

The New Reuse Economy

how the refill revolution will
shape the future of the Consumer
Packaged Goods sector

Perhaps one of the most exciting developments in the reuse space over the last several years is that most of the major Consumer Packaged Goods (CPG) brands have piloted reusable packaging systems.

In addition, many grocers and large retailers have experimented with reusable packaging - from reusable shopping bag pilots to refill stations and more. For the CPG and retail sectors, the question isn't the feasibility of operations - it's scale. And the central question is how to move from small disaggregated pilots to an interoperable system that works across brands and retailers.



The evolution of consumer goods packaging

Before the 1900s, most packaging innovations centered around blown glass, the wooden barrel, and the advent of crafted paper packaging. However, the industrial revolution and its evolution in the early 20th century prompted massive migration of people from farms and rural areas to manufacturing and service jobs in urban areas.

The migration of citizens into the city reduced the need for large bulk consumer packaging options and increased the need for individual and smaller packaging quantities.¹ Bulk packaging had been around for hundreds of years by that time, but individual packaging was something new. A variety of papermaking methods were implemented during this time period to fulfill the demands listed above.

In the early- to mid-1900s, most of the food packaging, bags, primary packaging, and in-store packaging options were developed from paper-based materials, metal cans and tins, and glass jars and jugs. Many companies developed printing methods to place their brand upon the product packaging. This helped users quickly identify the maker of the product and led to the era of modern consumer product branding.

Even though we think of plastics as being a post-WWII product, plastics were actually introduced to the packaging industry in the early 1900s.² The new cellulose plastic transformed the packaging industry. Then when polyethylene came into production in the 1960s, it quickly became a preferred packaging product.

Early efforts to collect CPG packaging mostly focused on recycling

Unlike the other two sectors – beverage and food service – where reuse was the norm until post-WWII, with the exception of some products sold in refillable glass, most CPG packaging was never designed for reuse. However, starting in the late 1800s, there were robust informal and formal industries in many major cities and rural areas for recycling metals, and metal recycling exploded in response to increased demand during WWII.³ Modern paper recycling also began in the late 1800s and waxed and waned for 50 years until there was a resurgence during WWII.⁴

