

**PRODUCT STEWARDSHIP SCHEME  
ACCREDITATION REPORT 2017-2018**



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# 1. SCOPE OF SCHEME

The Glass Packaging Forum's (GPF) purpose is to connect businesses that manufacture, import, fill and sell glass-packaged consumer goods with those that collect and recycle glass to enable glass bottles and jars to be returned to the furnace or made into alternative products, with the aim of zero container glass to landfill.

The scheme is funded by a voluntary levy which is paid by the scheme's 100+ member brands. The GPF also provides annual data on the mass balance of container glass - bottles and jars recovered and recycled as a percentage of glass consumed.

To maximise the GPF's ability to influence the recycling of container glass throughout New Zealand, three contestable funding rounds are held annually.

This year's funding, with a focus on sensible infrastructure to enable the smooth and efficient movement of glass back to the furnace, saw almost \$300,000 of member levies invested to improve the quality and quantity of glass going back to the furnace for recycling.

GPF is one of three product stewardship schemes operating under The Packaging Forum umbrella.

## OUR PURPOSE

is to **CONNECT** businesses that **SELL** glass-packaged goods with those that **COLLECT** and **RECYCLE** glass.

This enables glass to be returned to the furnace or made into alternative products, with the aim of

**ZERO CONTAINER GLASS TO LANDFILL.**



Glass, the ultimate circular resource [glassforum.org.nz](http://glassforum.org.nz)

**ALL NEW ZEALAND MANUFACTURED BOTTLE & JARS USE**



**69%\***

**RECYCLED CONTAINER GLASS**

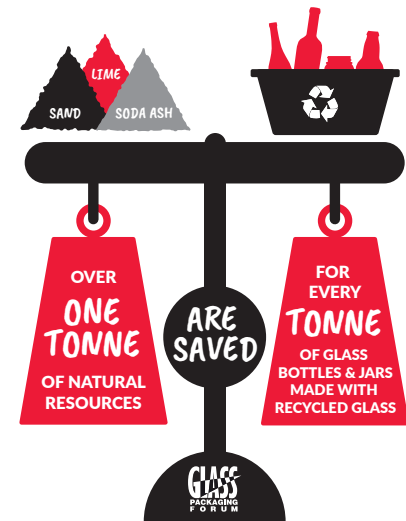
\*The average recycled glass content for New Zealand's only glass bottle and jar manufacturer, O-I New Zealand, in 2017 was 69%.

Glass, the ultimate circular resource [glassforum.org.nz](http://glassforum.org.nz)

**EVERY TONNE OF GLASS CONTAINERS RECYCLED SAVES APPROX 670kg of CO<sup>2</sup> emissions**



Glass, the ultimate circular resource [glassforum.org.nz](http://glassforum.org.nz)



Glass, the ultimate circular resource [glassforum.org.nz](http://glassforum.org.nz)

## 1.1. REPORTING PERIOD

The GPF Product Stewardship Scheme achieved re-accreditation on 23 March 2018. This report covers the first period of the new seven-year accreditation period. Specifically, this report covers:

- Financial reporting for the dates 1 April 2017 - 31 March 2018; and
- Mass balance reporting for the dates 1 July 2017 - 30 June 2018 (in line with council reporting year).

Activities and funding outlined in this report are in line with the financial reporting period of 1 April 2017 - 31 March 2018.



## 1.2. SCHEME GOVERNANCE

The Glass Packaging Forum operates under the governance of the Packaging Forum (PF), with its governing board of elected members representing the packaging industry. The PF governing board is responsible for the management of levies, administration and record keeping. The board also takes advice from advisory or steering committee groups representing the various stewardship schemes within its scope.

The Glass Packaging Forum Steering Committee, nominated from the Packaging Forum membership, provides guidance to the Scheme Manager, approves the Scheme's budget and approves funding requests from the GPF fund. Although GPF funding is separate from the Packaging Forum, GPF does contribute to the Packaging Forum-run Public Place Recycling scheme.

The Scheme Manager, reporting to the GPF Steering Committee Chair, is responsible for all operational aspects of the scheme and provides day-to-day management of it.



## GPF STEWARDSHIP SCHEME – STEERING COMMITTEE



**ROB LANGFORD (CHAIR)**  
Sustainability Manager  
Pernod Ricard



**DOUG BANKS**  
Technical Manager  
DB



**ALISTAIR SAYERS**  
Packaging Manager  
Fruco Suntory



**NEIL WAKA**  
Corporate Affairs Manager  
Coca Cola Amatil



**DAVID MEAD**  
Technical Regulatory Manager  
Lion



**PENNY GARLAND**  
Regional Cullet Manager  
O-I New Zealand



**DON CHITTOCK**  
South Island Resource  
& Sustainability Manager  
Fulton Hogan

## 2. REVIEW OF THE SCHEME

3R Group Ltd took over as Scheme Manager for the Glass Packaging Forum on 1 April 2017. 3R's primary functions are to improve outcomes affecting both the quality and quantity of container glass available for recycling, effectively manage the day-to-day operations of the GPF and grant allocation process, increase collaboration amongst stakeholders and raise the profile of the GPF and container glass recycling.

With this improved management capacity, the GPF selected two primary areas of focus for the 2017-2018 period to help achieve its principal aim of increasing the quantity and quality of glass recycled:

1. Financial support to improve glass recycling outcomes; and
2. Building relationships to connect businesses that manufacture, import, fill and sell glass-packaged consumer goods with those that collect and recycle glass.

As part of the KPIs set for the scheme in the Ministry for the Environment Product Stewardship Accreditation process, the GPF is committed to having transparency and integrity around its mass balance data. During the year the GPF undertook a complete review of its scheme operations. This includes the method and data sources used to calculate container glass consumption and recovery rates in New Zealand.

Work was also completed on improving the funding process. The new funding process is detailed in appendix 2.

Highlights were working with diverse funding applications ranging from investment into 5R Solutions' infrastructure to mitigate the transport impacts of the Kaikoura earthquake and improve South Island glass recycling rates, through to the funding of a solar-powered bin lifter in Whangaporoa.

As part of our aim to build better relationships, engagement has also been a key focus during these past 12 months. Considerable effort has gone into growing the GPF profile and telling its story, namely the infinitely recyclable nature of glass right here in New Zealand, and how the GPF can work with stakeholders to improve container glass recycling.

3R's 'Flying Squad' has visited a large number of councils, collectors and processors around the country with the "Let's Talk" message to help improve relationships and outcomes. The use of contestable funding, a new website and social media, plus attendance and speaking slots at industry conferences, particularly in the hospitality sector, have also served to make the GPF the go-to authority on glass recycling.

