


THE FUTURE OF PRODUCER RESPONSIBILITY IN AUSTRALIA

INTERNATIONAL SOLUTIONS
THAT WILL FIX
A BROKEN SYSTEM

July 2026





We acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of Country throughout Australia and recognise their continuing connection to land, waters and community. We pay our respects to Elders past and present and acknowledge the importance of First Nations knowledge and stewardship in shaping sustainable resource management and circular economy practices.

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Disclaimer

This report is based on the best-available data, sources and policies. Interpretation is provided and may simplify complex structural and methodological differences across nations and EPR systems. Efforts have been made to ensure the contents are factually correct, nevertheless figures, international benchmarks, and cost estimates are indicative and should be independently verified against primary sources including producer responsibility organisations, government, international entities, and national regulatory sources.

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FOREWORD



Professor John Thwaites AM

Professor of Practice in Sustainability

Monash Business School

Chair, Circular Economy Ministerial Advisory Group (2023 – 2024)

Why is this report so important and urgent?

As Helen Millicer identifies, Australia's Extended Producer Responsibility (EPR) system is well overdue for reform and now lags many comparable nations. Since 2011, no new national EPR schemes have been regulated, resulting in an ongoing fragmented and underperforming system that creates duplication, inefficiency and higher costs across the economy for households, businesses and governments. Australians continue to be sold products — from televisions, tyres and batteries to clothing and packaging — that are difficult to reuse, repair or recycle.

As Chair of the Circular Economy Ministerial Advisory Group (CEMAG), I saw strong evidence that better product stewardship and EPR systems will be essential to Australia's transition to a more circular and productive economy. Effective EPR is not simply an environmental measure. At its best, it is an economic and productivity reform that improves material efficiency, supports innovation and investment, and strengthens domestic manufacturing, recycling and repair industries.

This report fills an important gap in research and policy development in Australia. It is a practical examination of how effective EPR systems work, drawing on examples of both good and poor design from Australia and overseas. Importantly, Helen Millicer structures the report around the three essential components of effective EPR systems:

- legislation and regulation
- Producer Responsibility Organisations (PROs)
- strong regulatory oversight and enforcement.

This practical focus is particularly valuable. While Australia has undertaken important recent work on circular economy policy, there remains a need for detailed analysis of the institutional and operational design required to make EPR systems work effectively in practice.

The report also clearly identifies the growing weaknesses in Australia's current arrangements, including fragmented regulation, free riders, underfunded voluntary schemes and lack of national coordination. Without reform, these problems will continue to increase costs, undermine investment confidence and risk further stewardship scheme failures.

Importantly, the report does not simply identify problems. It draws on international experience and practical examples to propose realistic pathways for reform suited to Australian conditions. Its recommendations provide a valuable contribution to governments, industry and policy makers as Australia develops the next phase of circular economy and product stewardship reform.

Helen Millicer brings deep expertise and long experience in environmental policy and product stewardship to this work. Her report is thoughtful, practical and grounded in real-world experience. I commend it to governments, industry and all those interested in building a more effective and circular Australian economy.

Professor John Thwaites AM is a Professor of Practice in Sustainability Monash Business School. He was the founding chair of Climateworks Centre and Monash Sustainable Development Institute until 2025. He was Chair of the Ministerial Circular Economy Advisory Group and is chair of McKinnon Institute for Political Leadership. His distinguished contribution to the Australian public includes reviews of gas, electricity markets, pricing, building industry and more. He was Deputy Premier Victoria for eight years until 2007. Qualifications include science and law from Monash University.



ACKNOWLEDGEMENTS

I would like to pay tribute to the many wonderful experts who have graciously shared their knowledge over many years. This report would not be possible without them, particularly during my six months living and working in EU in 2025. I have sought to achieve appropriate breadth and depth in this complex area that underlies Australia's productivity and fairly represent facts; there is much more that could have been written on steps, staging, budgets and operations. This report is an independent analysis including meetings, presentations and discussions with colleagues in Europe and across Australia in government, industry, associations and consulting. Thank you to all.

