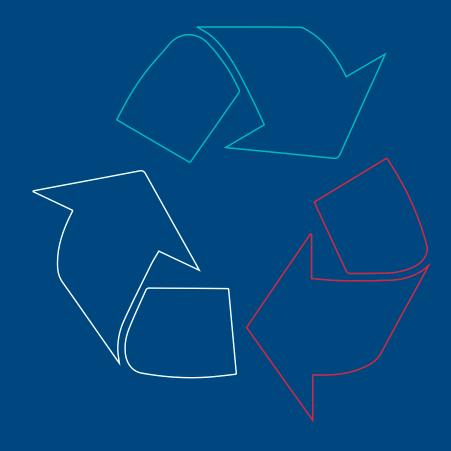


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OUR PURPOSE

ZERO CONTAINER GLASS TO LANDFILL

Glass bottles and jars are 100% recyclable and can be recycled over and over with no loss of quality. They're an excellent example of the circular economy in action.

Recycling glass saves natural resources, reduces CO2 emissions, saves energy, and grows our circular economy.

Our goal is to capture all glass bottles and jars for recycling, reuse or refill, or, when that's not possible, alternative uses.

(beverage and non-beverage containers) which keeps glass in circulation at its highest quality and value.





The Glass Packaging Forum (GPF) is Aotearoa New Zealand's voluntary product stewardship scheme for glass bottles and jars.

We are funded entirely by our members, based on the tonnage of glass they put into the New Zealand market. This is used to improve outcomes for glass, primarily achieved through contestable grant funding rounds.

Grant applications are assessed by the Scheme Manager and Steering Committee to ensure funding is applied to positively impact glass recovery, recycling, reuse or alternative use. Funded projects range from infrastructure and reuse to plant and public place recycling.

The Scheme Manager also works to improve outcomes for glass by facilitating stakeholder relationships, offering advice, expertise and support, and advocating for policies which support best-practice glass recovery methods.

The Scheme Manager also actively engages with members, consumers, and wider stakeholders through a variety of communications channels.

Sustainable development goals

The GPF recognises the significance and value of the United Nations' Sustainable Development Goals (SDGs).

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Goal 12: Responsible Consumption and **Production**

The scheme enables our members to take increased responsibility for the products they put into the market, by funding initiatives through their voluntary levies.

13 CLIMATE ACTION



Goal 13: Climate Action

By improving the circularity of glass in New Zealand, the scheme and its members are helping reduce the impact of climate change. Recycling glass requires less energy, fewer natural resources, and is a more carbon efficient process than manufacturing glass from virgin material.

17 PARTNERSHIPS FOR THE GOALS



Goal 17: Partnerships

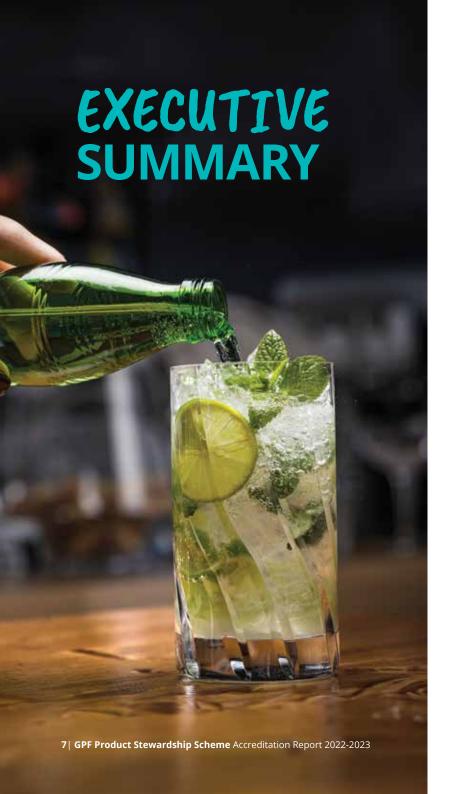
The GPF partners at a local level with organisations throughout the supply chain, based on a shared goal of increasing the recovery and recycling, or reuse, of glass in Aotearoa.



