AFRICAN CIRCULAR ECONOMY NETWORK

Scaling packaging reuse models in South Africa:

Learnings from local experience

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Scaling packaging reuse models in South Africa: Learnings from local experience.

Executive Summary

This study examines reusable packaging models in South Africa, focusing on business-to-consumer (B2C) and business-to-business (B2B) approaches that replace single-use packaging with refillable or returnable alternatives. The research combines literature review with case studies of seven local organisations operating across different income settings and product categories, and informal interviews of an additional five companies with their insights anonymously included in the report. The overarching aim of this study was to encourage the startup, growth and scaling of reuse-refill models in SA through better understanding refill-reuse models.

Current Landscape

South Africa's reusable packaging sector demonstrates diverse models operating across income levels. In low-income settings, both low-tech solutions (such as Gcwalisa's community-based refill stores in Alexandra) and high-tech automated dispensing systems (like Smartfill's machines in Thembisa spaza shops, and Sonke's dispensing stations in Diepsloot) are in operation. These models focus on essential goods including cooking oil, dry foods, and home care products, often delivering significant cost savings to consumers whilst addressing food security concerns.

Middle- to high-income segments show success in specialist retail environments, exemplified by businesses like Nude Foods in Cape Town, which have sustained operations for multiple years by building loyal customer communities around health-conscious and environmentally aware consumers. Traditional retailers have conducted various trials, though with mixed long-term success rates.

The food and beverage on-the-go sector presents particular opportunities, in return-cup systems at events and markets (Reusefy), where closed-loop environments facilitate high recovery rates and substantial packaging waste reduction.

Key Challenges

- Financing and Investment: Most initiatives remain self-funded, with limited understanding of reuse models within the investment community creating

barriers to scaling. Grant funding exists but is insufficient for achieving sustainability at scale.

- Supply Chain Modifications: Established businesses face significant challenges retrofitting traditional single-use supply chains. This includes redesigning packaging for durability, modifying filling and distribution systems, and implementing reverse logistics for container recovery and cleaning if a return model is employed.
- Health and Safety Concerns: Both suppliers and consumers express concerns about hygiene and product quality in refill systems. Current regulations, designed for conventional retail models, can create compliance challenges for reuse initiatives.
- Technology Trade-offs: High-tech dispensing systems offer better hygiene control and data collection but require substantial capital investment and ongoing maintenance. Low-tech approaches have lower barriers to entry and greater intuitive consumer appeal but may face quality control challenges.

Opportunities and Recommendations

The informal FMCG market, worth approximately R197 billion annually in 2023[1], presents substantial growth potential for reuse models, particularly given the economic drivers in low-income communities where bulk purchasing can deliver significant savings.

- For Established Brands and Retailers: Partnerships and collaborative learning through initiatives like the SA Plastics Pact could reduce individual development costs. Outsourcing elements such as cleaning services could enable focus on core business whilst sharing system development burdens.
- For Small Brands and Startups: Community relationship building proves critical for success, with local supply chains offering resilience advantages. Unknown brands can build trust through retailer relationships rather than relying solely on brand recognition.
- Sector-Specific Opportunities: Events and food services offer ideal closed-system environments for reuse implementation. B2B packaging presents opportunities with fewer stakeholders to coordinate, though theft prevention remains a key challenge.

[1] Trade Intelligence, 2024. The Enduring Power of the Independent Trade – Insights from 20 years in SA FMCG retail.

Way Forward

Reuse represents an essential component of South Africa's circular economy transition for plastic packaging. Whilst private sector initiatives demonstrate positive impact, broader stakeholder engagement including investors and government entities will be necessary for scaling.

The forthcoming Plastic Reboot project provides opportunities to advance policy frameworks, develop standards, and explore innovative financing mechanisms. Critical next steps include developing standardised operating procedures for health and safety compliance, creating demonstration projects in high-impact venues, and establishing collaborative platforms for knowledge sharing across the sector.

Success in scaling reuse models will require balancing technological sophistication with accessibility, addressing regulatory frameworks, and ensuring just transition considerations for affected stakeholders in the current single-use packaging value chain.

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List of Abbreviations

B2B	Business-to-Business
B2C	Business-to-Consumer
BAU	Business-As-Usual
BMZ	German Federal Ministry for Economic Cooperation and Development
CCL	Circular City Labs
CoA	Certificate of Acceptance
CSIR	Council for Scientific and Industrial Research
CSR	Corporate Social Responsibility
DSI	Department of Science and Innovation
EHP	Environmental Health Practitioner
EMF	Ellen MacArthur Foundation
EPR	Extended Producer Responsibility
FMCG	Fast-Moving Consumer Goods
GEF	Global Environment Facility
GIZ	Gesellschaft für International Zusammenarbeit
IoT	Internet-of-Things
ISO	International Standards Organisation
NRCS	National Regulator for Compulsory Specifications
PEETS	Process, Energy, and Environmental Technology Station
RFID	Radio-Frequency Identification
SA	South Africa
SACiLa	South African Circular Lab
SOP	Standard Operating Procedures
UJ	University of Johannesburg

1 Introduction

Reuse-refill models that replace single-use packaging with reusable formats in delivering products to consumers have been highlighted in global and national settings as being a critical element to address the growing plastic pollution concerns. A global model 'Breaking the Plastic Wave' was published in 2020 and was the first of its kind in modelling plastic flows globally (Pew Charitable Trusts & SYSTEMIQ, 2020)[1]. The aim of the work was to assess the most effective interventions that could produce the largest reduction in plastic pollution globally and develop an evidence-based pathway towards achieving the goal of near-zero plastic pollution. The modelling demonstrated that a single focus on interventions in either the upstream (reducing plastic production or design for recycling) or the downstream of the plastics value chain (collection and recycling) would achieve limited reduction in plastic pollution, while a suite of interventions across the value chain could achieve an 80% reduction in 20 years relative to Business-As-Usual (BAU). Reuse-refill models to replace single-use plastic packaging are one of the solutions in the reduction pathway (aiming at 30% reduction relative to BAU) along with elimination of problematic and unnecessary plastics.

The Pathways model developed by the Council for Scientific and Industrial Research (CSIR) in partnership with the Pew Charitable Trusts and Oxford University confirmed that a similar approach is needed for South Africa (SA) (Stafford et al., 2022)[2]. In the 'Optimal System Change' scenario, potential reduction in plastic pollution relative to BAU was modelled with maximum reduction in plastic pollution balanced with socio-economic development imperatives of maximising jobs and minimised costs. This scenario projected a 63% reduction in plastic pollution relative to BAU by 2040 and includes reuse of plastics as part of the reduction intervention at 0.24% per annum reduction between 2023 and 2040, which results in the reduction of 326 kT of end-of-life plastics over that timescale.

To inform SA's possible pathway to the reduction of plastic packaging through reuse-refill models, the project "SA Circular Lab (SACiLa) South African Reusable Packaging Solutions in the Plastics Value Chain" was devised by Plastics SA with funding from the German development agency, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), under the Circular City Labs project. ICLEI Africa was contracted under the same project to consider the potential of 'return' reuse models in SA, where

packaging is returned for washing and refilling, as well as the role SA municipalities could play in enabling reuse[2].

Reducing the application of single-use plastic packaging through reuse models should receive the necessary attention as single-use plastic packaging is proportionally the largest littered item globally and in SA. In SA, it is estimated that more than 60% of plastics leaked into waterways and the ocean is plastic packaging (IUCN-EA-Quantis, 2020[3]), while studies considering only meso- and macro-plastic leakage detected on beaches in SA, indicate that around 94% of leaked materials are plastic, with 77%[4] being plastic packaging (Ryan & Moloney, 2016 in Zadan & de Kock, 2020)[5].

The overarching aim of this study was to encourage the startup, growth and scaling of reuse-refill models in SA through better understanding refill-reuse models. The specific objectives of the study were:

- Considering recent literature (2020 to date) on reuse models in SA, and similar low- to middle-income country settings, to synthesise existing models and learnings to derive preliminary recommendations for establishment and scaling of reuse in SA;
- Understanding the business model and operational context for 7-8 local organisations from ideation to early replication in reuse or refill models in SA, and, if readily available, case studies from similar low- to middle-income country contexts such as Kenya, India and/ or Chile;
- Identifying common challenges, and challenges likely specific to product type or business context
- Identifying key elements for success for reuse-refill operations in the specific products and contexts in the sample group (note results will be anonymised); and

[2] ICLEI, 2024. Circular Economy in South Africa Opportunities for reusable packaging systems and women's participation, Cape Town, 10 May.

[3] IUCN-EA-QUANTIS, 2020, National Guidance for plastic pollution hotspotting and shaping action, Country report South Africa (updated).

[4] The difference in percentages reported is due to the exclusion of textiles, tyre dust and other sources of microplastics, as well as that many litter studies focus on material visible on shore or at surface and miss plastics that may sink in water bodies due to their density or due to being associated with other high-density materials.

[5] Ryan, P. and Moloney, C. 2016. Five applications where plastic is not fantastic. The Conversation. theconversation.com/ five-applications-where-plastic-is-not-fantastic-64901.
Sadan, Z. and De Kock, L., 2020. Plastics: Facts and Futures: Moving beyond pollution management towards a circular plastics economy in South Africa. WWF South Africa, Cape Town, South Africa

- Further developing recommendations and guidelines, to reflect learnings in the field from selected local organisations, for the establishment and scaling of reuse-refill models in SA.

2 Literature review

2.1. Challenges and opportunities in low- to middle-income countries

Reuse is defined by the International Standards Organisation (ISO) as the "operation by which packaging is refilled or used for the same purpose for which it was conceived, with or without the support of auxiliary products present on the market enabling the packaging to be refilled.
Note 1 to entry: Non reusable items that support packaging reuse, such as labels or closures, are considered to be part of that packaging" (ISO 18603:2013)[6].

Reusable packaging[7] is defined by the ISO in the following way "packaging or packaging component which has been designed to accomplish or proves its ability to accomplish a minimum number of trips or rotations in a system for reuse" (ISO 18603:2013)[1].

The replacement of traditional single-use product packaging, with single-use packaging in paper or another material should not be classified as a reuse model. It is recognised that in development of reuse models, sometimes interim single-use packaging may be employed during staff training and consumer education, but there should be a defined pathway to a truly reuse or refill model.

Reuse models for packaging are often categorised by the following system as used by the Ellen MacArthur Foundation (EMF) in the publication 'Reuse - Rethinking packaging' (EMF, 2019[8], and referenced in ANZPAC, 2022[9]; Figure 2-1). These models can be used to include consumer packaging (business-to-consumer (B2C) operations, or secondary and tertiary packaging (collation and transport packaging) in business-to-business (B2B) models.

[6] ISO 18603:2013 (en) Packaging and the environment — Reuse

[7] This includes takeaway or on the-go-packaging that is designed to be reused (it does not include any cutlery designed for reuse).

