SETTING THE SCENE

1.2 Current barriers to reusable packaging, and the case for supportive action from government and industry

1.2 Current barriers to reusable packaging, and the case for supportive action from government and industry

At home and abroad, reusable packaging is appearing on government and corporate agendas, but is the level of action sufficient to overcome present barriers to reuse? This chapter covers:

- What governments and corporates are saying and doing about reusable packaging.
- The stance of the New Zealand Government on reuse.
- The barriers to reusable packaging in New Zealand that government and industry action should be designed to target.

Recommendations for government and industry action are set out in our *Taking Action* chapters.

Around the world, public concern about packaging waste, climate change and plastic pollution is rising,[1] as is societal awareness about the role of reuse in helping to address these issues.[2] In New Zealand, over-packaging and the build-up of plastic in the environment both feature in the top ten list of issues that concern New Zealanders.[3] While most people want to align their lifestyles with their concerns about waste and the climate, the extra cost, effort and knowledge currently required are barriers.[4] The New Zealand public have strong expectations that government, brands and businesses (rather than individuals) will lead in addressing social and environmental issues.[5]

Civil society is increasing its advocacy for government and corporate action to advance reusable packaging, in recognition that systemic and legislative approaches are needed.[6] In New Zealand, reusable packaging has become an area of interest amongst organisations like WasteMINZ, Zero Waste Network, the Sustainable Business Network, Greenpeace, The Kiwi Bottle Drive, Use Your Own, and Takeaway Throwaways.

In response to this societal pressure, reusable packaging is moving onto the agenda of both corporates and governments.[7] However, the market share for reusable packaging remains stubbornly low and declining.

This chapter outlines the positive rhetoric and commitments of governments and industry and the barriers to progress. We draw on a literature review and one-on-one interviews with businesses operating (or seeking to operate) reusable packaging systems in New Zealand. Our findings in this chapter and in our *Sector Snapshots* directly inform the recommendations we set out in the Taking Action chapters of this report. While many of the barriers to reuse are significant because they are structural, none of them are insurmountable. However, they do need to be faced and properly understood, so that government and industry action is best tailored to resolving them.

WHAT GOVERNMENTS AND CORPORATES ARE SAYING AND DOING ON REUSE

In recent years, governments and businesses have issued a flurry of documents, commitments, targets and statements about reusable packaging. For example:

- The **New Plastics Economy Global Commitment**, launched in 2018 and led by the Ellen MacArthur Foundation, in collaboration with the United Nations Environment Programme.[8] The commitment has been signed by hundreds of businesses, governments and organisations globally, including the New Zealand Government. Some well-known corporate signatories include The Coca-Cola Company, Unilever, Nestle, and PepsiCo. The headline commitment is for all plastic packaging to be 100% reusable, recyclable, or compostable by

2025. Businesses and governments also pledge to apply reuse models "where relevant" to reduce the need for single-use packaging.

- Alongside the New Plastic Economy Global Commitment is the Ellen MacArthur Foundation's **Plastics Pact Network**—a network of national and regional initiatives to work towards a circular economy for plastics.[9] This includes the Australia, New Zealand and Pacific Islands Plastic Pact (ANZPAC). These pacts have a set of 2025 joint targets, some of which include reuse, e.g. "Eliminate unnecessary and problematic plastic packaging through redesign, innovation and alternative (reuse) delivery models" and "100% of plastic packaging to be reusable, recyclable or compostable packaging by 2025".[10]
- The EU is currently in the process of reviewing its Directive on Packaging and Packaging Waste, which could strengthen measures to increase reusable packaging, as indicated in the EU's 2020 Circular Economy Action Plan.[11] For example, the introduction of reusable packaging targets to go alongside the recycling targets already in the Directive.[12] Some individual European member states have already set binding targets for reusable packaging in legislation, including Austria, France, Germany, Portugal, Romania, and Sweden. France has a target for 10% of all packaging to be reusable by 2027, while Romania has a target of 5% of packaging to be reusable by 2020, with a 5% annual increase until 2025.[13]
- Coca-Cola has announced the aspirational goal of "at least 25% of all beverages globally across its portfolio of brands sold in refillable/returnable glass or plastic bottles, or in refillable containers through traditional fountain or Coca-Cola Freestyle dispensers" by 2030.[14] Starbucks has committed that by 2025 all of its stores globally will operate a reusable cup scheme and accept customers' personal reusable cups.[15] PepsiCo has committed that by the end of 2022 it will set time-bound targets to avoid or reduce single-use plastic in its beverage delivery systems, which could include the use of refillable/reusable bottles.[16]

Where the New Zealand Government stands on reuse

"In the long term, we would also like to see more reusable or refilling alternatives to single-use plastics. There is opportunity for New Zealand to rethink the use of some plastic packaging altogether, and to design innovative reuse models."—Ministry for the Environment (2020)[17]

