creating new markets for recovered materials

In short, systemic change across the product lifecycle is essential for the circular economy transition.

Characteristics of Effective Product Stewardship

As illustrated in the recent study Benefits and Effectiveness of Product Stewardship and EPR by the Centre and UTS Institute for Sustainable Futures, product stewardship/EPR is a proven effective approach for managing and reducing the environmental and human health impacts of products, packaging, and materials throughout their lifecycle

This extensive analysis of the annual performance data of stewardship initiatives, consumer, business and expert surveys demonstrates how product stewardship has promoted circular design making products more durable, less hazardous, and more recyclable. It has also led to improved production practices, contributed to CO2 mitigation, and resulted in the diversion of hundreds of thousands of tonnes of used chemical drums, tyres and machine lubricants to mobile phones, televisions and computers from landfill and increased recovery of materials available for manufacturing. All predominately funded by industry with minimal investment from government

The analysis also identified the following five essential characteristics to effective stewardship, which should guide WA's approach to advancing and improving existing and emerging product stewardship schemes

1. **High levels of industry or business investment and participation** because of regulation.
2. **Clearly defined objectives** — Measurable environmental, social, and economic performance indicators demonstrate benefits and allow for continual assessment of the effectiveness.
3. **Good governance** — This includes well-defined roles and responsibilities and ensures transparency through public reporting.
4. **Use of financial incentives** — to drive behaviour change of businesses, consumers, repairers, collectors, sorters, and recyclers
5. **Effective marketing and communications** — leading to high awareness and increased user participation

This research project represents a landmark study of the benefits and effectiveness of product stewardship in Australia. Its six distinct reports available at www.stewardshipexcellence.com.au and listed below provide an important and timely evidence base for the WA Government to inform, improve and enhance its Beyond Waste 2030 Strategy. The six reports are:

1. **Evaluating Stewardship Benefits and Effectiveness, Summary Report** provides an overview of the research findings including extent of product stewardship activity, benefits, levels of engagement, challenges and future opportunities.
2. **Product stewardship benefits assessment 2022: General population report** based on a survey of 1,000 Australians to measure awareness and understanding of product stewardship. A key finding was that product durability and longevity are key purchase considerations for consumers.
3. **Product stewardship benefits assessment 2022: Business report** based on interviews with 600 Australian businesses found that businesses are most engaged with product stewardship activities that relate to the production stage of the lifecycle, especially consideration of improved material choices and responsible supply chain practices.

4. **Product stewardship benefits assessment 2022: Local Government report** based on a survey of 89 local government staff to assess awareness and understanding of product stewardship among staff and assess the nature of their engagement with product stewardship initiatives.
5. **Effectiveness and Benefits of Product Stewardship: Themes from 60 Qualitative Interviews with Stewardship Actors and Experts.** This report found the key environmental performance indicators reported ranged from diverting materials from landfill (e.g. material recovery, product repair and reuse, recycled content in products); preventing waste (e.g. making products more durable, dematerialising packaging); reducing greenhouse gas emissions (e.g. powering supply chains with renewable energy); and conserving natural resources (e.g. substituting virgin materials with recycled materials, using less water and energy).
6. **Environmental, social and economic benefits of product stewardship initiatives in Australia:** A survey of publicly reported environmental, social and economic performance data for 106 product stewardship collective schemes and individual business initiatives which provides insights into what makes product stewardship schemes successful. This data is made available on the [Product Stewardship Gateway](#), a detailed database of existing and emerging product stewardship initiatives run by industry sectors and businesses in Australia.

Overarching comments on the Strategy and Roadmap

Product stewardship is a cross-cutting approach that has relevance across industries, sectors and communities and therefore is essential to ensuring WA's strategy actually achieves its desired goals, targets and actions. This submission also identifies the current barriers in Australia to designing and implementing more effective product stewardship schemes and initiatives in WA and more broadly.