[8] EMF, 2019. Reuse – Rethinking Packaging, https://www.ellenmacarthurfoundation.org/reuse-rethinking-packaging.

[9] The Australian, New Zealand and Pacific Islands Pact, 2022. The State of Reusable Packaging in Oceania, ANZPAC Reuse Model Mapping and Feasibility Study: short summary.

Business to Consumer Market

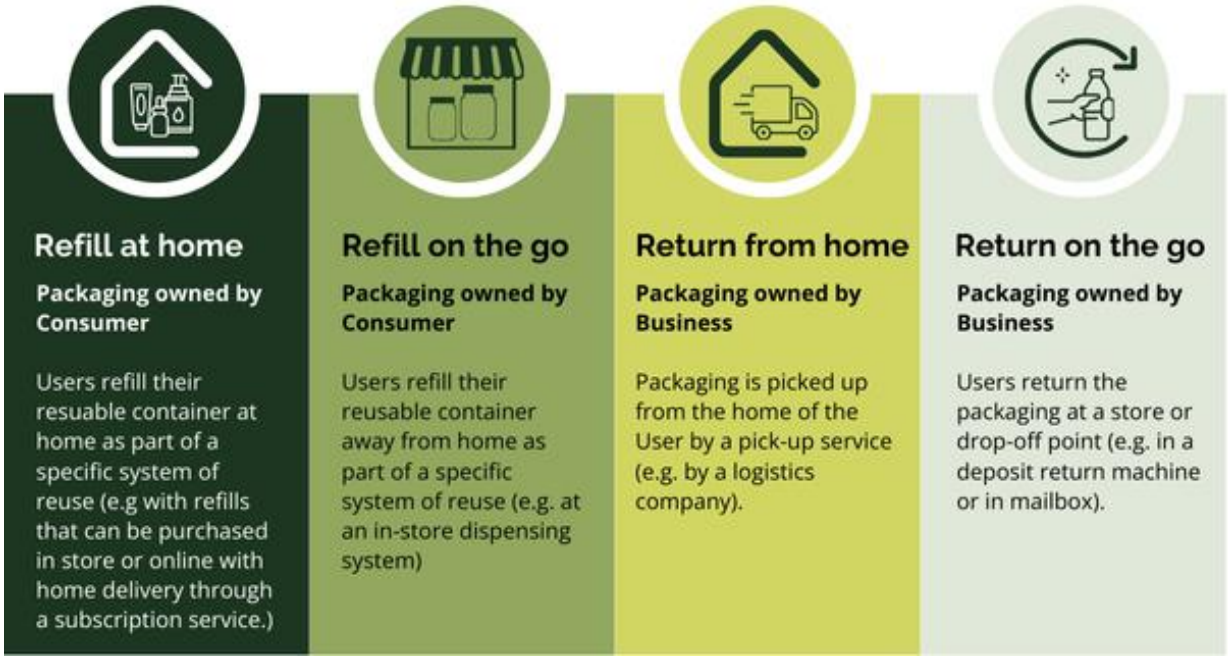

Figure 2-1 Categorisation of reuse models for B2C packaging. Source: EMF, 2019[8], derived from ANZPAC, 2022[9].

The refill models refer to B2C packaging that is refilled by the user, either at home or on-the-go. In these models, therefore, the user retains ownership of the packaging and is also responsible for cleaning the packaging before reuse.

Business to Business Market

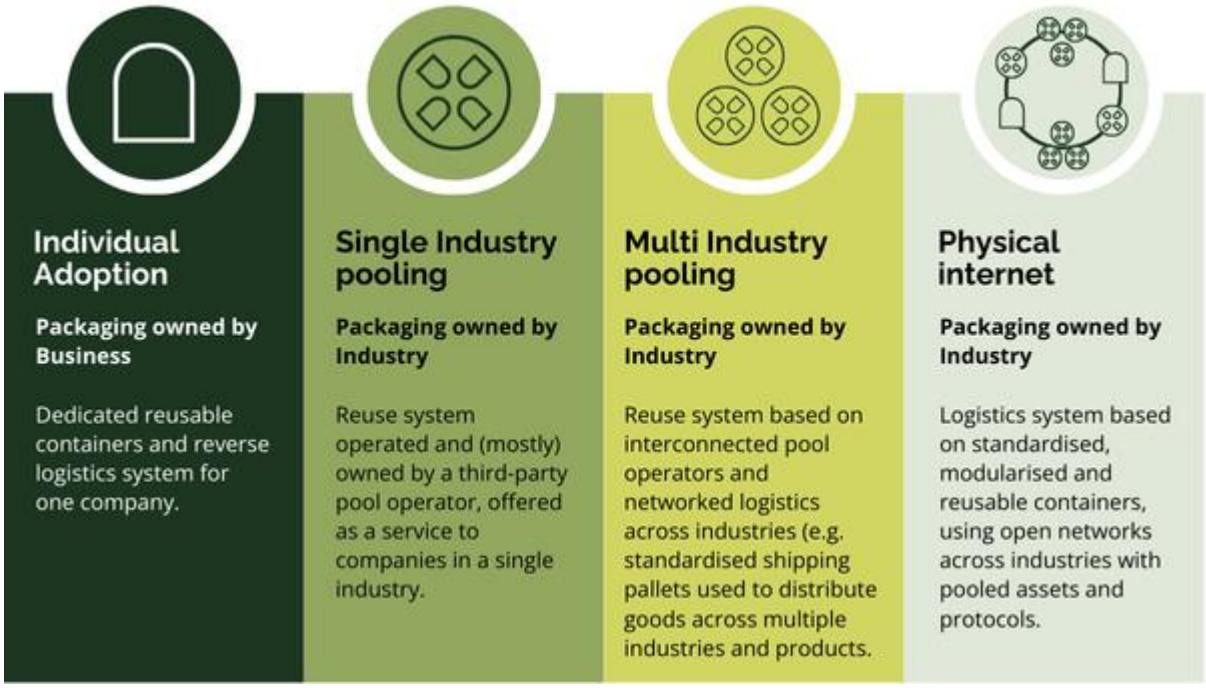

Figure 2-2 Reuse models in B2B packaging. Source: EMF, 2019[8], derived from ANZPAC, 2022[9].

In the return models, a brand or retailer retains ownership of the packaging and is responsible for cleaning and refilling the packaging with product.

The biggest challenge in scaling reuse models in most contexts is the re-orientation of manufacturing, distribution and retail models, as well as consumer behaviour, away from highly developed supply chains that are built on high efficiencies in one-way flows from producer to logistics network to retail to consumer, and an emphasis on convenience for consumers.

2.2. Value chains in single-use, refillable and returnable packaging

Generic value chains in single-use, returnable and refilled packaging are depicted below in Figure 2-3, Figure 2-4, and Figure 2-5.

The supply chain for supplying product in single-use packaging is the predominant model in use globally. Operations at each segment of the supply chain in numerous businesses globally have been optimised towards delivering products in single-use packaging to many retail outlets (Figure 2-3). At this point the product and packaging are taken away by the consumer, and in general there is no return of product or packaging into the brand supply chain.

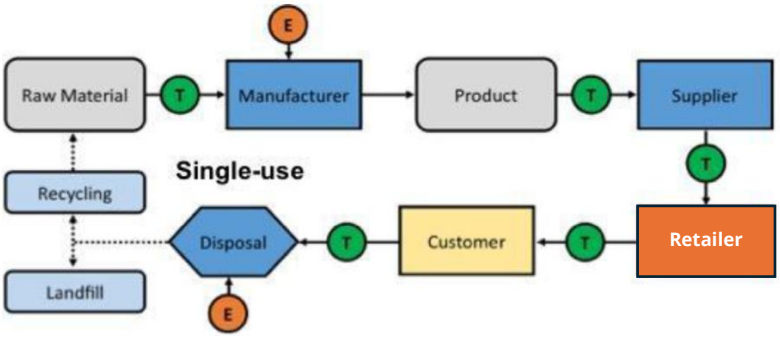

Figure 2-3 Generic value chain in single-use packaging (T = transport input, E = (major) energy input). Modified from: Greenwood et al., 2021[10]

[10] Greenwood, S.C., Walker, S., Baird, H.M., Parsons, R., Mehl, S., Webb, T.L., Slark, A.T., Ryan, A.J., and Rothman, R.H., 2021. Many Happy Returns: Combining insights from the environmental and behavioural sciences to understand what is required to make reusable packaging mainstream. *Sustainable Production and Consumption*, 27, 1688–1702.

In some instances, generally for large retailers with multiple retail stores, there may be reverse logistics transporting secondary[11] and tertiary[12] packaging, spoiled or out of date stock, back to the distribution centre for sorting, and aggregation prior to collection by a waste management company. In many cases, secondary and tertiary packaging and spoiled products are collected by waste management companies for recycling or disposal.

A reverse logistics element in an existing supply chain may enable the application of a return model for reusable packaging (used packaging is returned to a distribution centre and stored temporarily); or a refill model (B2B bulk packaging of product sold in a refill model is returned to the distribution centre and stored temporarily). In both instances, the brand owner could then collect either the B2C primary packaging, or the B2B bulk product packaging for cleaning and refill.

In a return model (assuming a return-on-the-go model), the material flows remain largely the same. The difference is the behaviour change and material flow from customer to retail outlet for washing and refilling and back again (Figure 2-4). The modifications needed to implement a return model at each stage of the supply chain are not evident in the diagrams. Changes are required in raw material selection (a material that is suited for multiple uses rather than a single use), as well as packaging manufacturing (again modifications for sturdier containers), in filling of different size and optimisation of that filling process, and then to the operations at the retail outlet. The storage area at the retailer will need to accommodate both incoming filled packaging, and outgoing empty packaging, which may be contaminated by decaying product or with other contaminants. There will be additional handling, stacking, storing and movement of containers required by retail staff, with new systems and standard operating procedures (SOPs).

[11] Collation packaging

[12] Logistics packaging

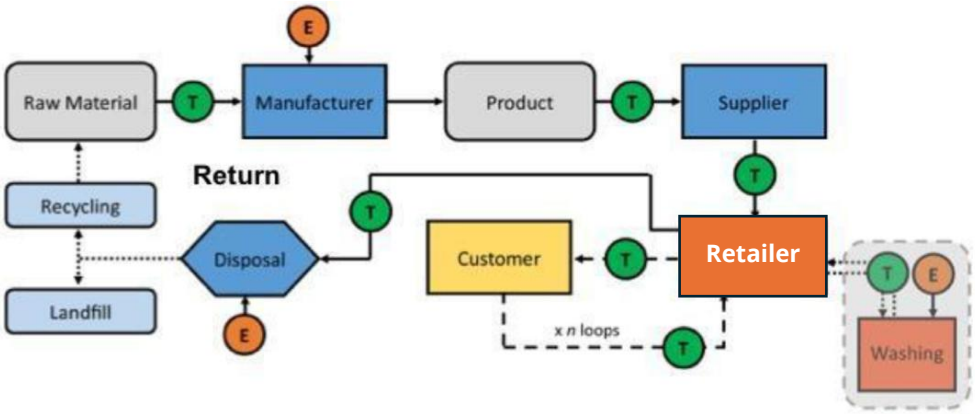

Figure 2-4 Generic value chain in returnable packaging models (T = transport input, E = (major) energy input) Modified from: Greenwood et al., 2021[10]

In a refill model, the material flows remain largely the same, with the behaviour change and material flow from customer to retail outlet and back again differentiating the model (Figure 2-5). Like the return model the modifications needed to implement a refill model at each stage of the supply chain are not evident in the diagrams. Changes are needed in raw material selection (a material that is suited to multiple uses rather than a single use), as well as packaging manufacturing (again modifications for sturdier and larger containers), in filling of different size packaging (aiming at bulk filling) and optimisation of that filling process, to the supplier distribution mechanism and process, and then to the operations at the retail outlet. At most stages of the supply chain, i.e., from manufacturer to retailer, the transport of different size and shape containers will require modifications to the method of loading and unloading, stacking and transport packaging to optimise the load.