Over the past 12 months the GPF has invested in sensible infrastructure to improve the flow of glass nationally. GPF funded applications over this period have improved the glass flow of 16,000 tonnes (both new and existing glass). Providing increased storage capacity has allowed for transport efficiencies to be achieved.

**CHALLENGE:** Shifting existing perceptions of GPF as a lobby group.

**SOLUTION:** The Let's Talk initiative has encouraged more open and honest communication with stakeholders.

## 2.1. SUSTAINABLE DEVELOPMENT GOALS



The GPF recognises the significance of the **United Nations' Sustainable Development Goals** (SDGs), in particular Goal 12: Responsible Consumption and Production, and the part the GPF Product Stewardship Scheme plays in allowing New Zealand consumers and businesses to meet this goal.

The scheme enables producers to take increased responsibility for the product they put into the market through their voluntary levies. The levies allow the GPF to provide funding to improve infrastructure, plant or services that might otherwise limit recovery.

The GPF is actively supporting the development of regional hubs in order to reduce the cost of processing and transporting recycled glass (cullet). A working example is the 5R Solutions' Christchurch hub, which received funding from the GPF to upgrade bunkers, a loader and to build a bottle breaker conveyor system.

This investment means a solution for up to 20,000 tonnes per annum of container glass from the South Island direct to Auckland. 5R now take container glass from Ashburton, Wanaka, Queenstown and the West Coast, with discussions being held with multiple councils and hospitality providers. Given the success of this investment, consideration of a lower South Island hub is now being considered.

The GPF's priority on engagement with all sectors in the glass recovery cycle is in line with SDG12. The Forum tells the circular story of glass and the emissions benefits of using cullet over virgin materials in the production of new glass bottles and jars. It also works to assist in bringing about broader behaviour change in regards to litter and recycling. In the following financial year work will be done to increase awareness of SDG12 and the broader adoption of the SDGs within its membership.

### CHALLENGE:

High transportation costs.

### SOLUTION:

5R Solutions Ltd's bottle breaker model increases the amount of glass transported per container by 25%.



Official opening of 5R Solutions' new bunkers - September 2017



## 2.2. MEMBERSHIP

The Glass Packaging Forum is a voluntary scheme with members choosing to pay levies to improve outcomes for container glass. Scheme membership has remained stable at over 100 brands for the year (as at 31 March 2018).

Membership discussions with Hospitality New Zealand and the New Zealand Beverage Council were undertaken during the year. These associations represent a total of more than 3,000 members and both share a mutual interest in helping their members reduce their environmental footprint. GPF membership of these two organisations will help us increase our reach across the hospitality and beverage sectors.

Free riders are an issue for all voluntary product stewardship schemes. The GPF membership currently accounts for an estimated 85% of total glass to the New Zealand market. To grow the membership base and reduce free riders, every effort is being made to maximise the value of membership to those who have not yet joined.

As the alcohol and beverage industry continues to grow and evolve, a number of member acquisitions have occurred which may impact membership numbers.

One point of interest to note is the number of enquiries from businesses relating to the benefits of glass packaging compared to plastic. With the environmental impact of single use plastics very much in the spotlight, glass as a returnable, reusable and infinitely recyclable packaging material is gaining appeal. This emerging trend will be one to watch over coming years.

### CHALLENGE:

An estimated 15% of glass to the New Zealand market comes from non GPF members.

### SOLUTION:

Clearly demonstrate and communicate the value of being a member of the GPF.



# GPF MEMBERS

Alana Estate  
Alchemy Beverages  
Aroha Drinks  
Arthur Holmes  
• Techpack Supplies  
Ashahi Beverages  
• Boundary Road Brewery  
• Charlies  
• Phoenix  
• The Better Drinks Company  
• Treasury Wine Estates (Matua)  
Ata Rangi Vineyard  
Babich Wines  
Beam Suntory (NZ)  
Black Barn Vienyards  
Blackmores  
BlueSun  
• Cracraft Chase Vineyard  
Bulmer Harvest/CUB (NZ)  
CJ Pask Winery  
Cerebos Gregg's  
Ceres Organics  
Chateau Waimarama  
Cloudy Bay Vineyard  
Coca-Cola Amatil (NZ)  
Comvita NZ  
Constellation Brands NZ  
• Kim Crawford Wines  
• Nobilo Wines  
• Selaks Wines

Coopers Creek Vineyard  
Cospak (NZ)  
Countdown  
DB Breweries  
• Tuatara Brewing Company  
Delegat's Wine Estate  
Delmaine  
Endeavour Consumer Health  
• Red Seal Natural Health  
Enpac  
EnviroNZ  
Fancrest Estate  
Foodstuffs NI  
Foodstuffs SI  
Frucor Suntory NZ  
• Simpy Squeezed  
Fulton Hogan  
Giesen Group  
Greystone Wines  
Hansells Food Group  
Henry's Beer, Wine & Spirits  
Hospitality NZ  
Hunter's Wines NZ  
Integria Healthcare  
Invivo Wines  
Jacobs Douwe Egberts NZ  
Johnson Estate  
• Spy Valley Wines  
Karma Cola  
Kono Beverages  
• Aronui Wines  
• Tohu Wines

Kraft Foods - Mondelez NZ  
Lawson's Dry Hill Winery  
Lion  
• Emerson's Brewery  
• Morton Estate  
• Panhead  
• Wither Hills  
Liquorland  
Loopline Vineyard  
Mahana Estates  
• Woollaston Estates  
Mars NZ  
Matawhero Wines  
Mills Reef Winery  
Moi Agencies  
Mt Difficulty Wines  
Muddy Water Winery  
Nautilus  
Negociants NZ  
Neill Cropper & Company  
Nestle NZ  
NZ Beverage Council  
O-I NZ  
Palliser Estate Wines of Martinborough  
Pernod Ricard NZ  
• Deutz  
• Jacobs Creek  
• Montana Wines  
• Stoneleigh Marlborough  
• Wyndham Estate

Peter Maude Fine Wines  
Real Foods  
Rogue Society - the Gin Company  
Rubbish Direct  
Sacred Hill Vineyards  
• Cairnbrae  
• Gunn Estate  
• Ti Point  
• White Cliff Estate  
• Wild South  
Saverglass NZ  
Silaca Glass Crushers  
Sileni Estates  
Simplot NZ  
Smart Environmental  
Te Mata Estate Winery  
The Antipodes Water Company  
Trinity Hill  
Villa Maria Estate  
• Esk Valley Estate  
• Vidal Wines  
Waimea Estates (Nelson)  
Wainhouse Distribution  
Whiskey Galore  
Whitehaven Wine Co  
Yealands Estate Wines  
• The Crossings  
• Peter Yealands

## 2.3. STAKEHOLDER RELATIONSHIPS

Engagement with stakeholders has been key to this year's activities, in line with our primary goals for the period.

