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ACTIVATING REUSABLE PACKAGING

IN THE ANZPAC REGION

FULL REPORT



DISCLAIMER

The Australia, New Zealand, and Pacific Islands Plastics Pact (ANZPAC) and the contributing authors have prepared this report with a high-level of care and thoroughness and recommend that it is read in full. This report is based on generally accepted practices and standards at the time it was prepared and in accordance with the project brief. The method adopted, and sources of information used are outlined within, except where provided on a confidential basis. This report has been prepared for use by the ANZPAC Plastics Pact and its Members to inform program planning. ANZPAC and the contributing authors are not liable for any loss or damage that may be occasioned from directly or indirectly using, or relying on, the contents of this publication. This report does not purport to give legal or financial advice. No other warranty, expressed or implied, is made as to the professional advice included in this report.

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Glossary of Terms

Abbreviation	Expansion/Definition
ABC	The Associated Bottlers Co. A Joint Venture under Lion Beverages Group, providers of the ABC Swappa Crate.
ANZPAC	The Australia, New Zealand and Pacific Islands Plastics Pact . 'The ANZPAC Region' refers to these geographies.
APCO	Australian Packaging Covenant Organisation
Archetype 1	Geographies with low volumes of mismanaged packaging waste, and established waste management systems. *
Archetype 2	Geographies with low volumes of mismanaged packaging waste, but less established waste management systems. *
Archetype 3	Geographies with high volumes of mismanaged packaging waste and limited/no waste management systems. *
B2B	Business-to-business
B2C	Business-to-consumer
EMF	Ellen MacArthur Foundation
Enablers	Actions needed to establish, initiate and facilitate a reuse model or system.
EPR	Extended Producer Responsibility
PR3	A global alliance established by not-for-profit organisation RESOLVE to advance reuse. This project references the PR3 standards framework for reuse.
RFID	Radio Frequency Identification (i.e., wireless technology commonly used in product tracking)
Success factors	Actions by a reuse model operator needed to continually operate, maintain, and monitor a reuse model over the long-term, including ongoing viability and growth.

* As defined by ANZPAC.

Executive Summary

Project objective and approach

The Australian, New Zealand and Pacific Islands Plastics Pact (ANZPAC) brings together key stakeholders collaborating on a vision to tackle plastic pollution and to achieve a circular economy for plastics.

ANZPAC has commissioned Edge Impact (Edge) to conduct research on enablers, success factors and opportunities for business-to-business (B2B) and business-to-consumer (B2C) companies in the ANZPAC region to explore common barriers, enablers, and success factors to reduce the impact of single-use plastic packaging by transitioning to reusable alternatives.

As part of this program of work, desktop analysis of publicly available information on global and local reuse models was conducted, which identified a total of 86 reuse models (73 B2C and 13 B2B models) predominately focused on fast-moving consumer goods (FMCG) (see appendix for further details).

The 86 models were then assessed against the following criteria¹ to determine their suitability:

- Model type: The presence of at least one of the Ellen MacArthur Foundation's (EMF) reusable packaging business models,
- Location and archetype: Geographic compatibility with ANZPAC's regional and rural archetypes and,
- Minimum operational history: A minimum model operational history of two years, and currently still in operation (further details found in the methodology section).

A total of six B2C and nine B2B reusable packaging models were selected for further analysis (see appendix for summary of selected models) to determine common barriers and enablers of these models.

Findings were explored further in two facilitated workshops (one B2B and one B2C), attended by ANZPAC and 36 stakeholders representing a range of cross-sector businesses and reuse model operators. In these workshops, concepts related to financial viability (investment outlay, ongoing commercial viability, logistics and storage) and reuse awareness and adoption (supply chain collaboration, consumer awareness, adoption, and legislative support) were discussed against publicly available information to validate and refine the identified barriers and enablers of the 15 reuse models. Further insights were also gathered to address any gaps and inform recommendations.

Outcomes of the research identified the importance of ensuring the financial viability of reuse models, which involves a delicate balance of initial investment, return on investment (ROI), and logistical challenges across the entire supply chain, from product design to consumption and return. Findings identified capital, operational complexities, resource needs, and measurement limitations as the main barriers, highlighting solutions related to optimisation, funding maximisation, technological partnerships, and innovative design for long-term success.

The viability of reuse models significantly hinges on awareness and adoption, influenced by distribution, return processes, retail, and consumption practices, with legislation and product design also playing crucial roles. Key barriers such as consumer awareness, operational accessibility, and regulatory limitations were identified, with potential enablers such as improved regulatory frameworks, behaviourally informed models, and leveraging existing infrastructure proposed to address these challenges.

This research resulted in the development of a consolidated list of six key recommendations and 10 practical next steps for implementing reuse models, along with supporting resources to build capacity within the industry.

¹ Criteria provided by ANZPAC

Methodology

Context

The findings and recommendations in this report were gathered through a combination of desktop research, analysis, and industry engagement to capture best practice in reuse while also reflecting locally relevant context across the ANZPAC region.

The purpose was to identify barriers, enablers, and success factors common to both B2C and B2B reusable packaging models operating in a range of sectors, then develop action-orientated recommendations that can be used by companies to assess feasibility, develop, adopt, and monitor reusable packaging systems in their own operations.

This work builds on learnings from previous studies on reuse model mapping and feasibility (Edge Impact), reuse labelling viability (Edge Impact), and resources such as [Reuse - Rethinking Packaging \(Ellen MacArthur Foundation\)](#), [Scaling Up Reusable Packaging \(APCO\)](#) and PR3 Reusable [Packaging Design Standards \(resolve.ngo\)](#).

The research identifies common challenges, drivers, and key factors for adopting reusable packaging, focusing on broad applicability across various businesses and sectors. Due to reliance on publicly available information, deeper insights from internal company data were not included. While no single set of factors applies to all B2C and B2B companies, many identified factors are widely relevant, with minor variations in implementation across sectors.

The study was conducted in two phases:

- Phase 1: Desktop Research and Analysis
- Phase 2: Industry Engagement and Recommendations

Phase 1: Desktop Research and Analysis

The following methodology was used for the initial desktop research and analysis phase. It focuses on identifying a wide range of global and local reusable packaging models, then selecting models with the most applicability to remote and regional Australia and New Zealand, and the Pacific Islands, which face significant challenges with recycling plastic packaging due to limited systems and infrastructure.

1. **Desktop Review:** A desktop review was conducted on publicly available information, identifying a total of 86 global and local reuse models, which predominately operate in the FMCG sector. This included:
 - 73 B2C models
 - 13 B2B models.

➤ See appendix for a list of reuse models identified, sectors, and EMF model type.
2. **Selection of Reuse Models:** The 86 models were then assessed against the following criteria to determine their suitability for more detailed analysis:
 - Model type: Alignment with at least one of EMF's reusable packaging business models.
 - Location and archetype: Geographic compatibility with ANZPACs archetypes 2 and 3 and,
 - A minimum operational history of two years, and currently still in operation.

➤ A total of six B2C and nine B2B packaging reuse models were selected. See appendix for a summary of selected models.
3. **Assessment of Reuse Models:** The 15 B2C and B2B models were assessed against a range of criteria across two categories:
 - Financial viability
 - Awareness and adoption.

- This included factors related to finances, infrastructure, operationalisation, systems, and engagement.
- Within these categories, common barriers, and the enablers to help overcome these barriers were identified through analysis of selected reuse models and circular economy expertise.

