Deloitte.

WWF

The case for reuse – a packaging transformation in Australia

Report prepared by Deloitte for WWF-Australia
July 2026

© Ake Ngiamsanguan, iStockphoto, Getty Images

Executive Summary | The case for reuse – a packaging transformation in Australia

Australia's packaging waste challenge cannot be solved by recycling alone, with greater focus on reuse needed to unlock economic value and support a more effective circular economy.

Australia has a significant packaging waste problem

The creation, use and disposal of single use plastic packaging present a critical threat to Australia's natural systems and human health. Without action to reduce packaging volumes, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) has estimated that more than 12 million tonnes of new packaging could be entering the market each year by 2040. Packaging reforms in Australia have been proposed to reduce the impact of single use packaging and improve circularity of the packaging industry. While the principles of the reforms are robust, there is a case for reuse to become a more prominent lever in Australia's circular economy reform agenda.

A reform agenda that is only focused on recycling will not get Australia as far as it needs to go to meet its circular economy targets

To date, efforts to drive the circular economic transition in Australia have primarily focused on recycling. The Australian Packaging Covenant Organisation (APCO) estimated that in 2022-23 approximately 7.04 million tonnes of new packaging entered the Australian market, however in the same year, the national recovery rate of all packaging materials was only 56%. Recycling systems alone were unable to enable the action needed to meet the National Packaging Target of 100% packaging being reusable, recyclable or compostable by 2025. To achieve circularity in Australia's packaging industry, the reform agenda needs to consider reuse with as much weight and value as recycling.

Reuse is a higher value retention pathway that will generate tangible economic benefits for the Australian economy

Reuse is a more effective circular economic strategy than recycling or upcycling because it provides a higher value retention over a product's lifespan. Reuse processes focus on extending a product's useful lifespan, retaining the embodied value of a product for longer while also preventing waste generation. Transitioning to enable reusable packaging models has the potential to unlock significant economic benefits for Australia through introduction of new revenue streams (e.g. product-as-a-service or subscription offerings) and creation of cost savings for businesses. Innovation and investment in infrastructure will contribute to new job creation and skills development.

In Australia, several industries are ready to scale reuse solutions (including food and beverage, logistics and supply chains and retail). With 91% of Australians being concerned about the environment impact of packaging waste, reuse has the potential to become an established and a sustainable part of the circular economy transition.

Reusable packaging businesses in Australia are constrained by persistent barriers to growth and are asking for government to include them in the reform conversation

Engagement with reuse businesses in Australia reveals that there are real barriers to growth due to 1) inconsistent application of policies that directly enable reuse; 2) the lack of critical infrastructure (collection, transport and washing facilities) needed to scale reuse systems, and 3) low customer awareness of reuse-specific alternatives to single-use packaging. Further, they don't feel included or recognised in the current engagement concerning the packaging reform direction.

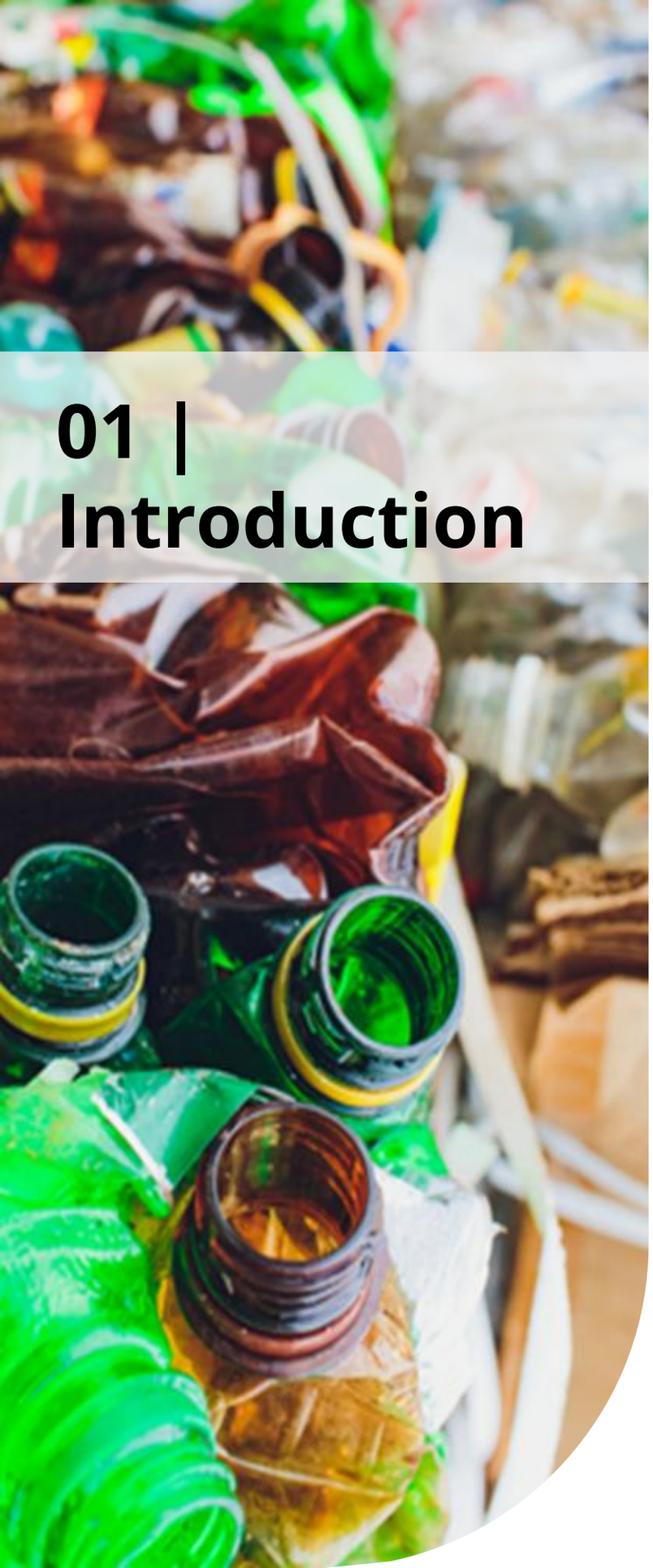
Australia can follow the same path as several international jurisdictions (The UK, the EU, France and Chile). In these countries, the adoption and growth of reusable packaging and reuse systems have been supported by investment in national-scale infrastructure, and through enabling legislation and mandatory policy introduction.

To advance Australian reuse systems at scale, the reusable packaging industry needs the leadership of all levels of government. While policy frameworks exist to support Australia's circular economy transition, without targeted government intervention and investment to grow the reuse industry, the full opportunity of reuse and its potential benefits will be out of reach.

Eight recommendations for Australia's packaging reform are provided* to accelerate reusable packaging and reuse systems. These recommendations are aligned to existing policy frameworks and provide achievable actions for commitment.

*See pages 12 – 20 for recommendations

Contents



01 | Introduction

Reuse – Reimagine and Reform

Single-use packaging presents a critical threat to our environment. The depletion of virgin materials for production, widespread littering of used packaging, and poor recoverability of readily recyclable components such as plastics, continues to cause significant damage to natural systems and human health.

In 2022-23, approximately 7.04 million tonnes of new packaging entered the Australian market, of which 1.265 million tonnes was plastic[1]. Without action to reduce the volume of packaging, the Department of Climate Change, Energy, the Environment and Water has estimated there could be more than 12 million tonnes of new packaging entering the market each year by 2040[2].

Australia has committed to transition towards a circular economy, setting an ambitious target to double the circularity of the economy by 2035[3]. To date, efforts to drive circularity have been primarily focused on recycling initiatives that have enabled both waste reduction and innovation in waste management systems. In 2024, the Australian Packaging Covenant Organisation (APCO) reported that the 2022-23 national recovery rate for all packaging materials was at 56% and the recovery of plastic packaging at 18%[1] making it clear that Australia's journey to circularity needs to be reimagined.

Reimagination of the packaging systems in Australia to include the processes that enable reuse, in addition to recycling, are needed to move us towards more sustainable use of raw materials and to reduce the volume of littered packaging. Reuse will also create new value in the packaging market.

For the sectors who rely on high-production high-waste packaging, the benefits of reuse are clear:

