



DISCUSSION PAPER

Proposal to expand the scope of eligible containers in Queensland's Container Refund Scheme—Containers for Change

DECEMBER 2022



Queensland
Government

Prepared by: The Office of Circular Economy, Department of Environment and Science

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Introduction

Containers for Change, Queensland's container refund scheme (scheme), started on 1 November 2018.

In the four years since, the scheme has delivered improved environmental, economic and social outcomes across the state.

More than 5.6 billion containers have been returned through 359 container refund points and more than \$554 million has been refunded to individuals, with a further \$9.4 million refunded to charities, community groups and schools. In addition, the recycling rate for beverage containers has increased by 45 per cent while the litter rate has reduced by an of 48 per cent.

The scheme has created long-lasting business and employment opportunities for Container Exchange—the not-for-profit company appointed to run the scheme, container refund point operators and logistics and processing service providers.

It has also supported community organisations, schools and charities to do more and has brought communities together, with local businesses working hand-in-hand with residents and community organisations to donate their time and containers.

The proposal to expand the containers that are eligible for a refund under the scheme will help to protect Queensland's unique environment, support economic and job opportunities and build community spirit.

Invitation to comment

This consultation paper is intended to gauge public sentiment on steps that can be taken to build on the success of the last four years of Queensland's container refund scheme, Containers for Change.

The focus of this discussion paper is on the proposal to expand the scope of containers that are eligible for a refund under the scheme. Specifically, to **include**:

1. glass containers that have contained wine and pure spirits
2. flavoured milk and pure vegetable or fruit juice (at least 90% juice) between 1 litre and 3 litres
3. water and wine in aseptic packs (liquid paperboard packs) between 1 litre and 3 litres.

Consultation closes on 5pm (AEST) Monday 20 February 2023.

Feedback can be provided via the survey on [In the Loop](#) or in writing to CRSreview@des.qld.gov.au.

Feedback

1. Do you support more containers being accepted for a refund as part of Queensland's container refund scheme, Containers for Change?
2. Do you support glass wine bottles between 150ml and 3 litres being eligible for a refund?
3. Do you support glass pure spirit bottles between 150ml and 3 litres being eligible for a refund?
4. The current size limit for flavoured milk, pure vegetable and fruit juice, and water and wine aseptic packs is 1 litre. Do you think the size limit of these containers should be increased to 3 litres?

How Queensland's container refund scheme works

Four-year scheme performance summary

- 6.91 billion containers in total
 - 5.64 billion containers returned through container refund points
 - 1.27 billion containers collected by kerbside recycling services and taken to Material Recovery Facilities
- 359 container refund points operating across Queensland
- 63 per cent container recovery rate
- more than 800 jobs created
- \$554 million in refunds returned to individuals
- \$9.4 million to charities, community groups and schools
- \$127 million provided to Material Recovery Facility (MRF) operators to be shared with local governments
- 48 per cent decrease in beverage container litter

Each year, around three billion eligible beverage products are sold and consumed in Queensland.

Prior to 2018, only around 18 per cent of these beverage containers were recycled. Now, around 63 percent are recycled and during peak return periods this rate has increased to 82 percent.

Queensland's container refund scheme is a mandatory state-based product stewardship scheme, legislated through the *Waste Reduction and Recycling Act 2011*. It is designed to achieve five main objectives:

- increase the recovery and recycling of empty beverage containers
- reduce the number of empty beverage containers that are littered or disposed of to landfill
- ensure the manufacturers of beverage products meet their product stewardship responsibility in relation to beverage products
- provide opportunities for social enterprise, and benefits for community organisations, by:
 - making funds available through the payment of refund amounts for empty beverage containers
 - creating opportunities for employment in activities related to collecting, sorting and processing containers for recycling
- complement existing collection and recycling activities for recyclable waste.

The legislation establishes the framework for governance, administration and operation of the scheme, including the obligations, requirements and functions of scheme participants and the Product Responsibility Organisation (PRO). The legislation states that the PRO must be a not-for-profit company, ensuring that funds are reinvested back into the scheme. Container Exchange is the not-for-profit company appointed to run the scheme in Queensland.

The Waste Reduction and Recycling Regulation 2011 establishes the performance targets for the scheme, including the minimum number of container refund points to be established and the container recovery rate to be achieved and maintained.

