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SECTOR SNAPSHOT

2.5

Personal care
& cleaning
products

2.5 Personal care & cleaning products

The packaging of personal care products (e.g. toiletries) and cleaning products is an enormous environmental concern.¹ These products typically come in single-use plastic bottles (mostly HDPE) that although technically recyclable, are often contaminated by residues from the products themselves that persist when the packaging is recycled.² Furthermore, many personal care and cleaning products come in hard-to-recycle packaging, like tubes and composite (multilayer) materials. For example, roughly 16 million toothpaste tubes are sent to landfill each year in New Zealand.³ While voluntary recycling schemes for these hard-to-recycle packages exist, they have low capture rates and the packages are exported for downcycling.⁴

Reusable packaging systems exist for personal care and cleaning products. Apart from product innovation to eliminate the need for packaging,⁵ many companies have made strides to combine the refill by bulk dispenser model for retail, with Business-to-business (B2B) returnable systems. Others have delved into the world of Business-to-consumer (B2C) returnable packaging. The personal care and cleaning product sector offers a good opportunity for reusable packaging innovation because customers are generally more open to non-food products being dispensed in unfamiliar formats.⁶

REFILL STATIONS

The most common reusable packaging system for personal care and cleaning products is the “refill station”, where customers fill their own containers from a bulk dispenser. In New Zealand, **ecostore** has helped to normalise this type of vending system, with over 100 refill stations nationwide (and growing), of which roughly 25% are in supermarkets.⁷ Consumer and retailer acceptance of ecostore refill stations has paved the way for other businesses in this sector to enjoy positive retailer uptake of this packaging format for their products too

(see **Table 1**). There are also some retailers who do not manufacture personal care products or cleaning products, but act as dedicated refill centres for other companies’ cleaning products, including **EcoKiosk** in Hawke’s Bay, **The Refillery** in Russell, and **Good Housekeeping** in Wellington.

Table 1: Companies selling cleaning products and toiletries “on tap” in New Zealand

Company	Number of refill stations	Takes back bulk dispensers for refill?
Conscious	24	Y
Ecostore	102	N
Figgy and Co	<20	Y
Kahuku Natural	<20	Y
Littlefoot	52	Y
Pure Blend	<20	Y
Will&Able	<20	Y

The refill model saves both waste and money. In their 2018 Sustainability Report, ecostore reported having sold 30,000 litres of product through refill stations in one year, saving the equivalent of 276,466 500ml bottles.⁸ One study into self-dispensing systems by Waste & Resources Action Programme (WRAP) in the UK found that:⁹

A typical 1 kg liquid detergent bottle weighs about 96 g, thus if consumers re-use one million detergent bottles by self-dispensing from a bulk container in store this will remove approximately 96 t from the domestic waste stream... In financial terms, re-using one million detergent bottles will save approximately 8000 - 12,000 pounds in packaging costs.

The same study also found that bulk dispensing systems reduce the need for secondary and tertiary packaging up the supply chain.¹⁰ In fact, most of the companies listed in **Table 1** also operate a B2B returnable packaging system for their bulk containers, i.e. they accept these dispensers back from retailers when they are empty, to wash and refill them.

B2C RETURNABLE PACKAGING

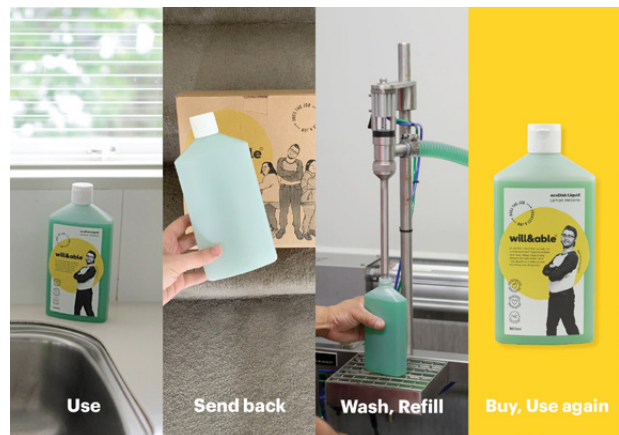
Several personal care and cleaning product companies are exploring B2C returnable packaging systems. These systems work best with convenient, cost-effective ways of retrieving empty containers from customers. In New Zealand, there is no equivalent to the household kerbside recycling service for reusable packaging, so return systems are usually bespoke and vertically integrated and/or rely on postal or courier services, making them expensive. Accordingly, B2C returnable packaging in the personal care and cleaning product sector is often progressed by luxury beauty brands (e.g. **Emma Lewisham** and **Aleph Beauty**), perhaps because these products are consumed more slowly (meaning smaller, more manageable volumes of returned packaging), and because the target customers are able to absorb the increased costs of a reusable packaging service.