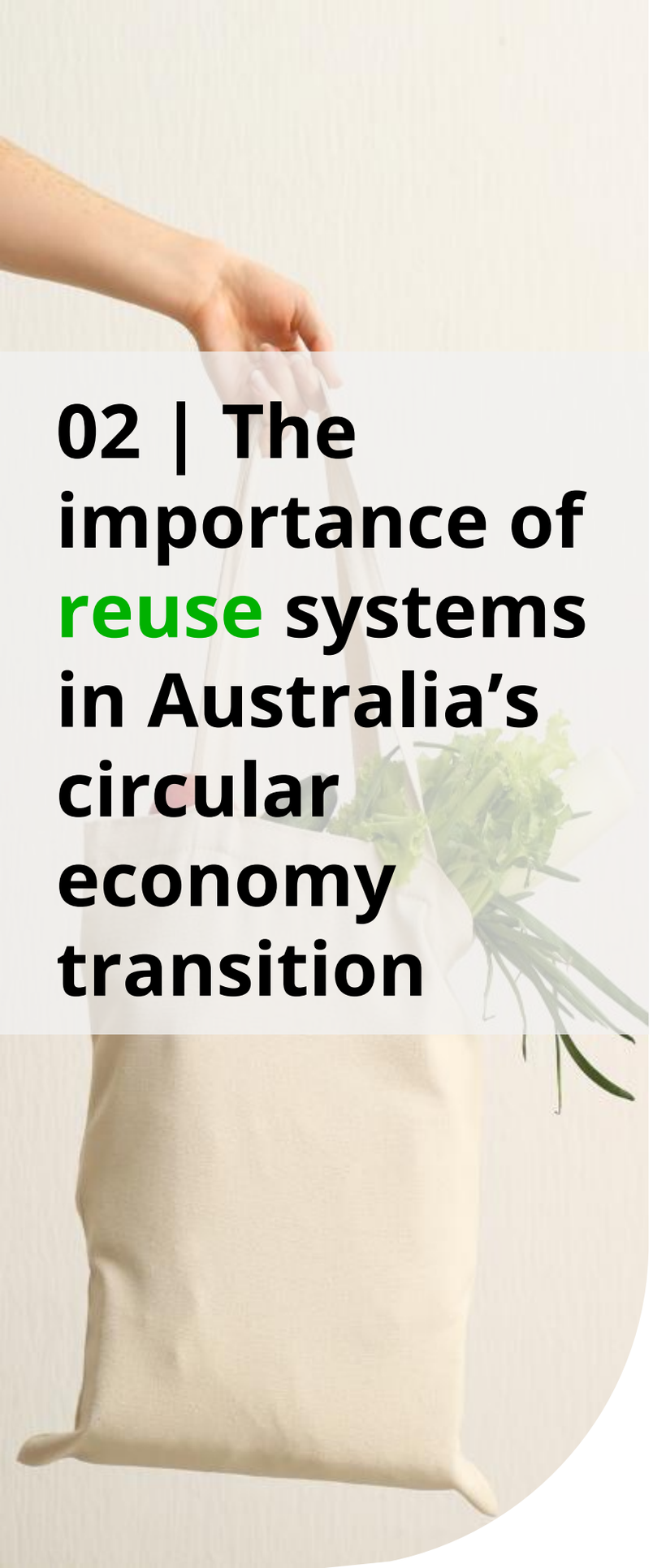
- Emissions reduction over the packaging product's lifecycle;
- Minimisation of the cost of energy and new material inputs required to bring a product back into circulation over its lifecycle , and;
- Less reliance on virgin materials for continued production of new packaging products.

Packaging reform in Australia has been proposed to reduce the impact of single-use packaging and while the principles of the reform are robust, there is a case for reuse to become a more prominent lever in Australia's circular economy for packaging reform.

While the role of reuse is recognised in the packaging reform scope, a report by APCO highlights a critical investment gap that needs to be closed to support the growth of reuse in Australia. Additionally, targeted government intervention aimed at adapting existing recovery systems, and driving innovation to support reuse, is required to drive uptake of reuse at scale.

This report explores the opportunities and value of adopting reuse strategies for packaging in Australia. It highlights current challenges faced by Australian reuse businesses and provides detailed recommendations to encourage the adoption of reusable packaging initiatives as part of the proposed reforms.

Reuse models can provide **over a 20% reduction** in total annual **plastic leakage** to the ocean by 2040[4].



02 | The importance of reuse systems in Australia's circular economy transition

Reuse | A high value retention pathway to achieve a circular economy

Reuse, as a circular economy model, is an upstream process that involves using a product multiple times for the same purpose without significant modifications[5].

Unlike downstream recovery processes, such as recycling (where products are diverted from landfill by being broken down and transformed into new products), reuse processes focus on extending a product's useful lifespan and preventing waste generation. The embodied value of a product (i.e. cost of labour, energy and manufacturing activities for production) is retained for longer. This results in greater economic contribution per unit of production[6] and minimises the need for significant amounts of additional energy and resources, as no new products are created to extend a product's lifecycle.

These benefits present reuse as a more effective, shorter-loop circular strategy than recycling or upcycling due to the higher value retention it provides within an economy. A report by the International Resource Panel (IRP), outlines the different value retention pathways and loops for reuse and explains the intersection of reuse and recycling as part of a full circular economy.

For Australia's packaging industry, APCO estimates that by 2027-28, with 100% utilisation of all reprocessing facilities projected to be in operation at that time, the maximum possible local recovery rate for plastic packaging will be 50%[1].

The 2025 National Packaging Target of 100% packaging being reusable, recyclable or compostable[7] was not met, and the largest growth potential lies in increasing adoption of reuse models.

To be able to achieve future National Packaging Targets, Australia needs to act now to ensure its packaging products and systems are redesigned with reusability outcomes in mind. Incorporating reuse into the packaging industry will recognise the full value of packaging products and bring economic, environmental and societal benefits to Australia.

Maximising packaging value by focusing on collection

Germany's deposit return system follows a "return-to-retail" model, making it easy for consumers to return bottles and cans for reuse or recycling using automated reverse vending machines (RVMs) and manual return point at retail locations. By making it easy for consumers to participate, Germany achieves a 98% packaging return rate[8]. Furthermore, the infrastructure enables efficient segregation and collection and supports national-scale reusable packaging and refill systems.

The model's success is underpinned by mandated recovery policy, consumer incentives and investment in a wide network of common-use collection infrastructure.

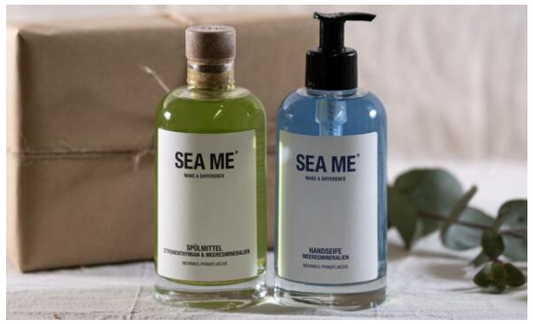
Reuse | International case studies in action

These case studies demonstrate that reuse systems and business models are already operating in international markets, highlighting how scaled adoption of reuse systems is possible with government support and policy that encourages innovation and commitment to change.

SVENSKA RETURSYSTEM

In Sweden, **Svenska Retursystem operates a nationwide reusable packaging system[9]** for the grocery sector, launched in 2001 by industry groups DLF and SDH. It replaced single-use packaging with standardised, reusable crates and pallets. **Sweden's extended producer responsibility (EPR)** policies require producers to manage packaging impacts. This has driven wide-scale adoption of reusable systems like Svenska Retursystem.

Now used for nearly all perishable grocery deliveries, the system has replaced close to one billion single-use packages, **cutting 50,000 tonnes of waste** and **saving USD 18.7 million annually[10]**. As of 2023, the Swedish food industry has saved more than 36, 700 tonnes of CO_2 through using these crates and pallets[9].



SEA ME REUSABLE BOTTLE POOLING

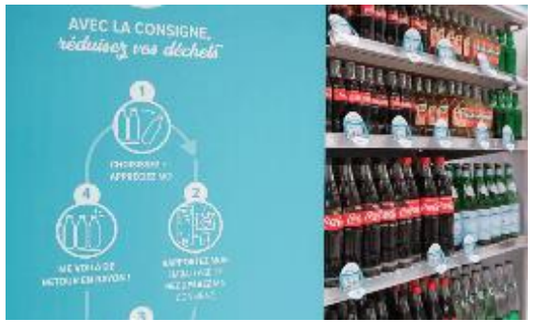
SEA ME[11] is a German-based company that partnered with zerooo and Alpla to produce **reusable bottles for personal care and cleaning products**. The bottles are made from materials such as glass, PET, cork and include innovative digital labelling for container recovery and circularity tracking.

Through zerooo's wide-scale reuse network, customers can return used bottles, pumps, and closures via reverse vending machines or retail counters. Returned bottles are then rinsed and refilled to be used again while other materials unable to be reused are recycled. The network has more than 900 collection and reuse points across Germany and Austria, providing accessible circular reuse infrastructure to support companies, including SEA ME, to serve their customers[11].

WAITROSE UNPACKED

Waitrose launched its Unpacked initiative in 2019, offering **refill stations** for products like cereals, coffee, and detergent where customers could bring their own containers[12]. Due to **strong demand**, the program expanded to more stores and items, increasing sales and reducing single-use packaging.