The scheme, Containers for Change, started on 1 November 2018.

Containers for Change is unique among other Australian schemes in that it gives people a variety of choices about how they return their containers and receive the refund. The container refund point network is a diverse mix of large full-service depots, smaller manual count depots, bag drops, Reverse Vending Machine depots and kiosks, and mobile and pop-up services.

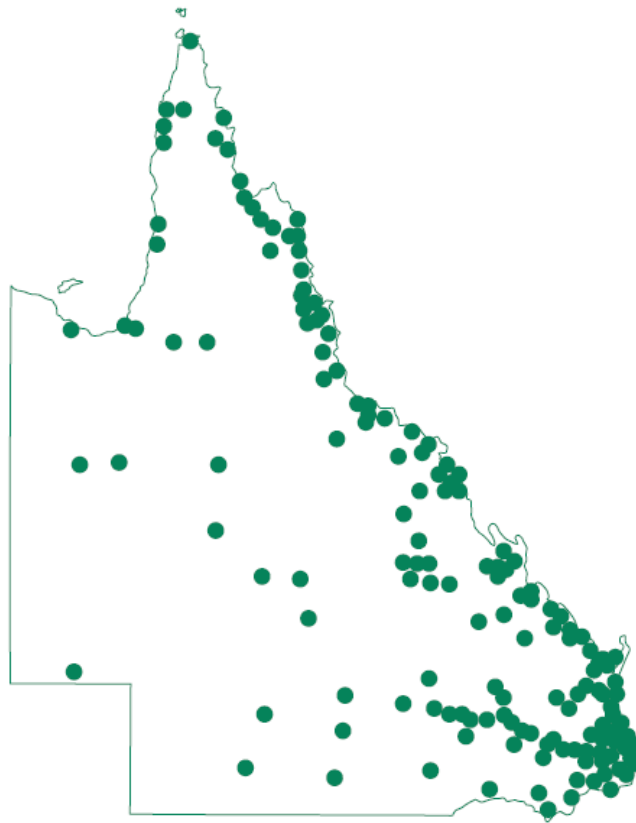


Figure 1 – Container refund point locations across Queensland
(source Container Exchange Annual Report 2021–2022)

The introduction of a scheme ID, the first of its kind for an Australian scheme, means that people can receive the refund directly into their bank account or direct the refund payment to any charity, community organisation, school, or individual with a Scheme ID. So far almost 80,000 Queenslanders (individuals, charities, community groups and schools) have signed up for a Scheme ID.

A key consideration for the Queensland Government in introducing the scheme was accessibility to allow people the best opportunity to return their containers for a refund. The legislation requires a minimum of 307 container refund points across Queensland—there are currently 359 operating sites.

Types of container return points

- Depot: 150
- Reverse Vending Machine (RVM) kiosk: 19
- Bag Drop: 121
- Mobile: 69

Material Recovery Facility (MRF) operators and local governments receive a financial benefit from the eligible containers that remain in the kerbside recycling bins. A MRF operator that has entered into a Material Recovery Agreement with Container Exchange will receive the 10-cent refund amount, based on audits of eligible containers received at the MRF. This refund amount must be shared with the local government whose material is received by the MRF. The default share arrangement is 50:50, however, MRF operators and local governments can come to their own agreements about a share arrangement.

All beverage manufacturers who manufacture and sell or distribute eligible beverage products into Queensland are required by the legislation to enter into a Container Recovery Agreement with the Product Responsibility Organisation (Container Exchange), which obligates manufacturers to contribute to the costs of the scheme.

Eligible containers are those that:

- have contained an *included liquid*
- are approved in Queensland
- carry the refund mark that provides information about the refund and where the container can be returned for a refund
- carry a barcode.

A beverage manufacturer's costs are determined by the reported number of eligible containers that are sold into Queensland each month.

Legislation also establishes containers that are excluded for the purposes of the scheme. Definitions for 'beverage' and 'container' are provided in legislation.

The scheme is funded by a price per container applied to all eligible containers. The current Queensland scheme price, by material is provided in Table 1.