Amongst the many in Australia and overseas I would like to thank these colleagues for their data and reports that have assisted with the comparative analysis in this report:

- Sophi MacMillian, CEO ResiLoop
- Ainsley Simpson, CEO Seamless
- Barry Cosier, CEO Soft Plastic Stewardship Australia
- Libby Chaplin, CEO Battery Stewardship Council
- Lina Goodman, CEO Tyre Stewardship Council
- Kylie Roberts-Frost, CEO Australian Bedding Stewardship Council (ABSC).

Finally, sincere thanks to those who have contributed their time and wisdom to this independent research project:

- Emma Syrat for her outstanding work with research, writing, structure, and bibliography
- Rod Carr (Marsden Jacob) especially for charts informing the comparative analysis
- Helen Lewis for her contributions to research, case studies and review
- John Thwaites and Richard Collins for encouragement and review.

And most importantly, my deepest appreciation goes to James Maude for supporting my time, travels and investments into this endeavour, and shared vision for a better future for Australia.



ABOUT THE AUTHORS



Helen Millicer, GAICD, Churchill Fellow has decades as a sustainability professional and board director and chair, and been CEO of One Planet Consulting since 2012. She has led national industry reform programs in energy, carbon, water and circular economy from within governments and peak bodies. Helen is currently EPR expert advisor to Soft Plastic Stewardship Australia, Australia-Lead for Climate Action for Associations (out of UK) and Director of Solving Plastic Waste CRC. Qualifications include BA and Post-Grad Dip Business Management from Monash University, and certificates from the Australian Institute of Company Directors, Carbon Accounting from Swinburne, and Sustainable Investing from Harvard..



Emma Syrat is a sustainability and circular economy professional based in France with a strong background in consulting and project management in Australia and Europe. UK qualifications include: BA International Relations and MA Environmental Planning and Management, and she is a certified environmental systems auditor. Emma is passionate about accelerating the transition to a more circular economy and creating systems where resources are valued rather than wasted.

COMMENDATION FOR THIS REPORT



Congratulations to Helen Millicer and her colleagues. This report is a strong, timely and much needed contribution to the EPR debate in Australia and around the world. It correctly frames EPR as a tool for improved governance, financing and productivity of priority product supply chains. The extensive international evidence and analysis in this report strongly supports moving towards mandatory, well-governed, transparent and properly enforced EPR systems. It clearly illustrates that voluntary schemes can be useful as a starting point but are not sufficient in product categories like packaging, tyres, electronics and clothing with thousands of obliged companies. More and better regulated EPR will provide fairness, scale, coordination and serious investment where little or none currently exists.

Australia has an opportunity to learn from the successes and failures in other countries and this report makes an important contribution to Australia's future. We look forward to seeing the results.



EXECUTIVE SUMMARY

OVERVIEW: UNPRODUCTIVE EPR SYSTEM NEEDS URGENT REFORM

Australia's Extended Producer Responsibility (EPR) system is in urgent need of reform. While over 80 nations have adopted mandatory EPR frameworks that drive investment in jobs, local manufacturing and infrastructure and cut waste and emissions, Australia has not used its existing laws to regulate a new national EPR scheme since 2011. EPR remains the missing piece in the Australian Government's reform agenda to reach productivity and emissions targets and form a more resilient future.

EPR is a proven regulatory and financial instrument that requires producers to take responsibility for their products through to end of life. Producers typically do so by forming Producer Responsibility Organisations (PROs) and paying levies that thereby enable a nation to progress beyond basic level recycling. When well designed, PROs coordinate and fund the economic gap ensuring products like tyres and packaging are designed for longer life and recycled at scale.

Good EPR and PROs stimulate investment in businesses, innovation and infrastructure for circular resources and high returns to the nation. It is also the way nations around the world regulate for increased recycled content in products. EPR is a quiet, effective solution for ongoing coordination of product supply chains and replaces less effective one-off taxpayer funded grants and bail-out programs.

Australia's EPR system is currently fragmented across federal and state jurisdictions, riddled with free riders, chronically underfunded and operating well below the standard of comparable nations. Australia is an outlier in not using EPR for common household and business products. The cost of inaction is substantial: industry is confused with expensive suboptimal systems, while Australian households, businesses and the environment bear the consequences. As a result, millions of dollars of valuable products and materials continue to be wasted going to landfills each year. Australia's per capita emissions and waste generation remains among the worst in the world while multifactor productivity growth has declined to barely visible 0.4% annually to June 2025¹.