The New Zealand Government is a signatory to the New Plastics Economy Global Commitment, and has therefore voluntarily committed to take action to increase reusable packaging through "ambitious policies and measurable targets".[18] In 2018, the Government established the New Zealand Plastic Packaging Declaration for individual businesses to sign up to. The Declaration is an independent initiative aligned with the Global Commitment, with the headline pledge of 100% reusable, recyclable packaging by 2025. Many major New Zealand companies have signed the New Zealand Declaration.[19]

In addition, since 2018, the Government has repeatedly expressed an interest in more reuse and refill packaging in its own publications, including the National Plastics Action Plan (2021),[20] various waste policy consultation documents,[21] a paper on plastic research, innovation and investment priorities (2021),[22] and a position statement on compostable plastics (2022).[23] In particular, the Government has recognised the need for New Zealand to work towards using "less plastic",[24] and that among other things, this requires a focus on "increasing the uptake of reuse and refillable models".[25] The Government has also recognised that New Zealand already has some existing reuse models, but that these "need scale, infrastructure and behaviour change".[26] Accordingly, the Government has highlighted how plastics innovation and investment must focus on research, infrastructure and behaviour change to:[27]

- increase the adoption of "innovative business models" based around "rethink, redesign, reuse, refill, reduce";

- enable "washing and sanitisation for reusable packaging"; and
- increase "public willingness to move to reusable, refillable options".

Furthermore, the Government's consultation documents on a new waste strategy and a beverage container return scheme both propose the possibility of targets for reusable packaging.[28]

Words not action?

"...reusable packaging is at its lowest level in history."—Copello, Porteron & Schweitzer (2021)[29]

Despite the public positivity and attention, and the pockets of legislative activity in some jurisdictions,[30] in most cases, **practical efforts by governments and corporates to increase reusable packaging remain largely tokenistic**. Reusable packaging constitutes a small proportion of the overall market share of packaging, and sectors that have historically been leaders, such as the beverage industry, continue to see an ongoing downward trajectory in their use of reusable packaging.[31]

The New Plastic Economy Global Commitment tracks the (self-reported) progress of individual signatories against the pledges and Plastic Pacts. Based on this data, the 2021 Progress Report highlighted "alarmingly little investment in efforts to reduce the need for single-use packaging" and observed that "levels of ambition to explore and scale reuse appear very low."[32] Currently, by weight, just 1.6% of signatories' plastic packaging is reusable (down 0.2% on the year prior), and more than half of all signatories have no reusable plastic packaging at all.[33] Furthermore, Government policy measures have been "largely limited to banning a narrow set of items, while only three government signatories have established targets on reuse affecting their whole jurisdiction".[34]

The rhetoric-action gap on reusable packaging relates to the wider challenge of implementing the waste hierarchy and preferred source reduction approaches to waste. Globally, businesses and governments routinely refer to the waste hierarchy and the benefit of reuse and refill. However, in practice, "this golden principle has been pretty much thrown out of the window", with focus remaining on activity at the bottom of the waste hierarchy.[35] The Reusable Packaging Association notes that all countries "have fallen short of enacting legislation that meaningfully emphasizes reuse as a more impactful approach over recycling".[36]

Some commentators have questioned the usefulness of voluntary corporate commitments to reuse.[37] The fact increasing numbers of companies want to be seen with

a reuse goal does demonstrate a growing recognition that consumers understand the importance of reusable packaging. However, organisations like Changing Markets Foundation have argued that voluntary commitments also act as a delay tactic, creating a semblance of activity that diffuses pressure on Government to set binding targets and other regulatory measures that could actually drive reuse.[38] Over the years, major brands have made a slew of waste-related voluntary commitments that remain unrealised, leading to criticism that they actually form part of a "Delay, Distract and Derail" strategy against progressive legislation to reduce plastic use and pollution.[39] As noted by the Changing Markets Foundation:[40]

> ... Coca-Cola — the biggest plastic polluter of all — has left behind a 30-year trail of broken promises, ranging from missed targets on recycled content to failed commitments on recovery and the introduction of alternative materials. This starkly illustrates that, regardless of how ambitious voluntary commitments sound, most companies regard them as just paper promises, easily warped, reframed or ignored while conveniently generating favourable headlines.

Similarly, the patchwork nature of voluntary commitments and targets leaves gaps and inconsistencies across industries that hampers progress and creates "an unequal and opaque picture of the overall state of play".[41] For example, in the UK grocery sector, despite some retailers having company-level targets around reduced plastic usage, the total volume of plastic packaging put on the market by the sector as a whole has increased by 1.2% since 2017 and reuse and refill strategies are simply not increasing at the scale and pace required.[42] In addition to voluntary commitments, the practice of "endless piloting" can also decelerate progress while creating a sense of activity; for example, in 2019 just 1.9% of the Global Commitment signatories' plastic packaging was reusable (by weight), yet 56% of signatory businesses were trialling reuse.[43]