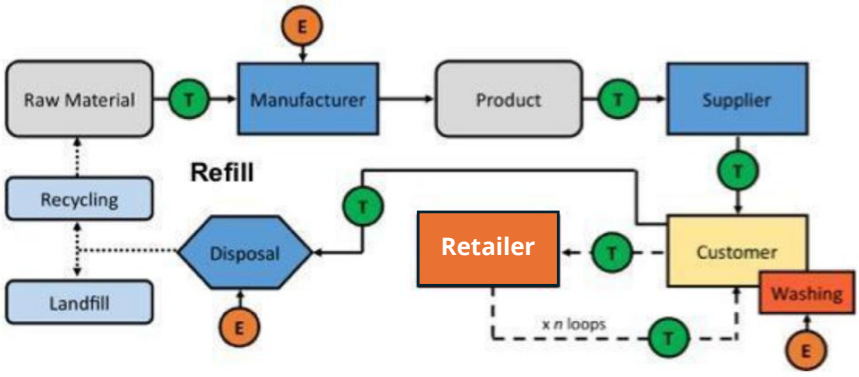

Figure 2-5 Generic value chain in refillable packaging (T = transport input, E = (major) energy input) Modified from: Greenwood et al., 2021[10]

2.3. Global representation of reusable packaging models

The Living Reuse Landscape is likely the largest available database that is updated at a global level, although not all countries have been surveyed, and informal reuse

solutions are likely to be underrepresented[13]. The largest number of reuse systems reported on the site is in **refill**, either in package-free stores at 675 out of 1 324 solutions (51.0%), or refill vending stations or machines the next largest category at 111 (8.4%) (Figure 2-6).

Solutions that constitute single-use packaging to refill larger rigid packaging at home i.e., liquid soap in a sachet for a soap dispenser are not counted as true refill solutions in this study, as although these models save in weight of plastic, the flexible packaging often used for the refill packs is multi-layer multipolymer packaging which is very poorly collected and recycled globally, as well as in SA.

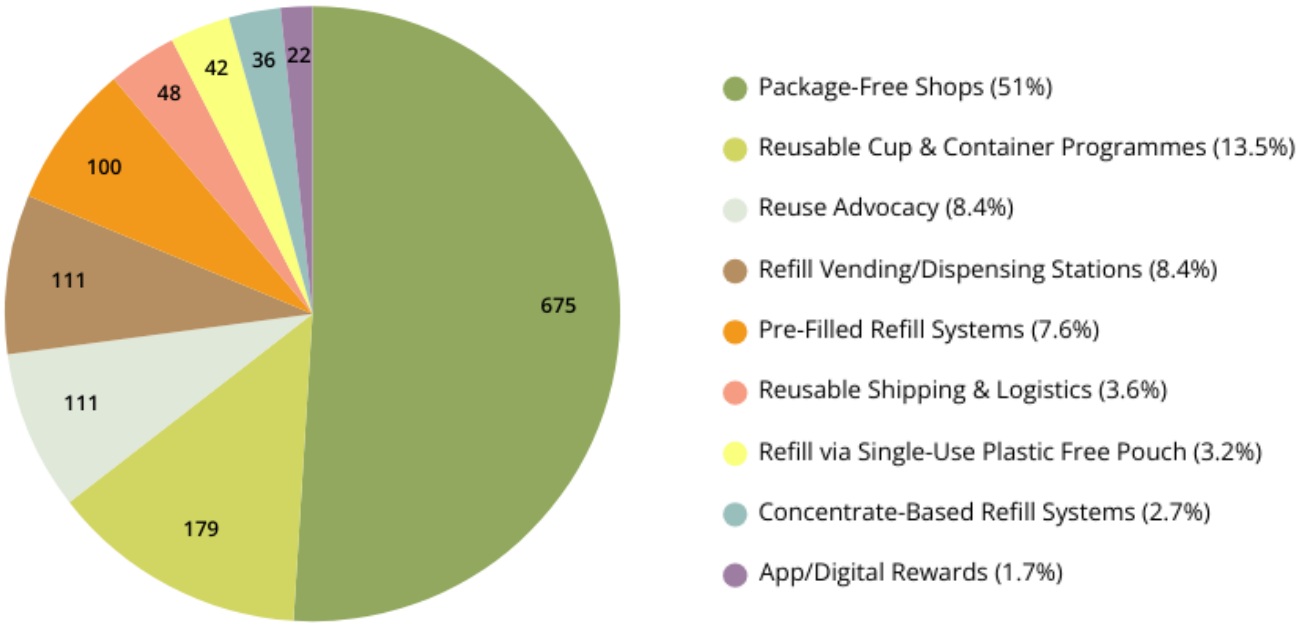

Figure 2-6 Reuse solutions globally by type Source: Living Reuse Landscape (2025)[14]

In **return** models, the Living Reuse Landscape includes 100 solutions (7.6%) in pre-filled refill packs, 179 in reusable cup and container programmes (13.5%), and 48 (3.6%) in reusable shipping and logistics (Living Reuse Landscape, 2025)[15]. In total, 18.7% of solutions compared to 59.4% in refill.
The much higher proportion of solutions in refill indicates that there is a lower barrier to entry for refill solutions over return solutions, although with the investment required for

[13] The last update is noted as the 10th of June 2025, https://www.reuselandscape.org/database, accessed on the 18th of July 2025.

[14] https://www.reuselandscape.org/charts, accessed 18 July 2025

[15] https://www.reuselandscape.org/charts, accessed 18 July 2025

return solutions there will be a much larger incentive to invest more time in planning and design, and to ensure continued operations in reuse.

2.4. Representation of reusable packaging models in low- to middle-income country contexts

The Living Landscape database includes about 239 reuse organisations in Africa, Asia, Latin America, Oceana, South America from low- to middle-income country settings, showcasing package-free shops, prefilled refilled systems and refill vending or dispensing stations. Of the initiatives represented, 200 are in refill (package free shops and in refill vending of dispensing stations) – 84%. There are only 40 active return or refill solutions listed for Africa, which is likely to reflect gaps in data collection, and an underrepresentation of informal reuse solutions. Refill models constitute 70% of the active solutions (28 examples). The team at Perpetual, who maintain the Reuse Landscape database, have included as many informal reuse projects as possible, see their website[16] for more information on these informal examples. More information on any reuse initiatives can be sent to the team (contact details are on the website). In Africa, there are reuse initiatives recorded for 14 out of the 54 countries.

2.4.1. Case studies of refill and return models in the Global South

Three recent reports document a number of reuse case studies from the Global South, and the details of each initiative can be found in the following documents: ANZPAC (2022)[9], India Plastics Pact (2024)[17], WWF and EMF (2025)[18].

The following sections will document the main learnings and recommendations for B2C refill models, and B2C return models.

The ANZPAC and India Plastics Pact reports scanned and assessed existing case studies in their regions and extracted learnings that may assist in scaling initiatives in their contexts[9,17]. The WWF and EMF report was based on 20 interviews with reuse startups in the Global South and international companies active in the region. Based on the authors' assessment of the reuse models, they selected the product categories that were deemed the most likely to scale rapidly: in B2C models – beverages, on-site and takeaway food, home care and store cupboard ingredients; and B2B packaging[18].

[16] Reuse Landscape, Informal Reuse, https://www.reuselandscape.org/informal-reuse. Accessed 20 August 2025.

[17] India Plastics Pact, 2024. Landscape Assessment – Reuse Models in India.

[13] WWF and EMF, 2025. Reuse in the Global South – Case Studies.

2.4.1.1. B2C refill models

Refill models are the dominant reuse model in B2C in India, with 90% of reuse initiatives documented by the India Plastics Pact being refill-on-the-go or refill-at-home[17]. In Australia, New Zealand and the Pacific Islands, refill-on-the-go and refill-at-home models accounted for 8 of the 14 case studies in B2C models (57%)[9]. Discussions in the Plastics Pact Network indicated that the predominant reuse model in Chile and Kenya is refill, either on-the-go or refill-at-home.

Learnings

- Low-income supply chains[18]
    - Route to market for the bigger brands is more complicated as distribution networks may be informal. Informal or low-income retail stores may be smaller and more dispersed, and there is likely a lack of distribution hubs.
        - Reuse models in these settings have developed supply chains for consistent supply of high-quality products and may be an enabler or intermediary for bigger brands.
- High-tech dispensing models for water and milk experienced the barrier of financing and sufficient buy-in to scale rapidly, particularly in low-income settings[18]
    - Water dispensers in luxury tourist venues were more viable
    - Water dispensers in lower income areas were constrained by logistics costs, with those close to natural water sources achieving a better business case
    - For milk dispensing, there seems to be a more established model, although financing for scaling the model is a barrier.
        - The potential noted in this model is for lower cost of milk (not buying the packaging) to drive demand and improve the business case.
- Quality and hygiene concerns – including counterfeit products
    - Due to concerns regarding hygiene and quality control, tracking technology was useful to attract the bigger brand owners and satisfy their auditing requirements.
    - Counterfeit products and contamination of foods due to poor handling and storage are a global concern. Counterfeit products are estimated to constitute 2.5% of global trade (OECD/EUIPO, 2021)[19].

[19] OECD/EUIPO, 2021. Global Trade in Fakes: A Worrying Threat, Illicit Trade, OECD Publishing, Paris, https://doi.org/10.1787/74c81154-en.

- In personal and home care, as well as in store cupboard food (dry goods, cooking oils etc) – type of brands
    - Partnerships with bigger FMCG players was assessed as a need to support for scaling (supply nationally)[18]
    - However, in India, the reuse retailer's own brand, second tier brands or 'sustainable' premium brands were more likely to be participating in refill models, as an approach to increase their market share[17].
    - In Chile, national brands competing with multinational FMCG companies were also highlighted as being important in reuse models, similar to the Indian experience[18].
- Frequency of sales in consumer products was emphasised by a South African model in high-tech dispensing, with experience that dishwashing liquid is less frequently bought than cooking oil, which therefore achieved a better performance in a formal retail environment[18].