This report provides an evidence-based analysis of EPR law, regulation, governance and funding models. It follows

key recommendations by the Productivity Commission in 2026 and national Circular Economy Ministerial Advisory Group's (CEMAG) 2024 national report *The Circular Advantage*². It benchmarks Australia's arrangements against international best practice across more than 20 countries and delivers clear, actionable recommendations for government and industry. The report outlines how Australia can harness effective EPR to reform the products that will be bought and used by Australians for decades to come.

Summary of key findings

This report identifies 10 key findings. The headline conclusions are:

1. EPR is a proven tool for effective economic, environmental and productivity reform.

Nations around the world are increasingly relying upon EPR and PROs to set targets and deliver on collections and recycling at a minimum and increasingly for reuse, repair and recycled content for common products. The multiplier returns include new and ongoing jobs, supply chain coordination, innovation, bolstered Small and Medium-sized Enterprises (SMEs), infrastructure investment and more efficient products. The benefits flowing to households and businesses across a country outweigh the short-term compliance requirements and costs upon obliged producers. Impacts upon inflation are negligible.

2. Reform unlocks significant economic opportunity.

Mandatory EPR gives governments, PROs, and industry the certainty to start, invest and innovate for the long term in infrastructure, jobs, and globally competitive manufacturing, while supporting progress toward 2030 and 2050 targets for recycled content, energy efficient products, lower emissions and reduced waste to landfill.

3. Fragmentation is costing Australia billions.

Ten regulators (state and federal) and no coordinating framework is expensive. The Australian Retail Council has estimated ongoing government regulatory fragmentation (including and beyond EPR) will cost \$26 billion in lost GDP over the next decade and add more than \$9 billion to household costs³. A formal intergovernmental agreement between federal/states is needed to clarify roles on EPR laws, regulations, regulator and scope of PROs. Belgium provides a good model for an effective collaborative federal system.



4. One national regulator would fix it.

Designating the national EPA as the regulator for all EPR schemes and PROs would remove duplication, improve business productivity, cut costs and strengthen government regulatory efficiency.

5. Australians and businesses lose out.

Absence of a coherent national direction and regulated PROs has resulted in multiple overlapping voluntary schemes struggling with reduced income, duplicated overheads and dispersed efforts. Other losses include lack of coordination in data, collections, recycled content and public education campaigns.

6. Voluntary EPR is at risk of failure and cannot scale.

Early industry resistance to regulation has eased as voluntary scheme struggles became clear. Only between 3-45% of liable companies pay levies in Australia against 85-100% in mandatory schemes overseas. This leaves champion brands carrying the risk, and national PROs chronically underfunded unable to grow and deliver. Without urgent actions, Australia faces more Redcycle 2.0-type potential collapses, while similar schemes overseas have millions to expertly plan and invest each year into system uplift in national economies with more circular products, repair, recycling and recycled content manufacturing.

7. Stagnating EPR system for 15 years.

No new regulated national EPR schemes have been introduced since 2011 and this lack of national progress

on EPR is hindering productivity gains⁴. Meanwhile, in many other countries not for profit (NFP) PROs start, grow, consolidate and collaborate with impressive results.

8. Government support and transparency are missing.

Typically, mandatory EPR schemes overseas form within two to five years with government-industry collaboration. In Australia some sectors and PROs have delayed structural reform while waiting 5-13 years for regulations. ACCC authorisation process for voluntary NFP PROs is a barrier and costly, and warrants streamlining in line with standard practice with authorisation of EPR schemes overseas.

9. Not-for-profit PROs deliver stronger outcomes.

Industry-led NFP regulated PROs are the norm at 87% and consistently outperform commercial competing schemes on results, transparency, accountability and public benefit. Following costly litigation and fraud scandals, four nations wrote new laws in 2023-25 to mandate the NFP model.

10. Central producer registries make compliance easy.

Given constitutional import/export product responsibilities, Australia’s national EPA is well placed to oversee national producer registries across current and future EPR schemes, enabling easy business processes, and government analysis, cross-checking, monitoring and enforcement.