As a model of getting used containers back from consumers, **ecostore** is trialling their **Plastics Return Programme** (supported by the Waste Minimisation Fund). Through this programme, **ecostore** has set up bins for their household sized packaging in participating retailers around the country. Returned containers are shipped back to **ecostore** in Auckland to be recycled back into new bottles. Although the programme has been designed to secure returns for recycling (not reuse), the programme has exposed the difficult economics of individual producer takeback schemes, which would also impact returnable packaging for reuse. On the other hand, the **Plastics Return Programme** also shows that producer takeback schemes create the opportunity to move towards reuse. For example, through the trial, **ecostore** has discovered that some of the returned containers are easily sanitised and refilled. Consequently, the company has decided to wash, refill and return these containers to market, rather than sending them for recycling, and has recognised that “there are more opportunities for us to do that kind of work”.

SNAPSHOT

Where there's a will, there's a way: establishing a returns network for B2C containers

Will&Able is a Christchurch-based social enterprise that manufactures cleaning products and employs people with mental and physical disabilities. They are “championing a clean and reuse model” for B2C packaging,¹¹ and encourage consumers to return empty **Will&Able** containers for washing and refill. They have both a North island and South Island postal address, and have linked up with nationwide retailers **Aon's** (70+ stores nationwide) and **Pricewise** (which, in the Tauranga area, has stores in **Fraser Cove** and **Bayfair**), who act as public drop-off points.¹² For their bulk containers, **Will&Able** are creating a return ticket for Christchurch customers,¹³ and collaborate with a network of collection depots to act as drop-off points for customers further afield.¹⁴



WILL&ABLE: IMAGE SUPPLIED

A SOLID EFFORT AT REUSABLE PACKAGING: INNOVATIVE DISPENSERS, RETURNABLE GLASS JARS



SOLID: IMAGE SUPPLIED

“We want to create beautiful products that people want to use that are sustainable, effective and good for you as well.”

.....

Solid is an oral health company based in the Wellington Region and selling nationwide. The company seeks to produce quality, dentist-approved oral hygiene products, sustainably, and manufactures toothpaste, tooth tablets, tooth powder, whitener, and mouthwash. A big part of the company’s sustainability story relates to their reusable packaging models and their approach to product innovation that reduces the need for packaging.

All of Solid’s products are packaged into returnable glass jars that can be sanitised and refilled up to 30 times.¹⁵ Solid chose to use glass packaging to avoid plastic, but recognised that they would have to operate a glass return system because “the energy it takes to make glass means you have to reuse it to make it worthwhile.” Solid received a grant from the **Glass Packaging Forum** to purchase a commercial steriliser for their packaging, which has enabled them to sustain and upscale their reusable packaging offering.¹⁶

For container returns, Solid accepts returns direct from customers at their Titahi Bay factory, or via courier (customers must pay for postage). A large number of their stockists across the country act as container return points too, and Solid covers the cost of courier return fees for the stockists.¹⁷ Recently, the company

has introduced a rewards programme where a customer receives a free toothpaste once they have returned 12 containers.¹⁸

Solid have also developed systems of selling product in bulk dispensers. For example, retailers can choose to sell toothpaste tablets loose in large glass jars, which customers decant into their own containers. Solid has also created the world’s first in-store toothpaste dispenser – a retrofitted sausage-making machine with the modifications designed by Solid and turned into reality with the support of Malcolm, a retired engineer. Aside from innovating the dispensing technology, Solid also altered their toothpaste formulation to be better suited for dispensing. Both innovations required in-store trials to get off the ground. The company partnered with a retail store in Wellington to trial the dispenser, and after successful trouble-shooting, can now make these dispensers available to retailers around the country.