Table 1 Current Container Refund Scheme price

Material	Scheme price (cents)
Glass	13.9
PET (polyethylene terephthalate/polyester)	13.5
HDPE Plastic (High Density Polyethylene)	13.5
Liquid paperboard	13.9
Aluminium	12.8
Weighted average	13.3

The scheme price includes the:

- 10-cent refund
- handling fee paid to container refund point operators
- logistics (transport) service fees paid to transporters taking containers from container refund points to processing service providers
- processing service providers who prepare the containers for sale
- administrative and marketing costs to run the scheme.

The cost is offset by the sale of the containers on the auction portal, a proportion of which is re-invested back into the scheme.

Collection varies by material type, with aluminium contributing the largest volume. Collection rates—measured against the sale of eligible beverage products in that material type also vary considerably.

Table 2 Collections by material type (2021–2022)

Material type	Volume (millions)	Collection rate
Aluminium	886.9	65.8%
Glass	505.0	78.9%
PET (polyethylene terephthalate/polyester)	412.9	53.8%
HDPE Plastic (High Density Polyethylene)	39.6	45.8%
Liquid Paperboard	31.6	23.2%
Steel	0.7	26.8%
Other	0.9	49.7%
Total	1,877.6	62.9%

The legislation requires that all containers on which a refund has been paid are to be recycled. Since the scheme started, over 338,000 tonnes of material have been recycled. One of the benefits of returns through container refund points is that the material is separated into single material streams, which provides a cleaner and easier to manage product for recyclers. More beverage manufacturers are starting to adopt circular economy strategies, including bottle-to-bottle which makes the demand for materials such as glass and PET plastic quite high.

Table 3 Tonnes of scheme material recycled (2021–2022)

Material	Tonnes
Aluminium	10,893
Glass	81,218
PET - clear (polyethylene terephthalate/polyester)	9,209
HDPE Plastic (High Density Polyethylene)	905
Liquid paperboard	620
PET - coloured (polyethylene terephthalate/ polyester)	555
Steel	27
Total	103,427

In the 2021–22 financial year, the revenue from the sale of scheme material was \$33.2 million. Ninety per cent of scheme material has been purchased by onshore recyclers since the scheme began.

While all manufacturers selling eligible containers and product into Queensland must enter into a Container Recovery Agreement with Container Exchange, the legislation also recognises the administrative burden this could mean for small business operators.

Therefore, the legislation provides that a Container Recovery Agreement between Container Exchange and a small beverage manufacturer (defined as a manufacturer manufacturing less than 300,000 eligible containers) only requires that manufacturer to report and make a scheme contribution quarterly rather than monthly.

In the 2021–22 financial year, 713 beverage manufacturers had entered into Container Recovery Agreements with Container Exchange.

Environmental, economic and social impacts of the scheme

In addition to reducing beverage container litter and increasing the volume of beverage containers that are recycled, the scheme has contributed significant social value to Queensland through the creation of more than 800 jobs. These have provided employment opportunities for the long-term unemployed and workers with disability.

In 2018, the Queensland Government provided grants of up to \$10,000 to 120 not-for-profit organisations including schools, community groups and charities to purchase container donation equipment such as bins, cages, trailers, sheds and signage.

Proceeds from the refunds from donated containers have so far supported:

1. the purchase of new sporting equipment
2. setting up recycling hubs at schools
3. funding school excursions and attendance at competitions and events
4. paying for ongoing operating costs to enable the continuation of vital services to the community
5. upgrading community infrastructure
6. offering support to returned forces servicemen and women and their families
7. the provision of outreach services for the elderly, families in need and palliative care.

Table 4 Grants distribution

Location	Benefit amount
Far North Queensland	\$52,000
North Queensland	\$70,430
North West Queensland	\$19,000

Mackay/Whitsunday	\$44,880
Central Queensland	\$32,380
Wide Bay Burnett	\$45,250
South West Queensland	\$118,480
South East Queensland	\$389,860
PCYC centres around the State	\$370,000

In 2021–2022, Container Exchange partnered with an independent social impact consultancy to conduct a detailed impact assessment of the scheme.