Figure 1 illustrates the wide gap and consistently low recycling performance of Australian PROs with these complex products, and illustrates what Australia can gain after EPR reform is undertaken. It provides a sample

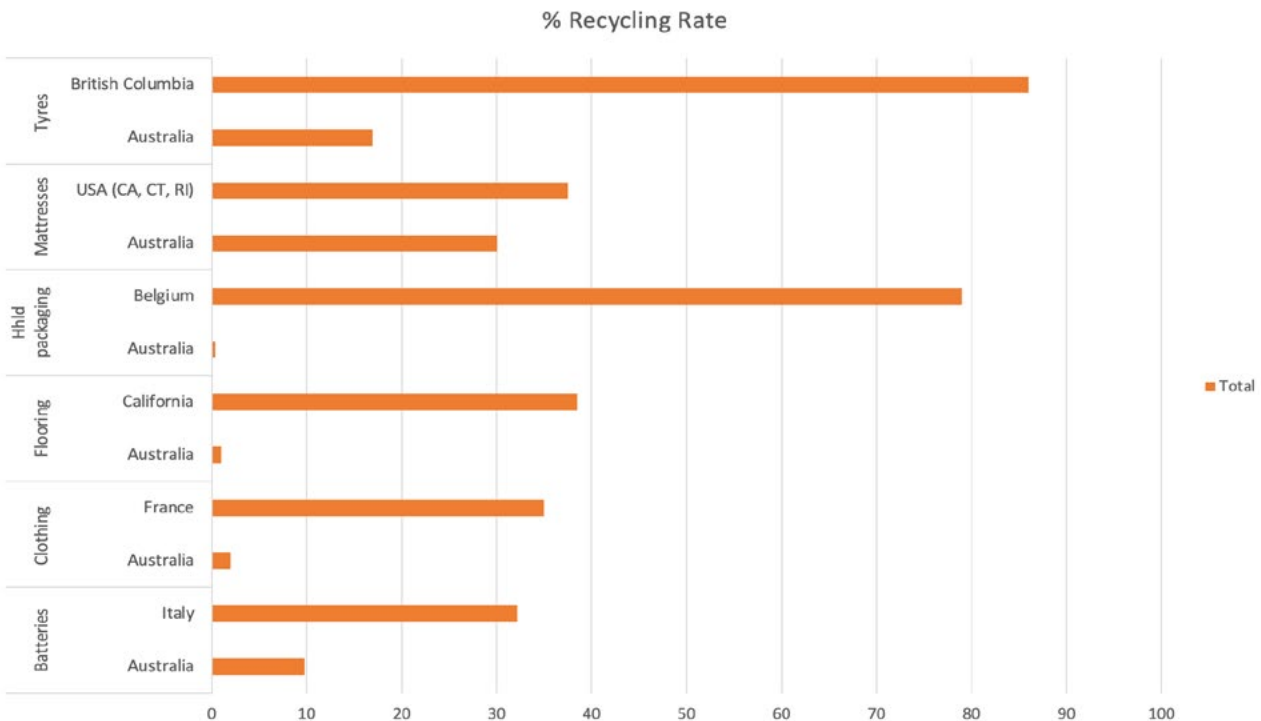


Figure 1 Annual mechanical recycling rates per PRO (2024-25)

NOTE: This chart uses mechanical recycling data obtained from specific PROs relative to the quantity of product into the jurisdiction; it excludes waste to energy/incineration. Australian tyre recycling is by industry and independent of the PRO, Australian packaging data is only soft plastics PRO, the French clothing PRO includes linen, shoes and data excludes reuse, and the Italian battery PRO is for one of four in operation.

of the primary data gathered for this report from some of Australia’s NFP voluntary PROs and ‘best in class’ comparable PROs in other nations. Section 5 covers more key factors behind the effectiveness of PROs including the budgets, staffing, cost coverage, fee eco-modulation and numbers of members.