Solid’s story of reusable packaging innovation demonstrates the importance of supportive partnerships with others in the supply chain to set up a container returns network, and to trial and develop new in-store dispensing technologies.

“We are indebted to those wholesalers that buy into our returns system and want to do that – we try to make it as painless as possible.”

.....

TRADE-OFFS – HURDLES AND SILVER LININGS

COSTS
<p>Refill stations can be cheaper than packaging into individual containers, which can translate into lower prices for the consumer.¹⁹ It also offers a simple, cost-effective way for producers to implement a reusable packaging system. However, refill stations are vulnerable to spillage, which can create product wastage costs for retailers.</p> <p>“We talk about refill in the context of saving bottles and reducing plastic and all of that... but you can also present a value proposition to the consumer as well - ‘you save a dollar or two when you refill.’”— Business/product manufacturer interviewee</p>
<p>Transport/freight for returnable packaging of either B2B bulk containers or B2C individual containers is expensive and either reduces profit margins for product manufacturers or increases the product price.²⁰ These costs can be reduced if the place of retail is close to the manufacturer, but often companies sell nationwide and have only one factory.</p>
<p>Purchasing reusable container fleets and washing equipment for returnable packaging is an upfront investment that doesn’t necessarily pay off over time because of freight costs and labour for washing.²¹ The economics might stack up better if companies choosing to use single-use packaging had to cover the costs of collection and recycling/disposal.</p>

APPROPRIATE RETAIL SPACE AND LOCATION

“There are stores that want to provide a refill offering to their customers and show that they care about these things.”—Business/product manufacturer interviewee

Partnerships with retailers is critical, for the success of dispensing systems and returnable packaging drop-off points.²² Generally, smaller retailers are more willing (and sometimes very keen) to engage with alternative vending systems and retail formats than supermarkets.²³ However, for many producers, breaking into the supermarket is critical for economic viability and impact. This may put them in the position of having to choose between their environmental sustainability (e.g. maintaining their reusable packaging system) and their financial sustainability.

“For us, it’s about impact – you can’t create change without selling in the supermarket.”— Business/product manufacturer interviewee

“The refill stations require an amount of space and attention in a store – it can be both an appealing selling point and also something that retailers are cautious about...”—Business/product manufacturer

Refill stations require extra retail space.²⁴ Some retailers are unable to provide this space, or else have to sacrifice stocking other products or multiple brands to accommodate the reuse system, which reduces consumer choice. However, for producers, refill stations are visible reuse systems that can increase their brand recognition.

“...the value of refills is more that we have presence in store, which is a different value and we have engagement with the consumer...”—Business/product manufacturer

The refill station model requires brick and mortar stores, and is negatively impacted by the rise of online shopping/delivery and covid-19 lockdowns. Returnable packaging systems can be adapted to online delivery models if an efficient reverse logistics system can be implemented.

Producers can host their own physical store to run a refill station. This is logistically simplest when the store is located at the producer factory. Some manufacturers have space at their factory for a retail refill space (e.g. Pure Blend in Hawke’s Bay), but factories are often on city outskirts as inner city rents are high. The lack of available retail space in Tauranga led one local manufacturer of personal care and cleaning products to discontinue the refill station they had previously provided.

“I want to do a brick and mortar thing again – somewhere where I can make the products on the site and have the refilling aspect.”—Business/product manufacturer

TIME, EFFORT, SPACE

For the consumer, reusable packaging systems for personal care and cleaning products involve more effort: refill stations require consumers to remember to BYO containers,²⁵ while returnable packaging requires consumers to return containers via the postal service or visiting a return point.

“There are two things that make it hard to refill – you have to remember that there is something you can do as a consumer, and remember to bring your bottles to the store – forming a new habit is always going to be a step. Some people can do that and some people won’t and are not interested at all.”—Business/product manufacturer

For manufacturers, running a returnable packaging system (B2B or B2C) involves washing containers. The washing process is time-consuming and requires extra space for storage and specialised washing and drying equipment.²⁶

For retailers, acting as a return and dispatch point for empty containers requires more work, storage and admin.²⁷ Refill stations also typically involve more staff time to help consumers to use the stations or clean up spills.²⁸

“there is a knack to refilling – all the products have different viscosity. You can turn a tap on the drum and some products pour through beautifully, and others are globby... It’s not always straightforward and sometimes you make a mess.”—Business/product manufacturer

Some manufacturers will seek to reduce freight costs for returnable containers by picking up containers from retailers themselves, which is more work.