The GPF attended a number of conferences during the year, including Hospitality NZ and WasteMINZ. This provided the GPF with exposure to, and the opportunity to have further conversations with, key stakeholders in the glass packaging industry including brands, retailers, local government, community recyclers and representatives from the waste and recycling industry.

The GPF also acknowledges the benefit of working with likeminded membership organisations including: WasteMINZ, New Zealand Beverage Council and Hospitality NZ. All these organisations complement the GPF's workstream and allow the amplification of key messages on a one-to-many basis. Attending conferences has allowed significant profile enhancement and fostered long-term sustainable relationships with this membership.

There has been a more direct one-on-one approach to developing relationships with stakeholders, in particular local government, to bring GPF members and those responsible for glass collection together to improve container glass recycling in New Zealand. The GPF Flying Squad has spent significant time talking with councils, business and contractors to better understand what can be improved. As a result, strong relationships have been forged and there is an increased awareness of the challenges faced.

The GPF submitted on a number of Council Waste Management and Minimisation Plans (WMMP) in order to influence positive outcomes for glass recycling. The WMMP process and timing allowed open discussion with councils throughout the submission process.



# 3. MASS BALANCE

As a requirement of the product stewardship scheme accreditation process, the GPF annually undertakes an industry-wide survey to report the annual data on the mass balance of container glass - the total glass capture rate as a percentage of glass consumed. This report is the first to present recycled glass and recovered glass as separate categories. Recycled glass represents the bottle to bottle recycling while recovered glass is crushed directly into a product of lower value or use, such as aggregate.

The mass balance process undertaken as part of this report has been the first year the scheme manager has access to a whole year's data. This has been an eye opening exercise as a number of seasonal variations have had to be considered and worked through. The focus has been the development of credible data that can be used to chart progress of the GPF Scheme over the duration of its accreditation period of 2018-2024.

## 3.1. METHODOLOGY

The GPF gathers data from multiple sources and is grateful to all stakeholders who have participated. Key data for mass balance analysis is gathered from the following sources:

- GPF members
- Councils
- Waste managers / contractors
- End users of recycled cullet
- Statistics New Zealand (alcohol consumption statistics)

Supply of total container glass into the market is sourced from GPF member declarations, while council and waste managers / contractors are asked to complete online collection declarations. Data collected via these declarations includes:

- Total tonnage for the specified period;
- Collection contractor;
- Collection source (both region and type – kerbside, public place, etc); and
- End glass use (eg. recycled, aggregate, landfill).

Alcohol consumption statistics reported by Statistics NZ are converted to tonnage based on the following assumptions:

- Litres ÷ by average bottle capacity = number of bottles
- Number of bottles x by average glass bottle weight - estimated percentage of 'other packaging' (based on member intelligence) = maximum tonnage of glass in market

All collected data is aggregated using a 'black box' approach'. Due to commercial sensitivities, a number of confidentiality agreements apply to this process.

The mass balance process serves to build relationships with stakeholders and also provides the GPF with an understanding of the geographical flow of glass to assist strategic planning.

*Note: Due to the influence of territorial authorities on the flow of glass through provided facilities and services, the mass balance reporting period has changed from a calendar year to a July-June year to better capture data. This also explains the variation between the GPF financial/activity period and the mass balance period.*

### 3.2. PERFORMANCE 2017-2018

The 2017-2018 GPF Product Stewardship Scheme Accreditation Report is the first time that the GPF has broken total glass capture into identifiable pathways. These are detailed below:

- Glass consumption for the year was up by 1.2%
- Glass capture rates decreased on the previous year to 62.4%

Of the 62.4% of glass captured:

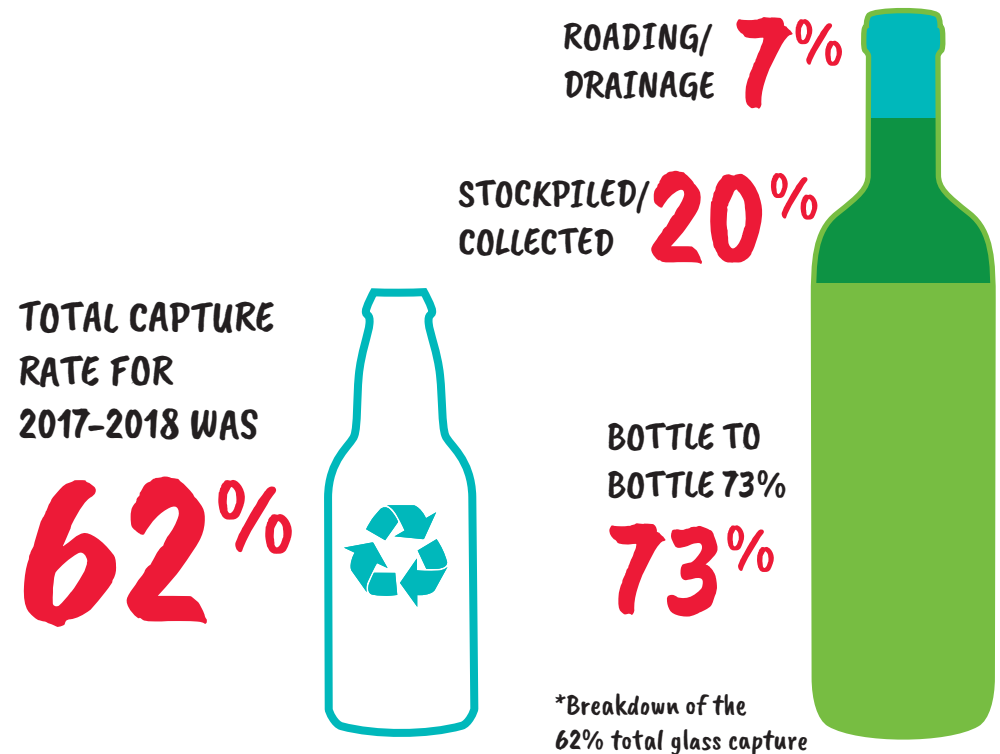
- 73% was bottle to bottle
- 7% roading/drainage applications
- 20% stockpiled or collected

These figures are derived from the total amount of glass sold to the New Zealand market considered against the total glass capture. It is clear that there is still a significant percentage of container glass bypassing existing services and infrastructure. This will form a key area of improvement for the GPF for the remainder of this accreditation period.