READINESS AND URGENCY OF PRIORITY PRODUCT CATEGORIES

As this report illustrates, some Australian voluntary schemes have waited up to 13 years for regulation. Most schemes overseas are regulated by governments within 2-5 years whilst industry coalesces around a PRO entity. As industry completes formal steps for PROs including constitutions, board structures, approvals, contracts and supply chain coordination, governments are simultaneously regulating, selecting, appointing and contracting the PROs. The PROs start small in a niche and grow becoming useful coordinators of improved products and national productivity. Based upon comparative analysis in Section 5 of this report, Table 1 summarises the readiness and urgency for national regulation of these products and appointment of PROs.

Given industry and PRO readiness, Australian Government funding in 2020 and financial precarity, it is reasonable for government announcements to be made in 2026 on phased timing for regulations and for selection and appointments of PROs over next one-three years. The suggested order is in Table 1. Other schemes for regulation can include electrical products and solar PV. Once underway PROs, industry and the Australian Government will be able to more confidently plan and set targets for PROs, sectors, recycled content and improved productivity in the run up to 2030.

This report and recommendations for smarter product stewardship are consistent with policies of all governments and parties for harmonised regulation, strengthened economy, productivity and resilience, including from the Productivity Commission, Australian Retail Council and CEMAG⁵.

REPORT RECOMMENDATIONS

Australia has sound governance regimes, willing governments and industry, talented people and fledgling schemes to build a world-class EPR system into the future. Several key industry sectors and their voluntary PROs, many formed in the last decade and often with support of governments, have demonstrated both the appetite for reform and the capacity to deliver. With the right regulatory framework in place, they can evolve and do far more. Sections in this report describe the roles and responsibilities for laws, regulators and PROs, and illustrate the tremendous scale of the potential benefits waiting to be achieved. The opportunity is as clear as the case for speedy regulatory action.

National policy reforms that enable successful EPR by 2030 for priority products sold to Australians (Sections 3 and 4)

1. Australian governments and industry should recognise EPR and PROs as essential productivity mechanisms that provide coordination, funding and services currently missing in the Australian market. Producer-funded PROs can deliver new collections, infrastructure and services to scale up reuse, repair and recycling for Australian households and businesses.

CRITERIA	BATTERIES	PACKAGING*	MATTRESSES	TYRES	FLOORING	CLOTHING
Environmental/economic/PRO risks if no regulation	Very high	High	High	Medium	Low	High
Australian Competition and Consumer Commission (ACCC) approvals	Attained	Attained	Attained	Attained	Attained	No
Readiness for regulation	High	High	High	High	High	Medium
PRO risk if regulation delayed beyond 1-2yrs	Very high	Very high	Very high	Medium	Medium	Medium
Timing for regulation and appointment of PROs	2026	2026-27	2026-27	2026-27	2027	2028

Table 1 Assessment of priority product category readiness for EPR regulation in Australia

**This refers to SPSA for soft plastic packaging, not the many other voluntary packaging schemes.*



2. Australian governments should recognise that other nations use their EPR and PROs to form targets, manage product supply chains, contract infrastructure, fund recycling and recycled content, engage thousands of producers, establish data, contracts and standards. It is the PROs who are the interfacing expert conductors between governments and markets managing material flow, budgets, reports and ensuring targets are met. The Australian Government must set the regulations, select the PROs and empower the regulator to regulate PROs and obliged companies.
3. Governments should regulate for EPR in high-priority product categories by 2028 for batteries, plastic packaging, mattresses, tyres, flooring, clothing and solar PV at a minimum. There is merit to update of the Oils scheme and TV and Computer scheme as well. Appointed PROs should operate under agreed staged implementation plans, defined timelines, and, where necessary, bridging finance to ensure quick and successful scale-up across Australia.
4. Given the precarity of priority voluntary schemes, the Australian Government should follow the precedent of its 2000 Oils Stewardship funding immediately making available bridging loan finance for a defined period of 5-7 years, with a clear early date for regulation to take effect so producers comply, and schemes can scale nationally.
5. Australian governments and industry should adopt the Extended Producer Responsibility Alliance (EXPRA) Golden Rules as the baseline for effective EPR design and PRO approvals and governance Figure 4⁶.
6. Improve government processes for future EPR in line with international standard practice, including ACCC authorisation, appointment, terms etc.
9. Regulations should require eco-modulated producer fees to be introduced so that fee structures incentivise efficiency, durability, repair, reuse, recycling and recycled content in products, and discourage product designs or materials that increase waste, processing, environmental and economic costs.
10. Governments, PROs and industry should work to a 2028 deadline for a cooperation-unification plan where there are competing schemes within specific product categories, such as packaging and electronic goods. This review should cover service scope, roles, responsibilities, budgets, and implementation timeframes. An independent transition broker should be appointed to coordinate negotiations, assess legal, financial, service and governance arrangements, and advise ministers and industry on plans for integration-cooperation options for efficiencies and measurable outcomes.
11. The Australian Government and industry should establish in EPR regulations and PRO agreements measurable performance targets and independent reviews that support ongoing improvement in national industry sectors in productivity, resilience, emissions and environmental performance.