The GPF product stewardship scheme was re-accredited by the Associate Minister for the Environment on 23 March 2018 for a period of seven years.

This report covers:

Financial reporting for the date	1 April 2022 – 31 March 2023
Funding awarded	1 April 2022 – 31 March 2023
Mass balance reporting for the dates	1 July 2022 – 30 June 2023
	(in line with council reporting year)



This reporting period saw a small decline in glass to market, as well as small decreases in the recovery and recycling rates.

GLASS TO MARKET **270,676 ♣** 2.2%

65.1% **4** 2.9%* 60.6%

OF RECOVERED GLASS

-1.8

PERCENTAGE POINTS

This reporting period saw a continuing trend of more food and non-alcoholic beverages packaged in glass. This was countered by a slight fall from glass-packaged alcoholic beverages, largely due to adjustments in the average beer and cider bottle weights, based on market information.

The drop in total glass tonnage recovered this reporting period is less than the 35% drop in tonnage reported by Auckland Council. Other areas combined recovered slightly more than the last reporting period.

The recovery rate has been heavily impacted by Auckland undertaking a rebuild of its materials recovery facility (MRF) which meant recycling collections were sent directly to landfill for 10 weeks.

Additionally, Auckland Council has publicly reported that it is battling contamination levels that have doubled since 2020, resulting in high waste outputs from the MRF.

Feedback received from Auckland Council states that while the MRF upgrades were successful in improving the quality of plastics, fibres and metals processed through the facility, the quality of glass has only marginally improved, with potential gains offset by higher contamination and more material less that 55mm.

A limited percentage of poor quality, contaminated glass can be used in the remanufacturing process compared to clean glass streams.

*If the Auckland MRF had not been shut for 10 weeks and Auckland had been able to maintain its tonnage from the previous reporting period, the recovery rate would have been 71%.

Data

We have continued to work on developing our glass mass balance methodology. This has led to a clearer picture around glass bottles for beer – a significant portion of the overall glass to market.

We thank our members for their insights into beer packaging trends, including the proportions packaged in glass and changes in average bottle weights.

Funding

Funding for the reporting period once again saw a good spread of projects, with \$191,972 awarded for infrastructure, plant, reuse, and cyclone relief. In total, 4,327 tonnes of glass were positively impacted.

Just over half of funding (\$106,082) was awarded to six infrastructure projects to improve and future-proof glass recovery, storage, and transport.

We continued to fund reuse initiatives, with \$25,000 awarded to a refillable beer flagon project by Again Again. We also made funding available to Hawke's Bay councils following Cyclone Gabrielle to help ensure glass continued to be transported out of the region for recycling.

Government policy

The Government made two announcements with significant bearing on glass recycling – regulation to standardise kerbside collections and the deferral of the proposed container return scheme (CRS).

The GPF welcomed the inclusion of glass in the

standard set of materials to be collected at kerbside in urban areas with a population of more than 1,000. However, it was disappointing to note that while the majority of submissions supported glass-separate collection, this was not reflected in the final regulation.

The deferral of the proposed CRS is a chance for the Ministry for the Environment to better consider an industry-funded extended producer responsibility (EPR) approach to container glass. An example of one such scheme can be seen in the GPF-commissioned Grant Thornton report from the previous reporting period.

March 2023 also saw the publication of Te Rautaki Para, New Zealand's waste strategy, which sets out a vision and guiding principles which give some needed clarity on how voluntary schemes such as ours can progress to meet the country's wider circular economy goals and aspirations.

Refillables report

In May we released a report outlining the current context, challenges, and opportunities for refillable glass containers in New Zealand.

There is a growing demand for, and supply of, refillable packaging in the country, particularly in terms of beverages and milk containers.

The report looked at existing schemes, challenges such as transport and investment, as well as opportunities for industry and the GPF's role.