Ideally the Strategy and Roadmap should include support for the design and establishment of emerging schemes. The WA Government should provide conditional investment and co-funding to industries to design and establish whole of lifecycle schemes (including the required recycling infrastructure) for several key product categories including:

- all types of electrical and electronic equipment aligned with the EU's WEEE Directive
- photovoltaic systems including solar panels, inverters, wind turbines and all other renewable energy technologies
- all types of batteries in terms of application, chemistry and scale
- tyres used in all applications
- manufactured products used in building. Construction including treated timber used in agriculture and horticulture
- mattresses and associated bedding products
- commercial and household furniture
- floor covering products including carpet and resilient flooring
- plastics and other consumables used in hospital and healthcare settings
- Passenger vehicles and e-micromobility products
- absorbent hygiene products

Effective product stewardship squarely places legal responsibility and accountability for the environmental and social impacts of products across their entire lifecycle solely on the producers, manufacturers, brands, importers and retailers placing products on the market. It is not this diluted notion of shared roles, which often fails to delineate who owns these impacts, be they solid and hazardous wastes at end of life, carbon emissions, or the specification of unsafe chemicals, finite resources or non-renewable inputs at the design and production stage.

As it stands, the Beyond Waste 2030 Strategy remains largely focussed on managing the symptoms of a linear economy and the bottom half of the waste management hierarchy. The goals, targets, priorities and actions lack explicit attention to specific circular economy principles, especially detail on waste prevention, designing-out waste, and solutions that are restorative and regenerative. In other words, the Strategy could be bolstered to recognise and reflect a much stronger focus on systemic change, which necessarily includes regulatory reform and a more prominent role for design thinking and action back up the product lifecycle and supply chain.

Specific comments on the Strategy

Circular economy (p8) – This is a useful explanation of what constitutes a circular economy and is largely descriptive. While the Strategy acknowledges the principles and objectives of a circular economy, it remains predominantly focused on actions that mostly perpetuate a linear economy. The Strategy falls very short on two key circularity principles i.e. designing-out waste and pollution and restorative and regenerative solutions. It is widely recognised that sustainable design is one of the key levers and drivers for achieving a circular economy however there is minimal evidence or detail in the Strategy and Roadmap to suggest that the principles are being applied with rigour and depth.

The waste hierarchy (p9) – The explanation and diagram provide a high-level overview of the waste management hierarchy yet omits ‘repair’ in the diagram. Repair is more than community-based repair cafes; it is pro-innovation and contributes to increased productivity as recently identified by the Australian Government and the National Farmers Federation through the expansion of Right to Repair initiatives for agricultural equipment. The ‘repair economy’ should be treated as a serious economic, sustainability and productivity intervention in addition to grass-roots, self-repair initiatives. The Strategy should more clearly acknowledge that the upper levels of waste hierarchy need to be honoured as an essential stepping-stone in the transition to a circular economy.

Benefits and opportunities (p10) – The Centre agrees with the benefits and opportunities outlined in the Strategy. These reflect the main areas of obvious gain and positive impact. We would encourage you to also consider the economic benefits to the WA Government of investing in well-designed product stewardship regulation. Please refer to the attached white paper published by the Centre:

Investing in Intelligent Regulation: The economic benefits to government of product stewardship regulation (2024).

The national waste context (p16) – The Centre would strongly encourage the WA Government to look more closely at the specific core recommendations of the Circular Economy Ministerial Advisory Group (CEMAG). The core recommendations (especially Recommendation #4), provide an additional layer of detail and specific direction on what needs to be done to transition to a circular economy. The final CEMAG report can be downloaded here: <https://www.dcceew.gov.au/environment/protection/circular-economy/ministerial-advisory-group>

Collective responsibility (p26) – The Centre agrees that we all have a role to play in to avoid and recover waste, however there is a marked difference between ‘roles’ and ‘responsibilities’. In relation to product stewardship, the Strategy should more clearly acknowledge which stakeholders have the strongest and most direct sphere of influence to make changes at scale, move the dial and implement measurable interventions. In relation to effective product stewardship, it is those businesses that place products on the market that have the primary responsibility to eliminate and/or minimise the environment impacts of those products. It is manufacturers, brand-owners, suppliers, importers and retailers that can make the most impactful changes. Consumers do not design products. Local government does not manufacture goods. Recyclers do not specify contaminating and toxic micro materials and unsafe chemicals during the product development process. It is manufacturers, importers and brand-owners that have the *most control over decisions that can affect waste avoidance and resource recovery*, and therefore they can make the most significant environmental improvements.