National regulator reforms for necessary compliance and transparency (Section 6)

12. Governments should designate the National EPA as the regulator for all regulated EPR schemes and PROs, supported by delegated state and national functions to improve efficiency, consistency, and regulatory symmetry. The report's findings can inform the design of regulatory obligations for PROs and supply chain participants.
13. The National EPA should have clear powers to apply penalties efficiently to PROs and liable entities where sufficient evidence exists, reducing free riding, time delays and unnecessary administrative burden.
14. Governments should establish a national producer registry, potentially managed by the National EPA, to support compliance monitoring, cross-checking of liable parties, trend analysis, detection of free riders, and coordinated enforcement.
15. Governments, the regulator and PROs should establish appropriate confidential oversight and public reporting frameworks for all regulated schemes, PROs, and liable parties. This can include reporting on financial flows, material flows, collection rates, recycling outcomes, standard contracts, and overall system performance. This will require altering the type of authorisations required by ACCC.

Reforms that strengthen capacity of PROs to deliver improved national productivity (Section 5)

7. Governments should clarify the selection criteria for PROs drawing on the EXPRA Golden Rules and the findings of this report. Criteria should require schemes to operate for public benefit, retain not-for-profit status and flexibility to adapt to improve services in line with regulations.
8. The Australian Government should regulate for industry-led not-for-profit PROs in line with 87% of global best practice. The objective should be to achieve significant efficiencies with singular regulated NFP schemes rather than multiple competing schemes, given this is the most cost-effective way to apply expertise, funds and logistics to related products across vast areas of Australia.



SCOPE OF REPORT

Comparing EPR schemes and PROs between countries and within countries is inherently challenging due to differences in scope, population, geography, economy, languages and cultural contexts. For this reason, this report focuses on overarching policy choices on EPR laws and regulations, as well as the roles of PROs and regulators, and uses case studies from other countries throughout to examine their impacts in practice. Two criteria have been used to select overseas schemes:

1. availability of data about their history, operations, governance, performance and budget
2. relatively similar scope in products covered with Australian PROs.

As Table 2 shows, analysis in this report is not limited to one country, and this diversity helps identify patterns and overarching principles behind the successes and failures in each jurisdiction providing lessons to inform the next steps in Australia.

Decisions have been made to focus on the key policy questions facing Australia at the moment, and less on the more operational, second order issues such as: how governments appoint PROs, length of PRO contracts, definition of 'producer' and which targets are written into regulations or in contract agreements. Such details can be considered after Australia's key policy positions are agreed.

Table 2 Australian and overseas EPR and PRO examples with detailed data and case studies in this report

PROBLEMATIC PRODUCT	AUSTRALIAN PRO	OVERSEAS EPR MODELS AND PROS
Oil	Australian Government Oil Stewardship	Cyclevia (France)
Batteries	Battery Stewardship Council (BSC)	Cobat (Italy)
Electronic goods	Multiple PROs for televisions and computers	Multiple PROs for electrical and electronic products in British Columbia (Canada)
Household packaging	Soft Plastic Stewardship Australia (SPSA)	Fost Plus (Belgium), EkoKom (Czechia), Slovenia, UK, California and Brazil
Mattresses	Australian Bedding Stewardship Council (ABSC)	Mattress Recycling Council (MRC) (US)
Tyres	Tyre Stewardship Australia (TSA)	Tire Stewardship (British Columbia)
Floor covering	Resiloop	CARE (California US)
Clothing	Seamless	ReFashion (France), UK



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