2.4.1.2. B2C return models

As noted, return models appear to be less prevalent globally, and particularly in the Global South, apart from existing models in returnable glass bottles for alcohol and carbonated soft drinks – the experience in South Africa and Kenya.

Learnings

- Upfront investment required – possible to retrofit production and filling lines, in some cases new lines may be needed. Coca-Cola Latin America invested more than $500 million in upgrading and expanding their operations to accommodate their 'universal'[20] refillable bottle[21].
    - This degree of retrofitting and investing in new plant will be far more difficult to achieve for smaller brands.
    - This investment has achieved a greater than 90% return rate, and a 15% higher likelihood that consumers will repurchase the product, compared to the product in single-use packaging[18].
- Potential for collaboration
    - By outsourcing certain aspects of a reuse value chain, such as cleaning services for returnable containers, brand owners can focus on their established core businesses and reduce the modifications needed to their business models[18].

[20] Across all the Coca-Cola beverage brands.

[21] EMF, 2020. Upstream Innovation – A guide to packaging solutions.

        - Cleaning services could also be centrally supplied to a number of brand owners to achieve profitability for the cleaning company.
- Harmonising of packaging design: To improve economies of scale, the adoption of the 'universal' bottle (packaging) design that is currently used by Coca-Cola, would enable collaboration through sharing of existing and additional manufacturing, filling and distribution infrastructure, as well as in the cleaning and decontamination processes before re-filling18.
    - One of the barriers to such collaboration is the committed investment and ownership of supply chains from bottle manufacturing to filling, distribution, collection and washing by bigger brands.
    - The 'environmental performance' of brands is often highlighted as a competitive edge, and as such sharing of IP related to system design, allowing competitors to benefit from investments to build brand reputation regarding ESG, as well as the risks of integrating with other brands' supply chains (eg quality of bottles produced etc) is a barrier.
    - There are initiatives convened globally to address such challenges[22].
        - Potentially independent organisations (not associated with any brand) could supply services to the industry, such as 'cleaning as a service'[18.]
- Consumer engagement: A focus on consumer communication and incentivisation is critical for an efficient return system [17,18]
    - Learning from a return system is that reframing the deposit on the returnable bottle, as a "cashback" had a more positive influence on consumer behaviour[18].
    - Informal settlement residents in India travelled further to access product in reusable containers due to incentives for reuse (rather then price of product)[17].
    - Staff training is very important to engage consumers effectively regarding the reuse model and new ways of purchasing products[17].
- Return rates
    - A deposit on returnable bottles is needed to achieve high return rates[18].
        - The informal sector can play a big role in returning packaging[18] as deposits collectors receive from reusable packaging in SA are

[22] EMF, 2024. Unlocking a reuse revolutions, https://www.ellenmacarthurfoundation.org/scaling-returnable-packaging/overview.
ecos 2024, A reuse standard to match new packaging rules: How to align the EU's harmonised packaging reuse standard with the Packaging and Packaging Waste Regulation (PPWR), https://ecostandard.org/wp-content/uploads/2024/12/2024-12_ECOS_Revise-reuse-standard-PPWR.pdf.

higher than payments for the same weight of material at buy-back centres or recyclers.
    - Highest return rates are in closed systems, such as in cafeteria or stadiums where food is eaten on the premises[18].
- Consumer participation – need a concentration of users:
    - A certain minimum number of consumers in refill-from-home models is needed to support the business case[17].
    - Brand recognition is key to encourage consumer participation; trials with unknown or small brands grew their consumer base very slowly[17].
    - A loyal community of consumers can be built through reuse solutions[17] – gathering around a common purpose and being early adopters of a system.
- Enabling growth
    - Franchise models have the potential to scale well-tested reuse business models to other similar contexts[18].

3 A selection of reuse-refill models in South Africa

A range of reuse-refill businesses were surveyed in the development of this report, as well as information gathered through internet searches and third-party information on some companies that were not available to directly participate in this study. The businesses were selected from applicants for pilot funding through Plastics SA's project "Reusable Packaging Solutions in South Africa", funded by the GIZ in the South African Circular City Labs Project. Additional initiatives and learnings were included based on past, and follow-up, engagements with certain SA Plastics Pact members.

Case studies are categorised by their business model and consumption profile as outlined in Table 3-1.

Table 3-1 Categorisation of case studies by business model

Categories of Case Studies	Description / Consumption Profile
Business-to-consumer (B2C)	citizens/ consumers typically receive products in primary packaging (packaging in contact with the product), and sometimes in secondary (or collation) packaging – such as in shrink wrap around a 6 pack of beverage cans
Business-to-business (B2B)	businesses, generally receiving products in bulk, and in logistics packaging in collation and transport packaging
Income level	• Low income, or • Middle to high income
Consumption purpose	• FMCG purchasing • Food and beverage on-the-go purchasing
Reuse-refill model	• Refill-on-the-go • Return-on-the-go

No refill-at-home or return-from-home models were accessible during the development of this report.

3.1. Business to consumer models

The business to consumer models were surveyed, either directly through conversations with the business owners or through review of information available online. The South African-specific case studies ranged from low-income to middle-high income settings mostly in the FMCG sector, and across both traditional retail settings where most products are sold in single-use packaging, to specialised retail settings where products are stocked with no primary packaging, and dispensed into the consumer's own packaging, returnable packaging supplied by the store, or sometime in single-use packaging.

3.1.1. Low-income settings in FMCG

In low-income settings, the refill/return models are categorised into low-tech models, and high-tech models with machine dispensing and digital technologies as part of the dispensing machine enabling reporting.

3.1.1.1. Low tech reuse-refill models

Gcwalisa in Alexandra (township) Johannesburg – 6 sites, 1st store launched in 2022
Supply chain segment: Retail – standalone, specialist store
Products: sunflower oil, eggs; *beverages* – coffee, creamer, hot chocolate; *dry food* – rice, sorghum, brown sugar, samp, sugar beans, wheat flour; *snacks* – mopane worms, nuts, rusks; *home care* – all-purpose cleaner, bleach, dishwashing liquid, pine gel, washing powder.

Operating model: Informal social franchise model, overseen by NGO Wakanda Food Accelerator.
Funding: Grant funding sourced through Wakanda for store infrastructure (container, shopfitting and scale), and 12 months of operational funding for operator. Targets must be met during the first 12 months. Once financial sustainability is reached there is a profit-sharing agreement between the operator and Gcwalisa.

Roles – Wakanda: Supplies and oversees container and shopfitting, supplier contacts and initial relationship management, training for store owner and staff, operational support for 12 months. Oversight of Gcwalisa brand and operators.
Roles – Owner/operator: Running the store, including hiring and managing store staff. Required to meet with Gcwalisa oversight regularly to maintain operational standards and report on store performance.

Reuse model: Initially refill-on-the-go with consumers bringing their own containers, or single-use paper bags in store, product is weighed with calibrated scale. By participating in the GIZ project Circular City Labs funded through BMZ, a return-on-the-go model, using PP plastic containers for dry foods and PET plastic containers for cooking oil and detergents, was trialled in partnership with a digital tracking company using QR codes in 2 stores, with 2 more launched in July 2025. The 2 initial stores still operate on a refill model, but with initial success of the returnable containers it is likely they will transition to incorporate both refill and return models.

New initiatives: new store and product activations (75% of customers to the 4 new outlets funded under the CCL project, heard about Gcwalisa from the ambassadors),

local SMME focus for suppliers, loyalty system and card (10c for every R10 spent), returnable container + deposit with QR code.
Impact: **Food safety** (challenge of counterfeit and low-quality food in informal settlements[23]) - **decreased food waste** (61% of respondents)[24], and **increased food security** (66% of respondents)[24] and **household wellbeing** (55% of respondents)[24], in CCL project (4 new outlets): **>60% packaging return rate**, **4 female jobs** (100% female), **81% female customers** , **>70% repeat customers**.
Source: Josephine Katumba, Head of Operations, Gcwalisa

Triple Shine Foundation NPC, established in 2016, Dendron, Limpopo
Supply chain segment: dispensing unit supplier, product liaison, supplier to retailers (spaza stores)
Goods: *home care* – detergents

Operating model: Micro-franchisee measures and sells detergent by volume to consumer at bulk prices, new partnership – Triple Shine supplies to spaza stores – shop owner dispenses by volume. QR code on plastic bulk containers used to track product batches and reuse cycles of the B2B container. QR code will also be trialled on B2C returnable plastic containers.

Funding: Self-sustaining micro-franchise model, new partnership launched in 2025 with Unilever and Reath Technology, funded through Innovate UK. Funding used to construct dispensing units for product in 6 spaza stores, and purchase QR code printer and reader.

Roles – Triple Shine: Micro-franchiser, accesses products from local suppliers and Sunlight dishwashing liquid from Unilever, oversees distribution to micro-franchisees and to spaza store owners.

[23] Mbonane, T & Rathebe, P. (2019). 'Fake food' epidemic in South Africa: a growing food safety/public health issue? 10.7196/SHS.2019.v3.i2.83.
[24] Based on a survey of 199 respondents at the first Gcwalisa store in Alexandra in 2023: Mhlanga, N., 2024. The socioeconomic and environmental impact of a weigh-and-pay model by Gcwalisa Spaza shop. University of Johannesburg – Process, Energy and Environmental Technology Station.

Roles – retail: Micro-franchisees run their own businesses selling detergent by volume; in new partnership spaza store owners buy product from Triple Shine and sell in their spaza stores.
Reuse model: Refill-on-the-go – consumers bring their own containers (B2C). In B2B, Unilever's Sunlight dishwashing liquid and other detergents Triple Shine provides are delivered in reusable plastic containers, which are washed and reused.

Impact: **6 spaza store owners** (so supporting income for 6), **33% female**, **3 jobs created for three rural women and youth**. 80 customers surveyed on refill use. NB: data on packaging saved will only be made available at a later date.

Source: Sharon Rapetswa, Director of Marketing and Business Development, Triple Shine Foundation NPC; Meera Vijayan, Sustainability Specialist Africa, Unilever

3.1.1.2. High tech reuse-refill models

Smartfill – **5 spaza shops in Thembisa (township) Ekurhuleni**, equipment launched 2020, spaza stores project launched in 2022 with 2 stores. 9 stores rolling out in Mtendere, Zambia in 2025 and 2 stores in Nairobi 2025.
Supply chain segment: equipment and digital tech manufacturer, sourcing products (brand liaison), supplier to retailers
Products: cooking oil; *dry foods* – maize meal, oats, rice; *snacks* – peanuts; *home care* – dishwashing liquid, fabric softener and washing powder.