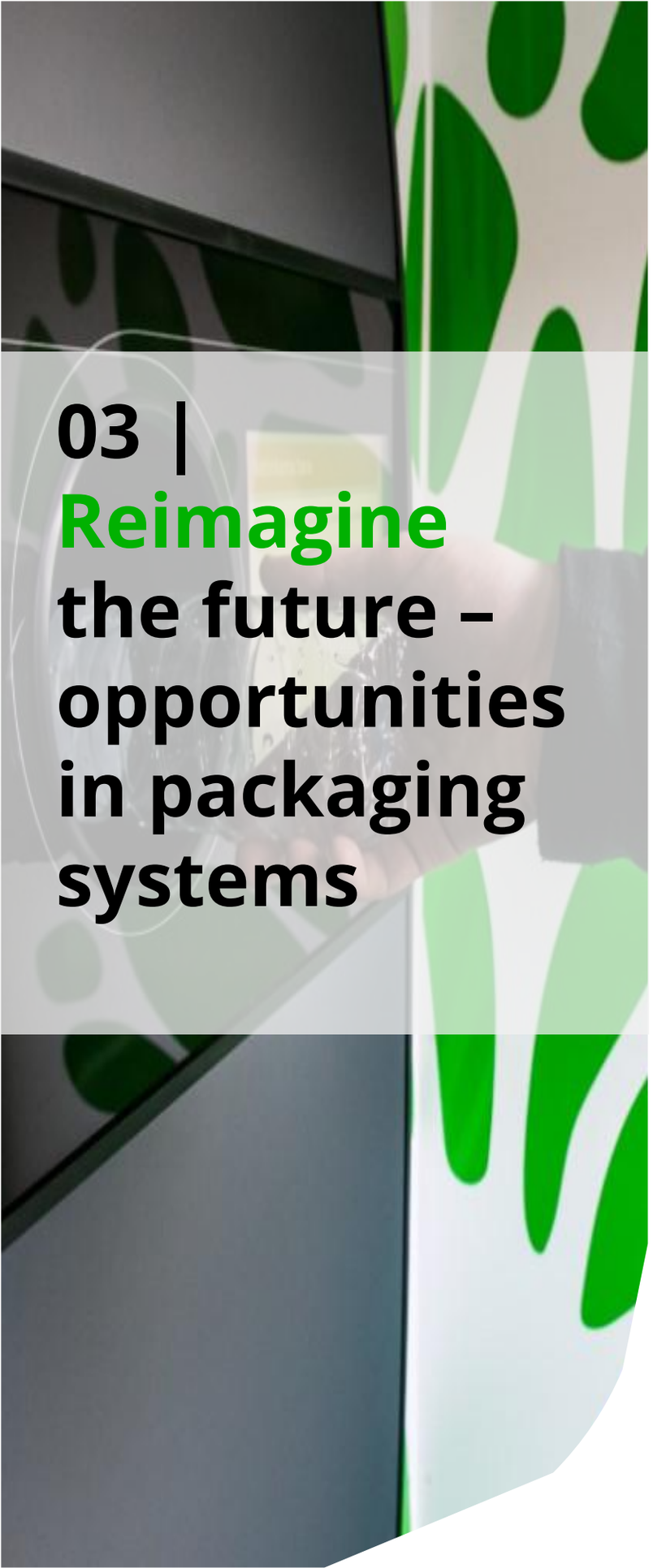
This initiative was enabled by the **UK Plastics Pact**, which provides a clear policy framework to reduce plastic waste and promote reusable packaging. As a member of the Pact, Waitrose committed to making all its own-brand packaging reusable, recyclable, or home compostable by 2025 with nearly 97% already meeting that target. The development and expansion of the Unpacked initiative helped Waitrose scale reuse within a mainstream supermarket retail setting.



LOOP CONTAINER RETURNS

Loop is a global reuse platform, managed by TerraCycle, that **partners with major brands and retailers to offer reuse solutions for packaging[13]**. Customers purchase items through participating retailers, use the products, and then return the empty containers for cleaning and reuse. Loop operates in multiple countries including the United States, Canada, France, the United Kingdom and Japan.

Loop estimates its system can **lower greenhouse gas emissions by 45% compared to traditional packaging[13]**. Each returned container prevents generation of emissions through landfill disposal or incineration. In addition, the reuse process keeps materials in use longer and prevents the depletion of virgin resources to produce new packaging.



03 | Reimagine the future – opportunities in packaging systems

Reimagine | Reuse systems for packaging offer substantial economic opportunities for Australia

Transitioning to reusable packaging catalyses innovation by prompting businesses and industries to rethink product design, manufacturing, and supply chains. The Ellen MacArthur Foundation has estimated that converting just 20% of single-use plastic packaging into reuse models presents a $USD 10 billion opportunity[14]. By adopting reuse systems, Australia stands to gain significant economic advantages through the introduction of new revenue streams and creation of cost savings for businesses, as well as growth in job creation and skill development pathways.

Research into the economics of reuse systems has identified that the full economic and environmental benefits from reuse are realised only when these systems operate at scale and are enabled by shared infrastructure, packaging standardisation and pooling, and high return rates[4].

It is expected that the global reusable packaging market will continue to grow as more countries adopt stricter regulations to phase out single-use packaging products and the demand for reusable alternatives increases. For Australia to capitalise on the local opportunities and the future export markets in full, it needs to adopt a nationwide approach to building and growing the industry.

Enabling reuse systems in Australia through technological advancement

Australia possesses a substantial scientific talent pool and robust research infrastructure able to drive leadership in reusable packaging solutions. With over 6,000 industrial designers contributing to sectors such as sustainable technologies and advanced manufacturing[3], the country is already equipped to accelerate product design for durability and reuse.

Australia has demonstrated its commitment to supporting the circular economy transition with over $29 million invested in plastic recycling innovations and technology through Cooperative Research Centre (CRC) projects[15]. This provides a proven framework for enabling the advancement of innovations for reuse systems and to bring together industry, academia and government to fast-track research, pilot projects and commercial deployment.

Reimagine | A closer look at tangible economic benefit

Scaling of reuse systems in the Australian economy has the potential to unlock economic opportunities – including the creation of additional revenue streams and new jobs. As well as supporting circular economy transition, employment can improve social inclusion outcomes.

New business models and revenue growth

Reuse systems will create new revenue streams and opportunities to expand business models.

Moving to reusable packaging and return systems enables businesses to adopt circular business models such as product-as-a-service, subscription offerings, closed-loop logistics and deposit-return schemes. These models shift the focus from single-use product sales to end-to-end service provision, generating additional recurring revenue sources and stronger customer relationships. Existing product-as-a-service business models for packaging demonstrate that managing the entire lifecycle of packaging can reduce upfront investments for customers and provide a more competitive, cost-effective solution to help producers transition away from single-use packaging systems[16].

In most cases, the assumed cost-burden of transitioning to reusable packaging at scale is not a reality. Modelling from GoUnpackaged estimated that the use of existing transport networks for return logistics of reusable packaging can result in a 29% lower end-to-end system cost compared to single-use scenarios[17].

Job creation and skills development

Shifting to reusable packaging systems generates direct and indirect job opportunities across the entire packaging supply chain.

As businesses transition from single-use to reusable models, additional supply chain opportunities emerge, including collection, cleaning maintenance and redistribution services. The job creation potential of reuse systems is significant and diverse, extending from manual labour to higher skilled workforce in areas such as design and engineering. Research on heavy-industrial reuse systems shows that employment opportunities are higher for high value retention pathways such as remanufacturing and refurbishment due to the greater number of labour hours and technical skills required for the services that bring products back into use[6].

The Ellen MacArthur Foundation has estimated that, in France, at least 11,000 local jobs can be created by the introduction of return logistics services supporting reusable packaging systems[4] showcasing the potential for substantial local employment growth in Australia too.

Social inclusion and employment opportunities in the reusable packaging industry

Reuse initiatives have been integral to the growth of social enterprises, with non-governmental organisation RREUSE estimating that social enterprises create approximately 70 jobs per 1,000 tonnes of products collected for reuse[18].

The charity and social enterprise businesses that currently contribute to the circular economy in the reuse and recycling industry (charity shops and recycling schemes) employ over 76,000 Australians[19]. With these roles focused on areas in collection, sorting, repair, refurbishment at both semi-skilled and skilled levels it offers employment opportunities to a diversity of workers, including marginalised groups, while also providing valuable services back to communities.

Reimagine | Australia's economy – reliant on packaging, ready for reuse

Many of Australia's industries are reliant on packaging for product protection and for ease of transportation to consumers. With small-scale systems and initiatives already in use, several industries are ready to take advantage of future packaging reforms.

FOOD AND BEVERAGE

Status: Ready to scale

The food and beverage sector in Australia is already beginning to adopt reuse systems at scale, making use of localised or closed-loop collection, washing and return systems. Return systems for consumer packaging such as beverage cups, takeaway containers, and glass bottles are increasingly used in cafés, venues and events. **Implementing these initiatives at a larger scale and with the support of common-use infrastructure has the potential to deliver new jobs and reduce waste across the food and beverage sector**, encouraging a wider range of vendors to adopt waste reduction initiatives.

LOGISTICS & SUPPLY CHAIN

Status: Ready to scale

The logistics and supply chain sector is important in advancing reusable packaging systems by managing the movement, storage, and return of durable transportation and protective packaging across multiple lifecycles. Bulk logistics providers are already established in Australia, proving the benefits that the adoption of packaging built for repeated use across the whole logistics industry can bring. On average, reusable plastic crates (RPCs) save $4.85 per shipment and are 58% cheaper than single-use cardboard cartons (SCCs)[20], showing how **reuse can deliver cost savings over relatively short terms**.

RETAIL

Status: Ready to scale

The retail sector generates substantial packaging waste from single-use containers used for groceries, personal care and household products, creating growing pressure on retailers to adopt reuse solutions. Reuse systems placed in-store successfully provide convenient refill options at the point of sale. These include refill stations and reusable packaging options, encouraging customers to return or refill containers instead of discarding them. By improving accessibility and convenience, these **systems can significantly reduce packaging waste by encouraging greater consumer participation in reuse options across all industries.**

CONSUMER GOODS

Status: Entry level

The consumer goods sector, particularly cosmetics and personal care, have begun to adopt packaging specifically designed for multiple uses. However, refill options are limited to direct delivery, mail-back programs, and in-store refills, and are generally customised for a specific business or brand. Sale of goods in packaging designed for reuse retains value in the packaging itself, but only when refill options are accessible to the consumer and don't cost more than the product itself. **Adoption of standard packaging and convenient refill options provides benefits to both producers and consumers by enabling bulk transportation and encouraging return customers.**