By breaking this data into recycled and recovered streams the GPF is able to better identify the pathways of glass disposal and recycling within New Zealand and target its funding and resources.

Since the last reporting period, there has been a significant decrease in the amount of glass used for roading and drainage. This change relates mainly to the Christchurch area and is influenced by the completion of the roading network as part of the rebuild programme.

The GPF is confident that the current investment in infrastructure will see a positive result for the 2018-2019 reporting period as a number of projects come to fruition - such as improved collection services, as offered in Tauranga, and from councils, like Tararua District Council, moving to actively recycle their glass.



**CHALLENGE:** How to justify and explain the total glass capture rate of 62%

**SOLUTION:** Transparency - to show what has been recycled and what has been recovered.

## 4. OBJECTIVES & TARGETS

The following table outlines the objectives and targets set for the scheme and shows our 2017-2018 performance toward achieving these goals.

OBJECTIVE	PARAMETER	2024 TARGET	2017-18 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	<p>“Let’s Talk” approach launched</p> <p>Flying squad activities improve GPF knowledge base and begin to impact on improving efficiencies, diversion rates and relationships</p>
Completeness of scheme	Close the gap between consumption data and tonnage declared by members	90% of consumption data comes from members	Declarations were received from all members as part of the mass balance process.
		≥ 60% industry engagement survey response rate	The recent survey to councils received a 64% 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	<p>≥ 60% local government engagement survey response rate</p> <p>Demonstration of targeted communications</p>	<p>Profile of GPF raised across all councils</p> <p>Website completed</p> <p>Quarterly e-news to stakeholders</p>
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	Achieved

# 5. FUNDING

GPF activities are funded by a voluntary levy paid by members based on the amount of glass they use, import, fill or put into the market. A large portion of the collected levies are earmarked as funding for projects that demonstrate the ability to improve the quality and quantity of glass available for recycling.

Since 2006, the GPF has funded more than \$2 million in grants for projects around New Zealand.

## 5.1. GPF GRANTS

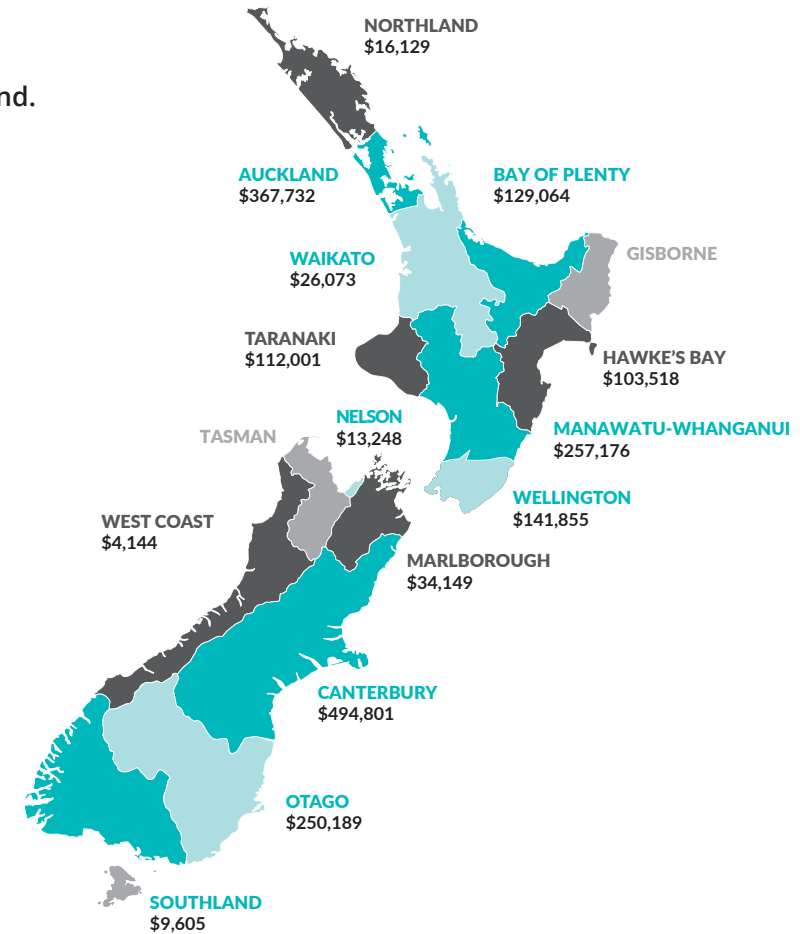
In 2017-2018 over \$267,000 was approved for 14 diverse projects across New Zealand.

APPLICANT NAME	PROJECT NAME/ DESCRIPTION	PROJECT TYPE	REGION	FUNDING APPROVED
Auckland bottle bank servicing	Servicing bottle banks	Servicing	Auckland	\$2,037.27
Visy	Public bottle bank	Infrastructure	Auckland	\$1,540.00
Pak n Save Queenstown	Bottlebank/Servicing/Freight	Infrastructure	Queenstown	\$4,441.19
5R Solutions Ltd	Glass conveyor belt	Infrastructure	Christchurch	\$27,078.00
CBEC / Sustainable North	Glass handling/sorting	Infrastructure	Auckland	\$9,570.00
Clean Events Ltd	Event recycling bin skins	Infrastructure/ Education	Auckland	\$6,500.00
Wanaka Wastebusters	Glass bunker extension	Infrastructure	Central Otago	\$9,720.00
Wanaka Wastebusters	Glass handling / storage system changes	Infrastructure	Central Otago	\$15,600.00
Greensky Waste	Improved storage capacity	Infrastructure	Hawke's Bay	\$17,950.00
Marlborough Wine Festival	Improved event recycling	Education	Marlborough	\$2,500.00
Tauranga City Council	Glass storage capacity	Infrastructure	Tauranga	\$31,219.00
Queenstown Lakes DC	Supply bottle banks	Infrastructure	Queenstown	\$10,215.00
Marlborough DC	Infrastructure to expand rural recycling	Infrastructure	Marlborough	\$10,000.00
Splore	Improved event recycling	Education	Auckland	\$4,950.00
Fulton Hogan	Alternate use - drainage	Alternative	National	\$34,310.00
Public Place Recycling Scheme	Scheme operation	Education	National	\$80,000.00
<b>TOTAL</b>				<b>\$267,631.14</b>

## GLASS PACKAGING FORUM INVESTMENT BY REGION 2006-2018

Total spend: \$2,052,241

Of this 4.7% was for national research, education and events.