NEW ZEALAND: THE STATE OF PLAY AND BARRIERS TO PROGRESS

In New Zealand, data gaps frustrate attempts to understand the current baseline level of reusable packaging nationally. However, basic observation shows that the local market reflects international trends and that the reusable packaging market is niche. Our *Sector Snapshots* highlight that reuse activity exists across the economy, but they also demonstrate how much industry must do to bring this to scale. New Zealand also suffers from the same reuse rhetoric-action gap that other countries face. While our Government has expressed an interest in reuse, its signatory report to the New Plastics Economy outlined very little tangible and direct action to drive an uptake in reusable packaging.[44]

However, the Government is currently developing and implementing a suite of sweeping law, policy and investment reforms in its Waste Work Programme.[45] These create a major opportunity for New Zealand to implement specific and separate legal provisions, policy and investment for reuse. To date, most of the Government's reforms and investments are still focused near the bottom of the waste hierarchy. The reuse targets proposed for the waste strategy would be a symbolic step forward, but the strategy is not legislation, so the targets would not be binding. The proposed inclusion of refillables targets in the beverage container return scheme legislation would be precedent-setting, though these would only apply to beverage packaging. To lift reusable packaging across the economy, we must all think big, and this requires an understanding of the current systemic barriers to reuse. With that understanding, policy, law and investment can be reshaped to remove these barriers and stimulate industry innovation in the right places.

The remainder of this chapter considers the barriers to setting up, sustaining and growing reusable packaging systems that we uncovered through a literature review and one-on-one interviews with local businesses. The numerous, structural and interconnected nature of these barriers mean they will not be overcome spontaneously.

Moving reusable packaging into the mainstream and cementing its affordability and accessibility is possible, but will require concerted, targeted action from both central and local government, and industry.

1 Single-use is the default setting across supply chains, reuse requires systems change

"We're all just a bit stuck in this single-use groove and have been for decades, literally."—Neil Pollett, Green Bottle (2022)[46]

Single-use packaging and throwaway culture are deeply entrenched in the current linear economy.[47] Globalised supply chains, retail distribution networks, business models and vending systems have been built around the expectation of single-use packaging, while pre-existing reuse infrastructure has largely been dismantled.[48] Returning to reuse requires changes in the systems and infrastructure for production, supply and logistics,[49] as well as new workflows and/or skills in reverse logistics, washing and repair.[50] In the words of one interviewee: **"there is a whole systems rethink that needs to happen"**.

Such a systems shift requires collaboration and coordination up and down supply chains, and the commitment of all parties to participate. This can be hard to achieve when actors are not obligated to change, when just-in-time distribution makes reorganisation or trials difficult to accommodate, and when the culture of the linear economy favours competition over collaboration.[51] Furthermore, even though reusable packaging systems are likely cheaper overall, they imply: a loss of economic value for those who benefit from the single-use system; the potential for stranded assets; and new, possibly unwelcome obligations, all of which create vested interest opposition to change.[52]

"Single-use, disposable is the norm; companies are established in this model. It's not in their interests to change unless they're made to, and as a reusable packaging company, you need to compete with them."—Reusable packaging business interviewee

New Zealand businesses operating reusable packaging systems highlight their struggle to 'break into' markets not set up for their packaging model. Many reusable packaging companies are emergent and/or small, and lack connections or influence to get their product through the door. They may face "an aversion to change from some or all of the supply chain in the industries they are designed to serve—whether consumers, suppliers or retailers—without whom the reusable packaging system cannot function effectively. Even established reusable packaging companies sometimes cannot onboard potential customers because the rest of the supply chain is unwilling to participate. This barrier is especially strong if reusable packaging could cost other supply chain actors. However, it occurs even where reuse could save money.

2 Consumer habits reinforce single-use, and are difficult to change

"Humans are creatures of habit and we have formed a society of consumerism. We want things to be fast and convenient, and packaging comes into that."—Business/service provider interviewee

Consumer attitudes, habits, preferences and expectations are shaped by what people know and are used to, so the unfamiliarity of reusable packaging that stems from its relative unavailability can create a consumer hesitance barrier for reuse.[53] The lack of participation of well-known brands and large retailers in scaled reusable packaging systems also reduces the 'mainstream' visibility, availability and social acceptability of reuse.[54] The more reuse is marginalised, the more economies of scale diminish and costs increase, reinforcing the perception that single-use is intrinsically cheaper and more convenient.

Single-use packaging has also shaped modern products and shopping experiences, and created customer expectations and lifestyles that reusable packaging systems may be unable to maintain.[55] Shifting consumer behaviour and preferences requires far more than public education campaigns, it requires a whole reorientation of what is normal in the economy, including a reset of financial incentives around packaging so that disposables are no longer the default.[56] Individual reusable packaging companies do not have the power to effect this level of culture change on their own.