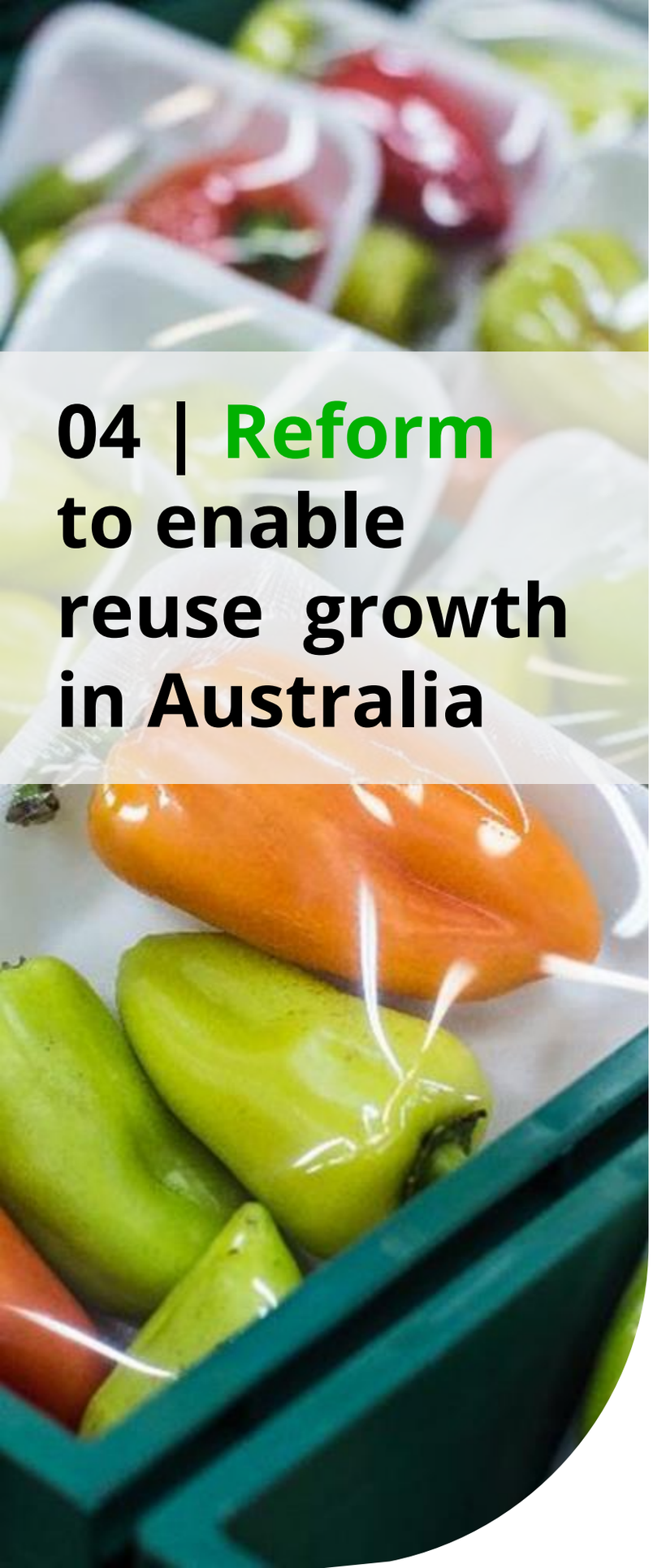
International legislation and policies that promote the adoption and scaling of reuse systems in packaging

The promotion of reusable packaging has enabled international markets to advance their circular economy transitions beyond approaches solely focused on waste management and recycling. Legislation and mandatory targets have enabled scale of reuse systems and both public and private investment in the industry.

The **European Union (EU)** is a global leader of the circular economy transition. The Circular Economy Action Plan, adopted in March 2020, includes directives to enhance packaging reuse and recently introduced reusable packaging targets through the Packaging and Packaging Waste Regulations [21]. The legislation has driven country-scale incentive schemes and infrastructure delivery in countries like Germany.

Through the Anti-Waste and Circular Economy Law, **France** has introduced extended producer responsibility schemes to create a solidarity reuse fund providing financial support and infrastructure to organisations that adopt reuse models. It has also introduced targets to mandate 10% of packaging to be reusable by 2027, driving producers to explore reusable packaging options [22].

Chile's Extended Producer Responsibility Law (EPR), passed in 2016, covers packaging materials for goods sold in the domestic market within their scheme, promoting reuse and establishing fundamental principles for the hierarchy for waste management [23].



04 | Reform to enable reuse growth in Australia

Reform | Intervention to support industry and consumer investment in reuse

The wide-scale uptake of reusable packaging systems in Australia is currently constrained by a lack of supporting mechanisms such as initiatives to harmonise reuse at a national-level, sustained investment in critical infrastructure, and enablers of change in consumer behaviours.

Government intervention for growth

A consistent barrier to scaling reuse businesses is the lack of established and harmonised strategy to drive sustained industry growth. The current reform agenda continues to focus on enhancing packaging design for recyclability and improving recycling options and recycled product use. This will lead to underinvestment in the existing reuse industry and it signals that the benefits of including reuse in actions to enable circularity are not widely known.

Efforts to harmonise state-based recycling initiatives, recycling-centric labelling requirements and single-use plastic bans across states and territories have resulted in clear increases in recovery rates for recyclable packing[1]. If similar harmonised initiatives were to be introduced for reusable packaging, it is certain that recovery rate and quantities of single-use products avoided would be significantly higher[1]. The success of reuse markets overseas demonstrates the effectiveness of government leadership in enabling producers and consumers to shift to reuse models.

Investment to enable industry-wide development

Short-term grants and pilot initiatives help to understand market opportunities and consumer demand; however, they often fail to drive long-term change or offer benefits beyond relatively small-scale and bespoke use.

Additionally, critical infrastructure such as collection, washing, and transport systems for reusable packaging are not widely established or available for all businesses to access. Realising the full potential of reuse systems requires the existence of shared infrastructure available for use at scale and standardised pooled packaging[4]. The competitive nature of the market means that there is little incentive for large packaging producers and users (such as supermarkets) to invest in change. Proactive intervention by government is required to support the packaging industry to grow to its full potential.

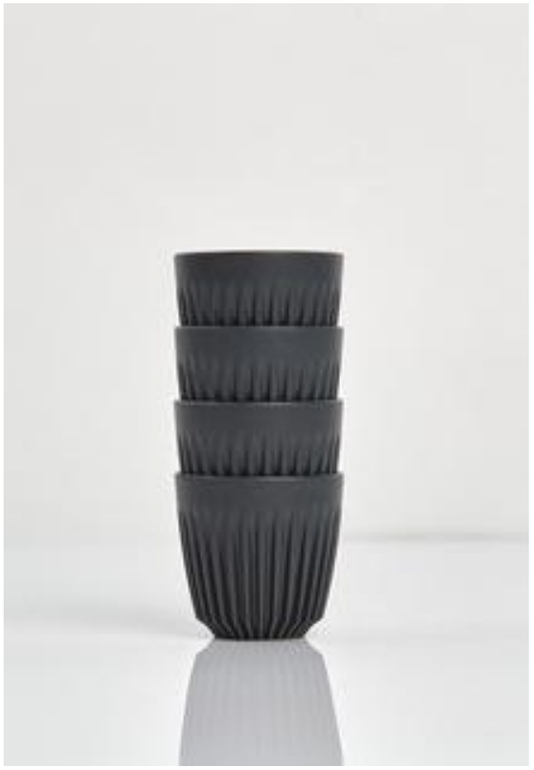
Australia's circular future

The final element essential to the growth of the reuse industry in Australia is the customer. Return rates are the key driver of environmental and economic benefits of a reuse system, and high return is supported by systems that are designed with customer convenience and demand in mind[4].

Reuse is not yet a societal norm in the Reduce, Reuse, Recycle cascade of waste management. The majority of consumers still favour the high-convenience single-use and recyclable packaging options. However, 91% of Australians are concerned about the environmental impact of packaging waste[2] indicating that a change in consumer behaviour is on the horizon. Unless reforms are expanded to include a wider range of circular initiatives, Australia may miss-out on the opportunity to capture the attention of the public, who desire a more sustainable circular future.

Reform | Challenges to scaling reuse packaging systems in Australia

Case studies from Australian food and beverage and retail sectors highlight the challenges impacting businesses today. Through interviews conducted with several of Australia's reuse businesses, including Huskee and Skipping Stones, the common message is that barriers to scaling reuse in Australia can be removed by ensuring consistent policy, expanding infrastructure and introducing standards for packaging.



HUSKEE

Huskee is an Australian design and manufacturing company founded in 2017, with the HuskeeOriginal reusable cup range made from repurposed coffee husk. In 2019, Huskee launched HuskeeSwap, a cup exchange network with over 1,000 sites across 25 countries where customers can borrow, use and return reusable cups. Alongside this, HuskeeLoop is a product stewardship program that collects used cups at end-of-life for remanufacturing and material recovery, ensuring a closed-loop lifecycle for their products. In 2024, Huskee was acquired by BioPak to expand its reach and accelerate reuse innovation globally in response to growing environmental concerns and shifting regulatory landscapes.

Despite increasing consumer interest and demand, insights from Huskee have highlighted barriers to reuse scalability within Australia. Examples include **inconsistent national bans and funding** that prioritise single-use (composting or recycling) outcomes over reuse strategies and the **lack of mandatory requirements** for foodservice providers to offer reuse alternatives, limiting widespread adoption. Costs and challenges around **accessibility, funding and development of wash hub infrastructure** needed to scale reuse and hygienically sanitise reusables offsite has required Huskee to bootstrap investment to support their new program Borrow by Huskee. Lack of direct engagement with the reuse industry to understand commercial needs has resulted in the **responsibility for managing returns still assigned to consumers rather than businesses**. Stronger collaboration between government and reuse service providers, such as Huskee, is needed to expand consumer access to reusable options and encourage behaviour change to make reuse systems mainstream and support long-term viability in Australia.

SKIPPING STONES REFILLERY

Skipping Stones Refillery is a Western Australian social enterprise offering household, personal care and food liquids through a mobile reuse system at farmers markets. Customers can use their own, borrowed or purchased containers, and the business is now trialling vending machines to expand access beyond the farmers market setting.