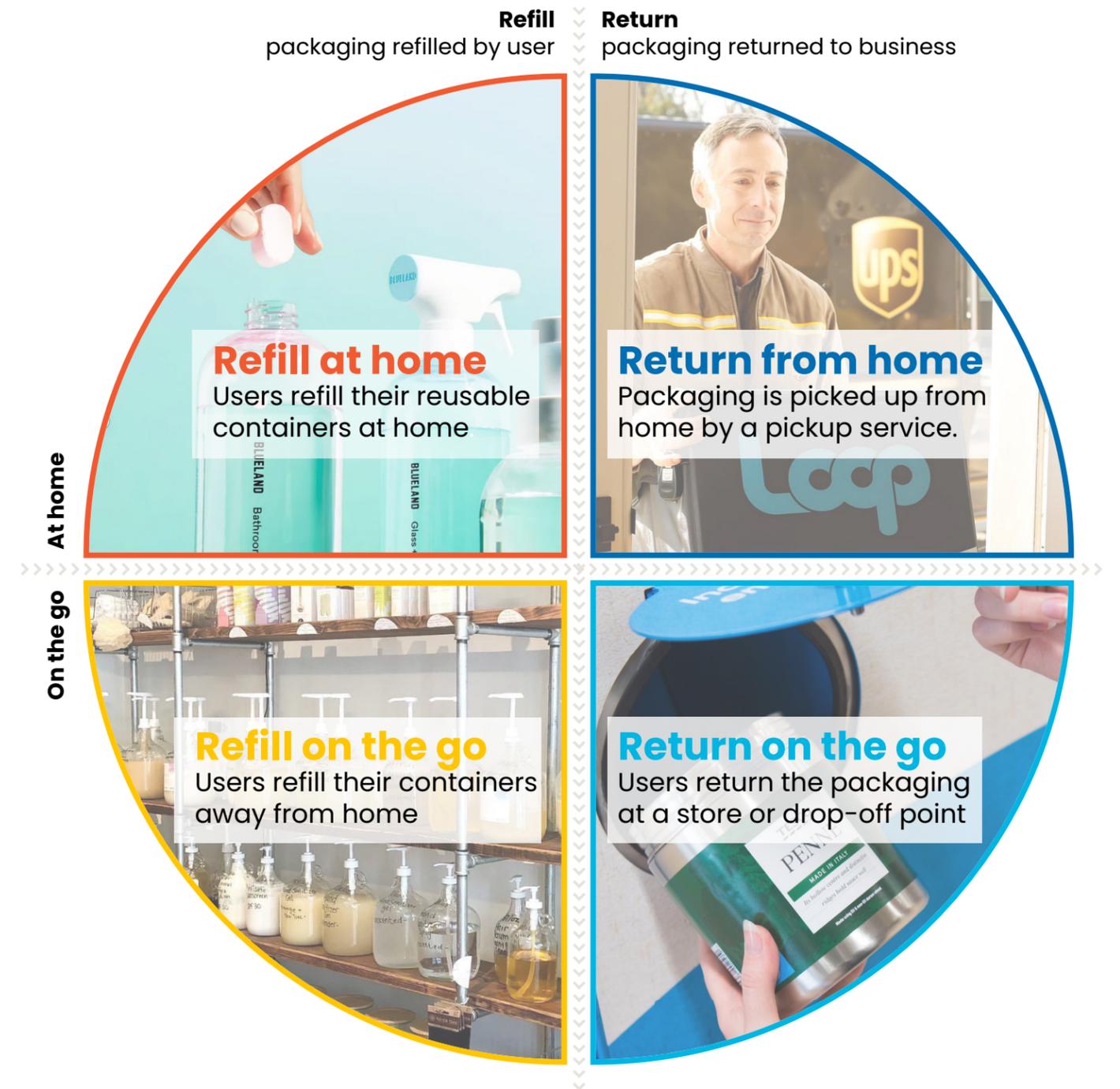
Post WWII, the aluminum, steel and paper packaging industries – and emerging plastics industry – followed similar trajectories for CPG packaging as with the food service and beverage sectors. There was a focus on selling more varieties, types and brands of consumable packaged goods in primarily single-use packaging formats.

Opportunities abound to rethink and redesign CPG Packaging

Rethinking CPG packaging for reuse systems touches on all four reuse models, and different products are likely better suited to different models. For example, the highest and best use case for cleaning sprays is a refill at home model, where the consumer buys one spray bottle (which can last upwards of 10 years) and refills that bottle with purchased concentrate pods plus tap water. Personal care products like shampoo, which don't lend themselves to a concentrate refill at home model, are better delivered through refill on the go (where the consumer refills their bottle at the store), return from home (where their reusable bottle is picked up (where their reusable bottle is picked up, processed, washed and refilled), or a return to store model (where they can drop their reusable shampoo bottle in with other returnables like beverage containers – possibly for a deposit-credit).

1. **Refill at home.** Users refill their reusable container at home (e.g. with refills delivered through a subscription service or through buying concentrates in much smaller packaging at the store). Brands can sell the primary packaging once – like a hand soap dispenser, cleaning spray bottle, or home soda fountain – and then sell the refill products. This is a good option for products where water, which can easily be added at home, is the main ingredient. It doesn't require any new infrastructure, and several brands have been able to scale this model for product delivery.

The four reuse/refill models for CPG



2. Refill on the go. Users refill their reusable container away from home (e.g. at an in-store dispensing system). In some models, the consumer either brings their own container or rents or borrows a container from the vendor to fill on the go. These types of reuse models don't necessarily need new infrastructure, as the reuse "loop" is driven by the consumer returning to the same refilling station. Only if they're bringing the packaging back for the brand-owner or retailer to clean will some new cleaning and reverse-logistics infrastructure likely be needed.

3. Return from home. Reusable packaging is picked up from home by a service (e.g. a logistics company or through a curbside collection provider). This works especially well for "pre-filled" products in reusable packaging (personal care, cleaning products, etc). For this model, modifying existing infrastructure will be important – either through incorporating reusable packaging into curbside collection for recycling, or by adding "milk-man-type" bins outside homes and apartments –

where logistics companies can pick up reusable packaging as they drop off new packages.