VALUE-ADD USER EXPERIENCE

Refill stations are popular and create intrigue and interaction, which some customers really enjoy. They also enable portion control, allowing consumers to select only the quantity they need.²⁹ However, they can also be messy and some customers find that off-putting. One interviewee also noted that not every product is suited to refilling. For example, dry powders may be less amenable to sale in dispensing formats as this can present a respiratory health issue. However, these could be suited to a B2C returnable system instead.

“refilling gives the consumer more autonomy and agency to create their own sustainable options. They can come in and get the quantity that they know already works in their house. Refills also means I can give people the option to trial things first. Then they know if they like the product and also how much they will need next time.”—Business/product manufacturer

LOYALTY AND BRAND VALUE

Reusable packaging systems appeal to a certain segment of the consumer market who are actively looking for more sustainable packaging solutions, and can build a brand’s status as more sustainable.³⁰ A number of interviewees noted that reuse systems are a practical way for eco-conscious customers to fulfil their desire to “play their part” for the environment. Returnable packaging systems can also build consumer and retailer loyalty and repeat purchasing of a product.³¹

“Our packaging is part of our USP and our brand... it’s a selling point in that it makes people feel they are tangibly making a difference. It’s hard when you read the stats and know what’s going on in the world. Being able to do tangible things and make a difference is really important to people.”—Business/product manufacturer

Retailers benefit from participating in a company’s reusable packaging system (either hosting a refill station or acting as a drop-off point for returnable containers) because it builds loyalty from producers towards the retailer,³² and brings consumers into the store who might not otherwise have entered.

“Being part of our reuse system is a labour of love for some stores, but it is also a reason for customers to return to the stores... we want people to go back to these shops.”—Business/product manufacturer

OPPORTUNITIES

Collaboration to streamline reverse logistics:

The clearest opportunities to increase reuse in the personal care and cleaning product sector relate to measures to streamline the “preparation for reuse” phase of the process – i.e. the reverse logistics, cleaning and redistribution. Currently, systems are operating in a highly bespoke fashion that hinders scalability and pushes up costs. In the absence of Government regulation or subsidies to drive change, more could be achieved if individual companies within the sector are able to collaborate to share some assets and infrastructure, and create a collective and thus more influential voice when engaging with other supply chain actors whose cooperation is essential. Specifically:

- Coordination across the sector to consider more container pooling and standardisation.
- Collectively outsourcing washing to a third-party or co-investing in shared washing infrastructure. Internationally, Terracycle’s Loop programme works with major brands and retailers to operate the reverse logistics and washing of B2C returnable packaging, including for personal care and cleaning products.³³ In New Zealand, the business model of companies like Recycled Plastic Containers is based on washing bulk containers for reuse on behalf of other companies.³⁴
- Collaborative efforts to negotiate with retailers and freight companies to enable more cost-effective returns systems.

Innovative retail formats to address problems of access to retail space

Increasing access to personal care and cleaning products ‘on tap’ in ways that reduces reliance on retailer participation or the need to pay rent could be achieved through mobile refill station formats. For example, Algramo in Chile adopts a ‘Mr Whippy’ style model of taking refill stations to neighbourhoods using mobile electric tricycles.³⁵

Including personal care and cleaning product packaging in a deposit return scheme

The Government is currently proposing a container return scheme for beverage containers. In the final proposed design of the government-funded Scheme Design Working Group, the project team signalled that future expansion of the scheme to include ‘janitorials’ was a possibility worth considering.³⁶ A deposit return scheme would support the development of a cost-effective and efficient nationwide returns/reverse logistics system.³⁷ The sector could consider developing a collective position in support of this type of policy proposal.

TAKING ACTION

The *Taking Action* chapters of this report set out recommended actions that local and central government and industry can take to make it easier and more cost-effective to establish, sustain and grow reusable packaging systems across the economy. The recommendations have been designed to address some of the trade-offs and opportunities raised in this *Sector Snapshot*. If you want to know more about what can be done to grow reuse, you can jump straight to the *Taking Action* chapters.

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