"Behaviour change is definitely the hardest part, across the board, from vendors, to end-users, corporates and councils. We are asking people to do stuff that doesn't have a blueprint. There is scepticism and fear at every step."—Reusable packaging business interviewee

3 Setting up reuse systems requires major upfront investment and ongoing operational costs because of a lack of shared infrastructure

One of the most consistent barriers faced by companies wanting to set up and/or sustain a reusable packaging system is the high initial investments, and ongoing operational costs, required in the absence of collective supporting infrastructure for reuse, e.g. facilities and logistical systems for collections, returns, washing and repairing of reusables).[57] Reusable packaging units are also typically more expensive than their single-use counterparts, so a fleet of reusables is a major upfront investment, as are bulk dispensing units. New Zealand also lacks manufacturers for reusable packaging and bulk dispensers, which significantly reduces the choice available to companies. In addition to high upfront infrastructural costs, reusable packaging companies often lack space to operate a reusable packaging system, and struggle with the prohibitive cost of rent.

"...the lack of washing and return infrastructure for reusables has been identified as a key barrier for getting reusable packaging launched at scale."—Bianchi & Yates (2021)[58]

The height of this particular hurdle is elevated because New Zealand lacks shared reusable packaging infrastructure, assets, third-party services and logistics that emergent and established companies alike can use. Unlike for single-use packaging, there is no obvious list of reusable packaging manufacturers for producers to order from, no clear supply chains or collection, distribution, washing or maintenance network to tap into, and virtually no reusable packaging pools to join. Therefore, **companies wanting to run a reusable packaging system must start from scratch**, which is expensive (often, prohibitively so). This situation has led to today's reusable packaging market being dominated by a patchwork of vertically integrated or highly bespoke systems, which increases inefficiency and cost and likely means these systems are not reaching their full potential to reduce cost savings across the supply chain or realise resource efficiency and emissions reductions.[59]

The lack of shared infrastructure and services is not only a barrier to overcome at the establishment phase, but an ongoing factor that increases operational costs for reusable packaging businesses (e.g. transport/freight costs for returning packaging has been cited as "crazy expensive"[60]). The higher operational costs translate to product price, which limits a company's potential market, and the system complexity limits access to retailers who do not want the inconvenience of having to manage the bespoke reusable packaging systems of countless vertically-integrated businesses.

Accordingly, many interviewees emphasised the need for a network or systems approach to reusable packaging, including third-party operators who can protect reusable assets and operate logistics at a scale that creates viability, the participation of some bigger players to push up economies of scale, and a greater degree of system and container standardisation.

"With reusable packaging you are running a system – you obviously need the scale of assets circulating at any one time, but you also need a network of points – service centres servicing products, return points, logistical operators moving things around."—Reusable packaging business interviewee

4 An uneven playing field due to unhelpful regulatory and policy environment

"...institutional processes, incentives and cultures are informed by linear economic and waste management models... In some instances, policies and incentives may even hinder reuse models and instead contribute to an inherent support for waste generation and single-use products..."—City Playbook Working Group (2021)[61]

The playing field between single-use and reuse is not level, which undermines operational viability for reusable packaging companies already playing catch-up from high set-up costs. **The regulatory and policy environment economically incentivises single-use, even though reusable packaging is higher up the waste hierarchy.** While reusable packaging systems essentially internalise their own costs (because the producer pays to collect back the packages, wash and refill them, and/or sets up and runs the supporting system infrastructure and logistics), the costs of single-use packaging costs are externalised across the supply chain.[62]

"...my bug bear is that plastic is not carrying the full environmental cost – that's the beef I have with regulators – it just needs to level the playing field."—Julian Raine, Oaklands Milk (2020)[63]

Single-use packaging is cheap and easy for manufacturers and businesses to purchase, and in many instances is dispensed to consumers for free. There is **no levy or other disincentive for knowingly putting a single-use item on the market**,[64] nor any targeted and consistent tax break, subsidy or other incentive for reuse. Furthermore, local and central government waste minimisation policy, practice and resource are funnelled towards recycling, downcycling and landfill, effectively subsidising and legitimising the single-use system.[65] For example, in New Zealand the overwhelming majority of material that enters rates-funded kerbside recycling systems is single-use packaging.[66] Waste and recycling services and their accompanying communication/promotional campaigns also make recycling, rather than reusing, the more convenient and obvious eco-decision for consumers.[67]

5 Policy and investment strategies to "fix" waste problems presume single-use

"The main reason reuse has not been adopted here is recycling has been promoted as best practice in New Zealand when in fact it's one of several options and sits below reuse on the waste hierarchy."—Reusable packaging business interviewee

While there is increasing awareness that something must be done about the problems of packaging waste

and pollution, the solutions that are financed and supported reveal a presumption that single-use will remain the dominant paradigm. This presumption leads to the underappreciation and under-resourcing of source reduction approaches, such as reuse. In New Zealand, very little public infrastructure, services, policy or investment cater to the needs of businesses and households operating higher up the waste hierarchy. Instead, the focus of businesses, government and consumer activity continues to be on:

- recycling, downcycling, and composting end-of-life packaging
- light-weighting packaging upstream to reduce volumes, which does not reduce the overall number of packaging units on the market, and often makes packaging less reusable and less recyclable
- regulating plastic, rather than single-use, which incentivises businesses to substitute plastic with other single-use materials, rather than encouraging a shift to reusables.