Operating model: Automated dispensing machines able to dispense by weight or price required, "cloud-based transaction and stock data supports stock management, logistics, and consumer insights". Smartfill buys in bulk (80 kg), fills 20 kg plastic hoppers fitted with RFID [25]tags that keep batch and best before dates, and these slot into the dispensing machines. A label is printed with product information, best before date, allergens and hazards for all purchases. Customers bring their own containers or use paper bags that can be purchased in stores. Most sales are currently in paper bags, planning to initiate a reusable container with a QR code to track consumer behaviour and reuse cycles.

[25] RFID – Radio-Frequency Identification, allows tracking and tracing of product

Funding: Transform, a partnership between the UK Foreign, Commonwealth & Development Office, Unilever, and EY, supplied funding for the manufacturing and installation of Smartfill dispensers for the 7 products listed above in 5 spaza stores in Thembisa, and 9 stores in Zambia.

Roles – Smartfill:[26]. Smartfill sources and manages supplier relationships, as well as logistics in standard hoppers (ie widely available products at plastic stores).
Roles – spaza store: Engage with consumers and guide them in using the dispensing machines.

Reuse model: Refill-on-the-go – ideally consumers are bringing their own containers.

Impact: **Food safety** (challenge of counterfeit and low-quality food in informal settlements)[23], **average of 5 kg flexible packaging saved per spaza store per month**. **Food waste kept to 0.5-1%** (traditional retail can have 5-8% wastage**). Cost savings** to consumers average **30%** from similar sizes on the shelf. 400-500 customers a day or less per store with an average of 26 sales per day, on a good day can sell 40-50 kg of product per store. Up to **50% return customers, 60% women customers, with 28% being daily return customers**.

Source: Nevo Hadas, CEO, Smartfill

Sonke Retail – SKUBU store in Diepsloot (township), Johannesburg. Equipment manufacturing launched in 2021, pilots in formal retailers, SKUBU store launched in 2025.
Supply chain segment: Equipment and digital tech manufacturer, sourcing products (brand liaison), supplier to retailers
Products: cooking oil; *dry foods* – maize meal, rice, sugar, wheat flour; *home care* – dishwashing liquid, washing powder; water

[26] Smartfill (2024), What makes us different? https://smartfill.store/, accessed 29 July 2025.

Operating model: Refillable containers are reused to stock the dispensing machines at the specialist SKUBU store (a B2B return model). Machines have IoT[27] connectivity to enable data exchange and performance tracking. The containers are washed and refilled. Consumers can buy per weight or according to monetary value. Consumers can bring their own containers or use a plastic resealable bag at store.

Funding: Circular Economy Implementation Fund – a partnership of the Department of Science and Innovation's (DSI) and the CSIR[28].

Roles – Sonke: Sonke manufactures the smart dispensers, sources and distributes products to store, and oversees the SKUBU retail store.

Reuse model: Refill-on-the-go, some consumers bring their own containers, most seem to buy plastic resealable bags (which may be reused).

Impact: **Food safety** (challenge of counterfeit and low-quality food in informal settlements)[23], Consumers benefit from **up to 50% savings**[29], "**R1.3 million in shopper savings in terms of price paid for products, 1.5 million pieces of packaging not in landfill**"[29]

Source: Sonke – All of Us, https://sonke.org/, accessed 29 July 2025.

[27] Internet-of-Things

[28] Council for Scientific and Industrial Research

[29] Sonke –All of Us, https://sonke.org/, accessed 29 July 2025.

3.1.2. Middle- to high-income settings in FMCG

Nude Foods, Cape Town City Centre, launched 2017
Supply chain segment: Retail – standalone, specialist store plus an online platform, with beverage Café, and an outsourced food truck Wild Eatery
Products: Beverages, dry foods; fresh produce; herbal health supplements, home care, lifestyle, oils and vinegars, snacks, spices, spreads, sweeteners (website)

Operating model: Healthy organic nutritious food and 'green' lifestyle products bought in bulk and dispensed into airtight containers. Many products are kept in cold storage until refill of store displays is needed. Each batch is stored in its own separate container. In the gravity dispensers or scoop bins, only one batch is sold at a time., ie. Product is sold out first before replenishing. All bulk containers are labelled with best before date, batch number, country of origin, and any allergens. This information is also placed on the store containers on refill. Suppliers' packaging is returned as far as possible to be cleaned and refilled for the next delivery. The focus is on small local suppliers to support local businesses and reduce the negative effects of long-distance logistics.
It is the customers' responsibility to bring well-cleaned containers (see notice in accompanying picture). Glass containers are on sale if needed. Customers doing regular shopping tend to bring their own containers, while local office workers buying lunch or snacks tend to use the paper bags. Roughly 50% of the sales in small quantities occur in paper bags, and the other 50% in refillable containers. The goods are weighed and a price allocated per product at the check-out.

Funding: Self-funded and self-sustaining

Roles – Owner/operator: Sourcing and onboarding suppliers, maintaining quality and freshness with storage and batch tracing protocols, managing inventory, and overseeing store staff and customer engagement.

Reuse model: Refill-on-the-go

Impact: Estimated **~3.4 tonnes of single-use packaging** in dry goods **saved** in 8 years (note the packaging saving in 'wet goods' about half of the 800 products in store, such as spreads, drinks and personal care is not included in this calculation – these are supplied in reusable glass containers at Nude Foods), **8 people employed** (50% female), **140 MSMMEs supported**.

Source: Paul Rubin, Managing Director, Nude Foods

The Refillery – established 2018, sold in 2023 (now The So Purist, Linden, Johannesburg)

Supply chain segment: Retail – standalone, specialist store plus an online platform (was at 5 physical stores), with associated café and co-working space at one site

Products: Mostly with shelf life 2-5 years, some confectionery 1-2 years (started at 100 products, ended with over 1 000): Dry foods, home care, personal care, snacks.

Operating model: Although most stores were located in middle- to high-income areas, The Refillery aimed at a broad market segment across the environmentally- and health-conscious consumers, as well as to lower income consumers as products were supplied in smaller volumes at bulk prices. Lower income consumers including local workers who would buy snacks or staples (like a cup of flour, or a cup of maize meal).

The owners focused on sourcing suppliers in SA "as local as possible" (there was some purchase of international products already imported into SA) and bought in bulk. Strict hygiene protocols and batch tracking were in place. All sales by weight with consumers bringing their own containers, and responsible for cleaning containers.

Funding: Self-funded and self-sustaining; the unprecedented shocks of COVID and greater consumer focus on convenience and shopping in one place, riots in Johannesburg and very high food prices all contributed to downsizing in 2022 and ultimately sale of the last store (in Linden).

Roles – Owner/operator: Sourcing and onboarding suppliers, maintaining quality and freshness with storage and batch tracing protocols, managing inventory, and overseeing store staff and customer engagement.

Reuse model: Refill-on-the-go, customers brought their own containers or could buy refillable containers in store.

Impact: Loyal Refillery community, including low-income consumers working in the vicinity of their stores.

Source: Sam Moleta, Co-founder of The Refillery

3.1.3. Traditional retailers in FMCG

There have been a number of reuse-refill trials in traditional retailers, as well as sustained retail sections of loose fresh produce, dispensing stations for snacks and confectionery, and dry foods such as rice, pasta, flour and beans.

Reuse-refill trials at traditional large retailers in middle- to high-income settings generally consisted of and consist of low-tech dispensing units (such as gravity-fed hoppers) with weighing stations and generally offered/offer single-use thin plastic barrier bags[30], or paper bags to contain product, with printed paper labels. Some retailers have weighing points at check out, which minimises customer waiting time at the product displays, and decreases the potential for theft through product added to bags after weighing. Some retailers also have refill stations for water in-store.

In low-income settings, there have been trials of automated dispensing units located separately from shelves stocking the single-use items.

Insights across 5 retailers were gathered through past experience and informal conversations. Due to the competitive retail space, and sensitivities in sharing specific information, the details of both the trials and sustained sections in reuse-refill or loose produce will not be shared in this report. High-level insights regarding challenges and possible initiatives to address barriers to growing reuse-refill in large formal retail settings will be presented in section 4.

[30] These thin plastic barrier bags are very unlikely to be recycled as they are very light weight and therefore have no value for collectors, can easily be blown away if collected, and tend to get wrapped around equipment in recycling plants.

3.1.4. Food and beverage on-the-go

Reusefy – established in 2022, temporarily closed in 2025 (study break)

Supply chain segment: Event services, on-the-go beverages

Products: Beer, coffee

Operating model: Supply of reusable beverage cups in closed systems such as events, markets, food courts or stadia where customers consume on-the-go beverages on site. Collection, washing and return of cups to vendors for reuse.

Funding: Pilot project that grew into Reusefy – Initial funding through the MAVA Foundation facilitated by the SA Plastics Pact[31], in partnership with the Oranjezicht City Farm Market and the V&A Waterfront. The V&A Waterfront provided marketing assets and support. Further operations were self-funded.

Roles – Owner/operator: Sourcing suitable containers, liaising with designers and printers for branding, relationship holder with venue management, assistance to management to onboard vendors to the reusable cup system, oversight of cup process from vendor supply to collection to washing and return to vendor.

Roles – Event or venue management: Engaging vendors regarding reuse system, and support for the system including announcements and information supply to consumers, making dedicated space available for collecting reusable cups and for the washing and storing of cups before return to vendors.

Reuse model: Return-on-the-go, initially trialled as honesty system, with advanced plans for deposit as part of conventional card/ contactless payments.

Impact: From September 2022 to April 2025, Reusefy's returnable cup service used two types of cups during its operations. From the start to April 2024, a total of **24,000 durable reusable cups** were used[32], to make **220,000 deliveries**, eliminating **174,000**

[31] SA Plastics Pact, 2023. Reusable Cup Pilot Project at the Oranjezicht City Farm Market, https://www.saplasticspact.org.za/2023/09/22/project-report-reusable-cup-pilot-project-at-the-oranjezicht-city-farm-market/, accessed 30 July 2025.

[32] estimated to be reusable more than 100 times; [28]assessed to be reusable 10 -15 times

single-use cups and during this period, across three cup sizes, Reusefy achieved a **89.4% return rate**, leading to each cup being **used on average 9.4 times**.

Due to lower prices and margins, during May 2024 and April 2025, Reusefy had to move to a more affordable robust single-use cup[33], to continue offering their service at the OZCF Market. They used a total of **70,500 cups**, to make **245,000 deliveries**, **eliminating 175,000 single-use items** from entering our waste stream. During this period, across three cup sizes, Reusefy achieved a **71.2% return rate**, leading to each cup being **used on average 3.5 times**. The return rate deteriorated significantly mainly due to customers not identifying the cups as reusable or returnable, leading to many being disposed of in normal waste bins.
Reusefy estimated that a total of **4,117 kgs of plastic waste** was prevented from entering our waste streams."

Source: Francois Cloete, Founder Reusefy

3.2. Business-to-business models

The only B2B model surveyed was in logistics packaging, due to the commercially sensitive nature of the information the company will not be named in this report.