L-R: Wanaka Wastebusters sorting; 5R Solutions conveyor



L-R: Whangaporoa solar bin lifter; Clean Events bins; Marlborough rural recycling bins



All applications were required to include a copy of the applicant organisation's Health and Safety Policy. Each successful applicant demonstrated a positive health and safety culture which was supported by good policy.  
*A full summary of projects funded is available in appendix three.*

## 6. FACTORS AFFECTING THE SCHEME

The previous reporting period was impacted by the Kaikoura earthquake which saw restrictions in the availability of freight as well as increased haulage costs. While the rebuilding of roading infrastructure has enabled greater freight choice, costs remain high and continue to place pressure on the financial viability of glass recovery from the South Island.

The GPF sees the following factors as having the ability to influence both the quality of glass and overall recycling rates.

- **Co-mingled collections** – when increased participation does not translate to increased quality
- **'Free riders'** – targeting the 15% of product released without levy payment to NZ Market
- **Geography challenges and freight costs** – how to attract glass to the furnace efficiently and economically.
- **Need for investment in plant and infrastructure** – improving how we store, transport and process glass
- **Council contracts** – negotiation of contracts does not always consider collection, processing and marketing of collected material

Part of the freight affordability equation is the reliance upon backloads; where a vehicle hauls a product into an area and transports glass outward. This option can be impacted regionally by the seasonal activity of each region, which may mean glass is stored for longer periods. For future mass balance data reporting it is recommended that a survey of the country's largest glass bunkers is undertaken prior to the start of July to determine collected material compared to reported material.

This pressure combined with New Zealand's challenging geography has led the GPF to invest time and funding with community recyclers, councils and industry, in recognised hot spots,

to improve freight efficiencies. This is in line with the two key areas of focus outlined in Section 2 – *Financial support to improve glass recycling outcomes* and *Building relationships*. The success of the regional glass hub at 5R Solutions in Christchurch has clearly demonstrated the value of investing in hubs to provide efficiencies.

The location of container glass consumption is not always directly linked to domiciled population. Much of this year's Flying Squad work and discussions has highlighted the need for GPF funding to be provided to areas where significant seasonal population fluctuations occur such as the West Coast and Coromandel Peninsula. Media coverage highlighted the challenge in these areas and future funding will allow improvements to be made.

Kerbside recycling is the primary collection system for container glass in New Zealand, however the collection methodology can vary greatly, impacting the quality and quantity of glass available for recycling. There is clear evidence that co-mingled collections actively reduce the total tonnage of glass available for recycling and this is an area the GPF will need to further influence in the future. With recycling being very much in the spotlight as a result of China's National Sword policy, the choice of 'co-mingled' versus 'kerbside sort' continues to be a challenge for councils as they juggle costs to ratepayers versus environmental benefit. To ensure councils understand the downstream impact of their decision on glass recycling, the GPF has provided submissions on a number of Council Waste Management and Minimisation Plans where

the future of glass collection may be at risk or the outcome could be improved.

One valuable result of building stronger relationships with all stakeholders is a better understanding of the flow of glass throughout the country and the challenges presented by collection, transport and recycling. As part of our flying squad activities we have spent considerable time actively listening to our stakeholders to hear about the issues they face around glass recycling. The Let's Talk approach - has ensured our investment is strategic and maximises the recovery and recycling of container glass. The GPF believes 'back to the furnace' is the best outcome for glass due to the reduced emissions and virgin material reductions provided by using cullet in production of new bottles and jars. The GPF will continue to work towards minimising the use of glass as an aggregate substitute or as alternative cover at landfill while a New Zealand onshore processing facility exists to provide a circular economy option.

The concept of New Zealand Container Deposit Legislation (CDL) has been gaining momentum through the Kiwi Bottle Drive campaign. A LGNZ remit also indicates clear local government support for CDL. The [Sapere Report](#) (2017) on the cost-benefit analysis of a deposit scheme also views CDL favourably. The GPF is open to further discussions on CDL but maintains the position that container glass should be excluded from any priority product declaration due to the existence of this pro-active voluntary product stewardship scheme, the existing glass collection network and a New Zealand-based recycling solution.




# 7. PROMOTION OF SCHEME

To raise the profile of container glass packaging and recycling, the GPF uses a variety of channels to promote and share the glass story. Included in these are the GPF website, social media, print publications, PR, direct communications, conferences and events.

## 7.1. MEDIA EVALUATION

**ADVERTISING:** A number of industry publications were targeted during the year including local government, hospitality, FMCG and waste management.



**HAVE YOU GOT A BOTTLENECK?**


**TALK TO US ABOUT HOW WE CAN WORK TOGETHER TO IMPROVE OUTCOMES FOR GLASS.**

Glass Packaging Forum aims to maximise end of life recovery of food and beverage containers

- Improving infrastructure
- Safeguarding the quality of cullet
- Closing the loop on 'glass into glass'
- Diverting glass from landfill

**LET'S MAKE IT WORK - TALK TO US TODAY**

Scheme Managers - 3R Group Ltd | dominic@glassforum.org.nz | 0800 267 674



**GLASS HAS A GREAT STORY TO TELL.**

IT'S BOTH **100% RECYCLABLE** AND **INFINITELY RECYCLABLE**, RIGHT HERE IN NEW ZEALAND. PLUS, IT'S A GREAT EXAMPLE OF THE **CIRCULAR ECONOMY IN ACTION**.

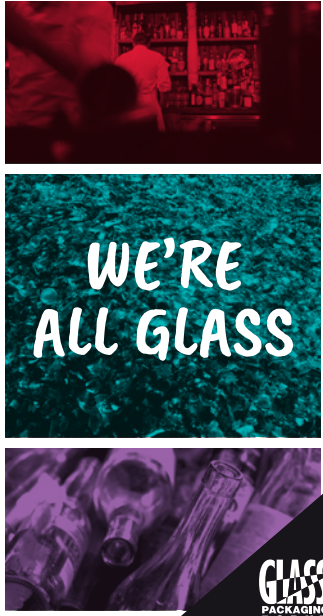
So, join the Glass Packaging Forum and let's keep glass out of landfill. The Glass Packaging Forum:

- ✓ **REMOVES BOTTLENECKS**
- ✓ **ENCOURAGES COLLABORATION**
- ✓ **SUPPORTS GLASS RECOVERY**
- ✓ **INVESTS IN INFRASTRUCTURE**


Play your part in a truly sustainable packaging story. Join the 100+ members who already support glass recovery in New Zealand.

www.glassforum.org.nz | 0800 267 674  
adele@glassforum.org.nz | dominic@glassforum.org.nz

The Glass Packaging Forum Product Stewardship Scheme is a voluntary stewardship programme accredited by the Ministry for the Environment. The Glass Packaging Forum is part of The Packaging Forum.