"Most people seem to get the distinction between reuse/recycle/compost, but they don't necessarily get that recycle and composting aren't reasonable pathways at scale. They think putting stuff in the right bin solves the problem."—Reusable packaging business interviewee

All these activities chew up the finite pool of resources, time and investment for packaging solutions, leaving reusable packaging with even fewer resources and financing to draw on, when it is already trying to compete for operational viability on a playing field tipped towards the single-use packaging system. For reuse to scale, this logistical, service and infrastructure support would need to shift. Most interviewees discussed being heavily undercapitalised, which undermined their ability to scale or make their operations more efficient.

Even when reuse or source reduction are mentioned in policy, targets and commitments, they often are not given their own specific focus and attention, separate from recycling and composting.[68] This failure of differentiation in both policy, regulation and business strategies reinforces the **continued neglect of reuse, which requires distinct infrastructure and approaches that often directly compete with recycling**.[69] For example, high-profile targets that bundle these strategies together, like "100% reusable, recyclable or compostable packaging by 2025", often do not advance a shift towards reuse because Governments and businesses can fully achieve the target via the path of least resistance (e.g. 100% recyclable) without any reuse gains made.

6 Reuse needs a louder voice and more champions

Reusable packaging lacks an independent voice or profile and is poorly understood across the economy. The reusable packaging sector in New Zealand is fragmented and lacks independent representation of its interests within the wider packaging industry, the industry sectors it serves, or with local and central government policymakers, or politicians. We know of no industry bodies that have a resourced work programme specifically for reuse. The world over, local and central governments have largely left the promotion of reuse to NGOs and reuse businesses, who are time and resource poor.[70] In addition, methodologies for collecting data on reusable packaging and calculating its waste prevention impact are underdeveloped and not applied by central or local government, who tend to measure waste diversion rather than waste avoidance. As a result, **the story of reuse is simply not being told**.

Many interviewees lamented the lack of awareness amongst the public, policymakers and industry groups about the necessity and benefits of reuse, as well as the reusable packaging systems and opportunities that exist already. They cited a lack of resources and funding to promote themselves or reach wider audiences and retailers beyond niche stores and groups of people, and felt drowned out by the continual promotion of recycling. They also noted the difficulty of measuring and proving their own impact without clear and standard methodologies for doing so, which further problematises telling the reuse story.

7 Over-policing of reusable packaging on the grounds of safety and hygiene

"There's no understanding of bulk and reuse in food safety – everything's set up for linear. It's not that we are asking to do really dangerous food safety stuff, it's just that no one wants to make decisions on certain things because there is no legislation on things other than linear – it goes in a package and it leaves the factory."—Business operating reusable packaging system

The drafting and the implementation of food safety, hygiene, health and safety legislation can be unclear or overly restrictive for reusable packaging.[71] Reusable packaging is largely not foreseen by wider legislation, which creates an uncertainty that can lead to over-policing by inspectors.[72] In some cases, the stringent requirements might be justified, but there is a low level of support for businesses to adapt, with one interviewee noting that "it's a nightmare to get MPI approval to be able to clean this stuff".

8 Covid-19

"Covid has impacted reusables because all trials and pilots have been put on hold, and also because of increased germaphobia."—Business operating reusable packaging system

The covid-19 global pandemic has created an additional hurdle to establishing reusable packaging, largely because it has exacerbated the existing barriers discussed in this chapter above. The use of single-use packaging has increased dramatically during the pandemic,[73] largely because of a greater reliance on online delivery, as well as some heightened fear about the safety of reusables (even where this is not scientifically justified). Most businesses are more time- and resource-constrained and, coupled with supply-chain disruptions causing delays and increasing costs, there is greater unwillingness to try new things or change systems. As a result, many trials and pilots of reusable packaging have been delayed or cancelled.[74] Furthermore, because many reusable packaging operators service hospitality, smaller grocery retailers or markets, lockdowns that saw these outlets closed eliminated a large share of the market. While Government recovery funding presents an opportunity to 'build back better' and increase investment in reuse, most funding has been used to sure up resource recovery for recycling.

It's time to act – find out how

The barriers to reusable packaging are significant, but not insurmountable. Through coordinated action from local and central government, as well as industry groups and individual businesses, these barriers can be overcome and New Zealand can move beyond the current state, and build a pathway towards the brightest future for reuse.

The good news is that reuse solutions exist already in most key sectors, they just need support and the right enabling conditions to scale. To read more about these existing reuse solutions, take a deep dive into our *Sector Snapshots*. Otherwise, jump straight to our *Taking Action* chapters to find a range of recommendations for local and central government and industry, to increase reuse.