Phase 2: Phase 1: Desktop Research and Analysis

The following methodology was used to validate the barriers and enablers identified in Phase 1 and develop practical recommendations and further resources to support B2C and B2B businesses to transition from single use to reusable packaging models.

1. **Industry Engagement Workshops:** Barriers and enablers identified in Phase 1 were discussed in two facilitated workshops, attended by ANZPAC members and businesses from a range of sectors. Workshops included:
 - B2B workshop, attended by 21 participants
 - B2C workshop, attended by 15 participants
 - Barriers and enablers were discussed and validated, and further insights were gathered to refine findings and develop informed recommendations. Opportunities for collaboration were also explored.
 - Insights gained from industry workshops were synthesised and incorporated into the report to ensure the findings were practical and industry tested.
2. **Recommendations:** Findings consolidated from desktop research, analysis, and industry engagement were synthesised and refined. Action-orientated recommendations were developed aligned with assessment criteria, common barriers and enablers. Further resources were also developed to support the adoption of reusable packaging models, including:
 - Types of reuse models
 - List of active logistics suppliers in the ANZPAC region
 - Circularity metrics
 - Assessment considerations, including measurement tools

Financial viability

When considering the shift to sustainable practices like packaging reuse models, it's essential to weigh the financial viability of such transitions. Aspects such as initial investment, return on investment (ROI), and the complexities of logistics and storage were a focus for the initial assessment.

Research relating to financial viability was gleaned from desktop research and case studies to attribute assumptions against these factors. These insights were then stress-tested with stakeholders to gather diverse perspectives and experiences.

As this scope of work relied solely on publicly available information and stakeholder insights, it is important to acknowledge its limitations. Publicly available data may not always provide the depth and specificity needed to fully understand the unique challenges and opportunities of a particular business context or reuse model. For example, a lack of publicly available information on profitability and commercial viability means that these important concepts are addressed in general terms without specific examples.

Moreover, while stakeholder insights are invaluable for gaining diverse perspectives, they may sometimes reflect subjective experiences or biases, which might not represent the broader industry landscape.

These limitations highlight the importance of conducting detailed feasibility studies that seek to model the financial (CapEx and OpEx) investment needed for transitioning to reuse models throughout the lifecycle of these assets and associated systems change. Such an approach ensures a more accurate and comprehensive understanding of the feasibility and implications of adopting reuse models, ultimately facilitating a more informed and strategic transition from single-use to sustainable alternatives.

Awareness and adoption

When transitioning to single-use alternatives in packaging, considering factors like awareness and adoption is pivotal.

Legislative support plays a crucial role, as policies and regulations can significantly accelerate the adoption of sustainable practices by setting standards and providing incentives for businesses and consumers alike.

Consumer awareness is equally important; informed consumers are more likely to make conscious choices, driving demand for environmentally-friendly packaging alternatives. This demand, in turn, encourages businesses to innovate and adopt sustainable practices.

Furthermore, collaboration along the supply chain ensures that these alternatives are viable and scalable, addressing potential bottlenecks in production, distribution, and recycling.

Together, these elements create a conducive ecosystem for a successful transition to sustainable packaging solutions, making them integral considerations for businesses aiming to contribute positively to the environment and society while meeting increasing stakeholder expectations.

Findings

Common reuse model types and sectors

Four B2C reuse model types² and two B2B reuse model types³ were targeted (see page 40 for more details) as the most commonly adopted reusable packaging models. Key sectors with demonstrated success and high potential for impact through the adoption of reusable packaging include personal care and hygiene, cleaning, food and beverage retail, food and beverage service, packaging, events, supply chain distribution, and supply chain packaging.

1. **Refill at home:** Personal care & hygiene, cleaning, and beverages
2. **Refill on the go:** Food (retail), food (service), and beverages
3. **Return from home:** Packaging and food (service)
4. **Return on the go:** Food (service), beverages, and packaging
5. **Single-industry pooling:** Beverages and events (food and beverage service)
6. **Multi-industry pooling:** Supply chain distribution and supply chain packaging

Reuse Models Assessment Criteria

Reuse models that met the three criteria of reuse model type, location and archetype, and minimum operational history were further analysed against two main categories of criteria applicable to all reuse models: financial viability, and awareness and adoption. This included factors related to finances, infrastructure, operationalisation, systems, and engagement.

Within these categories, common barriers, and enablers to help overcome these barriers, were identified through analysis of selected reuse models and circular economy expertise. These are outlined below.

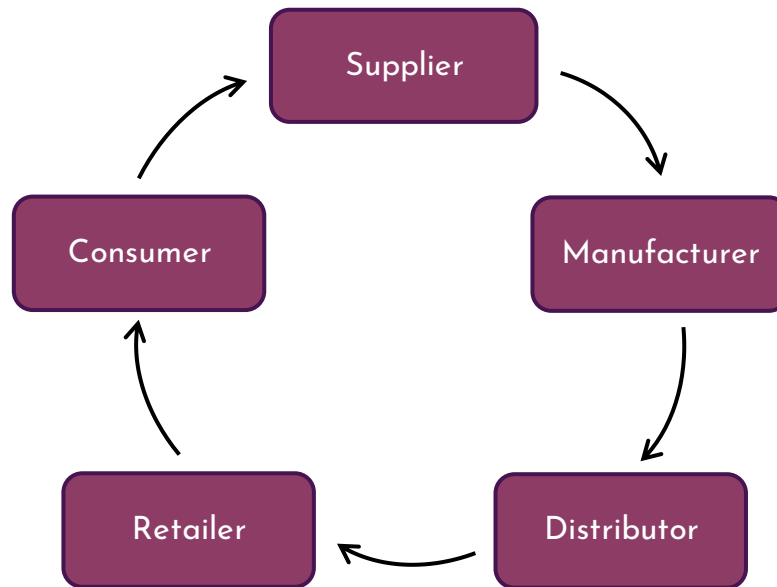
Criteria	Financial Viability	Awareness & adoption
Barriers	<ul style="list-style-type: none"> • Capital outlay and investment • Operational costs and complexities • Resources and systems change • Limited measurement and funding 	<ul style="list-style-type: none"> • Awareness and willingness to pay • Operational accessibility • Limited regulation and siloed practices
Enablers	<ul style="list-style-type: none"> • Measurement and optimisation • Maximising funding opportunities • Technology and partnerships • Innovation in product design 	<ul style="list-style-type: none"> • Regulatory frameworks • Behaviourally informed models • Accessibility within existing infrastructure channels

² Ellen MacArthur Foundation, Reuse - rethinking packaging (2019)

³ Ellen MacArthur Foundation, The New Plastics Economy (2016)

Reuse models in operation

Packaging reuse models operate across the supply chain from supply, manufacturing, distribution, retail, and consumption through to collection and return of assets to close the loop (as depicted adjacent).



The attributes of successful packaging reuse models can vary depending on the operational context, reuse model type, and industry. However, desktop research on best practice⁴ and review of reuse model examples identified the following influencing factors:

- **Product design in the supply and manufacturing phases** of reuse assets, including durability, modularity and standardisation,
- **Infrastructure** for distribution and return, including dispensing, cleaning, and storage requirements,
- **Logistical efficiencies in reuse model design** related to infrastructure, as well as through digital technology, and
- **Awareness and behavioural change** including incentivisation, labelling on reuse assets, marketing and communications, and overall accessibility of infrastructure and reuse adoption.