4. Return on the go. Users return packaging at a store or drop-off point (e.g. in a deposit-return machine or kiosk). This approach will require modifying existing infrastructure – like incorporating reusable containers into existing return-to-store deposit-return systems for beverages.

Recommendations for the Consumer Packaged Goods Industry

The Consumer Packaged Goods Industry – and their value chains – should embrace reusable foodware as the future, and should:

1. For large companies – set "rates and dates" targets to transition from single-use to reuse, similar to what Coca-Cola has done with their pledge to serve 25% of their beverages in refillable formats by 2030.⁵
2. Begin developing or participating in reuse services for your products either a) individually for products that make sense – like refill at home delivery methods for cleaning products, or b) through using 3rd party reuse services like Loop.
3. Work to pass mandatory extended producer responsibility legislation with reuse/refill targets and other provisions to spur the development of reuse service infrastructure.

CPG Reuse in Action

Returnity designs, manufactures and implements reusable packaging and circular logistics systems, replacing single-use packaging in shipping. With a client portfolio which includes Walmart, Estée Lauder, New Balance, Rent the Runway and others, Returnity has demonstrated proof of concept in the fast-evolving space of e-commerce and delivery.



CPG Reuse in Action

Algramo has enabled global brands – like Unilever, Nestle, Walmart, and Colgate – to create smart reusable systems which focus on selling just the product and eliminating the need for single-use packaging. Algramo began in Santiago, Chile and is continuously striving to address the social side of reuse, prioritizing affordability and accessibility. Their solution enables individuals to buy exact amounts of product at bulk prices and offers refill without the need for complex and expensive reverse logistics systems.



Conclusion

Every time a consumable product is sold in a reusable package, the extraction and waste cycles stop. Forests remain forests. Plastic pollution ceases. Landfills and recycling supply chains are not needed. And with the increased attention on Scope 3 Climate Emissions from brands (the emissions from a value chain not directly owned or controlled by the company) – plus the potential for cost savings once the infrastructure is built – **refillable packaging is making a comeback.**

The bottom line is that leaders are waking up to the idea that reuse can help reduce the environmental impacts of consumable products and save businesses money. It's a win-win.

And the New Reuse Economy is not just a hypothetical vision for the future. All over the world, people are working to change the throw-away paradigm by innovating new ways to transform how we consume.

In this future, we will have access to services that make reuse clean, safe, affordable, accessible and fun. And we will be getting the things that we want and need in ways that don't generate waste or pollution, or the unnecessary mining and clearcutting of our planet home.

CPG Reuse in Action

Loop is a global platform for reuse. They collaborate with brands and manufacturers to enable refillable versions of their conventional single-use products, and partner with leading retailers to embed these offerings into their online eCommerce and physical retail stores. Loop is working with category-leading brands, retailers, restaurants, and more to activate a circular reuse ecosystem offering thousands of products, with an aim to make reuse as convenient and accessible as single use. They have active operations in the UK, France, and Canada – and recently launched a major pilot with Kroger grocery stores in the Pacific Northwest of the US.



The Rounds. The Rounds is centered on the belief that convenience can be sustainable and sustainability can be convenient. They are revolutionizing the “15-min delivery” concept with a “psychic home manager” that manages the inventory of everyday essentials in the home, learns what customers need, refills personalized amounts based on a household’s usage, and delivers those products in reusable containers with zero packaging waste. As a delivery service, The Rounds addresses a key sector for reuse. They are building up solid data and traction from mid-sized cities and are focused on transforming the way we purchase everyday goods and essentials.

Endnotes

1 Foodservice Packaging Institute, [Foodservice Packaging History](#)

2 Plastics Technology Online, [Tracing the History of Polymeric Materials: Part 7](#)

3 Byers, Anne, [Reuse It: The History of Modern Recycling](#).

4 Industrial Shredders, [Paper Recycling Has Been Around Longer Than You Think](#)

5 The Coca-Cola Company, [The Coca-Cola Company announces industry-leading target for reusable packaging](#)