While interest in reuse is growing, the business highlighted that the **risks related to health and safety compliance,** the **lack of standardised packaging and labels** that are fit-for-purpose for reusability, and **limited guidance available on how businesses should manage container quality, hygiene practices or product information** has created barriers for scaling up. The barriers are particularly evident for grassroots businesses that have a smaller pool of resources and deter other business and manufactures from entering the reuse market. An example of government intervention that could address these barriers include improved packaging design standards that lead to production of high quality, reusable and washable containers that are able to the used and refilled multiple times. Additionally, governments can support industry by making improvements to the wording of funding guidelines to ensure eligibility of reuse businesses within circular economy grants, and promoting reuse options at all levels (federal, state and local) to make it the social norm in the community.

05 | Taking action for circular packaging reform

Recommendations | An alternate future for packaging in Australia

Eight recommendations for packaging reform to enable reuse are presented in this report. These recommendations are driven by three overarching themes derived from both desktop research and interviews with market participants:

There is appetite for scale, but it is at risk of regression: existing reuse businesses want to grow and be a part of the system-wide change, but they are being held back by a lack of engagement, the narrow scope of circular economic initiatives and minimal enabling regulation and supporting infrastructure to help them succeed.

> *"Australia lacks the policy settings, cultural collectivism and manufacturing capability needed to enable reuse at scale [so we looked to overseas markets for growth opportunities]".*
>
> **- Lachlan Hill, Skipper**

Key research highlights the critical role of enabling environments: the IRP report[6] on user-to-user opportunities in a circular economy found that regulatory and access barriers presented the most significant constraint on the adoption of value-retention processes (including direct reuse and reprocessing of products).

> *"Australia is too slow. If we wait any longer to change the system, we risk our reputation [as global innovators and leaders]"*
>
> **- Anonymous**

Growth in the reusable packaging industry in Australia is ready to be realised. By establishing clear reuse targets, and investing in infrastructure, government can lead the way – creating the conditions to encourage innovation and a competitive reuse market. The presence of a thriving reuse industry will place Australia amongst the countries that are already showcasing their circular economic achievements in the global arena.

> *"We need partners who want to make it work for them just as much as we need it to work for us"*
>
> **- Skipping Stones Refillery**

Recommendations | Actions for a refocused packaging reform

Eight recommendations are given, for a circular packaging reform that leverages reuse. The recommendations are written with the understanding that a systemic approach is more effective for realisation of whole-of-economy benefits. Implementation of these recommendations can be considered at all levels of government.

Role of government | Eight recommendations across four key areas are proposed for circular packaging reform

Accelerate reuse strategies through existing policy frameworks

Advancement and scaling of reusable packaging is driven by a clear policy environment and strong leadership.

1. Establish mandatory metrics and targets for packaging reuse.

2. Lead-by-example through government procurement practices.

Collaborate with industry to drive innovation

The existing reuse industry is included in the design of reforms and solutions for future reusable packaging initiatives.

5. Engage with industry stakeholders to hear diverse perspectives.

6. Establish partnerships for innovation and technology uplift.

Invest in infrastructure to support scaleup of reuse processing systems

Key infrastructure is established for the support of a growing industry. Shared facilities drive faster and stronger growth.

3. Invest in Australian-based initiatives that build capacity in industrial reprocessing facilities.

4. Invest in collection and reprocessing infrastructure to maximise economic benefits.

Provide the enabling conditions to grow reuse industry

Real and perceived risks faced by producers and consumers are mitigated, leading to organic market growth.

7. Eliminate barriers to consumer demand and use of reusable products.

8. Harmonise labels and packaging for a safe and competitive market into the future.

Recommendations | Opportunities exist to accelerate reform now

Australia is ready to accelerate reusable packaging reform – there is no need for delayed action, especially where frameworks and models are established and opportunities are already in motion.

To advance reuse systems at scale, the reusable packaging market needs the leadership of the Australian Government. The federal government already has existing and robust policy frameworks in place to support the circular economy transition, but achieving the target of 100% reusable, recyclable or compostable packaging by 2025[1] will not be met within these timelines and continues to remain ambitious.

APCO identified that while system-wide reform is needed, short-term initiatives can be effective at bringing the National Packaging Targets back on track. The table below shows how the key report recommendations can be put into practice by using existing mechanisms or applying insights from previous case studies in Australia and overseas, to progress action on circular packaging reforms and reuse systems.

Table 1. Opportunities to support key recommendations to accelerate reusable packaging in Australia.

Recommendations		Policy and frameworks exist in Australia	Success at industry-scale demonstrated in Australia or overseas	Success at small business-scale demonstrated in Australia	Tactical opportunities can be supported by easy intervention, education and investment
1	**Establish** mandatory metrics and targets for packaging reuse.	✓	✓		
2	**Lead-by-example** through government procurement practices.	✓		✓	
3	**Invest** in Australian-based initiatives that build capacity in industrial reprocessing facilities.		✓		✓
4	**Invest** in collection and reprocessing infrastructure to maximise economic benefits.		✓		✓
5	**Engage** with industry stakeholders to hear diverse perspectives.			✓	✓
6	**Establish** partnerships for innovation and technology uplift.		✓	✓	
7	**Eliminate** barriers to consumer demand and use of reusable products.	✓		✓	✓
8	**Harmonise** labels and packaging for a safe and competitive market into the future.	✓			✓

Legend

✓ : Where Australia can currently leverage off existing policies or proven examples to progress reuse initiatives.

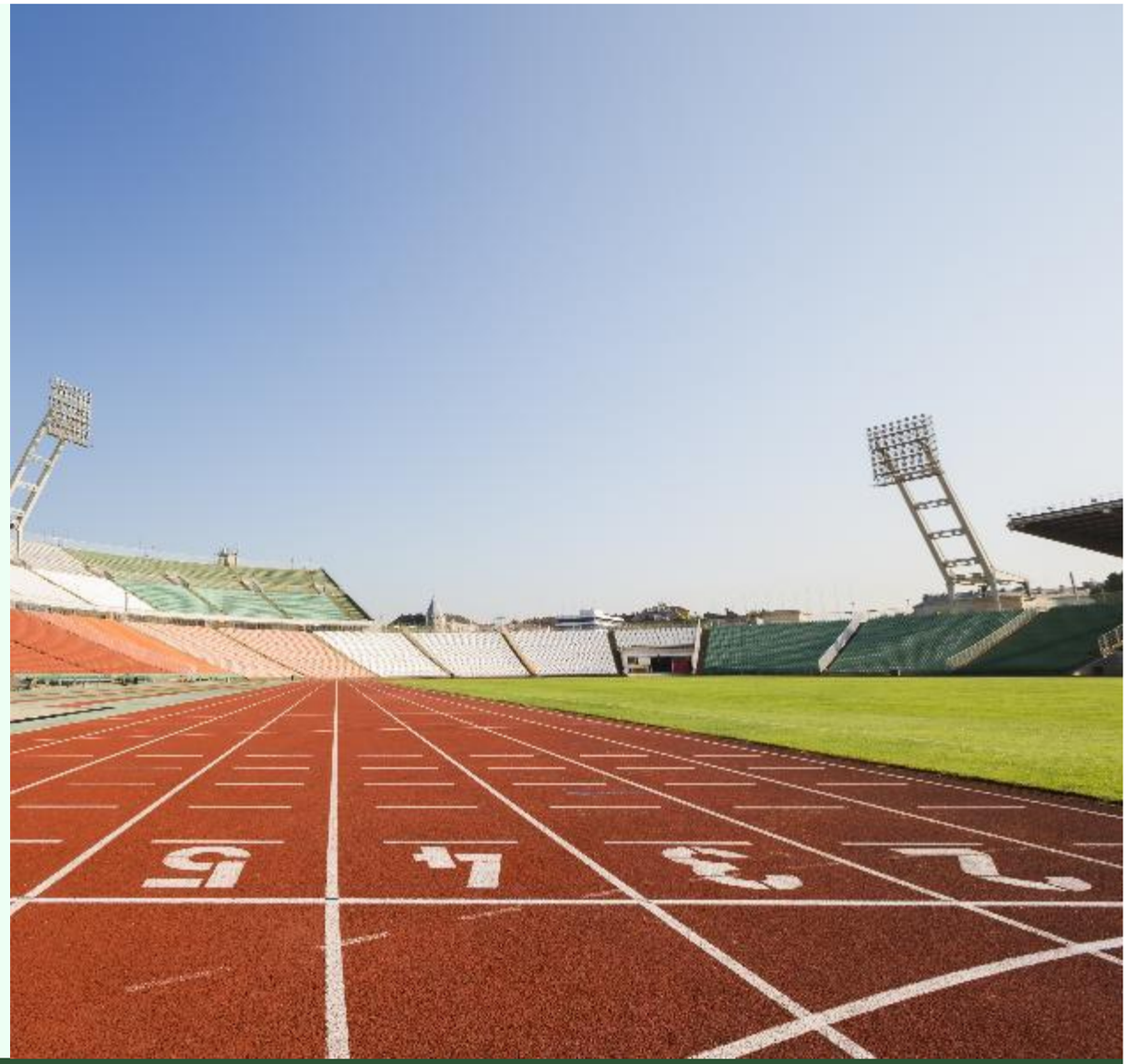
Opportunity spotlight | reuse at major events

The Australian Government holds the levers for change. Major events offer a chance to test and upscale reuse systems, and to influence stakeholders at all levels.

The Australian Government holds the prescriptive, economic and information levers to drive effective behavioural change across all stakeholders in a circular framework. The packaging industry and product manufacturers often cite cost as a barrier to reuse systems, but they are not currently incentivised to innovate or test different systems and solutions.