There is potential for a range of solutions in logistics packaging in plastic materials. There are existing companies using a pool of plastic logistics packaging in reuse models, as well as those using wooden logistics packaging particularly in pallets, in a reuse system. There are advantages and disadvantages to both material types, and the material selection will depend on the application. The details of material selection will not be considered in this study. The main barriers and opportunities in logistics packaging will be discussed in section 4. Due to the inclusion of only one company in reusable logistics packaging, the insights will be limited.

4 Challenges and opportunities in reuse-refill in FMCG in SA

South Africa doesn't yet have policy and legislation that directly enables reuse of plastic packaging. Mandatory EPR legislation has been in effect since the 5 November 2021, with the first year of implementation being 2022. There are reuse targets currently

specified for glass only in the EPR notice for paper, packaging and some single-use products, which does suggest that future targets may include reuse targets for other packaging materials.

In spite of the lack of specific enablers, there are a number of formal reuse models operating in South Africa, with Nude Foods referenced in this report, self-sustained for eight years. As expected with newer business models running 'counter-current' to the predominant retail models, a number of startups[34] and even some more established businesses have closed, in part due to the COVID pandemic and associated pressures.

The more informal reuse models in which formal single-use packaging is reused by informal takeaways and traders are not well-documented. Particularly concerning is the counterfeit product market, in which packaging from well-known brands is refilled with local products of questionable quality. This practice is more common in informal settings and sometimes has significant impacts on consumer health[35].

Challenges common across the reuse models surveyed will first be described, followed by context- and model-specific challenges. Possible interventions and key role players will be suggested for the challenges presented. Ideally, these recommendations should be workshopped and refined with the organisations surveyed and other key players in the industry.

This study focuses on solutions to challenges in the short-term, which will focus on industry or private sector action to support scaling of reuse models in South Africa. Although policy and legislation, as well as standards, are useful tools to create level a playing field that will support early movers in reuse models in South Africa and create a faster track to growth for newer reuse organisations, these interventions are likely to be impactful in the medium- to long-term. For both policy and legislation, as well as industry standards for reuse such as the developing PR3 standards from the Global Alliance to Advance Reuse[36], SA can benefit from the learnings of development and

[34] Estimates of failure rates in startups from Forbes are that 90% fail in the first 5 years while Startup Genome estimates that 92% fail in 3 years (Corbishley, 2018. Getting to Series A: The odds and how to beat them. Medium, https://medium.com/@ChrisCorbishley/getting-to-series-a-the-odds-and-how-to-beat-them-f2e6e8092a91, accessed 1 August 2025). It is interesting to note that these are pre-COVID statistics and include startups across all sectors.

[35] Nkosi, M., 2023. Fake foods sold in unregulated SA spaza shops pose massive threats to public health. Daily Maverick, 23 October 2023.

[36] RESOLVE, 2024. PR3, https://www.pr3standards.org/, accessed 1 August 2025.

implementation in other contexts, including low- to middle-income countries such as Brazil, Colombia, and India[18].

4.1. Common challenges for reuse initiatives in South Africa

The common challenges presented will focus on the B2C models.

1. Financing and limited understanding of the models in the investment community
2. Establishing and trouble-shooting the modifications to more traditional supply chains to optimise products and retail to reuse solutions
    - Onboarding brands and products to build a sufficient basket size of products in FMCG, or a core of vendors and venue owners in events or food services to attract customers
    - Refining and optimising the filling and supply of bulk product, storage and refill of display or dispensing units, the method of measuring for pricing and point of sale methods, and inventory and stock management.
    - Reaching and retaining customers in an unfamiliar retail space.
3. Health and safety in refill and return models is a common barrier to supplier and consumer uptake.

None of the above challenges are unique to the South African context, as highlighted in section 2.4.1.

4.1.1. Financing and limited understanding of the models in the investment community

All the models presented have been largely self-financed by the organisations, which is especially burdensome for the smaller organisations. Barriers to entry into the reuse space are high, requiring upfront capital investment from the owners. Organisations such as Wakanda Food Accelerator which hosts Gcwalisa, and SMMEs with a focus on low-income settings and food security for low-income consumers have been more successful in winning external funding largely through grants and green accelerator programmes. However, available grant funding is limited, and for some models is not sufficient to support organisations to the point of sustainability.

Arguably, smaller dedicated reuse models have been more successful than reuse[37] in large retail settings, as some smaller models have been sustained through the shock of COVID and have experienced some growth in footprint and product range. While in larger retail settings, there have been a number of trials[38], many of which are no longer active, and some have reduced in floor space.

Resistance in financing or investing in different approaches of doing business is common, and early movers often carry a heavy burden of development and refining of sound business and operational models. There are a number of options to support further development of green and circular economy initiatives, some of which offer more sustained investment beyond small grants and prizes of innovation challenges. A useful approach is an outcomes-based approach, such as the Green Outcomes Fund, where de-risking funding is available that attracts other investors, and funds are paid in tranches to initiatives based on their performance. It is beyond the scope of this report to consider financing mechanisms in detail. Some useful resources are included in a footnote below[39, 40]. Even though investment into circular economy business models is growing, a lack of finance is common globally[41]. A recent study showed that only 2% of current global investment is going towards circular economy business models, also noting that investment in developing economies might not have been captured as successfully as those from Europe and the United States.

Recommendations

- Financing options and approaches to be explored for reuse models, especially in support of SMMEs.
- Engagements with the finance sector are required to raise awareness. Develop more evidence (resources) with critical insights for reuse business models to decrease their business risks and increase their success, which enables finance institutions to leverage their investment opportunities and hence make finance opportunities more accessible.

[37] Often these may be better termed as 'packaging reduction models', as although products may be supplied from bulk containers, single use paper or plastic bags are often used as consumer packaging, and rarely refilling of consumers' own packaging, or refillable packaging bought in store.

[38] Unfortunately the data on failed trials was not available for this report.

[39] GreenCape (2024). Green Finance Databases, https://greencape.co.za/archives/green-finance-databases/

[40] Circular South Africa. (2024). Circular Economy Finance Database. Accessible online: https://circularsouthafrica.co.za/knowledge-hub/

[41] Circle Economy. (2025). Circularity Gap Report Finance: Accessible online: https://finance.circularity-gap.world/?page=9

- For some SMMEs, business mentoring or accelerator support would be useful, as many entrepreneurs in this sector are driven by a focus on environmental and/or socio-economic development, and often do not have a background in business.

4.1.2. Establishing and trouble-shooting the modifications in traditional supply chains

4.1.2.1. Retrofitting established businesses to reuse-refill

There have been many reuse pilots in many countries, SA included, resulting in the much-repeated phrase that there are 'more pilots in reuse than pilots flying into Heathrow'. It seems that some reuse pilots in large formal retail environments were designed and even sustained more as marketing and PR initiatives than for any substantive decrease in single-use packaging, or to inform plans for roll-out in more stores.

Implementation by well-established brands and retailers who have large investments in one-way product delivery to consumer requires fundamental redesign of packaging, sometimes also of the product, resulting in changes to manufacturing and filling lines, distribution networks and retail. This redesign is required whether the reuse model to be used is in refill (where the consumer retains ownership of the packaging) or in return (where the brand or retailer has ownership of the packaging to clean and refill with product for sale). The magnitude of the redesign for return models is in general greater due to the need to recover packaging, transport dirty packaging back to a central point, cleaning and scanning for contamination, and finally refill.

In Table 4-1 a high-level analysis of the changes required in established value chains to supply product in either refill or return systems is presented. Both the refill and return models are assessed as 'on-the-go' models as the return- or refill-from-home are relatively rare (The Overbrook Foundation and Plastic Solutions Fund, 2023)[42]. The status quo of products supplied in single use packaging is indicated by light green shading, with light orange indicating an intermediate level of change and light purple shading indicating significant changes needed (and likely increasing investment needed) from the status quo.

[42] The Overbrook Foundation and Plastic Solutions Fund, 2023. The Living Landscape of Reusable Solutions, https://www.reuselandscape.org/charts, accessed 18 July 2025.

Table 4-1 Generic comparison of single-use, refill and return value chains

Aspect	Single-use packaging	Refill packaging	Return packaging
Ownership of packaging	NA	Consumer	Brand
Filling of packaging – B2C (bulk of filling operations in FMCG)	Design of filling for maximum efficiency in small to medium pack sizes for consumers.	NA (*possible saving realised if sales in refill grow past pilot stages*)	Redesign of packaging and filling lines – to fill sturdier packaging able to withstand multiple trips.
Filling of packaging – B2B	Design of filling for maximum efficiency in medium to large pack sizes for businesses.	Design of filling for maximum efficiency in medium to large pack sizes for businesses – ideally in packaging to directly stock refill stations.	Redesign of packaging and filling lines – to fill sturdier packaging able to withstand multiple trips.
Distribution networks	Maximum efficiencies in one-way delivery, some reverse logistics in logistics B2B packaging for reuse and recycling, such as bread crates (reuse), and cardboard (reuse or recycling) and pallet wrap (recycling) returned to the distribution centre after unpacking at individual stores.	• Delivery and return of large volume packaging – redesign for reverse logistics. • Cleaning and refilling required by the consumer	• Delivery and return of small volume packaging, possibly from a larger number of sites than refill models – redesign for reverse logistics. • Cleaning and refilling required.
Retail approach	Single-use packaging on shelves, restocking and inventory systems optimised for single-use.	Redesign of product inventory, stocking and dispensing – can be dispensed from shelf (redesign) or from a separate refill area.	New system for receiving, cleaning, re-stocking shelves, as well as storage of empty containers before collection.
Consumer interaction	Accustomed to receiving product in single-use packaging – many in SA don't further handle packaging at end of use, beyond throwing it into the rubbish bin.	• Consumer must bring container (ideally, not using 'interim' refill packaging such as paper bags) • New consumer/ shop assistant interaction to	• Consumer engages with different packaging • Consumer required to return packaging to store or through another method.

Aspect	Single-use packaging	Refill packaging	Return packaging
		refill product efficiently and hygienically. • Possible behaviour change to go to a different area in the store, or to a specialist store.	

In general, the investment required to re-engineer a value chain in returnable packaging will be greater than that required to deliver a refill system, where more of the responsibility for system success lies with the consumer.

This of course does not mean that reuse-refill models applied by big brands and retailers will not achieve greater viability and growth in SA, but the challenges to overcome will be different compared to startups in reuse-refill. Established brands and retailers have the following advantages:

- consumer-accepted products and well-recognised brands
- good supplier relationships and
- established supply chains – as noted in Figure 2-4 and Figure 2-5 the general flow of materials (product and packaging) may not change.

4.1.2.2. Challenges and recommendations for established brands in reuse

Challenges for established brands and retailers in supply chains using single-use packaging have been identified as:

- Infrastructure, service providers, moving of stock, logistics packing, inventory management, SOPs, staff training, consumer education and other core business practices will have to change for the refill/return models, while sustaining the supply and sale of products in single-use packaging.
- Additionally large brands and retailers will have higher overheads and specific targets regarding profit, consequently large changes in systems to test small pilots require investments in time, model design, floor or plant space (in production and filling lines), staff training, and consumer education.
    - In order to run pilots, two systems will be run in parallel supplying product in reuse-refill and product in single-use packaging. In the highly competitive and strained retail space in South Africa, reuse-refill pilots are in direct competition with the optimised systems in supplying product in single-use packaging.