**WE'RE ALL GLASS**



PR: The GPF regularly distributes media releases both regionally and nationally – and the majority of which were carried in local, regional and industry publications.

## Council expands rural recycling services

By Bill McElhinney

Recycling is becoming more accessible for residents and visitors in the Marlborough Sounds and Awatere Valley.

A \$10,000 grant from the Glass Packaging Forum has enabled the Marlborough District Council to expand its rural community recycling programme to include Okwi Bay in the Marlborough Sounds, and the Awatere Valley, south of Blenheim.

A 20cubic metre container is being placed at each location, giving residents and visitors far easier access to recycling.

The programme already has containers in seven other rural sites around Marlborough, resulting in hundreds of tonnes of recyclable material, like glass, cardboard and plastic being diverted from landfill every year. During 2016/17 over 353 tonnes of recyclables were collected from the seven sites, of which glass made up over 203 tonnes.

Okwi Bay and the Awatere Valley were chosen as they are currently isolated from direct

recycling services, council solid waste manager Alec McNeil says.

"The travel time for residents and visitors from these areas to the Resource Centre in Blenheim can take between two and four hours roundtrip. The nearest transfer stations, in Seddon and Rai Valley, are only open for limited hours during the week – 12 hours total.

"These containers will provide not only a service to these areas but also a feeling of connectivity to the wider region," Alec says.

The Awatere Valley container is already in place and the container in Okwi Bay will be placed this week, Alec says.

While both areas have relatively low populations during the winter months – there are fewer than 100 winter residents in Okwi Bay and some 50 properties in the Awatere Valley – both experience a huge influx over summer.

In peak season the resident and visitor population in Okwi Bay is up to 1500, while the Awatere Valley Road is a popular alter-

native scenic route to Hanner Springs via the Moleysworth Station, with hundreds of cars per day in summer, Alec says.

The new container is next to the Awatere Valley Road, approximately 25km from the junction with State Highway 1, and the other will be in the Okwi Bay settlement on council land, Alec says.

He expects around 56 tonnes of recyclable material will be collected from them, of which glass will make up nearly 60 per cent.

## PITCHING IN

IT'S THURSDAY morning when we spot Ray (who would only give his first name) sorting bottles by colour into collection bins at Mount Maunganui Intermediate.

He lives nearby and takes turns with neighbours bringing glass for collection. "I don't mind it, but I hope there's enough people that are responsible enough to do it and not simply dump their bottles anywhere."

Already, reports and photos show glass en masse outside new community collection sites like this one and outside the glass recycling bins at the Bethlehem Town Centre, where bottles and boxes lined the ground last weekend.

Centre manager Andrew Wadsworth said the centre increased its number of bins from three to five and were emptying them daily. Papanoa Beach Four Square owner Ben Duffield said the first week of hosting glass recycling bins had been very busy and Waste Management was now making daily pickups.

Waste Management's decision to stop collecting co-mingled glass has kicked off a frenzy of complaints to Tauranga City Council.

It also has city leaders mulling a kerbside glass recycling service ahead of a more comprehensive, rationalised waste collection system for 2020/21.

Councillors Wednesday voted unanimously to seek community

The Waste Minimisation Act requires local authorities to promote effective and efficient waste management within their districts. Morris said Tauranga hasn't been doing its job the past 34 years. Rather than a co-ordinated waste removal system, Ray residents watch each week as truck convoys from a half-dozen companies rumble the same streets, one after the next, after the next.

"We've been at the mercy of private business decisions, and as a result our community is suffering, it's up to us to pick it up, literally."

Morris thinks the council can collect rubbish and recycle more items for considerably less money than what residents currently spend.

"It is a core service. It's what councils are supposed to do. It's what Parliament has said we are supposed to do. What we wouldn't do is with our sewage treatment plant, we are supposed to take solids anymore. Can you please take a chamber pot to a sewage treatment plant or one of your friendly neighbourhood centres?"

People would think – "nuts". And I know there would be other cities and towns around the country looking at us with equal amazement as to how we could be going backwards."

## WHY?

Waste Management explained its decision to stop collecting kerbside glass on its website.

Papanoa, Te Puka, Omokoroa and Bowenstown. Sorted glass from those sites will be collected and transported to an Auckland furnace and transformed back into glass.

The Glass Packaging Forum, a voluntary product stewardship scheme, estimates about 27 per cent of New Zealand's glass ends up rolling around or splintered into landfills – about 60,000 tonnes' worth.

GPF's Dominic Salmon said best practice for recycling is a 'glass out' system, where separate crates for glass are manually handled and separated at kerbside. It reduces labour and processing costs.

Salmon said more councils around the country are considering a 'glass out' system. He said health and safety concerns cited by Waste Management are manageable.

"It doesn't create a well-supported story for the community to accept. You're looking at glass, which is infinitely recyclable."

Also, Tauranga's proximity to the glass furnace in Auckland removes logistical barriers to recycling.

Waste Management officials didn't return calls before deadline for this story. But a regional manager at O.J. New Zealand's only glass bottle and jar manufacturer, defended the company's decision to stop collecting kerbside glass.

Penny Garland said people used to think communities could save a

Continued p11  
Continued from p10

# Hospitality's role

The hospitality industry is a 'significant consumer' of wine, beer and non-alcoholic beverages in glass bottles, according to the Glass Packaging Forum.

Its website states time-poor and often transient staff, combined with lack of space for recycling bins, means the hospitality sector generally has low recovery rates for glass.

The forum said it's working with Hospitality New Zealand and its 3000 members to change that.

Hospitality New Zealand regional manager Bay of Plenty Alon Sciascia said some businesses had been affected by Waste Management's decision not to collect kerbside glass, while others have not.

"If they don't already have a separate bin for their glass they've got two options: either get a separate bin... or they find space in their general rubbish."

Cornerstone duty manager John Watene said the pub used a different company for recycling than for its general rubbish.

"We've always separated our glass. It's standard procedure." Watene said three 100-litre bins are collected twice a week: two for glass, one for cardboard.

Rain Bar general manager Sarah Sopp said her operation does not recycle glass.