Looking forward

The end of our accreditation period in 2024 will be an opportunity to re-evaluate how we achieve our members' aspirations for the glass circular economy in New Zealand. Glass recovery and recycling have improved vastly since the GPF was formed in 2006. Challenges and opportunities remain, however.

The system and funding mechanisms proposed in our report from Grant Thornton look very different from the way the GPF currently operates. While that scheme is based on mandatory participation, many aspects could guide the future direction of a voluntary scheme with a membership committed to being a driving force in New Zealand's circular economy.

500

Dominic Salmon 3R Group Ltd (Scheme Manager)





Who we are

Our steering committee is elected from our membership and provides guidance and strategy to the scheme manager. The committee also approves budgets and funding requests from the GPF contestable fund.

Selected steering committee members represent GPF interests on the board of The Packaging Forum, which is responsible for the management of levies, administration, and record-keeping for the GPF.

Day-to-day operational management of the scheme is contracted to 3R Group. The scheme manager reports to the steering committee chair and provides information, advice, and expertise to assist the steering committee in its decision-making.

Steering Committee and Scheme Manager 2022-2023



Monique Sprosen Pernod-Ricard Chair



Don Chittock Fulton Hogan



Mark Campbell Asahi Beverages (NZ)



Debra GouldingFoodstuffs



Penny Garland Visy Glass



Nick Keene Hospitality NZ



Sarah Goldsbury Indevin



Sara Tucker Lion



Dominic Salmon 3R Group Ltd (Scheme Manager)

GRANT FUNDING



\$191,972

INFRASTRUCTURE



PLANT

PROJECTS

\$54,284 **IMPACTING**

540 TONNES



PROJECTS

\$106,082 **IMPACTING**

3237 **TONNES**

REUSE

PROJECTS

\$25,000



SUPPORT POST-CYCLONE **GABRIELLE LOGISTICS**

PROJECTS

\$25,000

\$6,606

550 **TONNES IMPACTED**



WAS MADE AVAILABLE

WAS CLAIMED

The Glass Packaging Forum had another busy and productive period of grant funding, with 11 successful applications totalling \$191,972, positively impacting 4,327 tonnes of

Around half the funding (\$106,082) was awarded to infrastructure projects, which impacted 3,100 tonnes of glass. These projects not only address existing challenges and pinch-points but have a positive impact on glass recovery, recycling, and resilience, in the long term.

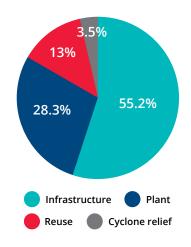
While large grants for projects like glass storage bunkers have a big

impact on tonnage recovered but little public presence, funding for projects like bottle banks create excellent public awareness and behaviour change opportunities.

The GPF was able to lend its support following Cyclone Gabrielle through a grant to help alleviate the increased cost of freight caused by road closures.

We also co-funded an innovative project for reusable, glass beer flagons in taprooms. The project will use purpose-designed software to streamline the process, both for retailers and consumers.

Funding by project type



Each funding application is:

Considered and scored against **GPF** key criteria

- Scored by three assessors and a summary report completed
- Submitted to the GPF Steering Committee for consideration
- Accepted or declined by the committee
- Asked to provide results and photos for accountability, public relations and educational purposes



Funding highlights

Project: Glass storage bunkers at new Waikato recycling facility

Purpose: Build glass storage bunkers in a new recycling sorting

centre in Huntly

Recipient: Waikato District Council

The Waikato District Council built a new, fit-for-purpose recycling sorting centre, with the GPF awarding \$20,000 to help construct the glass storage bunkers. The new centre decreased contamination rates and increased the quality and quantity of glass available for recycling.



Project: Glass transport following Cyclone Gabrielle

Purpose: Help with the additional cost of freighting glass from

Hawke's Bay to Auckland following Cyclone Gabrielle

Recipient: Offered to Hastings District Council, Napier City Council,

Central Hawke's Bay District Council, Wairoa District Council, taken up by Hastings and Central Hawke's Bay.