- In order to justify investment in production and filling lines, large brands have a minimum sustained order size. Many if not all reuse solutions in SA are not yet at a scale to fulfil this requirement.

Due to limitations in resourcing, the experience in many contexts accessed through discussions on reuse with international counterparts, is that reuse pilots are frequently under-resourced at multiple stages from concept to design and implementation. Furthermore, in the fast-paced retail and brand environment, oversight, trouble-shooting and monitoring and evaluation are often also not well planned for or included; and consumer engagement and awareness-raising is often limited.[43] An interesting comparison cited was the fraction of company expenditure on engaging with consumers regarding a reuse pilot, compared to the expenditure on marketing in launching a new product or re-branding an existing product.

The following recommendations for big brands and retailers have been identified for retailers to enable a reuse-refill system:

1. Partnerships and collaborative learnings:
    - There have been many pilots and many associated learnings that are generally not shared between retailers in South Africa, apart from in the SA Plastics Pact where members commit to collaborate on shared challenges, and (at least in part) restrict competition to their products. Some members aim to not compete regarding their packaging, and potentially in system re-design that could boost circularity in plastic packaging in South Africa.
    - Partnerships will also be needed with suppliers regarding supply of product and co-development of systems to ensure product quality and safety[44].

[43] Personal communications from a number of sources beyond this study, undisclosed due to commercial sensitivities.

[44] There are useful learnings and developments globally that can assist (such as the PR3 Standards).

PR3 – Global Alliance to Advance Reuse

"Launched in 2019, PR3 develops standards to undergird the growing reuse economy, creating a blueprint for efficient, reliable, economic, and environmentally beneficial reuse systems.

PR3's standards are set by a global consensus body with over 80 organizations representing industry, government, and civil society. PR3 is accredited as a standards developer by the American National Standards Institute (ANSI). PR3 also works in cooperation with the Canadian Standards Association (CSA Group) to publish and adopt the standards bi-nationally." https://www.pr3standards.org/about

2. Outsourcing of some elements to enable focus on core business and sharing the burden of system development with other organisations (there can be the element of supplier development here).
    - Co-packers could be a useful point of intervention, or engaging distribution and logistics specialists, or separate washing and cleaning service providers (as recommended in other contexts, see section 2.4.1).
3. In terms of system redesign, troubleshooting, and monitoring and evaluation, the following is required:
    - System design, behaviour change (for staff and consumers) and M&E consultants or in-house experts need to be resourced[45].
        - Another option could be to engage university students at an appropriate level and institution such as the SA Plastics Pact has done in the past through their academic member, University of Johannesburg (UJ), enabled through the Process, Energy, and Environmental Technology Station (UJ-PEETS). Students could engage in consumer surveys, be involved in M&E and reporting, among other aspects.

4.1.2.3. Challenges and recommendations for small brands and startups in reuse

For smaller brands or startups, the potential to design reuse into their business models may be simpler, particularly in startups as the business model can be inclusive of or exclusively reuse from the start, rather than a retrofit. For smaller brands which are able

[45] There is also a growing body of knowledge globally that can be accessed – likely best through academics or consultants who can synthesise, condense and adapt the appropriate learnings for the context.

to be more dynamic in product supply and delivery, and who are willing to be more responsive to retail and consumer requests, may have a greater opportunity in reuse in the short term than larger brands, which may not have the resources or willingness to support dual delivery systems in both-single-use and refill/return models. The scale required for bigger brands to realise business value will be much larger than for smaller brands.

In other words, smaller brands may achieve a business case more successfully with limited enablers or intervention depending on the solution, while the drivers to move larger brands may need to be regulatory through extended producer responsibility regulations as an example. The economic business value for the larger brands would therefore be realised later than smaller brands, unless other mechanisms such as standardised packaging and shared logistics (in B2B) were employed to fast-track return on investment. Due to the large investment required in recovery and cleaning of B2C packaging, especially for large brands and retailers, return models are unlikely to be financed and gain much traction in the constrained and highly competitive retail environment in FMCG. B2C models in small businesses with very local circulation or in closed settings (like stadia) will be simpler and less costly to implement.

Four organisations surveyed have (and had) a strong focus on very local suppliers and SMMEs and building sustained relationships with these small suppliers. For some the decision was mostly driven by the desire to support local organisations, and for others a lack of interest from big brands, and the difficulties in establishing supplier relationships with big brands also influenced their decision to focus on smaller brands. Both low-income and middle-to-high income models are included in this group of four. As mentioned in the previous section, unless there is a corporate social responsibility (CSR) or another driver, reuse businesses in SA are too small to receive product directly from big brands.

This approach means that supply chains are short, and limited transport distance not only means reduced environmental impacts in logistics but also means supply chains are more resilient to shocks and changes, eg shocks like COVID which significantly affected international supply chains, and changes like increasing fuel prices. One organisation also offers activation days for their suppliers to engage customers regarding their products.

A key challenge for small reuse initiatives stocking small or unknown brand products is a lack of consumer uptake due to the lack of brand recognition.

Community was emphasised by four reuse organisations across low to middle-income settings. Some started up with limited links in their communities (the 2 in middle- to high-income settings) and built their community through specific look and feel, very hands-on shopkeeping and consumer engagement (hearing what customers would like to see in store). The two in low-income settings started with existing relationships in their communities; they started with a level of trust and acceptance. For all four, the strong community focus means that introduction of new products is more likely to see consumer uptake, because the retailer has become the trusted brand for the consumer.

The following recommendations for small brands and startups have been identified for retailers to enable a reuse-refill system:
The benefits of community:

- Relationship building is key in the local community to guide consumers in a new way of shopping, to modify the model based on consumer feedback, and to become the trusted brand in the eyes of the consumers.
- Consider small brands and local suppliers, while looking for potential with larger brands.
- Maximise local supply chains to build resilience into the reuse initiative, which will also build community. Store and product activations with local community ambassadors could be a useful mechanism to encourage consumers to change their shopping habits.

Attracting consumers:

- Stand-alone stores: A big enough offering of FMCG products was emphasised by most stand-alone stores as critical to not only bring consumers to the store but to retain consumers.
- Knowing the specific value to the consumer and engaging across types of consumers to build the market base.

4.1.2.4. High-tech vs low-tech dispensing models

Both high- and low-tech dispensing systems have been employed in low- to middle- and high-income settings in SA. There are advantages and disadvantages to both approaches (Table 4-2).

Table 4-2 Advantages and disadvantages to high tech vs low tech dispensing models – differentiating elements

Reuse system element	High-tech models	Low-tech models
Separation from point of sale	Equipment designers, tend to be designing the equipment outside of direct partnerships with brands and retailers[46] – this creates the added burden of onboarding suppliers and retailers, and subsequent piloting and refining of the equipment in situ with retailers.	The low-tech models in the survey group were designed by the retailers – so those who were directly interacting with consumers. The design was adapted to the community setting and for the store operators. This seemed to be a quicker route to optimising the store and dispensing system. For these models, only the product suppliers needed to be convinced of the efficacy and usefulness of the system (not both brands and retailers as for the equipment suppliers).
Design and refining	Research and development, pilot testing and redesign – costly.	Less costly in design and refining of equipment and dispensing model.
Capital costs	High manufacturing costs especially in early stages of business, high-tech equipment manufacturers are focusing on reducing costs. Higher economies of scale needed.	Low set up and establishment costs
Maintenance	Equipment is designed for long life. However, maintenance is needed, and part replacement or machine replacement will be needed. This is likely to be more costly than the low-tech system and will need skilled people to repair them. High-tech models also need a constant energy source.	Less maintenance required, repair and/or replacement will be cheaper than the high-tech models.
Hygiene	Sealed storage of bulk container in dispensing system – potentially	Gravity-fed dispensers and display bins for product in store require more frequently re-filling of

[46] Equipment manufacturers do often have brand experience, or a relationship with merchandising elements of the value chain.

Reuse system element	High-tech models	Low-tech models
	better protection against contaminants.	product and may have less of a seal than more high-tech dispensers. Batch-tracking is very important. SOPs to maintain hygiene standards are also vital.
Accuracy in measurement	It may be easier to deliver accurate product amounts by weight or Rand value. This approach is a potentially easier route to be approved by the National Regulator for Compulsory Specifications (NRCS) as fulfilling the metrology standards regarding sale of product. Note – measuring dispensed product by volume is far more difficult regarding standardisation, as temperature and humidity may affect product volume, but it depends on the accuracy required and the volume of product dispensed.[47]	Can be less accurate – weighing systems with calibrated scales will supply accurate weights, and an indication of product amount per Rand value can be given in the store displays. Paying by volume dispensed is more difficult to maintain accuracy, as there is visual assessment, often in a measuring flask or beaker as to the amount dispensed.
Consumer use	Will need consumer training or onboarding. The dispensing units are designed for ease of interaction.	Low-tech dispensing systems are more intuitive for consumers and require less consumer education on the use of the system.
Data and reporting	The high-tech equipment generally offers automated data collection and storage of information. This means that inventory management and reporting will likely be easier than with low-tech systems.	Although low-tech dispensing systems do not record and store data, there are innovations in point-of-sale design and in the use of QR codes on containers that enable collection of detailed data and with container codes allows recording of the number of uses of each container. This constitutes a hybrid of low- and high-tech, with a low-tech dispensing system, and

[47] Ie. In very small volumes, such as 5 mL or g of product achieving a 95% accuracy will mean an allowed volume or weight to be dispensed to be between 4.75 and 5.25 mL/ g.

Reuse system element	High-tech models	Low-tech models
		higher tech at point of sale and in container management. Inventory management in a low-tech system is more complex, as all stock in store will have to be weighed, as well as any partly used product in back-of-store.
Business model summary	• Higher capital cost • Larger scale needed in terms of equipment supplied (and by extension, product sold to attract and retain product suppliers) to achieve business sustainability • Potentially better hygiene and product safety and quality maintained • Automated data collection • Easier inventory management	• Low capital cost – low barrier to entry for entrepreneurs • Less scale needed in terms of sale of product to achieve business sustainability • More intuitive system for consumers • Ability to 'start smaller' and increase offerings to consumers as business grows • Can phase in more high-tech elements as business growth allows

The following recommendations for high-tech and low-tech approaches have been identified:

Both high-tech and low-tech approaches to reuse have application in SA.

- Low-tech approaches have the lowest barrier to entry, and have greater potential to reach financial sustainability, and possibly scale with limited investment.
- It is likely that larger brands with more stringent hygiene and traceability concerns will favour high-tech dispensing equipment, which will then need to be funded at scale, or a suitable leasing model be put in place.
- High-tech dispensing may also be better applied in very informal store settings where the potential for cross-contamination of product may be higher. There will be fewer requirements on the small informal retailer (or spaza store owner) to maintain the standards for product safety, as the dispenser will perform that function. However, in a trusted retailer in an informal environment it has been demonstrated that product can be delivered safely to consumer, with the right protocols in place and well-trained staff.