Major events provide a unique closed-loop environment for upscaling, testing and collecting data on circular systems, in particular reuse. Packaged products are seen as essential for effective event management including transportation, logistics, food and beverage, cleaning and hygiene products and merchandise. The diversity of packaging used in a single location offers a range of opportunities to test new technology and reuse systems at scale, while simultaneously educating and informing a wide sample of the public.

Innovations in event management in Australia are emerging to challenge the traditional perceptions of what is possible for industry, producers and the public to achieve at major venues and events (see case study below). Internationally, event venues are further demonstrating how reuse and circularity concepts are integrated beyond reuseable cup programs. Seattle's Climate Pledge Arena (a certified zero waste venue) is one of a number of venues that has incorporated procurement rules, education and sorting infrastructure into their operations. They also have a single-use plastic ban which applies to the sale of beverages on site and led to installation of water refill stations for guests to use. Over 90% of the waste they generate onsite is diverted from landfill[24].



Case study: WA's Fringe World Festival 2025

Fringe World is one of Australia's largest arts festivals, entertaining over 700,000 attendees over five weeks[25]. In 2025, Bettercup partnered with Fringe World to provide a reusable cup system that integrated within their existing beverage provision model.

Learnings from previous attempts at implementing a reusable cup system at Fringe World enabled Bettercup to design appropriate solutions for collection, cleaning and redistribution logistics for bar operations across the primary pop-up entertainment venue for the festival. Showing that data collected at previous events was crucial in delivering a successful reuse system in 2025.

The system supported vendors serving over 46,000 drinks in reusable cups over 31 days, diverting 372kg of single-use plastic waste from landfill[25]. Further, the system introduced by Bettercup achieved a return rate of almost 85% which exceeded the industry benchmark rate of 70-80% for similar scale reusable cup systems[25].

Opportunity spotlight | reuse at major events

The arenas that showcase Australian sport and entertainment provide unique stages for our circular economic ambition to be realised.

Case Study: Giants-WOSUP partnership to eliminate single-use plastic

Kicking off in 2024, the partnership between War on Single Use Plastic (WOSUP) and the Greater Western Sydney Giants AFL team (Giants) resulted in a proven approach to minimising single-use plastic waste at large-scale sport and entertainment venues in Australia[27].

WOSUP is a Sydney-based sustainable beverage packaging and clean technology company delivering integrated reusable systems for major sports and entertainment venues. Its proprietary WOSUP System is a premium, lightweight and durable reusable cup platform, available in aluminium and advanced polypropylene formats. The system is supported by data and technology designed for use in high-volume stadiums. The ENGIE Stadium venue, home of the Giants, now operates as a 100% reusable beverage environment*. The integrated delivery of cup supply, return infrastructure, collection integration, commercial washing and digital reporting, provides a scalable and commercially viable alternative to single-use packaging in major event environments.

After three years of operation, WOSUP cups have replaced over 200,000 single use plastic cups and, with the right approach to patron experience, the partnership has achieved an average return rate of 89% at ENERGIE Stadium in 2025[27].

208,925

Total number of WOSUP cups used[28].

20

The number of AFL games where WOSUP cups were used instead of single-use plastic[27].

2,298 kgs

of single use plastic waste saved from landfill[27].

That's equivalent to more than

5,000 footballs

*for draught and poured beverage categories.

The spotlight is on Australian sport, as the nation prepares to host numerous major sporting events in the lead up to the Brisbane 2032 Olympic and Paralympic Games. These major sporting events provide an opportunity to showcase and test waste management innovation in the sporting arenas and events management. For reuse to be effectively implemented at major sporting events:

- Sporting venues and clubs need to set specific objectives for waste reduction and reuse implementation;
- Venues and arenas need to be set up with the right infrastructure; and
- Spectators need to be educated and encouraged to make use of the reuse options at events.

The Future of Australian Sport report published by the Australian Sports Commission found that sports organisations will be under increased pressure to be environmentally sustainable[28]. The call for better sustainability outcomes in sports can, in part, be answered by adapting arenas to implement Australia's reuse innovations and improve circular economy transition beyond recycling. Initiatives may include mandates to adopt reusable packaging and disposable packaging bans at major sporting and major event venues. Driving reuse systems through sport, provides opportunities for funding longer term reuse programs and the evaluation of reuse system success beyond pilot-scale testing.

Recovery of cost can be incentivised through club and venue hire arrangements and recovered through ticketing and advertising with a benefit of providing organisations with transparent environmental metrics. Reuse also has the potential to introduce cost saving, particularly in the food and beverage sectors by maximising packaging value-retention over the long-term use of a venue.

Recommendations | Accelerate reuse strategies through existing policy frameworks

Research shows that supporting material reuse can reduce waste and improve circularity[29], but current Australian policies lack clear targets and metrics. Strengthening sector-specific targets and integrating reuse into government procurement will incentivise investment and uptake.

Amending targets in existing policy

The National Waste Policy 2018[30] and National Waste Action Plan 2024[31] acknowledge the importance of reuse strategies to support Australia's circular economy transition; however, many of the existing packaging targets and metrics combine reuse with other recycling initiatives. An example is one of the National Packaging Targets which aimed to have '100% of Australia's packaging be recyclable, reusable and compostable by 2025'. Without specific targets in place, the ability to monitor the progress and impact of reuse-specific initiatives will be limited, and progress towards packaging circularity may continue to be dominated by recycling.

The EU's *Packaging and Packaging Waste Regulation* provides examples of targets set specifically for reuse[21]. The initial targets were set for only a selection of industry sectors, chosen based on the likely ease of adoption of reuse requirements. Initial packaging sectors chosen in the EU were transport, alcoholic and non-alcoholic beverages and point-of-sale packaging[21]. APCO recently released data that identifies reuseable pallets as having the largest reuse potential in Australia[1], indicating that staged targets may be successful at driving investment and adoption of reuse practices locally too.

Leading the way with government procurement requirements

Government procurement of packaged products represents a relatively small percentage of overall purchasing budgets; however, mandatory procurement practices have the potential to drive behaviour change for industry, producers and to influence consumption behaviours at a household level.

Procurement practices have been shown to impact product development and use. An example is Victoria's Recycled First Policy, which is aligned to the National Waste Action Plan targets for recycled material use in government projects. It promoted the diversion of more than 3.4 million tonnes of material from landfill and drove innovative product development and use across a range of applications on construction and transport projects nationally[32].

The current Commonwealth Sustainable Procurement guide refers to reuse in end-of-life decision making only. There is both scope and opportunity to adopt reuse considerations in purchasing, and contracting decisions within all levels of government.

Recommendation 1 - Establish mandatory metrics and targets for packaging reuse

Now

- Expand target 2 of the National Waste Action Plan 2024 to include the percentage of products or materials that are reused each year.
- Expand target 3 of the National Waste Action Plan 2024 to include the number and capacity of operational reusable packaging systems.

Next

- Redraft existing packaging targets to separate the various circular economy initiatives to drive better data collection and analysis.
- Introduce sector-specific packaging reuse targets.

Recommendation 2 - Lead-by-example through government procurement practices

Now

- Introduce reuse-specific targets in target 4 of the National Waste Action Plan 2024.

Next

- Update existing procurement policies and guidelines and national frameworks supporting circular transition to include reuse. Updates can be made in product design, tendering, purchasing and extending life of products guidelines used by all levels of government.

Recommendations | Invest in infrastructure to support scaleup

Expanding national reuse infrastructure could significantly cut Australia's logistics costs and enable more cost-effective reuse systems.

Opportunities for adapting and developing infrastructure for reuse systems

Australia currently lacks the supporting infrastructure to allow reuse systems to be effective at scale. Research from case studies has shown that the majority of existing reprocessing systems are successful at delivering closed loop processes at a small scale (e.g. single business), but they rely on consumers for transportation, separation, washing and de/re-labelling of packaging.

The APCO report on *'Costs and incentives for a more circular packaging system'* concluded that the increased cost of expanded recovery systems (for recycling) should be primarily funded by increased sales of products[33]. The report also noted that the highest cost of packaging production in a circular model is the purchase of new materials for reprocessing. There in an alternative option for lowering the costs of circular economic transition without increasing sales of products, that also considers diversification of use of existing recovery systems.

Reusable packaging systems are less cost-intensive, as no (or very few) new materials are required to bring a product back into use. Significant savings can be realised through the introduction of effective reprocessing systems that support the reuse industry such as systems for packaging collection, washing/cleaning, quality control testing and redistribution.

Package collection systems already exist. Internationally, the same infrastructure that is currently used to support the Container Deposit Scheme within Australia, has been re-engineered to support reuse markets (refer to the Case Study on page 5). This indicates that for relatively low effort, Australia can adapt existing infrastructure to support scaled reuse systems nationally. In addition to potential reduction of recovery of costs associated with development, the use of the established collection infrastructure can directly enable consumer and producer incentives and EPR schemes which have already been discussed in WWF-Australia's previous submission on the Australian Government's packaging reform consultation.

New initiatives to support reuse at scale are most needed in the reprocessing, quality control testing and redistribution components of reuse systems. By building Australian-based capacity in reprocessing for reuse, significant cost savings and supply chain risk can be realised through reduction of long-range overseas transportation of virgin materials and new packaging. In the long-term, cost savings can encourage the growth of local manufacturing of reusable packaging products and the development of co-located facilities that support large-scale packaging return, reprocessing and reuse industries.

Recommendation 3 - Invest in Australian-based initiatives that build capacity in industrial reprocessing facilities

Now

- Fund pilot scale reprocessing facilities to support the existing reuse market – focusing on bulk container and point-of-sale container reprocessing.