The evaluation identified:

- environmental outcomes including a reduction of:
 - 151,272 tonnes of carbon dioxide equivalent emissions
 - 66,094 tonnes of waste disposed to landfill
 - 1,369,158 kilolitres of water usage
- social outcomes including the increased:
 - ability for people to meet basic needs
 - sense of fulfilment from helping charities and the environment
 - employment of First Nations peoples
- economic outcomes including:
 - additional jobs
 - skills development.

Overall, the analysis identified the creation of \$281 million in value in the 2021–22 financial year:

- \$175 million in economic value
- \$62 million in social value
- \$44 million of environmental value.

When compared to the \$383 million that was invested into the scheme in the same period, an overall social return of investment score of 0.73 was achieved. For every dollar invested in the scheme, 73 cents of social, economic and environmental value was created.

From the Queensland’s Government’s perspective, Containers for Change has delivered improved environmental, economic and social outcomes across the state.

The scheme has created long-lasting change for the hundreds of people employed by Container Exchange, container refund point operators and logistics and processing service providers. It has also helped to clean up our unique environment and supported local community organisations, schools and charities.

The annual Change Maker Awards showcase the unsung heroes of the scheme. Those who help to raise money for life-changing hearing surgery for a child, support animal welfare volunteers on Thursday Island to improve the health of local animals and in turn, residents of the community, keep the lights on at a local Meals on Wheels so they can continue to provide meals to the elderly, and raise money to buy a bus for children who live in remote Queensland so they can enjoy excursions.

The scheme also helps bring communities together, with local businesses working hand-in-hand with residents to donate time and containers.

Case study

Thursday Island Animal Support Group

Containers for Change is having a monumental impact on a remote Queensland community in more ways than one, with a little help from its committed volunteers.

A group of animal-loving residents started the Thursday Island Animal Support Group (TIASG) in March 2021 to improve the health outcomes of local animals and, in turn, its residents.

With no permanent vet service, TIASG works with a clinic in Cairns to provide medical treatment and supplies to dogs, cats and other animals on the island. They also educate pet owners about the importance of desexing, worming and other preventative care.

With no other recycling on the island, TIASG's involvement in the scheme is helping to remove container waste from the environment as well as raising valuable funds. In just 15 months, the organisation has raised more than \$11,000 and diverted more than 110,000 containers from landfill.

TIASG volunteers collect containers from local businesses and have placed bins at several locations on the island, which has a population of just 3,500 people.

Their fundraising efforts have also led to the establishment of a quarterly desexing clinic to reduce the number of street dogs and associated diseases that can impact on the health of residents.

TIASG volunteers have helped to introduce the scheme to a remote part of Queensland, with Thursday Island schools also taking part and helping to make their home cleaner and greener.

Source of information – Container Exchange Annual Report 2021–2022

More information is available:

Container exchange website: [About us | Our Organisation | COEX - Container Exchange](#)

Annual report: [Annual Report 2022 | COEX - Container Exchange](#)

The proposal to expand the container refund scheme

The containers that are currently eligible for a refund are consistent with those included in schemes in other states and territories. When these schemes were introduced, the focus was typically on containers that were found in the litter stream.

However, with the objectives of Queensland's scheme being to reduce litter and increase recycling, an opportunity is presented to expand the scope of eligible containers to include other beverage products.

Container refund scheme inclusions and exclusions

The scheme currently includes all beverage containers between 150ml and 3 litres, with the exception of excluded containers.

Excluded containers

1. Containers that have contained:
 - plain milk (animal and plant-based)
 - cordial and concentrated fruit or vegetable juice intended to be diluted before consumption
 - a health tonic
 - a syrup.
2. Containers made:
 - to contain less than 150ml or more than 3 litres; or 1 litre or more of flavoured milk or a beverage that is at least 90 per cent fruit or vegetable juice
 - of glass that has contained wine or pure spirits
 - of cardboard and either plastic or foil (or both) containing 1 litre or more of wine, a wine-based beverage or water
 - of plastic or foil containing 250ml or more of wine.

Proposed expansion

Containers for Change has been operating for four years and continues to grow. The time is right for a review of the scheme, including expanding the scope of containers.

It is proposed to expand the scope of containers that are eligible for a refund under the scheme to include:

- wine in glass bottles
- pure spirits in glass bottles
- wine in aseptic packs between 1 litre and 3 litres
- water in aseptic packs between 1 litre and 3 litres
- flavoured milk containers between 1 litre and 3 litres
- pure juice containers between 1 litre and 3 litres.