Road closures following Cyclone Gabrielle meant freight from Hawke's Bay to Auckland became more expensive due to the need to use a far longer, alternative route. The GPF made \$25,000 available to help ensure glass continued to be transported to Auckland for recycling. Of the amount available, \$6,606 was claimed.



Funding highlights

Project: Trial colour-sorted glass collections in Christchurch

Purpose: Trial the viability of colour-sorted glass in Christchurch so it

can be recycled in Auckland

Recipient: EcoCentral

Christchurch-based EcoCentral trialled a new system for collecting colour-sorted glass for residents at their transfer stations. The GPF funded \$37,500 for the necessary equipment. EcoCentral partnered with glass recyclers 5R Solutions, with the glass transported to Auckland, alongside glass from other parts of the South Island, via 5R's aggregation depot in Christchurch.



Project: Mobile rural recycling trailers in Western Bay of Plenty

Purpose: Make recycling easier for rural residents

Recipient: Western Bay of Plenty District Council

The council identified a need to make recycling more convenient for rural Western Bay of Plenty residents. A \$12,000 grant from the GPF partially fundedtwo mobile recycling trailers, which were very well-received by the community.



Grant funding map

ROTORUA

Applicant: Rotorua Lakes Council

Funding: \$6,390

Project Name: Bottle banks **Project Type:** Infrastructure Tonnage Affected P/A: 124 **Project Operational:** Yes

WAIKATO

Applicant: Waikato District Council

Funding: \$20,000

Project Name: Glass storage bunkers **Project Type:** Infrastructure

Tonnage Affected P/A: 1,600 Project Operational: Yes

TWIZEL

Applicant: Ben Ohau Golf Club

Funding: \$4,784

Project Name: Public place recycling

Project Type: Plant

Tonnage Affected P/A: N/A **Project Operational:** Yes

CENTRAL OTAGO

Applicant: Central Otago District

Council

Funding: \$1,200

Project Name: Bottle banks

Project Type: Infrastructure **Tonnage Affected P/A: 3**

Project Operational: Yes

WAITAKI

Applicant: Waitaki Resource

Recovery Trust Funding: \$38.492

Project Name: Glass storage bunkers

Project Type: Infrastructure **Tonnage Affected P/A: 600 Project Operational: Yes**

THAMES-COROMANDEL

Applicant: Thames-Coromandel District Council

Funding: \$20,000

Project Name: Bottle bank **Project Type:** Infrastructure Tonnage Affected P/A: 350 **Project Operational:** Yes

WESTERN BAY OF PLENTY

Applicant: Western Bay of Plenty

Funding: \$12,000

Project Name: Mobile recycling trailers

Project Type: Plant

Tonnage Affected P/A: 40 Project Operational: Yes

TAURANGA*

Applicant: Again Again **Funding:** \$25,000

Project Name: Refillable beer bottles

Project Type: Reuse

Tonnage Affected P/A: 25,000 **Project Operational:** In development

*Again Again are based in Tauranga, their

work is nationwide.

HAWKE'S BAY

Applicant: Hastings District Council, Napier City Council, Central Hawke's Bay District Council, **Smart Environmental**