4.1.3. Overcoming health and safety concerns in refill and return models

Both product suppliers and consumers often raise concerns regarding health and safety in refill and return models, as well as product quality. Liability is a major concern for all brands, with big brands particularly aware of their liability and the potentially large implications for their businesses.

There are a number of regulations that govern retailers and brand owners in terms of food safety and consumer protection, including:

- South African Regulation R638 of 2018 for Food Premises – all premises selling food products are required to comply with this regulation which specifies hygiene and food safety standards. All premises must have a Certificate of Acceptance (CoA) and accept regular inspections of the premises. Due to the limited number of Environmental Health Practitioners (EHPs) who do the inspections, many stores are not regularly inspected, especially in informal settings – this is another point of concern for brands supplying product into these areas. As a result, brand owners often conduct their own inspections before initiating supply and during their supply of products to a retailer.
- South African Regulation R146 of 2010 for Food Labelling – refill models have adopted a variety of approaches to be compliant with these regulations, including display of the product information, batch number and best before date on the product display or the dispenser. Two of the models printed labels that were then applied to the customer's container. Another model used QR codes that could then be used to give the consumer more detailed information – these could be applied both on the product display and on the refillable consumer container.
- South African Consumer Protection Act 68 of 2008 – protects consumers and defines producer liability. Some reuse stores prominently display information that informs the consumer that they have the responsibility to clean their own containers, and that responsibility in a refill model does not only lie with the brand and the retailer. Two reuse store owners shared experience with consumers bringing back product that had spoiled – for more sensitive products such as milk, even slight contamination of a container will reduce its shelf life. In rare cases, a certain batch from a supplier was found to be lower quality on testing, and the supplier replaced the batch and the retailer refunded and resupplied the consumer.

All of the above regulations were developed with common retail models in mind, and not specifically to address or enable reuse. A scan of SA and international policy, regulations, and standards to assess applicability and as well as the existing barriers and enablers to reuse models is needed.

The following recommendations for health and safety concerns in refill and return models have been identified:

- A set of SOPs be developed for reuse retailers and small brands supplying product in refill/return. One of the reuse organisations was assisted by a large SA brand owner in developing SOPs for their stores that are compliant with SA legislation and the requirements of the brand owner.
    - The SOPs should cover the full supply chain and retail models – from filling and delivering of product, to decanting and batch tracking, inventory management, dispensing approach (for both low-tech and high-tech), and cleaning protocols for all models.

In the medium- to long-term, it is recommended that formal standards, as well as policy and regulation to enable reuse to be developed that is suitable for the SA context.

4.2. Opportunities in reuse models in SA

The FMCG reuse models constituted six out of the eight presented case studies. The comparison of different approaches to reuse and the main barriers presented above are generally applicable to reuse models in FMCG in SA.

4.2.4. Reuse in FMCG in low-income settings

The informal FMCG market in SA was estimated to be worth R197 billion in 2023 (25% of total FMCG market), with formal independent wholesalers and retailers[48] at R259 billion (33% of total FMCG market)[49]. The percentage market in the informal sector varies by product sector, with some products registering 50% of their sales in informal retail[50]. The formal independent sector is generally the supplier to informal sector retailers, with a large proportion of their income derived from sales to informal traders[49].

[48] Unlisted wholesalers and retailers

[49] Trade Intelligence, 2024. The Enduring Power of the Independent Trade – Insights from 20 years in SA FMCG retail.

[50] BizCommunity, 2024. #BizTrends2024: Ged Nooy - 4 trends to unlock the informal market, https://www.bizcommunity.com/article/ged-nooy-4-trends-to-unlock-the-informal-market-456389a#:~:text=FMCG%20manufacturers%20must%20double%20down%20on%20this,this%20figure%20can%20spike%20up%20to%2050%25, accessed 3 August 2025.

The informal sector market in SA is growing due to the increasing pressure on low-income households, therefore the market share and opportunity for brand owners to grow sales in the sector is large. The route to market in the informal sector differs from formal sector product supply, with the formal independent sector being a large supplier.

Reuse models will focus on bulk supply to the informal sector, which is currently possible through the formal independent sector, with single-use bulk packaging. Low-tech informal models can use existing channels to access product, although both high- and low-tech models surveyed in SA have generally liaised directly with the brands.

It is recommended that informal sector reuse models be the focus for grant funding and support, due to the economic driver of need for low-cost quality products that exist particularly in these settings. There are further benefits of additional job creation in informal settings, as well as reduced waste in these areas where waste management services can be patchy or non-existent.

4.2.5. Reuse in FMCG in middle- to high-income settings

In middle- to high-income settings, reuse models have been more successful in specialist stores, initially stores focused almost exclusively on the environmentally conscious consumer which was a limited demographic and offered products at relatively high prices. Reuse models surveyed and those referenced beyond the survey group noted a growth in market towards more health-conscious consumers which was boosted during and after the COVID pandemic. One reuse business in particular made an effort to attract the largest range of consumers across the environmental and health conscious, to the more minimalist younger demographic, and on staple goods aimed to keep refill prices at the bulk buy prices to also attract lower-income consumers.

The funding to scale operations in this space is limited, and with rising commercial space rental and the need to spend on growing a consumer base into more mainstream shoppers, the rate of growth in this sector seems to be very slow. Traditional investors are not interested in these businesses as the reuse model is relatively new in the age of supermarkets.

It is recommended that alternative financing models be employed, or traditional investors are made aware of the benefits and potential of such models to the investment sector.

4.2.6. Reuse in events and food services

4.2.6.1. Reuse in closed precincts

Single-use packaging for food and beverage at events, including at stadia, and in takeaway constitutes of a large number of items that are rapidly used and thrown away and have low recycling rates.

There is good potential to institute reuse models at events and takeaway outlets in closed areas (precincts), which could have a large impact in terms of reduced packaging to landfill, and in terms of job creation.

It is recommended that well-designed demonstration projects in venues such as a stadium, a food court, airports, campuses, and/ or a large office cafeteria be delivered and reported on to encourage uptake beyond the projects. There are a number of international examples, and local examples such as the Elgin Railway Market that could be considered in the demonstration project design.

Figure 4-1 An example of a reusable beverage cup at Wimbledon. Source: Cupable (2025)[51]

4.2.6.2. Reuse in high traffic networked spaces

Taxi ranks, train stations and airports connect commuters between different nodes on these transport networks. Areas like train stations and taxi ranks are also often highly littered areas. If standardised containers and collaboration on washing stations could be adopted, the result could be reduced litter and local job creation. Food and beverage containers used in-flight on national routes could be another opportunity for reuse. Applying reusable containers on international flights may be more difficult due to regulations in place to restrict the transfer of pathogens and alien species.

[51] LinkedIn post, https://www.linkedin.com/posts/cupable_when-we-say-reusable-cups-most-people-assume-activity-7350774850833051649-EPAo?utm_source=social_share_send&utm_medium=member_desktop_web&rcm=ACoAAAGS9eABjN-g5cXZmLMcjImiOOEhP3Wcibc, accessed 16 July 2025.

4.2.7. Reuse in B2B packaging

Due to the more limited engagement needed to modify B2B packaging (ie in theory, B2B packaging could be designed, and systems are in place that could serve a number of brands), while B2C models require designing systems that also serve diverse consumers.

There are a few companies in SA advertising their design capability for B2B reusable packaging (packaging manufacturers), and those who are using plastic reusable packaging in B2B models. One of the main barriers to growing the market in plastic reusable crates and other such packaging is the theft of these high-value products from a reuse pool. Beverage, dairy and bread crates are difficult to retain in circulation, as are those used to pack fruit at picking. Companies are exploring technologies such as RFID tags, QR codes and other mechanisms to retain reusable plastic B2B packaging in circulation.

It is recommended that the potential in reusable B2B plastic packaging be assessed and stakeholders engaged collaboratively to address the issues of theft from reuse systems.

5 Way forward

Reuse of packaging is a required part of a circular economy for plastic packaging in SA, if we are to achieve the retention of plastics in our economy and out of landfill and the environment. Although reuse is not the only intervention necessary, it is the circular intervention that has probably attracted the least focus and investment in the plastic packaging value chain. This lack of focus is due to the effort needed to redesign supply chains, packaging and in some case product to implement sales of product in reusable packaging. Another aspect which has delayed investment, is the resources needed in behaviour change campaigns to convince consumers to engage in reuse models (and possibly reduce the convenience of their shopping habits).

This study is a high-level scan of current reuse models in SA including their reuse systems, business models, success conditions and learnings. The recommendations presented in this report are based on insights obtained from the surveyed reuse organisations and the findings of the literature review.

Although private sector players in reuse are more able to demonstrate the positive impact of reuse, and to address some barriers to their growth in the short-term, other

stakeholders such as investors, and government entities are needed to enable reuse in SA.

Further work on enabling reuse and supporting reuse initiatives to grow will be undertaken in the Plastic Reboot project. The learnings from this study could be taken forward into Plastic Reboot, and the findings and recommendations discussed with a wider range of organisations active in reuse in SA, to increase the learnings, refine the recommendations and produce a roadmap to scaling reuse in SA. An important aspect to address in Plastic Reboot will be the just transition required in the scaling of reuse models, as reducing single-use plastic packaging will affect the livelihoods of informal waste reclaimers, as well as formal collectors.

Important aspects that will enable growth in reuse is innovative financing for circular initiatives – which may have impact in the short- to medium-term for reuse initiatives.

To strengthen the enabling environment in the medium-to-long term, stakeholders from government and standards agencies will also need to be engaged to recommend developing, and updating policy and legislation, as well as standards.

For reuse initiatives starting up in SA, the most accessible opportunity seems to be in refill models in low-income areas. Based on interviews with SA experts and engagement with organisations in similar country contexts, these are some recommendations for this model type:

- Start with strong partnerships/ links in the community (the aim is for the reuse retailer to be the trusted brand)
    - Local brand activators have proven to be a great asset in such models.
- "Local is lekker!" – Build very local supply chains with SMME suppliers, such as supporting local farmers – verify product quality and consistency and collaborate on operations to supply product safely and efficiently in bulk to stock a refill store.
- Standard operating procedures for safe handling of food products and maintaining quality in all products is essential – including washing procedures for dispensers, and to educate customers on washing procedures.
    - This will protect customer base and could lay the groundwork to stock some bigger brands to draw more customers.
- It is easier to get approvals to sell goods using weight rather than volume. If a start-up can fund a scale and regular calibration of a scale, this is more likely to be acceptable to brands.

- Build your community – guide and educate your customers, consider incentive mechanisms – NB build engagement around supplying products cheaper than in standard stores (i.e. at bulk prices).
    - Make sure the business works for sustained operations.