REFERENCE LIST

1 City Playbook Working Group (2021) City Playbook: Building a Reuse City (Consumers Beyond Waste – An initiative of the Future of Consumption Platform, World Economic Forum). Accessible at https://weforum.ent.box.com/s/fx48az4ij1c8gr31g8jm5bppns79fpom, p.18; Lauren Weir (2022) What the EU can do to support the grocery retail sector in reducing packaging and plastic pollution: policy briefing (Environment Investigation Agency, #breakfreefromplastic, Rethink Plastic, We Choose Reuse). Accessible at https://rethinkplasticalliance.eu/wp-content/uploads/2022/02/1702-RPA-European-Grocery-Retail-Plastic-Policy-Briefing-V7.pdf, p.8.

2 City Playbook Working Group (2021), above n 1, p.7.

3 Kantar and Sustainable Business Council (2022) Better Futures 2022. Accessible at https://www.kantarnewzealand.com/wp-content/uploads/2019/05/Kantar-Better-Futures-Report-2022.pdf, p.14.

4 Kantar and Sustainable Business Council (2022), above n 3, p.4.

5 Kantar and Sustainable Business Council (2022), above n 3, pp.21,30,35.

6 City Playbook Working Group (2021), above n 1, p.7. For example, Greenpeace, Zero Waste Europe, Global Alliance for Incinerator Alternatives, #BreakFreeFromPlastic, UPSTREAM Solutions, and Oceana.

7 City Playbook Working Group (2021), above n 1, p.19.

8 Ellen MacArthur Foundation (n.d.) The New Plastics Economy Global Commitment. Accessible at https://ellenmacarthurfoundation.org/global-commitment/overview.

9 Ellen MacArthur Foundation (n.d.) The Plastics Pact Network. Accessible at https://ellenmacarthurfoundation.org/the-plastics-pact-network.

10 Ellen MacArthur Foundation (n.d.) ANZPAC Plastics Pact. Accessible at https://ellenmacarthurfoundation.org/anzpac.

11 European Commission (2020) Circular Economy Action Plan: For a cleaner and more competitive Europe. Accessible at https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf.

12 Justine Maillot (2022) "Setting Effective Reuse Targets to serve the Upscale of Reusable Packaging" We Choose Reuse. Accessible at https://rethinkplasticalliance.eu/wp-content/uploads/2022/04/WeChooseReuse_EffectiveTargets_def.pdf, p.1.

13 Maillot (2022), above n 12, p.4.

14 The Coca-Cola Company (2 February 2022) "The Coca-Cola Company Announces Industry-Leading Target for Reusable Packaging" The Coca-Cola Company. Accessible at https://www.coca-colacompany.com/news/coca-cola-announces-industry-leading-target-for-reusable-packaging.

15 Starbucks (15 March 2022) "Starbucks Innovates, Tests and Learns from Store Partners to Achieve Waste Goals" Starbucks Stories & News. Accessible at https://stories.starbucks.com/stories/2022/starbucks-innovates-tests-and-learns-from-store-partners-to-achieve-waste-goals/.

16 As You Sow (16 March 2022) "PepsiCo Pledges to Reduce Single-Use Packaging as Requested by As You Sow Proposal" As You Sow. Accessible at https://www.asyousow.org/press-releases/2022/3/16/pepsi-reduce-single-use-packaging.

17 Ministry for the Environment (2020) Reducing the impact of plastic on our environment – moving away from hard-to-recycle and single-use items (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/publications/reducing-the-impact-of-plastic-on-our-environment-moving-away-from-hard-to-recycle-and-single-use-items/, p.39.

18 New Plastics Economy Global Commitment (2020) Commitments, Vision and Definitions (Version: February, 2020), p.4.

19 For more details about the New Zealand Plastic Packaging Declaration see Ministry for the Environment (2021) New Zealand Plastic Packaging Declaration. Accessible at https://environment.govt.nz/what-you-can-do/campaigns/new-zealand-plastic-packaging-declaration/.

20 Ministry for the Environment (2021) National Plastics Action Plan for Aotearoa New Zealand (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/publications/national-plastics-action-plan/.

21 Ministry for the Environment (2020), above n 17.

22 Ministry for the Environment (2021) He ara hou mō te kirihou | A new path for plastic: Plastics research, innovation, and investment priorities (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/publications/a-new-path-for-plastic/.

23 Ministry for the Environment (2022) Compostable products: Ministry for the Environment position statement (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/publications/compostable-products-ministry-for-the-environment-position-statement/.

24 Ministry for the Environment (2021), above n 20, p.6.

25 Ministry for the Environment (2021), above n 22, p.14.

26 Ministry for the Environment (2021), above n 20, p.5.

27 Ministry for the Environment (2021), above n 22, pp.8, 9, 11.

28 Ministry for the Environment (2021) Te kawe i te haepapa para | Taking responsibility for our waste: Proposals for a new waste strategy; Issues and options for new waste legislation (Wellington: Ministry for the Environment). Accessible at https://consult.environment.govt.nz/waste/taking-responsibility-for-our-waste/; Ministry for the Environment (2022) Transforming recycling | Te panoni i te hangarua: Consultation document (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/news/transforming-recycling/.