The proposed expansion does not extend to the removal of the exclusion for cordials and concentrates, registered health tonics and syrups. These items are not considered to be a beverage for the purposes of the scheme as they need to be mixed with another beverage prior to consumption. This also applies to multivitamin, electrolyte and energy boosting supplements.

The continued exclusion for registered health tonics is consistent with the proposal that has been consulted on in South Australia and New South Wales.

Table 5 Proposed changes summary

Current inclusions	Current exclusions	Proposed inclusions	Proposed exclusions
Pure fruit or vegetable juice: all containers between 150ml and 1 litre	Pure fruit or vegetable juice containers greater than 1 litre and less than 3 litres	Pure fruit or vegetable juice containers between 1 litre and 3 litres	All containers greater than 3 litres
Flavoured milk: all containers between	Flavoured milk containers greater than 1 litre and less than 3	Flavoured milk containers between 1	All containers less than 150ml

150ml and 1 litre	litres	litre and 3 litres	
Soft drinks (carbonated and non-carbonated): all containers between 150ml and 3 litres	Cordials and concentrates	Wine: - glass bottles - aseptic packs between 1 litre and 3 litres	Cordials and concentrates
Water: - Aseptic packs/casks made from cardboard, plastic or foil between 150ml and 1 litre - All other container materials between 150ml and 3 litres	Registered health tonic	Water: aseptic packs between 1 litre and 3 litres	Registered health tonic
Alcoholic beverages (excluding wine and pure spirits): all containers between 150ml and 3 litres	Syrup		Syrup
Pure spirits: all containers (excluding glass) between 150ml and 3 litres		Pure spirits: glass containers between 150ml and 3 litres	
Wine and wine-based flavoured beverages: - Aluminium cans and aseptic packs/casks between 150ml and 1 litre - Plastic containers and plastic or foil sachets between 150ml and 250ml - Glass between 150ml and 3 litres			

While the Queensland Government is yet to decide on the proposed expansion, a key benefit of including additional containers is reduced consumer confusion over which beverages and container types are eligible for a refund.

Expansion of the scheme to include flavoured milk and pure juice containers up to 3 litres will bring consistency to the upper volume limit for all containers.

Currently a significant percentage—up to 30 per cent in some areas—of glass and plastic containers still end up in the kerbside general waste bin. An expanded scheme will make more containers available for recycling as the 10-cent refund provides a disincentive to place these containers in the waste bin.

In areas where no waste or recycling service is provided, expansion of the eligible containers will provide a greater ability for people to participate in recycling and to earn money for themselves or a charity, school or community group at the same time.

Transitioning to the proposed changes

Any proposed expansion of the scheme will require a period of adjustment for consumers, retailers, beverage manufacturers, container refund point operators and other participants in the scheme.

Before changes can be implemented, issues around system changes, logistics capacity, collection and processing capacity to handle the additional containers need to be considered. In addition, new beverage manufacturers need to be given sufficient time to enter into a Container Recovery Agreement as do new and existing manufacturers to change labelling on the additional containers in order to comply with the requirements of the legislation. New containers also need to be registered and approved to enable the 10-cent refund to be paid.

While some wine and spirit manufacturers are already participating in the scheme, the largest proportion of wine and pure spirits is typically packaged in glass bottles. Queensland's wine and spirit industries contribute benefits to the economy, including tourism and employment opportunities and have grown significantly over recent years. Therefore considerable consultation will be undertaken with these sectors, to enable the identification and consideration of potential impacts, particularly on small businesses.

A significant benefit that can be identified is the removal of glass from the co-mingled kerbside recycling bin. Broken glass can contaminate other recyclables such as paper and plastic and be contaminated by 'glass-like' materials that are inadvertently placed in the kerbside bin, such as ceramics, heat-resistant glass cookware, stones and other materials. Separating more glass from the co-mingled recycling bin provides an opportunity for a cleaner stream to go back into bottle manufacturing.

In addition to this discussion paper, the Queensland Government is also undertaking targeted industry consultation and preparing a cost-benefit analysis on the proposed inclusions to ensure future decisions are fully informed.