"We haven't been affected in a business sense. It just goes into the regular rubbish. Of course, I'd like to recycle at work, but it's not always practical."

and once you layer that cost into the process it becomes cost-prohibitive."

Croucher Basecamp (formerly Brew) co-owner Nigel Gregory said the business uses Waste Management's recycling bins, which are cleared weekly.

He said Basecamp fills around half a wheeled bin per week with glass. They've replaced bottles and cans with concentrated bags of soda, which run through taps. "It saves a huge amount of recycling."

**WE HAVEN'T BEEN AFFECTED IN A BUSINESS SENSE. IT JUST GOES INTO THE REGULAR RUBBISH . . .**

— SARAH SOPP

## Road to redemption for rural recyclers

PAULA HULBERT

Clocking up the kilometres in a bid to recycle rubbish will soon be a thing of the past for some rural residents.

Recycling efforts in Marlborough have been given a \$10,000 funding boost.

A \$10,000 grant from the Glass Packaging Forum means Marlborough District Council can expand its recycling service to serve more rural communities.

Council staff have extended the issue to their Rural Community Recycling programme now includes Okwi Bay in the Marlborough Sounds, as well as the Awatere Valley, south of Blenheim.

A giant 20m cubed container at each site will help residents and visitors to get rid of their recycling without having to travel too far.

Council's Solid Waste Manager Alec McNeil says Okwi Bay and the Awatere Valley were chosen as they are currently "isolated from direct recycling services".

"The travel time for residents and visitors from these areas to the Resource Centre in Blenheim

can take between two and four hours [for a] round trip.

"The nearest transfer stations (in Seddon and Rai Valley) are only open for limited hours during the week, 12 hours in total.

"Installation of these containers would provide not only a service to these areas but also a feeling of connectivity to the wider region," he says.

The programme already has containers in seven other rural sites around Marlborough.

During 2016/17 over 353 tonnes of recyclables were collected from the seven sites, 203 tonnes of glass. The Awatere Valley container was put in place on

Monday while the container in Okwi Bay is set to be put in place next week.

The new containers will be placed next to the Awatere Valley Road, approximately 25km from the SH1 junction, and the other within council land in Okwi Bay. McNeil says he expects around 56 tonnes of recyclable material will be collected from the new sites. For more on the Glass Packaging Forum visit

www.glassforum.org.nz

## Queenstown's glass landfilled until July 2019

GLASS from Queenstown homes will continue going to landfill for the next 16 months at least.

Mountain Scene revealed back in May 2016 that resort glass – even glass diligently placed in blue recycling bins – was being dumped at Victoria Flats landfill in Gibbston.

Now Queenstown Lakes District Council infrastructure boss Peter Hansby, two years on, says little can be done until new contracts commence with waste firms in July 2019.

Some 2500 tonnes of glass from Queenstown is landfilled each year, although that figure includes commercial waste from businesses collected privately.

A draft waste minimisation and management plan (WMMP) for the next six years is due to go before the council at its next full meeting on March 23.

It will then go out to public consultation.

Hansby says: "People in the Wakatipu have made it very clear that they expect to be able to fully recycle glass, and this is something we are working towards with the WMMP as a starting point.

"... it is most certainly on the

cards and is a priority for council."

The preferred option is an increased focus on recycling and a focus on organics. Council has trialled a huge 'vermicomposting' worm farm at Gibbston over the past year.

The issue so far with glass is that colours are mixed together in the blue bins and also mixed with other recyclables.

"This glass is separated out at the Wakatipu Recycling Centre, but as it is contaminated by other recyclables and not colour-sorted, it is of low value and unable to be sold."

Mixed recycling is collected by

All Waste Queenstown. Smart Environmental runs the Wakatipu Recycling Centre. Council contracts cover

residential waste and public bins. Some were due to end last year but were extended to create one end-date for all, allowing council

to thrash out a better overall system.

Glass is an inert material, so has been used as a 'face stabiliser' at the landfill.

Before March 2016, it was being crushed and used as

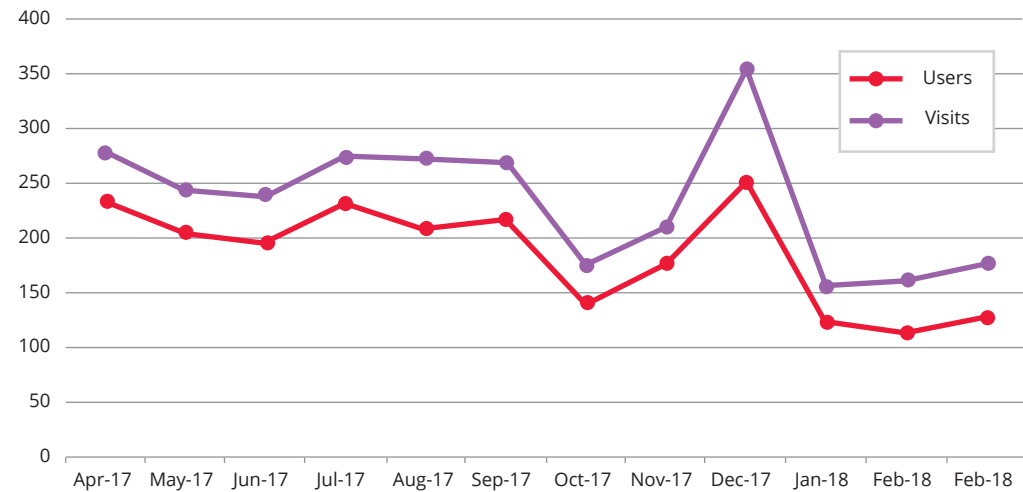
**DIRECT COMMUNICATIONS:** Targeted quarterly e-newsletters were sent to stakeholders including council representatives, GPF members, brand owners, waste management contractors and community recyclers during the reporting period. Campaign statistics report regular high engagement with just under 50% of recipients engaging with the communications.

**WEBSITE:** A new website was launched in December 2017. The new site better promotes and educates the GPF’s purpose and supports an online funding application process. Analytics reported steady visitor traffic throughout the period with a peak in December due to the new site’s launch.

**SOCIAL MEDIA:** The GPF Facebook page was launched in March 2018 with the objective to educate the general public and communicate the glass story to a wider audience.

**CONFERENCES/EVENTS:** The GPF was represented at two large conferences during the year – Hospitality NZ and WasteMINZ. Attendance allowed the GPF exposure to, and engagement with, a wide range of stakeholders across the glass use, collection and recycling sphere.