29 Larissa Copello, Samy Porteron and Jean-Pierre Schweitzer (2021) Realising Reuse: The Potential for Scaling up Reusable Packaging, and Policy Recommendations (Rethink Plastic and #BreakFreeFromPlastic), p.4.

30 See an overview of the key national policies and regulations on reuse in Europe, the Americas, and Asia-Pacific here: Consumers Beyond Waste (2021) National Reuse Policy Briefing Paper (World Economic Forum's Platform for Sharing the Future of Consumption). Accessible at https://www.weforum.org/agenda/2022/01/how-national-policies-can-accelerate-the-transition-to-a-reuse-economy/.

31 Jason Wilcox and James Mackenzie (2021) What We Waste: Tracking 20 years of growth in international drinks container wastage, and how refillables and deposit return systems can reverse this trend (Reloop). Accessible at https://www.reloopplatform.org/what-we-waste/; Copello, Porteron and Schweitzer (2021), above n 29, p.4.

32 Ellen MacArthur Foundation (2021) The Global Commitment 2021 Progress Report. Accessible at https://emf.thirdlight.com/link/n1ipti7a089d-ekf9l1/@/preview/1?o, p.5.

33 Ellen MacArthur Foundation (2021), above n 32, p.5.

34 Ellen MacArthur Foundation (2021), above n 32, p.5.

35 Suneel Kunamaneni, Sukky Jassi, Dong Hoang (2019) "Promoting reuse behaviour: Challenges and strategies for repeat purchase, low-involvement products" Sustainable Production and Consumption 20. https://doi.org/10.1016/j.spc.2019.07.001, p.257.

36 Reusable Packaging Association (2020) Reusable Transport Packaging: State of the Industry Report 2020. Accessible at https://reusables.org/wp-content/uploads/2020/06/Reusable-Transport-Packaging-State-of-the-Industry-Report-2020-1.pdf, p.9.

37 Maillot (2022), above n 12, p.1.

38 Alice Delemare Tangpuori, George Harding-Rolls, Nusa Urbancic and Ximena Purita Banegas Zallio (2020) Talking Trash: the corporate playbook of false solutions to the plastic crisis (Changing Markets Foundation), https://talking-trash.com/.

39 Tangpuori et al (2020), above n 38, p.15.

40 Tangpuori et al (2020), above n 38, p.14.

41 Weir (2022), above n 1, p.3.

42 Environmental Investigation Agency and Greenpeace (2021) Checking Out on Plastics III (London: EIA UK). Accessible at https://checkingoutonplastics.org/, p.4.

43 Nusa Urbancic from Changing Markets Foundation (6 July 2021) "Corporate commitments on reuse: all talk and no action?" (Presentation at the 8th European REUSE Conference hosted by Deutsche Umwelthilfe (Environmental Action Germany)).

44 Ministry for the Environment (2021) Global Commitment 2021 Signatory Report. Accessible at https://ellenmacarthurfoundation.org/global-commitment/signatory-reports/gov/ministry-for-the-environment-new-zealand.

45 Ministry for the Environment (2021) Waste reduction work programme (Wellington: Ministry for the Environment). Accessible at https://environment.govt.nz/publications/waste-reduction-work-programme/.

46 Neil Pollett (25 February 2022) Representing Green Bottle for the panel session "Aotearoa New Zealand's reusable packaging future—how to transition, benefits, challenges and needs" at the Sustainable Business Network Packaging Masterclass 2022. Accessible at https://sustainable.org.nz/learn/sbn-event-recordings/aotearoa-s-reusable-packaging-future/.

47 Ferran Rosa (2018) The Story of Recircle: Zero Waste Consumption and Production (Zero Waste Europe). Accessible at https://zerowasteeurope.eu/wp-content/uploads/2019/11/zero_waste_europe_cs1_cp_reCircle_en.pdf.

48 Patricia Megale Coelho, Blanca Corona and Ernst Worrell (2020) Reusable vs Single-Use Packaging: A review of environmental impacts (Reloop & Zero Waste Europe). Accessible athttps://zerowasteeurope.eu/library/reusable-vs-single-use-packaging-a-review-of-environmental-impact/, p.6. Nathan Dufour of Zero Waste Europe (6 July 2021) "When reuse becomes the new 'normal' – a system change perspective" (Presentation at the 8th European REUSE Conference hosted by Deutsche Umwelthilfe (Environmental Action Germany)); George Beechener et al (2020) Packaging Free Shops in Europe: An initial report (Bristol: Prepared by Eunomia Research & Consulting Ltd, with contributions from Zero Waste Europe and Reseau Vrac). Accessible at https://zerowasteeurope.eu/library/packaging-free-shops-in-europe-an-initial-report/, pp.27,35.