Next

- Consider state-wide schemes (building off existing Container Deposit Schemes) to provide incentives for established recycling operators to invest in infrastructure and technology that support reuse.

Recommendation 4 - Invest in collection and reprocessing infrastructure to maximise economic benefits

Now

- Incentivise co-location of reuse collection and reprocessing infrastructure with existing recycling infrastructure.

Next

- Incentivise major supermarkets and retailers to develop shared reuse systems infrastructure, associated with warehousing and distribution networks to enable all-sizes of business.

Recommendations | Collaborate with industry to drive innovation

The right partnerships can strengthen the existing reuse industry and bring experience to inform future national-scale reuse efforts.

The current reform agenda for circular packaging focuses on system-wide changes that impact producers and mass distributors (like major supermarket and retail companies). While these initiatives will enable the future market, the existing small-medium enterprises are currently not captured and leave the existing reuse industry participants feeling unrecognised and unsupported.

Capturing voices and experiences for the benefit of the whole industry

By providing the existing reuse industry with a voice in the design of packaging reforms, the Australian Government can offer a balance of long-term system-level interventions, and short-to-medium term industry-ready solutions as part of packaging reforms.

Supermarkets are responsible for vending the majority of household packaging waste generated in Australia[33]. However, unsurprisingly, small businesses are the current leaders on developing the reuse systems that will support future circular economy frameworks. Innovations such as reuse vending options, digital labelling, and measure and fill point-of-sale solutions have already been mentioned in this report and are working successfully at small-to-medium business scale in the Australian market. These implementation-ready innovations could be easily captured in the reform recommendations through balanced representation and consultation.

Connecting industry to partners to advance solutions

Establishing the right partnerships and connections for reusable packaging solutions enables industry-wide access to much needed technology and skills. By funding collaborations with research organisations, the government can provide solutions that support existing industry at a relatively small scale, while identifying the needs for successful and cost-effective future nationwide systems.

Sector-specific information platforms, working groups and industry network events have driven growth and collaboration in other national-scale waste management sectors like organic food recovery (Food Waste for Healthy Soils), plastics (National Plastics Plan) and e-waste (E-stewardship in Australia) and can promote similar outcomes for the reuseable packaging industry too.

Recommendation 5 - Engage with industry stakeholders to hear diverse perspectives

Now

- Ensure that existing small businesses are able to participate in existing packaging advocacy initiatives (e.g. APCO) by offering accessible membership options or targeted stakeholder engagement forums.

Next

- It is recommended that the Australian Government establish a reusable packaging advisory body, with a similar structure to the Circular Economy Ministerial Advisory Group. The body can facilitate the development of a future national action plan for reuse, ensuring balanced perspectives are considered by decision makers.

Recommendation 6 - Establish partnerships for innovation and technology uplift

Now

- Create innovation hubs to develop solutions that the existing industry needs now - such as technology for washing containers used for bulk transportation and refilling of high-viscosity liquids, or technology to guarantee food safety standards are met at lower cost.

Next

- Provide grants and funding to enable scaled roll-out of collection and redistribution systems, quality control testing and other solutions to the barriers already highlighted by industry[33].

Recommendations | Provide the enabling conditions to support growth

Legal liability concerns and the lack of standards for containers and labels are significant barriers to the growth of reusable packaging businesses in Australia.

The introduction of single-use plastic bans in Australia has had a noticeable impact on consumer behaviours and the uptake of reuseable options, such as BYO containers, bags and refillable packaging. However, significant barriers remain for reuse businesses, including the legal risks associated with hygiene and safety requirements for packages and products.

Nationwide protections for reuse businesses

The industry insights captured during our research highlighted that safety concerns and fear of legal action were at the forefront of their minds when considering the growth of their business:

- What will happen if someone gets sick from food in a BYO container?
- What if the liquid reacts with the container material and makes it degrade?
- What if someone does not know what is in the container and uses it incorrectly?
- Glass is a sustainable and chemically inert option for reuse, but what if it breaks and someone gets hurt?

Liability protections and guidance and standardisation of containers and labels are two tried-and-tested approaches for improving business and consumer safety and providing conditions for a competitive market.

In July 2022, South Australia undertook legislative amendments to their *Civil Liabilities Act 1936* which allowed for better protections for food businesses that wanted to encourage reuse options by allowing customers to bring their own containers[34]. Government interventions such as legislative change to de-risk reusable systems is sensible and provides tangible support to businesses already offering BYO packaging options.

Progression of packaging and label standards ahead of global change

The diversity of packaging designs and labelling also presents a barrier to the ease of reuse uptake by consumers and prevents healthy competition within industry. Updating packaging and labels ahead of global standard roll-out can help businesses be ready for future requirements and begin to align point-of-sale systems to support reuse. Importantly, harmonisation within Australia will drive early innovation pilots for shared collection and reprocessing resources.

There are opportunities for the Australian Government to follow in the EU's footsteps. Collaboration with APCO to update the Sustainability Packaging Guidelines ahead of global standards will strengthen reuse as a preferred packaging design consideration[35] for new packaging designs entering the Australian market.

Recommendation 7 – Eliminate barriers to consumer demand and use of reusable packaging

Now

- Undertake legislative amendments on food safety regulations to protect businesses from legal action and damages.

Next

- Expand amendments to provide safety and business protections in other sectors where reusable packaging potential exists, such as household cleaning products, chemicals and home maintenance products.

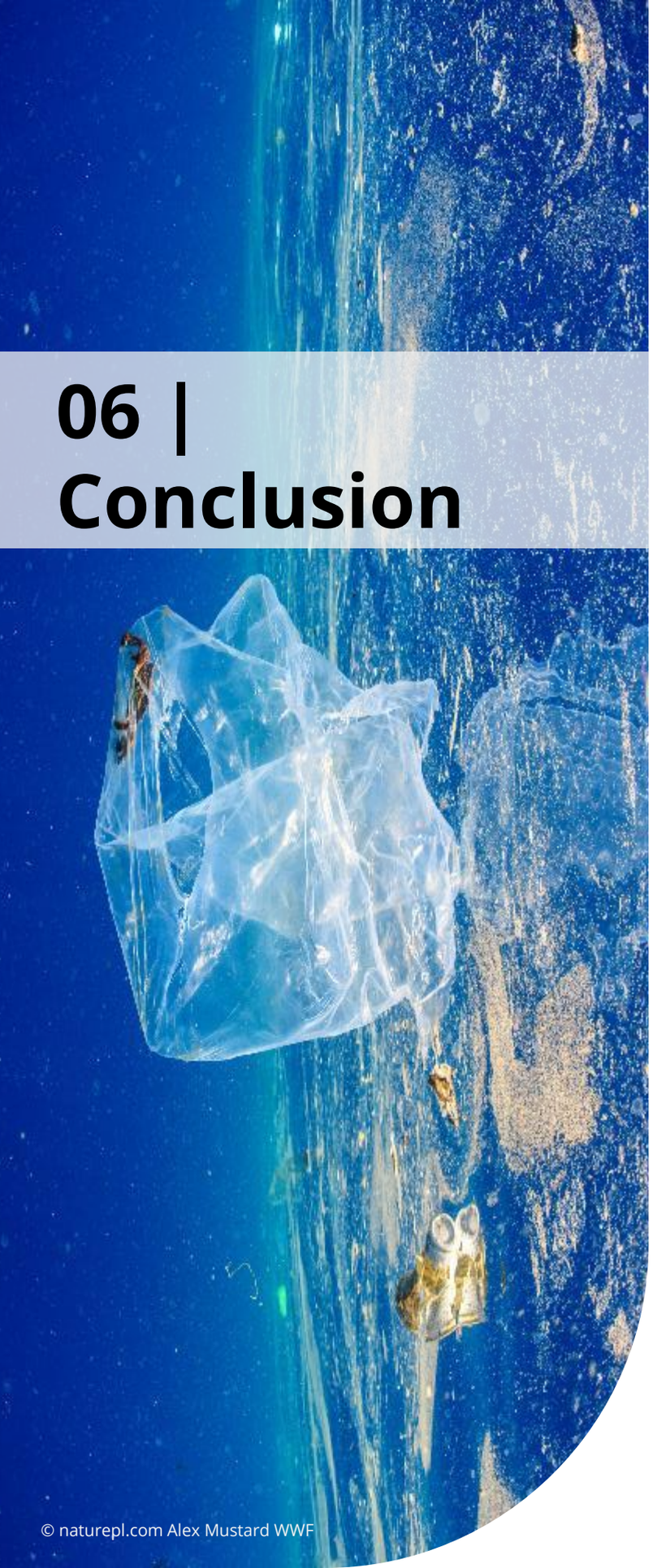
Recommendation 8 - Harmonise labels and packaging for a safe and competitive market into the future

Now

- Develop guidelines for harmonised packaging designed specifically for reuse that considers:
  - Low-waste labels (including digital labels) that guide safe refilling decisions (e.g. safe for food or chemically inert).
  - Weights and volumes for refill pricing calculations.
  - Wide openings and removable caps.

Next

- Explore mandatory design standards for reusable containers:
  - Mandatory materials, shapes and colours for containers and/or labelling of new reusable packaging.
  - Creation of a reuse icon to show consumers packaging can be kept in use instead of recycled or disposed.



06 | Conclusion

© naturepl.com Alex Mustard WWF

Conclusion | Reform for reuse will drive long-term economic benefit

Acceleration of reusable packaging options and reuse systems is a crucial part of circular economy reform in Australia and essential for tackling the growing problem of single-use packaging waste.