These factors were also explored with industry stakeholders to identify, validate, and refine the key barriers and enablers of packaging reuse models. The findings, which relate closely to financial viability and awareness and adoption, are expanded on in the following pages.

Financial viability

Financial viability is critical to establish and ensure the ongoing success of reuse models. However, complexities can arise for reuse operators in balancing initial investment, ROI, and the intricacies of logistics and storage.

Across all stages of the supply chain (depicted adjacent), financial viability is based on product design in the supply and manufacturing phases through to operational efficiencies across distribution, retail, consumption, and return.

⁴ RESOLVE, [The PR3 Standards](#) (2023)

The scope and nature of this research did not allow for establishing barriers through desktop research; however, four key themes were identified based on industry engagement and circular economy expertise:

- Capital outlay and investment,
- Operational costs and complexities,
- Resources and systems change,
- Limited measurement and funding

This section will explore how these can be addressed through identified enablers, including:

- Measurement and optimisation
- Maximising funding opportunities
- Technology and partnerships
- Innovation in product design.

These barriers and enablers related to financial viability will be explored further in this section.

Financial viability - Barriers

1. Capital Outlay and Investment:

- Initiating reusable product systems may entail considerable upfront financial commitments. The commitments and capital investment required may differ between establishing a reuse model for a new product versus transitioning to reuse for an existing product.
- However, common costs across the board include those associated with acquiring or manufacturing the reusable assets, decommissioning existing assets and potentially establishing new distribution and retrieval networks.
- Such initial investments may render the reusable alternatives less economically attractive and potentially less profitable in the short term when compared to single-use counterparts.
- However, this perspective only considers the financial outlays and excludes the longer-term ROI associated with reuse models. Neglecting to account for the lifecycle and environmental impacts of having materials in use for longer can further prohibit adoption.

2. Operational Costs and Complexities:

- Establishing or transitioning to packaging reuse models require additional infrastructural and logistical expenses and considerations for the distribution, storage, cleaning, and return of reuse assets.
- Operational and logistical costs include those required for the upkeep of reusable packaging (e.g., cleaning or replacing them), storing them before they are distributed or collected, and the transport costs for distribution.
- In addition, there are ongoing administrative costs to manage the reuse assets and upskill consumers or personnel on how to transition to and continually engage with the model. This is especially critical for reuse models in which businesses maintain ownership of the reuse assets to ensure ROI and ongoing viability of the model.
- These complexities and challenges differ between B2B and B2C setups. For instance, B2C setups, such as refill stations, need a local system for collecting used items, cleaning them, and refilling them to be both economically and environmentally sustainable². In contrast, B2B setups involve storing reusable items such as pallets or crates during the collection and reverse logistics process³.
- The cost and complexity of infrastructure can present additional costs to establish infrastructure or logistical systems that are not required for single-use models, and risk and liability related to health and safety, resulting in limited visibility over the use and service life of reuse assets.

3. Resources and Systems Change:

- The ongoing operation of packaging reuse models requires systems change. Reuse models require both management and maintenance across the supply chain, which requires stakeholder buy-in.
- For example, CHEP has implemented changes to their purchasing model to prevent the purchase of any of their pallets or containers, requiring businesses to instead utilise a pooling system in which equipment rented for the purpose of transporting goods is then picked up at its destination by CHEP⁵.
- Multiple stakeholders including distributors, reverse logistics operators, retail staff, personnel, and consumers need to be engaged in this process. This requires socialisation, personnel training, redesigning current processes, and infrastructure changes. With due consideration of storage and/or cleaning in relation to reverse logistics and redistribute reuse assets.
- While requirements for reuse models can differ at each stage of the supply chain depending on the sector and reuse model, they typically require additional resources and planning at the retail stage.

4. Limited Measurement and Funding:

- Measurement and funding support are both important for building a business case to compare the impacts and benefits of reuse against single-use, and to bridge the gap between capital outlays, operational costs and long-term operational integration.
- Engaged industry stakeholders acknowledged limitations in measuring and quantifying impact achieved through reuse, with particular emphasis on capturing emissions reduction data and identifying data management systems. Additional challenges include the uptake of digital technologies that enable more streamlined and detailed data collection such as through the use of barcodes, QR codes or radio frequency identification (RFID) technologies.
- Metrics and measurement of the benefits and impacts of reuse model throughout their lifecycle are imperative to build the business case for change, gain stakeholder buy-in, and unlock potential funding opportunities.
- In addition to challenges unlocking funding opportunities, industry feedback identified limited availability of funding support. Industry engagement highlighted that current funding models often target small-scale pilots, which facilitates market entry but falls short in addressing the financial challenge of scaling up. This underscores the need for investment that bridges the divide between initial costs and long-term operational integration.

Financial viability - Enablers

1. Measurement and Optimisation:

- Circular metrics and measurement play an important role in informing the business case for reuse. This is particularly important to comparing costs and benefits versus single-use, and to bridge the gap between capital outlays and long-term outcomes.
- For example, Algramo 2.0 offers vending machines distributed by electric tricycles for customers to purchase household essentials in desired quantities, enabling global brands to replace around 20% of single-use packaging with reuseable packaging. This reduced Unilever's product costs by 35-40% from their business-as-usual supermarket prices. Demonstrating the benefits and cost savings helps to strengthen the business case for reuse⁶.
- Manufacturing vending machines and establishing a vending distribution network requires upfront investment. Trialling this approach in a specific market or region before larger-scale rollout is an effective way to test viability and adoption with less risk and without significant outlays.

⁵ CHEP, [How does CHEP work?](#) (2024)

⁶ MIT Solve, [Algramo: Using Smart Packaging to Catalyze Reuse](#) (2024)

- Measuring and monitoring key factors such as resource efficiency, lifecycle assessment data, cost savings, customer satisfaction, and supply chain performance during these trials can further enhance the business case for reuse.
- A number of these considerations are captured in industry metrics frameworks such as:
 - **Circular Transition Indicators (CTI)**: designed to enable businesses to measure circularity performance. This includes measures on material recovery and type, number of cycle uses, circular material productivity, GHG emissions, and nature impact.
 - **PR3 Guidelines**: provides 31 recommended data elements specifically for measuring and monitoring reuse. This includes data on reuse assets (e.g., primary material of the asset, or number of completed cycles), as well as collection points (e.g., location feed recording location of uses)⁷.

2. Maximising Funding Opportunities:

- The inclusion of circularity metrics and measurement in relation to extended resource use, brand loyalty and reputation was seen to help build stronger CapEx and OpEx cases for internal support. In addition, it can unlock external funding opportunities.
- Research identified that the funding landscape to date has been somewhat limited, with a focus on pilots, which can improve uptake and normalisation of reuse, but can fail to address barriers or establish reuse systems with long-term solution integration.
- While reuse models ultimately need to be commercially self-sustaining, grants and funding play an important role in minimising the barriers to entry and bridging the stages between initiation and larger-scale adoption.
- The main benefits of small-scale pilots lie in the ability of organisations to measure the financial and environmental benefits of reuse models, enabling more robust modelling and feasibility testing of initiatives, while also reducing risk.
- Industry stakeholders highlighted their appetite for a range of funding models, including:
 - **Short-term funding and pilots**, such as customer support and integration for reuse service providers, or manufacturing grants support, and
 - **Longer-term outcomes and integration of solutions**, such as multi-year marketing or education support for behavioural change, or funding towards transition costs for automation or infrastructure.