49 Kunamaneni, Jassi, Hoang (2019), above n 35, p.254; Patricia Megale Coelho et al (2020) "Sustainability of reusable packaging—Current situation and trends" Resources, Conservation & Recycling: X, Vol 6. https://doi.org/10.1016/j.rcrx.2020.100037, pp.2,8; Beechener et al (2020), above n 48, p.35.

50 Leonore te Bokkel et al (2021) The Future of Work: Baseline Employment Analysis and Skills Pathways for the Circular Economy in Scotland (Zero Waste Scotland and Circle Economy). Accessible at https://www.zerowastescotland.org.uk/content/future-work.

51 Laura Stewart (2022) "Business Unusual: Exploring the Role of Vertical and Horizontal Collaboration in the Development of Circular Business Models for Reusable Packaging in Zero-Waste Grocery Stores" (Thesis submitted for Master of Sustainable Business at Department of Management, University of Otago), p.49.

52 City Playbook Working Group (2021), above n 1, p.16; Coelho et al. (2020), above n 49, pp-5-7.

53 Sarah C. Greenwood et al (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. https://doi.org/10.1016/j.spc.2021.03.022; Jasmin Wiefek, Julia Steinhorst & Katharina Beyerl (2021) "Personal and structural factors that influence individual plastic packaging consumption—Results from focus group discussions with German consumers" Cleaner and Responsible Consumption 3. https://doi.org/10.1016/j.clrc.2021.100022.

54 Kunamaneni, Jassi, Hoang (2019), above n 35, p.253.

55 Wiefek, Steinhorst & Beyerl (2021), above n 53.

56 Miriam Gordon (2020) Reuse wins: the environmental, economic, and business case for transitioning from single-use to reuse in food service (UPSTREAM). Accessible at https://upstreamsolutions.org/reuse-wins-report, p.68; Wiefek, Steinhorst & Beyerl (2021), above n 53.

57 Valerie Bianchi and Sunshine Yates (2021) The Journey to a Circular Economy in the Waikato Region (Waikato Regional Council Technical Report 2021/34). Accessible at https://www.waikatoregion.govt.nz/assets/WRC/TR202134.pdf, p.14; Coelho, Corona and Worrell (2020), above n 48, p.19; Dufour (2021), above n 48; Coelho et al. (2020), above n 49, pp.4-5,8.

58 Bianchi and Yates (2021), above n 57, p.14.

59 Copello, Porteron and Schweitzer (2021), above n 29, pp.4, 12-13; City Playbook Working Group (2021), above n 1, pp.16-17; Dufour (2021), above n 48; Beechener et al (2020), above n 48, p.35.

60 Stewart (2022), above n 51, p.40.

61 City Playbook Working Group (2021), above n 1, p.18.

62 Dufour (2021), above n 48; Coelho et al. (2020), above n 49, pp-5-7; Beechener et al (2020), above n 48, p.27.

63 Julian Raine (4 November 2020) Representing Oaklands Milk for the panel "Reuse Systems" at the Zero Waste Network Aotearoa Digital Summit Our Zero Waste World. Accessible at https://www.summit.zerowaste.co.nz/watch.

64 Rosa (2018), above n 47, p.4; Beechener et al (2020), above n 48, pp.27.

65 Dufour (2021), above n 48; Kunamaneni, Jassi, Hoang (2019), above n 35, p.257; Coelho, Corona and Worrell (2020), above n 48, p.8.

66 Sunshine Yates Consulting Ltd (2019) Rethinking Rubbish and Recycling (Prepared for WasteMINZ TAO Forum). Accessible at https://environment.govt.nz/assets/publications/Rethinking-

rubbish-and-recycling.pdf.

67 Kunamaneni, Jassi, Hoang (2019), above n 35, pp.254,264-265.

68 Miriam Gordon (2021) The Reuse Policy Playbook: A policy roadmap to reuse (Upstream), p.8.

69 Reusable Packaging Association, above n 36, p.9.

70 Dufour (2021), above n 48.

71 Rosa (2018), above n 47; City Playbook Working Group (2021), above n 1, pp.25-26; Beechener et al (2020), above n 48, p.27.

72 Gordon (2020), above n 56, pp.68-69; Beechener et al (2020), above n 48, p.27.

73 Jiri Jaromir Klemes et al (2020) "Minimising the present and future plastic waste, energy and environmental footprints related to COVID-19" Renewable and Sustainable Energy Reviews. https://doi.org/10.1016/j.rser.2020.109883.

74 Rebecca Percasky (25 February 2022) Representing Better Packaging Co for the panel session "Aotearoa New Zealand's reusable packaging future—how to transition, benefits, challenges and needs" at the Sustainable Business Network Packaging Masterclass 2022. Accessible at https://sustainable.org.nz/learn/sbn-event-recordings/aotearoa-s-reusable-packaging-future/.