Funding: \$6,606

Project Name: Glass transport following Cyclone Gabrielle

Project Type: Collection

Tonnage Affected P/A: 550

Project Operational: Completed

CHRISTCHURCH

Applicant: EcoCentral

Funding: \$37,500 **Project Name:**

Colour-sorted glass collection trial

Project Type: Plant **Tonnage Affected P/A: 500**

Project Operational: Yes

KAIKOURA

Applicant: Innovative Waste Kaikoura

Funding: \$20,000

Project Name: Glass storage bunkers

Project Type: Infrastructure **Tonnage Affected P/A: 500**

Project Operational: Yes

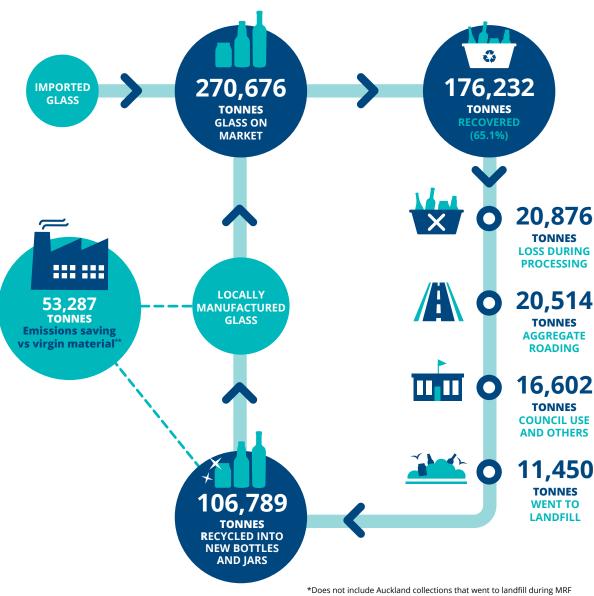


Mass balance results

Data methodology

Our data methodology is unchanged from last year. However, we were pleased to have access to additional data from members to help us refine the factors used for the percentage of product in glass packaging and bottle weights.

- 6,026 fewer tonnes of glass were placed on the market during this reporting period compared to the previous one, a drop of 2.2%
- 10,300 more tonnes of glass from food and nonalcoholic beverage packaging were placed on the market than in the previous period, an increase of 18.9%
- 11,977 fewer tonnes were collected compared to the previous period, a 6.4% drop, leading to a 65.1% recovery rate
- Notably, Auckland reported 16,158 fewer tonnes recovered, a 35% drop. This was largely attributable to the 10 weeks the MRF was closed while being upgraded (when recycling collections went to landfill), and ongoing contamination challenges.
- Had Auckland maintained its glass tonnage from the previous period, the recovery rate would have been 71%
- The biggest opportunities for improving recovery and recycling remain:
 - Glass separate collection in Auckland and Christchurch to improve quality and reduce losses in processing
 - Prioritising circular outcomes (recycling) over aggregate and other alternative outcomes



closure (not reported as recovered)

^{**499}kg per tonne of material recycled Grant Thornton product stewardship scheme design for glass (pg 82)

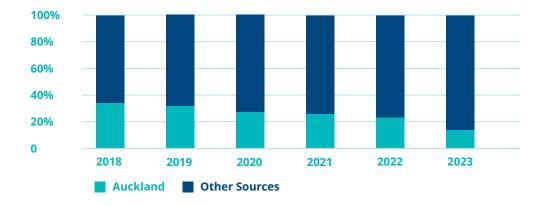
Auckland the key to higher glass recovery

While Auckland has seen a notable drop in tonnage in this reporting period, due to the closure of its MRF and high contamination levels, it has also reported a steadily decreasing tonnage of glass recovered over the past few years, as well as a decreasing percentage of all glass recovered nationally.

The percentage of glass recovered in Auckland has steadily fallen from **34.4** percent of all glass recovered in the 2018 reporting year (roughly commensurate with its share of population) to **24%** in the 2022 reporting year.

The GPF remains open to working together with Auckland Council to reverse this trend.

Percentage of recovered glass



63% recycled content in locally-manufactured glass

During this reporting period, Visy announced its glass containers manufactured across Australasia had an average of 63% recycled content. Green and amber bottles averaged 75%, with some bottles reaching 90% recycled content. Visy's current goal is to average 70% recycled content across Australia and New 7ealand.

Visy's ability to increase its use of recycled glass recovered in the New Zealand market rests on technical constraints, a clean glass stream with low contamination rates, and the market demand for its glass overall.

The percentage of recycled content in glass manufactured outside Australasia entering the New Zealand market is unknown.

Objectives and targets

The following table outlines the objectives and targets set for the scheme and shows our 2021-2022 performance toward achieving these goals.