3. Technology and Partnerships:

- Digital technology and distribution partnerships are key to unlocking operational efficiencies and accessibility.
- Digital technology enhances data collection, environmental accounting, user experience, system optimisation and analysis.
- Common technologies utilised in reuse models include:
 - **Barcodes or QR codes**. For example, RePack provides packaging-as-a-service with each package containing a unique barcode that links packaging identification, shipping information, and user rewards upon return².
 - **RFID**. For example, Kegstar utilise RFID scanning and tracking technology in their keg rental service, which provides real-time data on location and contents².
- While blockchain technology is also a future option for data transactions and storage, further research is required to ensure affordable, effective, and sustainable uptake in the reuse ecosystem⁷.
- Distribution efficiency can reduce both capital and operational cost barriers and the complexity of infrastructure requirements by creating efficiencies. Research suggested that there is an opportunity for shared logistics through existing channels or establishing partnerships for distribution, collection or reverse logistics to achieve economies of scale and

⁷ RESOLVE, [Reusable Packaging System Design - Specifications and Recommendations - Part 3: Digital](#) (2022)

cost efficiencies through a shared cost model. This concept is further explored in 'Accessibility within existing infrastructure' on page 14.

4. Innovation in Product Design:

- Innovation in product design of reuse assets and systems, such as modularisation and standardisation, has a number of benefits. This can allow for interoperability across various suppliers; flexibility and scalability by accommodating varying product sizes, volumes, and transportation modes; cost savings through increased efficiency and environmental benefits including emissions reductions.
- Examples of modularisation and standardisation in reuse models included:
 - **RePack:** a B2C packaging service for online retailers and shoppers that enables customers to opt in and order reusable shipping mailers in their order. The mailers are available in small, medium and large sizes that enable use across different products, including pet food, clothing and outdoor equipment².
 - **Algramo 2.0:** a B2C distribution service that utilises smart-powered mobile electric tricycles that deliver vending machines containing a range of homecare products, including laundry detergent, pet food and household disinfectants².
 - **Swedish Return Systems:** a B2B logistical packaging provider whose reusable pallets and crates utilise standardised design which allows producers and retailers to know exact measurements and calibrate packing systems accordingly. The crates reduce CO₂-e emissions by 74% compared to disposable cardboard packaging².

Awareness and adoption

Awareness and adoption of reuse models have a significant impact on long-term viability. Interventions are focused on distribution and return, retail, and consumption in the supply (as depicted adjacent). Legislation and product design are also key drivers of awareness and adoption.

The scope and nature of this research did not allow for establishing barriers through desktop research; however, three key themes were identified based on industry engagement and circular economy expertise:

- Awareness and willingness to pay
- Operational accessibility
- Limited regulation and siloed practices

This section will explore how these can be addressed through identified enablers, including:

- Regulatory frameworks
- Behaviourally informed models
- Accessibility within existing infrastructure channels

These barriers and enablers to awareness and adoption will be explored further in this section.

Awareness and adoption - Barriers

1. Awareness and Willingness to Pay:

- Reuse models require end-users to transition from traditional single-use and linear consumption models to new systems and models of operation.
- According to industry stakeholders, there are common misconceptions around the costs and benefits of reuse. The belief is that reuse models are not cost-competitive, despite case studies demonstrating cost savings.
- Without awareness of the wider environmental and lifecycle costs of linear models, this was seen to deter end-users largely due to challenges in quantifying emissions and the effective lifespan of reuse assets and communicating benefits to prospective and existing users.

- For B2B models, there are challenges quantifying benefits of reuse linked to ESG drivers based on lack of data availability or investment in quantifying benefits.
- For B2C refill-at-home models, packaging formats often appear smaller and less attractive than traditional full-sized products². Communicating benefits would help consumers to see the value.

2. Operational Accessibility:

- The operational and physical accessibility of reuse models was also considered fundamental in uptake, scalability and long-term viability. For individual consumers, adopting reuse models such as 'refill-on-the-go' necessitates a change in daily habits, including the responsibility of customers carrying and maintaining their own containers. This not only requires a shift in mindset but also in practical routines, as individuals must remember to bring their containers and keep them clean, which adds an extra step in their consumption patterns.
- In a B2B context, models like PACT, which utilises reusable crates, bins, and other handling solutions, demand adjustments in operational procedures. Employees need to adapt to new methods for unpacking, storing, and managing these reusable assets. This could involve retraining staff, altering workspace layouts, and updating inventory management systems to accommodate the reusable items effectively.
- Implementing these changes requires a dedicated effort in change management from the outset. This includes allocating sufficient resources and budget for training personnel, raising awareness, and integrating these new practices into the daily operations of the business. Support mechanisms, such as clear guidelines and accessible customer service, are essential to assist both employees and customers in navigating the new systems.
- Moreover, when designing reuse models, especially those involving return-from-home schemes, it is crucial to establish incentives that motivate users to participate without imposing barriers. Deposit and reward schemes can be effective, but they must be carefully calibrated to avoid discouraging participation with overly burdensome initial costs and processes. The goal is to make the process of returning packaging as seamless and rewarding as possible, encouraging widespread adoption and long-term commitment to the reuse model.

3. Limited Regulation and Industry Silos:

- Industry silos and lack of regulation pose significant barriers to the widespread adoption and effectiveness of reusable packaging models. These can result in fragmented supply chains, limited market access and scale for solutions, regulatory uncertainty and inconsistency across states, and limited investment and innovation.
- These challenges are further enhanced by geographic limitations in regional and rural areas such as archetypes 2 and 3. Creating economically viable distribution and return pathways in isolated areas is a challenge in the absence of regulatory drivers and industry collaboration.
- Industry engagement highlighted a lack of legislation to drive uptake of reuse or penalise single-use (with the exception of state-based single-use plastic bans).
- A lack of clear policies around reusable targets, timeframes, clear or consistent definition of reuse and unsubstantiated reusability claims limits common ground and unintentionally reinforces siloed industry practices.
- With the exception of ANZPAC, which brings together key players to share knowledge and lead innovation in phasing plastic out of the supply chain, within the scope of this research limited publicly-available examples of cross-sector collaboration were found.
- B2B models such as Swedish Return System and ABC Swappa Crates demonstrate cross-supply chain collaboration in the supply of groceries and beer, respectively. However, there are limited examples of pooled logistics and sharing across different industries.

Awareness and adoption - Enablers

1. Regulatory Frameworks:

- Robust regulatory frameworks that establish precise regulations, standards, and timelines are pivotal for increasing the adoption of reusable packaging, offering businesses and consumers confidence in the safety, quality, and practicality of these alternatives.
- Legislative change is being implemented across parts of Europe. For example, Germany introduced the 'VerpackG' Packaging Act in 2021 to ensure retailers begin participating in dual-systems for national collection of packaging waste⁸. Utilising registration number (LUCID), initial distributors to retailers must register and license their packaging in a nationwide takeback system. Packaging included in this dual-system registration includes sales packaging, service packaging, and shipment packaging. It is now an offence for packaging distributors to not register their products before release in the German market. This puts the onus on distributors to be more accountable and transparent with their products and encourages more optimal design of packaging for recovery and could also accommodate reusable packaging.
- In the Australian context, industry engagement highlighted a need for legislative instruments to drive greater uptake of reuse in packaging and bridge the financial gap between single-use and reusable. Stakeholders highlighted the need for:
 - Government legislation, policy and targets to incentivise reuse,
 - Establishing standards and definitions for reusables, such as how many times a product must be recirculated to be classed as 'reusable',
 - Government or industry guidelines on measuring and reporting of reusable asset practice, and
 - Stricter regulations of reusability claim to close loopholes and counter intentional or unintentional greenwashing.