Our analysis shows that reuse can also stimulate economic benefits through retention of high value products within our economy; however, the reuse opportunity in Australia is currently held back, with our research concluding the role of government to be critical in enabling reuse for packaging:

Appetite for scale

Existing reuse businesses want to grow and be a part of the system-wide change, but they are being held back by a lack of engagement, the narrow scope of circular economic policies and minimal enabling regulation.

Enabling environments are critical

Key research[6] finds that regulatory and access barriers presented the most significant constraint on the adoption of value retention processes within a circular economy framework.

Growth is ready to be realised

Growth in the reusable packaging industry in Australia can be realised with the right policy frameworks, infrastructure, partnerships and conditions that enable innovation and a competitive market.

Eight recommendations are proposed across four action areas:

- **Accelerate reuse strategies through existing policy frameworks**
- **Invest in infrastructure to support scaleup of reuse processing systems**
- **Collaborate with industry to drive innovation**
- **Provide the enabling conditions to grow reuse industry**

Importantly, the basis for delivering on these actions is already in place. As the government progresses Australia's circular economy transition, the reuse opportunity cannot continue to be lost behind a focus on recycling.

This report highlights the role for reuse in solving Australia's packaging challenges and the opportunity this will stimulate for our future economy if we create the right policy environment today.

Acknowledgements

Thank you to industry stakeholders including Huskee, Skipping Stones Refillery, Skipper, The Waste and Resources Action Programme (WRAP) and WOSUP for providing their time and valuable insights to inform the development of this report.

Thank you to WWF-Australia contributor Malene Hand for providing their support and time and to Deloitte contributors Ella Jones and Sarah Gerrard for their contributions in creating this report.

Contributors

Deloitte

Celia Debens
Partner, Sustainability and Climate
Deloitte Australia
Email: cdebens@deloitte.com.au

Tracey Hassell
Director, Sustainability and Climate
Deloitte Australia
Email: thassell@deloitte.com.au

WWF-Australia

Richard Leck
Head of Oceans
WWF-Australia
Email: rleck@wwf.org.au

Malene Hand
No Plastic in Nature Policy Manager
WWF-Australia
Email: mhand@wwf.org.au

References

1. Australian Packaging Covenant Organisation. (2024). Australian Packaging Consumption & Recovery Data 2022–23. APCO. https://documents.packagingcovenant.org.au/public-documents/APCO%20Australian%20Packaging%20Consumption%20and%20Recovery%20Data%202022-23
2. Department of Climate Change, Energy, the Environment and Water. (2024). Reform of packaging regulation: Consultation paper. https://storage.googleapis.com/files-au-climate/climate-au/p/prj309de1e89171c2b4c52be/page/Reform_of_Packaging_Regulation_Consultation_paper.pdf
3. Department of Climate Change, Energy, the Environment and Water. (2024). Australia's Circular Economy Framework. https://www.dcceew.gov.au/sites/default/files/documents/australias-circular-economy-framework.pdf
4. Ellen MacArthur Foundation. (2022). Unlocking a reuse revolution: Scaling returnable packaging. https://content.ellenmacarthurfoundation.org/m/791a4013fead211e/original/Unlocking-a-reuse-revolution-Scaling-Returnable-Packaging.pdf
5. Ellen MacArthur Foundation (2021). Circular economy glossary. https://content.ellenmacarthurfoundation.org/m/af7397aab398037/original/Circular-economy-glossary.pdf
6. Nasr, N., Russell, J., Bringezu, S., Hellweg, S., Hilton, B., Kreiss, C., & von Gries, N., (2018). Redefining Value: The Manufacturing Revolution. https://www.resourcepanel.org/file/1105/download?token=LPqPM9Bo
7. Australian Packaging Covenant Organization. (n.d.). Australia's National Packaging Targets. https://apco.org.au/national-packaging-targets
8. TOMRA. (n.d.). Germany's effective deposit return scheme explained. TOMRA. https://www.tomra.com/reverse-vending/media-center/feature-articles/germany-deposit-return-scheme
9. Retursystem. (n.d.). Svenska Retursystem – Reusable transit packaging. Retursystem. https://www.retursystem.se/en
10. Reusable Packaging Association (2020). Svenska Returnsystem Case Study: Sweden Standardises on Reusable Packaging for Grocery Industry. https://reusables.org/inner-loop-library/rpa-member-news/svenska-retursystem-case-study-sweden-standardizes-on-reusable-packaging-for-grocery-industry/
11. SEA ME. (n.d.). SEA ME – MAKE A DIFFERENCE. SEA ME. https://sea-me.com/
12. Waitrose & Partners. (n.d.). Unpacked: Plastic reduction and reuse. Waitrose & Partners. https://www.waitrose.com/ecom/content/sustainability/plastic-reduction/unpacked
13. Loop. (n.d.). Purpose. TerraCycle. https://exploreloop.com/en/purpose
14. Ellen MacArthur Foundation (2017). The New Plastics Economy: Catalysing action. https://www.ellenmacarthurfoundation.org/the-new-plastics-economy-catalysing-action
15. Department of Climate Change, Energy, the Environment and Water. (2021). Research, Innovation and Data. Research, Innovation and Data - DCCEEW
16. CHEP (n.d.) CHEP – Our Purpose. https://www.chep.com/au/en/why-chep
17. GoUnpackaged. (2025). A 30%+ reuse future for the UK. https://static1.squarespace.com/static/64f87d1ca3b62218f953f0c8/t/68557b025be3d06cb083511a/1750432514856/30percent-reuse-future-for-UK-report-GoUnpackaged.pdf
18. RREUSE. (2021). Job Creation in the reuse sector: data insights from social enterprises. RREUSE https://www.rreuse.org/publications/job-creation-in-the-re-use-sector-data-insights-from-social-enterprises
19. Charitable Reuse Australia. (n.d.). Volunteers and careers. Charitable Reuse Australia. https://www.charitablereuse.org.au/education/volunteers-and-careers/
20. Kelly, S., Downes, J., Retamal, M., Lewis, H., (2019). Prepared for CHEP Australia by the Institute for Sustainable Futures, University of Technology Sydney. The true cost of cardboard crates. https://www.uts.edu.au/globalassets/sites/default/files/2021-10/isf-the-true-cost-of-cardboard-crates-final-report.pdf
21. Official Journal of the European Union. (2025). Regulation (EU) 2025/40 of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904 and repealing Directive 94/62/EC. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202500040
22. Agence de la transition écologique (ADEME). (2025). Declaration of reuse of industrial and commercial packaging and food services packaging: Declaration support guide for 2024 marketing data (January 2025). DECLARATION OF REUSE OF INDUSTRIAL AND COMMERCIAL PACKAGING AND FOOD SERVICES PACKAGING
23. International Energy Agency. (2024). Law 20.920: Establishment of a framework for waste management, extended producer responsibility, and recycling. Law 20920. Establishment of a framework for waste management, extended producer responsibility and recycling. – Policies – IEA
24. Climate Pledge Arena. (n.d.). Home. https://climatepledgearena.com/
25. Bettercup. (2025). Case study: Fringe World festival 2025. Case Study - Fringe World
26. Optus Stadium. (2022). The cup you drink out of matters. https://cms.optusstadium.com.au/news/2022/the-cup-you-drink-out-of-matters
27. WOSUP (2025). Unpublished Case study: GWS Giants Leading the Charge in Reusables. Authored by M. Salter of WOSUP.
28. Australian Sports Commission. (n.d.). Future of Australian sport. https://www.ausport.gov.au/clearinghouse/research/future
29. CSIRO. (2024). Modelling circular economy transition targets. https://research.csiro.au/circulareconomy/wp-content/uploads/sites/303/2024/12/24-00427_ENV_REPORT_ModellingCircularEconomyTransitionTargets_WEB_241219.pdf
30. Commonwealth of Australia. (2018). 2018 National Waste Policy: less waste more resources,. https://www.dcceew.gov.au/sites/default/files/documents/national-waste-policy-2018.pdf
31. Department of Climate Change, Energy, the Environment and Water (2024), National Waste Policy Action Plan 2024,. https://www.dcceew.gov.au/sites/default/files/documents/national-waste-policy-action-plan-2024.pdf
32. Victoria's Big Build. (n.d.). Recycled First Policy. https://bigbuild.vic.gov.au/about/ecologiq/recycled-first-policy
33. Accenture & Australian Packaging Covenant Organisation. (2021, November). Costs and incentives for a more circular packaging system [Final report]. Australian Packaging Covenant Organisation. https://documents.packagingcovenant.org.au/public-documents/Costs%20and%20Incentives%20For%20a%20More%20Circular%20Packaging%20System
34. Government of South Australia. (2022). Bringing your own container no longer risky for businesses. Small and Family Business | Bringing your own container no longer...
35. Australian Packaging Covenant Organisation. (2020). Sustainable Packaging Guidelines. https://documents.packagingcovenant.org.au/public-documents/Sustainable%20Packaging%20Guidelines%20(SPGs)
36. Cover page Image: Ake Ngiamsanguan. (2024). iStock by Getty Images. https://www.istockphoto.com
37. Image page 5: Kalkan, D. (2020). How the deposit return scheme was introduced in Germany. ECOnomia. https://www.economia.rs/how-the-deposit-return-scheme-was-introduced-in-germany/
38. Image page 11: Supplied by Huskee. (n.d.). Shop. Huskee. https://huskee.co/shop/?page=2
49. Image page 11: Supplied by Skipping Stones Refillery (2025)
40. Image page 16: Supplied by WOSUP (2025).

Deloitte.

Limitation of our Work - General Use Restriction
This report is prepared for WWF-Australia for the purpose set out in our engagement letter dated 4 July 2025 and the use of our name, the images in the report and our and advice is not permitted for use for any other purpose. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity.

This publication contains general information only. All references and URL links were correct as of October 2025.