ОВЈЕСТІVЕ	PARAMETER	2024 TARGET	2021-22 PERFORMANCE	2022-23 PERFORMANCE
Increase in the volume of container glass recycled	Report on diversion activity and be recognised as the reliable source of container glass recycling data by collating national data on container glass diverted from landfill via all activities	82% of total container glass into market is diverted	68%	65.1%
Completeness	eteness Close the gap between consumption data	90% of consumption data comes from members	GS1 catalogue and Arcana scan set data used	GS1 catalogue and Arcana scan set data used. Detailed analysis undertaken of data provided by largest members
	and tonnage declared by members	≥ 60% industry engagement survey response rate	-	-
Stakeholder support	Management and operational staff with council and the commercial collector network who have direct influence over glass recycling in their region are actively engaged in the scheme	≥ 60% local government engagement survey response rate	95% engagement from local government on mass balance survey, either directly or through contractors	89% engagement from local government on mass balance survey, either directly or through contractors
Contribution to community	GPF investment fund set aside for regional recycling initiatives annually	Budgeted investment fund allocation represents at least 40% of total operations budget by 2024	39% awarded 2% recovered from projects which did not proceed	35.9%

Advocacy and stakeholder engagement

Stakeholders:

- · Scheme members
- Other producers (potential members)
- Councils
- Consumers
- · Recycling contractors and processors
- Community recycling organisations
- Grant applicants
- Government bodies
- · Elected government officials

Our communications:



EDM

12 E-NEWSLETTERS

EDITORIAL ARTICLES

OR RADIO SPOTS

f

SOCIAL MEDIA

260,000 PAGE REACH

MEDIA

14

MEDIA RELEASES

RESULTING IN 17

677,713
PAID IMPRESSIONS

12,970 WEBSITE (PAGE VIEWS)

We engage with everyone, from producers and retailers to consumers and recyclers, to achieve the best environmental outcomes for container glass.

Inspiring behaviour change in our communities is a key part of increasing recovery rates and reducing contamination.

Engagement with members remained a high priority, primarily through member-only newsletters and webinars.

Advocacy for systems which support the glass circular economy

Collecting glass separately to other recyclables and colour-sorting it at source yields a higher quantity and quality of glass for recycling. It also improves other recycling streams by reducing the risk of contamination. The number of councils using this best practice method increased slightly this reporting period.

Only a small minority of councils continue to offer co-mingled (everything in one bin) kerbside recycling, however, they serve just under half of New Zealanders. This leads to decreased glass quality, slower and more costly processing and higher contamination. We continue to communicate with these councils to help them improve their outcomes.

Engaging with the glass network

One of our most important data points is a survey conducted with councils and contractors. This year we again invested significant resources into the survey.

The GPF also maintained our ongoing engagement with members of the glass supply chain to identify roadblocks, opportunities for improvements, and offer assistance as needed and possible.

Advocacy for an industry-funded, extended producer responsibility model

While huge strides have been made in glass recycling since 2006 when the GPF was formed, we recognise the limits of the existing structure and funding mechanism.

The Grant Thornton report we commissioned and published in the previous reporting period remains a blueprint for what regulated product stewardship for container glass could look like.

With the CRS now on hold, and our accreditation period coming to an end in 2024, now is an opportune time to consider what the future of the GPF could look like, as well as how we can progress towards the system envisioned in the report.



FINANCIAL INFORMATION

Glass Packaging Forum incorporated statement of profit and loss For the year ended 31 March 2023

REVENUE

Total revenue	539,447
Levies	534,701
Interest income	4,746

EXPENSES

Operating costs

External consultants - data	12,740
EPR development	201,378
Travel & accommodation	1,922
Scheme performance reporting	7,410
Member/stakeholder engagement, external communications	49,548
External funding projects	193,220
Data capture/monitoring/audit	24,005

Overhead costs

Bank Fees	20
CEO/Scheme Managers/administration	169,103
General	1,456
Subscriptions/software	550
Telecommunications	718
Website hosting and support	1,900
Total	173,747
Total expenses	663,970
Taxation expense	862
Net surplus (deficit) after taxation	(125,385)