2. Behaviourally Informed Models:

- The success of reuse models hinges not only on their environmental and economic benefits but also on their practical implementation and the ease with which users can integrate them into existing habits and routines. Thoughtful design, effective change management, and ongoing support are key to overcoming the initial barriers to behaviour change and ensuring the sustainability of these models.
- Reuse models should focus on:
 - Ensuring ease-of-use by making reuse the default option and providing consistent and simple key messaging around the benefits and instructions for engagement. Algramo provides a great example of key messaging with their four-step process to 1. Download an app, 2. Charge your account, 3. Bring packaging to an Algramo dispenser, and 4. Choose how much product.
 - Making reuse models attractive through financial incentives or non-financial incentives such as gamifying engagement through a mobile application. Financial incentives are commonly utilised in B2C models such as ABC Swappa Crates, providing added benefits of offsetting capital costs and promoting sustained resource use.
 - Creating social norms around reuse such as KeepCup or amplifying existing norms through leveraging extended networks. Models such as ABC Swappa Crates leverage industry networks and supply chains, thus normalising reuse, in this instance around purchasing beer.
 - Timely and considered communication with end-users is also important. Clear communication of the immediate benefits at point of sale is advisable.

3. Accessibility within Existing Infrastructure:

- Research identified that there is an opportunity for cross-industry collaboration and pooling of resources to improve system outcomes. Transferability of reuse assets across different

⁸ [VerpackG Packaging Act](#), (2021)

supply chains and industries presents an opportunity to offset infrastructural requirements and associated costs; however, this is yet to be demonstrated beyond B2B multi-industry pooling³.

- Industry stakeholders showed an appetite and willingness to explore opportunities for cross-industry and cross-supply chain partnerships to address these barriers.
- The research indicated that B2C models typically leverage existing channels, including:
 - Postal distribution and return are utilised by Bite (personal care products) and Ecovia (packaging)².
 - Selling products from existing retail spaces such as supermarkets and breweries. Cove sells refillable cleaning products and sachets from supermarkets that do not require return logistics.
 - ABC Swappa Crates sell standardised bottles and crates for beer with incentivised return for refill at multiple sites across New Zealand.
- On the other hand, B2B models have demonstrated shared cost models through industry pooling reuse systems, such as Swedish Return Systems' reusable pallets and crates for grocery distribution with over 1,500 participating businesses².

Summary

Key barriers

The viability of reusable models faces three significant barriers.

First, economic and infrastructural challenges encompass the high costs and complexities involved in setting up and maintaining the necessary systems for reuse, making it a substantial financial undertaking. The major economic and infrastructural challenges identified relate to capital costs, operational costs, and limited funding support for ongoing reuse.

Second, the complexity of these systems and the logistics required for their operation present a considerable hurdle, as they demand sophisticated management and coordination. Key challenges include establishing or transitioning to cost-competitive reuse models, overcoming siloed industry practices and limited legislative drivers.

Lastly, behavioural and operational accessibility and integration issues highlight the difficulty in altering established consumer habits and seamlessly incorporating reusable models into existing operational frameworks, further complicating the transition from single-use to reusable solutions.

Key enablers

The success of reuse models is significantly bolstered by several key enablers.

Legislative and financial support or incentives play a crucial role, as they can provide the necessary backing and motivation for businesses and consumers to adopt reuse practices.

Operational efficiencies and innovation are also vital, as they enable businesses to streamline their processes, reduce costs, and introduce novel reuse solutions that are both effective and appealing.

Digital technology, distribution format and efficiency, and modularisation and standardisation are key levers to realise these benefits.

Additionally, increasing awareness and improving the accessibility of reuse mechanisms within existing systems or structures ensure that more individuals and organisations are informed about and can easily participate in reuse initiatives.

These factors collectively create a conducive environment for the successful implementation and growth of reuse models.

Key recommendations

The integration of business analytics, adherence to industry standards, strategic enhancement of business cases, and leveraging digital technology emerge as pivotal strategies. Collectively these components work to quantify the value, optimise the processes, and refine the approaches necessary for successful and scalable reusable packaging models.

1. Integration business case and metrics:

- Effective measurement and evaluation are fundamental to demonstrating the tangible value of reusable packaging models, thereby strengthening the business case. By establishing clear, quantifiable metrics, organisations can not only unlock potential funding opportunities but also articulate the environmental and economic benefits to stakeholders. These metrics should encompass lifecycle assessments, cost savings, waste reduction, and customer engagement levels, providing a comprehensive view of the impact and efficiency of reusable models.

2. Utilising the PR3 Guidelines:

- Utilising guidelines, like the PR3 Reusable Packaging Design Standards currently in development, ensures that measurement and evaluation efforts are both rigorous and industry-aligned. These guidelines recommend specific data points and methodologies for assessing the performance of reusable packaging systems, offering a framework for consistent and credible analysis. By utilising such standards, organisations can benchmark their performance, identify areas for improvement, and validate their sustainability claims through recognised best practices.

3. Amplifying reuse business cases:

- Trialling, measuring, and refining are critical components in building a compelling business case for reusable models. By testing these systems in controlled environments, organisations can gather real-world data to inform improvements, demonstrate the viability, and fine-tune operations to maximise efficiency and consumer adoption. This iterative process not only optimises the economic and environmental potential of reuse models but also strengthens the overall business strategy by aligning it with sustainability goals and market demands.

4. Leverage digital technology for data collection:

- Digital technologies offer unparalleled opportunities for efficient data gathering and analysis in the context of reusable packaging. Implementing tracking systems, such as RFID tags or QR codes, on packaging allows for real-time monitoring of reuse cycles, product integrity, and user interactions. This data not only informs operational improvements and resource optimisation but also provides valuable insights into consumer usage patterns, facilitating targeted engagement strategies.

Capitalising on shared infrastructure and strategic partnerships is essential for enhancing the efficiency and innovation of reusable packaging models. Clear communication of the environmental and cost-saving benefits, coupled with initiatives aimed at behaviour change, are paramount for boosting adoption rates and achieving sustainability targets.

1. Identifying opportunities through shared infrastructure:

- Capitalising on shared infrastructure and strategic partnerships is essential for enhancing the efficiency and innovation of reusable packaging models. Clear communication of the environmental and cost-saving benefits, coupled with initiatives aimed at behaviour change, are paramount for boosting adoption rates and achieving sustainability targets.

2. Enhancing operational efficiencies through partnerships:

- Collaboration across the supply chain is crucial for operational efficiencies and innovation in reusable packaging models. Strategic partnerships enable businesses to streamline logistics, minimise redundancies, and drive innovation. In the B2B sector, significant opportunities arise from collaborating with pooled asset logistics suppliers, facilitating optimised resource use, reduced transportation costs, and improved supply chain sustainability.

3. Communicating the benefits:

- Communicating the benefits of reusable packaging to end-users is crucial for increasing adoption rates. By transparently sharing data on the positive outcomes of using reusable models—such as reduced carbon footprint, waste diversion, and potential cost savings for consumers—organisations can build trust and encourage a shift in consumer behaviour. Tailoring this communication to highlight the direct benefits to consumers can further incentivise participation and support for sustainable packaging initiatives.