*GPF Website Traffic April 2017-March 2018*

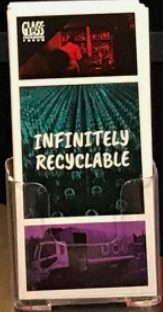


## 8. FINANCIALS

A summary of the Scheme’s financial income is provided separately.

# INFINITELY RECYCLABLE

Class 100 Recyclable



# LET'S TALK!

# 9. LOOKING FORWARD

In 2018-2019 the GPF's focus will remain firmly on growing both the quantity and quality of container glass available for recycling.

Unlike many other packaging items collected via kerbside, New Zealand has strong recycling and recovery options for glass bottles and jars. There are challenges to reaching our 82% recovery rate by 2024, but the GPF Steering Committee, scheme manager 3R Group and GPF members are firmly committed to resolving them and achieving our target.

**After a year as scheme manager and many "Let's Talk" conversations, it is noted:**

- That a significant percentage of container glass is currently not captured
- Glass use in roading and aggregate is declining
- There is room to improve data on post-consumer glass
- The GPF needs to tell its story and address inaccurate information surrounding container glass recycling
- Glass collection methods vary across every city, district and region
- Co-mingled kerbside recycling, when compared to other collection methodologies, impacts the recycling rate by creating a higher percentage of material loss
- Sensible investment in infrastructure is key to ensuring the cost effective glass capture from around New Zealand
- We need to engage with membership organisations such as Hospitality NZ to increase glass recycling
- We need to increase our membership to capture the 15% of glass to market that does not participate in the scheme - increased membership means increased levy take and greater level of contestable funding to address some of the issues outlined above

These issues will inform decisions on how to best maximise efforts and investment to improve recycling rates.

Since commencing our role as GPF scheme manager we are now confident the profile of glass recycling in New Zealand has never been as high and we will continue to ensure we invest in the marketing of glass as the ideal recyclable commodity – right here in New Zealand.

The impact of co-mingled recycling on tonnage of glass available for recycling is significant. Total tonnage of lost material is likely to be greater than the wins offered by the CDL debate. The GPF recommends further work is undertaken to better quantify glass flow. This work will be used to better inform future mass balance reports. An additional outcome may also be increased glass to furnace instead of recovered uses.

Bottles and jars are a great example of the developing circular economy at work right here in New Zealand. Not only is container glass 100% recyclable, it can be recycled over and over without loss of purity.

New Zealand is fortunate to have a world-leading producer of glass bottles and jars, O-I New Zealand, which is committed to using significant percentages of cullet in its production, with the dual benefits of reducing emissions and the use of virgin materials.

A number of councils have signalled their desire to move to a glass only wheelie bin as a way of increasing glass recovery rates and providing a cost effective service. This is a move that would remove a number of issues around collection and storage but which currently presents a challenge achieving furnace acceptable glass.

Quality cullet is critical to maximising the recycling rate and the GPF will continue working with councils and contractors on prioritising separation at source. This approach also preserves the quality of other recyclables in the stream.

Accurate and reliable data will also be a cornerstone of our work to ensure transparency and targeted strategies to achieve our 82% glass capture rates by 2024.

In becoming a voluntary member of the GPF, brand owners have committed to work towards SDG12: Responsible Consumption and Production. In the coming financial year, the GPF will encourage its members and stakeholders to more broadly adopt the United Nations Sustainable Development Goals SDGs1-17.

# APPENDIX 1: FUNDING CRITERIA/METHODOLOGY

During this period, the GPF completed a review of the funding process for grants. Starting in May 2018, the new format will mean there are three funding rounds each year.

This revised format provides improved structure around the process, comparative analysis of project outcomes and efficiencies in the resource required when compared with the previous format which allowed applications to be submitted ad hoc throughout year.

**Each funding application is:**

1. Considered and scored against GPF key criteria;
2. Scored by three assessors and a summary report completed;
- 3 Submitted to the GPF Steering Committee (GPFSC) for consideration;
4. Accepted or declined by the GPFSC; and
5. Asked to provide results and photos for accountability, PR and educational purposes.

## APPENDIX 2: GRANTS APPROVED

APPLICANT NAME	PROJECT NAME/ DESCRIPTION	PROJECT TYPE	APPLICANT TYPE	REGION	FUNDING APPROVED (EXCL GST)	% OF PROJECT FUNDED	PER CAPITA COST	GRANT CONTRIBUTION PER TONNE (FIRST YEAR)	EXTRA/TOTAL TONNAGE (FIRST YEAR)
Auckland bottle bank servicing	Servicing bottle banks		Commercial	Auckland	2,037.27				
Visy	Public bottle bank	Infrastructure	Commercial	Auckland	1,540.00	100%			
Pak n Save Queenstown	Bottlebank/Servicing/Freight	Infrastructure	Commercial	Queenstown	4,441.19	83%	0.15	355	12.5
5R Solutions Ltd	Glass conveyor belt	Infrastructure	Commercial	Christchurch	27,078.00	100%		1.59	17,000
CBEC/Sustainable North	Glass handling/sorting	Infrastructure	Community	Auckland	9,570.00	87%	0.47	141	78
Clean Events Ltd	Event recycling bin skins	Infrastructure / Education	Commercial	Auckland	6,500.00	68%	0.02	130	50
Wanaka Wastebusters	Glass bunker extension	Infrastructure	Community	Central Otago	9,720.00	100%	0.53	32	600
Wanaka Wastebusters	Glass handling/storage system changes	Infrastructure	Community	Central Otago	15,600.00	100%		52	300
Greensky Waste	Improved storage capacity	Infrastructure	Commercial	Hawke's Bay	17,950.00	100%	0.13	3.88	4,368
Marlborough Wine Festival	Improved event recycling	Education	Commercial	Marlborough	2,500.00	29%	0.31	312.5	8
Tauranga City Council	Glass storage capacity	Infrastructure	Council	Tauranga	31,219.00	37%	0.22	12.50	2,500
Queenstown Lakes DC	Supply bottle banks	Infrastructure	Council	Queenstown	10,215.00	100%	0.63	130	78
Marlborough DC	Infrastructure to expand rural recycling	Infrastructure	Council	Marlborough	10,000.00	24%	0.21	330	40
Splore	Improved event recycling	Education	Commercial	Auckland	4,950.00	9%	0.61	990	5
Fulton Hogan			Commercial	National	34,310.00			30	
Public Place Recycling Scheme				National	80,000.00				
<b>TOTAL / AVERAGES</b>					<b>\$267,631.14</b>			<b>7.43</b>	<b>25,040</b>



**GLASS**  
**PACKAGING**  
**FORUM**