Thank you to our members for improving outcomes for glass Membership financial year 2022-2023

AB- Inbev (NZ) Ltd Antipodes Water Company Ltd Arthur Holmes Ltd

- Techpack Supplies Ltd

Asahi Beverages - brands include:

- Asahi
- Peroni
- Boundary Road
- Carlsberg
- Pure Blonde
- Victoria Bitter
- Haagen
- NZ Pure
- NZ Lager
- Ranfurly
- Penfolds
- Pepperiack
- 19 Crimes
- Fickle Mistress
- TICKIC IVIISCICSS
- Matua
- Shingle Peak
- Squealing Pig
- Wolf Blass
- Ivanov
- Seagers
- Black Heart
- Kristov
- Woodstock
- Cruisei
- Long White
- Cruiser
- Major Major
- Cody's

- KGE
- Cider
- Somersby

The Better Drinks Company

- Charles Juices
- Phoenix Organics
- Lipton

Allpress Espresso

- Allpress Coffee

Ata Rangi Vineyard

Babich Wines Limited

Beam Suntory (NZ) Ltd
Bundaberg Brewed Drinks

Pask Winery Ltd (C.J. Pask Winery)

Chateau Waimarama

Cloudy Bay Vineyards

Coca-Cola Europacific Partners Ltd

Constellation Brands New Zealand Ltd

- Craft Union Wines
- Kim Crawford Wines
- Robert Mondavi Winery
- Ruffino
- Selaks Wines
- Simi
- The Prisoner Wine Company
- Tipping Point
- Young & Co

DB Breweries Ltd - brands include:

- Tuatara
- Monteith
- Heineken
- Tige
- Export

- Tui
- Kingfisher
- DB Draught
- Double Brown
- Flame
- Better Beer
- Rekorderlig
- Orchard Thieves
- Old Mout
- Odd Company
- Barrel 51
- White Claw

Delegat Limited

Endeavour Consumer Health Ltd

- Red Seal

Foodstuffs North Island Ltd

Foodstuffs South Island Ltd

Frucor Suntory New Zealand Ltd

Giesen Group Ltd

Hansells Food Group

Hunter's Wines (NZ) Ltd

Integria Healthcare

Jacobs Douwe Egberts NZ

Johnson Estate Ltd

- Spy Valley Wines

Karma Drinks Ltd

Lawson's Dry Hill Winery

Lion - 80+ brands including:

- Steinlager
- Speights
- Mac's
- Panhoa
- Fmerson's

- Little Creatures
- Kirin
- Corona
- Stella Artois
- Becks
- Waikato Draught
- Lion Red
- Lion Brown
- Zeffer
- Isaacs Cider
- Wither Hills
- Lindauor
- The Ned
- Mt Difficulty
- Martinborough Vineyards
- Daniel Le Brun
- Bombay Sapphire
- Bacardi
- Bailevs
- Bushmills
- Dalwhinnie
- Four Pillars
- Glenkinchie
- Ionnie Walker
- lose Cuervo
- Lagavulin
- Lagavuiiii
- SmirnoffTalisker
- Тарантара

- Tanqueray
Liquorland Ltd

Moi Agencies Limited

Nestle New Zealand Ltd

New Zealand Beverage Council

Palliser Estate

Pernod Ricard Winemakers NZ Ltd

- 60 brands including:
- Brancott Estate
- Montana
- Stoneleigh
- Deutz Marlborough
- Church Road
- Jacob's Creek
- St Hugo
- Wyndham Estate
- Campo Viejo
- Mumm
- lameson
- Absolut Vodka
- Beefeater
- The Glenlivet
- Martel

Pic's Peanut Butter

Saverglass New Zealand

Simplot New Zealand Ltd

Te Mata Estate

Villa Maria Estate (Indevin)

- Vidal Wines
- Esk Valley Estate

Visy Glass

Wainhouse Distribution Ltd

Woolworths