4. Behaviourally informed integration:

- To maximise the effectiveness of reuse models, a focus on seamless integration into existing practices is essential. This involves designing systems that are inherently easy to use, making the reuse option the most accessible and straightforward choice for consumers.
- Additionally, making reuse models more appealing through incentives and social norms can significantly boost adoption and long-term viability.

Translating opportunity into action

Implementing reuse models is a complex process that necessitates deliberate planning, execution, and continuous improvement. Addressing the barriers to financial viability and awareness and adoption is fundamental to ensuring reuse models are profitable, scalable, and ultimately viable.

The key recommendations highlight the importance of business analytics, industry standards, business cases, digital technology, shared infrastructure, industry partnership, communication of benefits, and behavioural change. In particular, shared infrastructure and strategic partnerships have been identified by industry as underutilised avenues, for example through standardised products, or shared infrastructure and storage facilities in remote areas.

Common principles for unlocking organisational or sector-level change to improve profitability and scalability include:

- Quantifying current or potential impacts,
- Clearly defined boundaries (e.g., geographic, product, or sector),
- Product and/or systems understanding and design,
- Testing and trials as an intermediate measure prior to scaling up,
- Monitoring and evaluation to measure impact,
- Ongoing refining, scaling, and improvement.

The following pages provide a ten-step plan for implementing reuse models applicable to individual organisations, as well as single- or multi-sector partnerships.

Practical next steps for implementing reusable models

Below is a series of practical next steps for individual or collective organisations poised to embark on the journey of integrating reusable packaging into their operations.

STEP 1: Quantify environmental impacts of current systems

- Conduct a comprehensive life cycle assessment (LCA) to understand the environmental footprint of your current packaging systems or a desktop literature review to help benchmark your packaging in terms of environmental impacts. Depending on the rigour, this includes evaluating the carbon emissions, water usage, waste generation, and other environmental impacts associated with your existing single-use packaging solutions.

STEP 2: Assess customer appetite for reusable models

- Utilise existing market research, primary surveys, focus groups, and social media engagement to gauge consumer interest and willingness to participate in reuse models.
- Understanding customer values, preferences, and potential barriers to adoption is crucial in designing an effective reusable model.

STEP 3: Identify and select a region

- Choose a small or controlled region that is representative of your broader market but manageable in scale for a trial.

- Factors to consider include demographic diversity, infrastructure readiness, and legislative environment conducive to supporting reusable models.

STEP 4: Develop and test reusable model prototypes

- Based on customer insights and the specific characteristics of the region, work with internal and external stakeholders to design prototype models for reusable packaging.
- These should address identified consumer needs and preferences while being operationally feasible and environmentally sustainable.

STEP 5: Conduct a trial

- Roll out the reusable model prototypes in the selected region.
- Ensure the infrastructure for collection, cleaning, and redistribution of reusable packaging is in place.
- This phase should include clear communication with consumers about how to participate in the program and the benefits of doing so.

STEP 6: Monitor and collect data

- Throughout the pilot trial, collect data on various metrics, including customer participation rates, operational efficiencies, environmental impact reductions, and any logistical challenges encountered.
- Utilise digital tracking technologies where possible to gather real-time data.

STEP 7: Analyse feedback and impact

- Conduct post-trial surveys and focus groups to gather direct consumer feedback on the reuse model.
- Analyse the collected data to assess the environmental benefits, cost implications, consumer satisfaction, and operational challenges of the reusable model.

STEP 8: Refine and optimise based on learnings

- Use the insights gained from the pilot trial to refine the reuse model.
- This may involve adjustments to design, logistics, customer incentives, or communication strategies to enhance the effectiveness and consumer appeal of the model.

STEP 9: Scale and expand

- With a successful pilot and optimised model in hand, plan for a gradual scale-up to other regions or markets.
- Develop a detailed expansion strategy that considers the lessons learned from the pilot and includes plans for infrastructure development, marketing, and ongoing consumer engagement.

STEP 10: Continuous improvement mechanisms

- Set up processes for ongoing monitoring and improvement of the reuse model, even after wider deployment.
- This includes regular environmental impact assessments, customer satisfaction surveys, and operational efficiency reviews to ensure the model remains effective and sustainable over time.

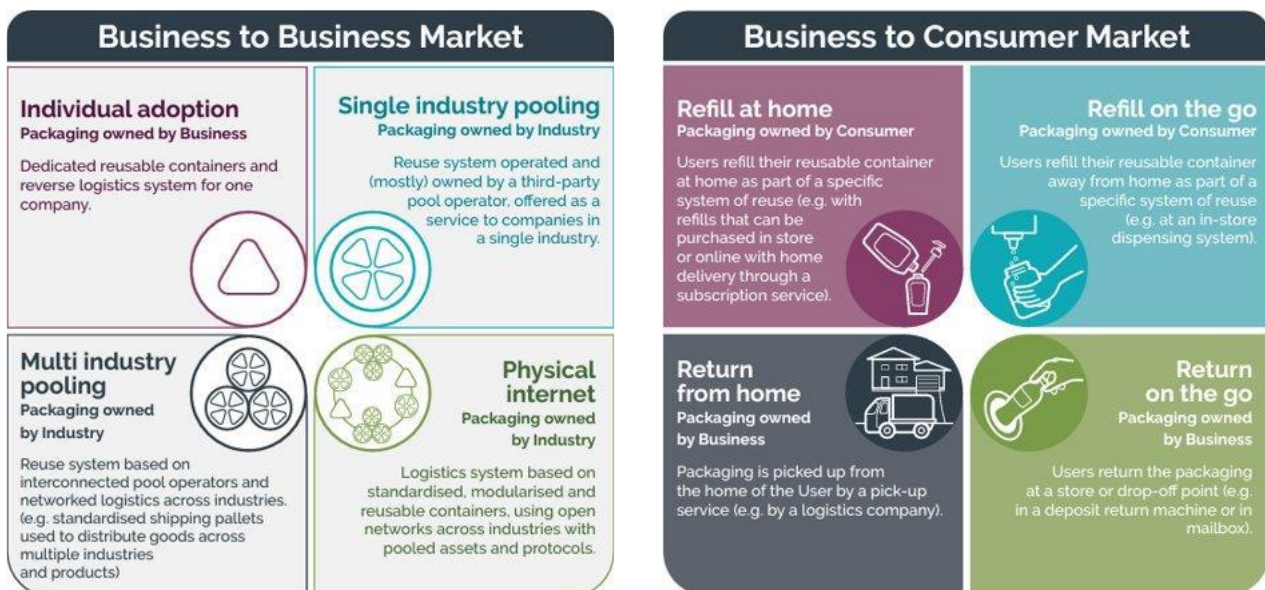
Additional Resources

Types of reuse models

A key selection criterion for determining which reuse models to target for further analysis was that it aligned with at least one of the EMF reusable packaging business models pictured to the right.

EMF has defined a range of B2C and B2B reusable packaging categories for B2B) based on key logistical considerations, including fitness for purpose, packaging ownership, and user requirements.

These categories and definitions have been adopted in this report, with the exception of Individual Adoption and Physical Internet as insufficient examples informing clear enablers were found through desktop research within the scope of this study. Further research is recommended to explore the enablers underlying these categories as they gradually establish and develop maturity globally.