In other words, manufacturers, importers and brand-owners should be assigned primary responsibility, while the public and other stakeholders have a *role* to play in buying better, reusing and repairing more, and recycling effectively. Local councils have a role to play in informing and educating. The resource recovery industry, including recyclers, have a role to provide the infrastructure needed to ensure economically efficient and environmentally sound services are accessible to the public, businesses, institutions, governments and other relevant organisations.

Priorities and actions (p28) – Priority #4 to support the circular management of clean energy technologies and electronics is a necessary near-term and ongoing activity however it is totally focussed on end-of-life solutions such as recycling with no indication of any waste avoidance and prevention interventions. Success in the circular management of clean energy technologies and electronics will necessarily require attention to sustainable design of electronics and photovoltaic systems to enable durability and product life extension as well as reuse, repair, refurbishment and repurposing. The absence of recognition and inclusion of these upstream measures represents a major omission with regard to Priority #4. The Strategy can easily address this major gap in action.

Closing comments

An opportunity to drive nationally aligned state regulated schemes (by adjusting, aligning and /or replicating the Product Lifecycle Responsibility Act (and imminent regulation), and supporting product specific regulations for batteries, solar panels, textiles, mattresses, tyres, soft plastics, in collaboration with NSW and other jurisdictions might also lead to:

- greater uptake of product stewardship schemes,
- cause more investment in circular economy outcomes,
- build innovation in circular economy business opportunities,
- encourage better design of products and services,
- encourage the repair sector
- drive better metrics data collection, and analysis
- add to transparency of schemes and products
- educate the community
- reduce contamination and improve recycling rates, and
- drive efficiencies and productivity improvements in the economy.

While there is relative alignment on some priorities between the WA Strategy and those of other jurisdictions, it is very important to ensure there's also strong continuity and complementarity between jurisdictions, with the over-arching aim of common policy focus, monitoring systems and regulatory instruments. Mandatory reporting from existing product stewardship schemes and from local government will aid in building the necessary metrics and inform policy interventions.

Please accept this email and the attached submissions and reports as information that can further inform the draft. These documents have been prepared and/or published by the Product Stewardship Centre of Excellence.

The following six documents are attached for your review and analysis as input to finalising WA's Waste Strategy 2025-2030. In several cases these documents contain recommendations, observations, conclusions and data that can contribute to building out the draft waste strategy.

1. Investing in Intelligent Regulation: The economic benefits to government of product stewardship regulation (2024). Published by the Product Stewardship Centre of Excellence

2. Annual Impact Report 2024 (includes the State of Play). Published by the Product Stewardship Centre of Excellence

3. Product Stewardship Centre of Excellence submission to the Productivity Commission's Inquiry into Opportunities in the Circular Economy., 2024

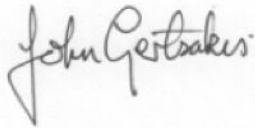
4. Evaluating Product Stewardship Benefits and Effectiveness – Summary Report (2023).

Published by UTS Institute for Sustainable Futures and the Product Stewardship Centre of Excellence

****NB**** Additional data reports resulting from extensive stakeholder consultation associated with this major project commissioned by DCCEE are freely available via the Centre's website and the department has copies. Copies can be downloaded here: <https://stewardshipexcellence.com.au/resources/#benefits>

Thank you for the opportunity to comment on the WA Strategy, and for the Government's efforts to further improve the state of waste avoidance and resource recovery in WA as we all seek to fulfil our ambitions to achieve a circular economy.

Yours sincerely

A handwritten signature in black ink that reads "John Gertsakis". The signature is written in a cursive, flowing style.

On behalf of the Product Stewardship Centre of Excellence

John Gertsakis
Director

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