Figures above: APCO, Scaling Up Reusable Packaging (2022)

Pooled asset logistics supplier in Australia, New Zealand and Pacific Islands

Supplier Name	Summary	Australia	New Zealand	Pacific Islands
CHEP Australia	CHEP is a global supply chain solutions partner that enables retailers, manufacturers and transporters to move and handle goods in a cost-effective and sustainable way.	✓	✓	
Loscam Solutions	Loscam is a pallet rental business offering solutions to factories, distribution centres and retail environments. Products include plastic pallets, and retail-ready merchandising units.	✓	✓	

Smart Pallets	Smart Pallets offers both pallet products and recycling across Victoria, Australia. Offerings include timber, used, export and custom pallets, as well as a pallet collection service.	✓		
RE>Pal	Re>Pal offers pallet products made from 100% waste plastic, designed to offer solutions that are cost-effective, low energy and environmentally responsible.	✓	✓	
Perth Pallets	Perth Pallets is a pallet manufacturing and recycling business offering solutions to retailers, manufacturing and industry customers.	✓		
Plain Pallets	Plain Pallets offers new and second-hand pallets to the Melbourne and Victorian Regional areas. Offering includes plastic, recycled and wooden pallets.	✓		
Palleco	Palleco specialises in cost-effective and environmentally minded pallet solutions across Australia. Offering includes recycled plastic, recycled wood, recycled export and wooden pallets.	✓		
Pacific Exporters	Pacific Exporters offers logistics solutions in mining, construction, oil and gas industries.	✓	✓	✓
Linfox	Linfox offers end-to-end logistics across Australia, New Zealand and Southeast Asia.	✓	✓	
JP Pallets	JP Pallets offers new and second-hand pallets across Australia. Offering includes plastic, aluminium, steel, and wooden pallets.	✓		
Pack & Send	Pack & Send is an Australia-based logistics company that offers packaging and shipping services both in Australia and globally.	✓	✓	

Metrics: Circularity performance using the Circular Transition Indicators

There are numerous frameworks available to measure product or organisational circularity. One such framework is the Circular Transition Indicators (CTI)⁹, designed for business by business to provide a methodology to measure an organisation's circularity performance and its impact on sustainability, taking into account total inflows and outflows.

CTI has been designed to measure impact, strengthen reporting capabilities, and maximise resource efficiency. This is particularly useful when assessing and measuring the potential for adopting reusable assets.

⁹ WBCSD, [Circular Transition Indicators V4.0](#) (2022).

Transition indicators represent the various stage of material or product reuse within circular economy models, and can help with tracking lifecycle stages, visualising resource flows, monitoring performance, and educating end users.

These metrics, with additional recommendations by Edge, are summarised below. More conventional metrics such as waste and material use minimisation are also recommended.

- 1. Close the loop:**
 - % material circularity
 - % water circularity
 - % renewable energy
- 2. Optimise the loop:**
 - % critical material
 - % recovery type (recovery, recycling)
 - % recovery by lifetime extension (retained value through additional material life)
 - Actual lifetime/# of use cycles (designed vs actual life)
 - Onsite water circulation
- 3. Value the loop:**
 - Circular material productivity (including mass per cost and carbon units)
 - CTI revenue
- 4. Impact the loop:**
 - GHG impact (embodied and direct emissions)
 - Nature impact (regenerative)

The data required to measure against some of the CTIs on the previous page are shown below. With current data collection norms, it is common for businesses to lack several datasets required to calculate all the CTIs. Literature review or stakeholder consultation can inform assumptions to fill data gaps for, for example, the % non-virgin content for material inflows.

- 1. Close the loop:**
 - Mass and material type for inflows & outflows
 - % renewable or nonvirgin content for inflows
 - % recovery potential and actual recovery for outflows
- 2. Optimise the loop:**
 - % recovery type (reused, repaired, refurbished, remanufactured, recycled, biodegraded with/without gas capture, etc..) per outflow
- 3. Value the loop:**
 - Revenue of assessed products
- 4. Impact the loop:**
 - GHG impact uses close the loop data
 - Site location and industry activity
 - Supply chain spend and country of sourcing

Assessment considerations

In order to assess the environmental impact of single-use and reuse models it is recommended that the following assessments are considered.

- Material flow analysis
- Lifecycle assessment
- Carbon footprint:
 - Embodied emissions
 - Transport emissions
 - Avoided raw materials benefit
- Water footprint
- Waste audits
- Spend analysis
- Input / output analysis

Consideration of the above is important, especially in the absence of universally accepted standards for circularity measurement, with Circular Metrics - ISO 59020 currently under development.

The following examples demonstrate these tools in action:

- **Material flow analysis** - [Vicinity Centres Circular Economy Strategy](#) operational waste baseline and hotspot identification.
- **Lifecycle assessment** - [KeepCup reusable coffee cups lifecycle assessment and benchmark](#).

Appendix

Location and archetypes

The selection criteria for shortlisting reuse models in phase 1 included a requirement for geographic compatibility in archetypes 2 and 3. These archetypes, as defined by ANZPAC, are summarised below.

Geographic Archetype 1	
Description	Geographies with low volumes of mismanaged packaging waste, and established waste management systems.
Characteristics	Established recycling systems producing high-quality recyclate; mandatory Extended Producer Responsibility (EPR), limited informal waste systems.
Proxy geography	Capital cities in Australia and New Zealand.
Geographic Archetype 2	
Description	Geographies with low volumes of mismanaged packaging waste, but less established waste management systems.
Characteristics	Recycling systems are limited in scale or have a considerable loss of material quality; emerging, limited or voluntary EPR, some informal waste systems.
Proxy geography	Regional Australia, Regional New Zealand.
Geographic Archetype 3	
Description	Geographies with high volumes of mismanaged packaging waste and limited/no waste management systems.
Characteristics	Limited systems; No/limited EPR; large informal waste sector.
Proxy geography	Pacific Island Countries, Remote and Regional Australia

All reuse models selected for detailed analysis (B2C & B2B)

Reuse Business/ Model	Description	Sector	Model type	Location and Archetype	Operational history (2+ years)
ABC Swappa Crate	ABC purchases and distributes refillable bottles and crates of beer. ABC currently supplies new and reused bottles/crates to DB Breweries and Lion breweries.	Food & Beverage	Return from home	1, 2 and 3	1920
Algramo	A mobile dispensing system that delivers directly to user doorstep. Users organise a visit from the tricycle and refill their containers.	Food & Beverage	Refill on the go	1, 2 and 3	2011
B- Alternative	Provides event management solutions that include reusable crockery and cups, cleaning and compostable products to schools, festivals, businesses and venues.	Events	Single-industry pooling	1, 2 and 3	2015
Bite	Bite delivers toothpaste tablets in a glass jar with an aluminium lid to subscribers. Products are shipped directly from warehouse to end-consumer.	Personal Care & Hygiene	Refill at home	1 and 2	2018

CHEP (Brambles)	CHEP offers sustainable supply chain solutions and packaging through a pooling model.	Distribution	Multi-industry pooling	1, 2 and 3	1946
Cove Cleaning	Refillable cleaning products where the consumer owns bottles and can refill by ordering online or going to participating stores (Coles and Woolworths).	Personal Care & Hygiene	Refill at home	1 and 2	1950 (Natures Organics)
Ecovia	Returnable packaging system for e-commerce. Packages are picked up and returned to partner brand.	Packaging	Return from home	1 and 2	2000
Euro Pool Group	Logistics company operating in the fresh food supply chain, FMCG and retail sectors.	Distribution	Multi-industry pooling	1, 2 and 3	1992
GaPrie	Flexible, reusable pallet netting giving consistent pallet loading stability. User purchases and owns the netting.	Distribution	Multi-industry pooling	1, 2 and 3	2008
Kegstar	Kegstar is a rental service for kegs with integrated reverse logistics.	Beverages	Single-industry pooling	1 and 2	2012
PACT	Reuse solutions across the supply chain; crates, bins and handling alternatives. Ownership structure is flexible with the option to own, hire, lease or create an asset pool.	Distribution	Multi-industry pooling	1, 2 and 3	2002
ReBox	Distributor of once used cardboard boxes. They purchase boxes from suppliers after use and sell to customers at a discount to the new equivalent	Distribution	Multi-industry pooling	1, 2 and 3	1990
RePack	Packaging as a service for web stores. Online retailers lease RePack bags and provide their customers with a "RePack" delivery option at checkout.	Packaging	Return on the go	1 and 2	2011
Swedish Return System	SRS is a system of reusable pallets and crates operating across the entire grocery supply chain, from producers all the way to restaurants.	Distribution	Multi-industry pooling	1 and 2	1997
TURN (Globelet)	A reusable cup system for events and businesses. Cups are circulated to users and returned to the event organiser at the conclusion of the event.	Events	Single-industry pooling	1, 2 and 3	2012
Woolworths BYO Container	Woolworths offers a BYO container program that empowers customers to bring their own reusable containers for fill-up at any of the deli, meat and seafood counters.	Food & Beverage	Refill on the go	1, 2 and 3	2021

All reuse models assessed (B2C)

Reuse Business/Model	Sector	Model type
Again Again	Food & Beverage	Return on the go
All Things Hair Refillery	Personal Care & Hygiene	Refill on the go

ALLGoods	Food & Beverage	Return from home
Bevi	Food & Beverage	Refill at home
Blueland	Personal Care & Hygiene	Refill at home
Boston Tea Party	Food & Beverage	Refill on the go
Brews Brothers	Food & Beverage	Refill on the go
By Humankind	Personal Care & Hygiene	Refill at home
Carrefour Bio Bulk Wall	Food & Beverage	Refill on the go
ClubZero (CupClub)	Food & Beverage	Return on the go
Coca Cola Freestyle	Food & Beverage	Refill on the go
Coca-Cola Brazil Universal Bottle	Food & Beverage	Return on the go
Costa Clever Cup	Food & Beverage	Refill on the go
CoZie	Personal Care & Hygiene	Return on the go
DabbaWala	Food & Beverage	Return from home
Danone water jugs	Food & Beverage	Return from home
Dasani PureFill	Food & Beverage	Refill at home
Dazz	Personal Care & Hygiene	Refill at home
Deliveround	Food & Beverage	Return from home
Disposable Cup Charge Trial	Food & Beverage	Refill on the go
Drinkfinity	Food & Beverage	Refill at home
Eco Store	Personal Care & Hygiene	Refill on the go
Ecopods	Personal Care & Hygiene	Refill on the go
Ecospirits	Beverages	Physical internet
Ecover	Personal Care & Hygiene	Refill on the go
Emma Lewisham	Personal Care & Hygiene	Refill at home
Freiburg Cup	Food & Beverage	Return on the go
Fresh Bowl	Food & Beverage	Return on the go
GO Box	Food & Beverage	Return on the go
Hepi Circle	Personal Care & Hygiene	Return on the go
Huskee	Food & Beverage	Return on the go
IFCO CRATE	Distribution	Single-industry pooling
Jean Bouteille	Food & Beverage	Return on the go
John Deere	Distribution	Single-industry pooling
KeepCup	Food & Beverage	Refill on the go
Less Mess	Food & Beverage	Return on the go
LimeLoop	Packaging	Return on the go
Liviri	Packaging	Return from home
Loop	Distribution	Multi-industry pooling
Loop	Packaging	Return on the go
Meu Copo Eco	Food & Beverage	Return on the go
MIWA	Food & Beverage	Refill on the go
Naked Foods	Food & Beverage	Refill on the go
Nestle Refill Pilot	Food & Beverage	Refill on the go
Neverfail water coolers	Food & Beverage	Return from home
Newcy	Food & Beverage	Return on the go
Ozarka	Food & Beverage	Return on the go
Ozzi	Food & Beverage	Return on the go
Pepsi Spire/PepsiCo Hydration Platform	Food & Beverage	Refill on the go
Plaine Products	Personal Care & Hygiene	Return on the go
P-Lux	Food & Beverage	Return on the go
RECUP	Food & Beverage	Return on the go
Refill	Food & Beverage	Refill on the go
Replenish	Personal Care & Hygiene	Refill at home
Returnity	Packaging	Return on the go

ReturnR	Food & Beverage	Return on the go
Revolv	Food & Beverage	Return on the go
Sharepack	Food & Beverage	Return from home
Shrewsbury Cup	Food & Beverage	Return on the go
Signal Toothpaste Tabs	Personal Care & Hygiene	Return from home
Sodastream	Food & Beverage	Refill at home
Splosh	Personal Care & Hygiene	Refill at home
Stack Cup	Food & Beverage	Return on the go
Synlait	Food & Beverage	Return on the go
Tesco (Partnership with Loop)	Food & Beverage	Refill on the go

Reuse models assessed

B2C Reuse Business/Model	Sector	Model type
The Milk Station Company	Food & Beverage	Refill on the go
The Wally Shop	Food & Beverage	Return from home
Vanilla Bean	Food & Beverage	Return from home
Waitrose Unpacked	Food & Beverage	Refill on the go
Zero Co	Personal Care & Hygiene	Refill at home

B2B Reuse Business/Model	Sector	Model type
John Deere	Single industry pooling	Distribution
IFCO CRATE	Single industry pooling	Distribution
Loop	Multi industry pooling	Distribution
Ecospirits	Physical internet	Beverages

Workshop approach

Two 2-hour online industry engagement workshops, including one for B2C and one for B2B business delivery models, were facilitated by Edge and ANZPAC. Their objectives were:

- Validate findings and identify gaps from desktop research and analysis
- Collect further insights to refine findings and inform recommendations
- Identify current and future opportunities for collaboration

Workshops were attended by stakeholders from 36 businesses across a range of sectors, including representatives from FMCG, logistics, beverages, hospitality, hardware, reuse model operators, resource recovery systems, and packaging manufacturing. Invitees were determined by ANZPAC and Edge Impact to ensure diversity of experience and insights, and real-world knowledge of drivers for adopting more sustainable packaging, barriers faced by businesses, and steps to overcome them.

Prior to the workshop, participants were sent an online survey to gather information to inform discussion. During the workshops, attendees were first briefed on ANZPAC's role in supporting the elimination of single-use plastics, the objectives of the industry engagement workshops, and findings of desktop research and analysis.

Participants were then invited to provide insights via an online Mural board, followed by a facilitated discussion, on four key areas: current and planned reuse initiatives, key barriers in establishing a reuse model, key enablers to overcome these barriers, and identifying opportunities to establish reusable packaging models by individual organisations and through a collaborative approach.



GET IN TOUCH

If you have any questions about the ANZPAC Plastics Pact, please contact the ANZPAC Team via anzpac@apco.org.au