



Government of **Western Australia**
Department of **Water and Environmental Regulation**

Container deposit scheme - Expanding the scope of eligible beverage containers

Discussion paper

Department of Water and Environmental Regulation

December 2022

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1. Introduction

The Western Australian container deposit scheme (CDS), Containers for Change, started on 1 October 2020. It delivered a commitment of the McGowan Government to increase recycling, reduce litter, provide benefits for community groups and charities, and create employment opportunities for people living with disability, Aboriginal people and long-term unemployed people.

The CDS was designed to align with the schemes in other states and territories so the same types of containers can be returned everywhere. This helps to avoid consumer confusion and also prevents containers being illegally transported from one state to another.

By the end of July 2022 more than 1.54 billion containers had been recovered for recycling and more than \$5 million had been donated to the 4,965 community groups and charities registered for a scheme ID. Containers for Change is also changing how many communities fundraise and providing new opportunities to spread the message about recycling.

Continuing the Western Australian emphasis on delivering social benefits from Containers for Change, more than 820 jobs have been created with upwards of 32 per cent of these going to people with disabilities, Aboriginal people and the long-term unemployed.

Schemes are established in each state. The South Australian CDS started in 1977 and has provided the broad template for eligible containers across all Australian jurisdictions with CDSs. The Northern Territory started its scheme in 2012, while New South Wales started in 2017. Queensland and the Australian Capital Territory followed in 2018. Tasmania and Victoria have both announced their schemes will start in 2023.

2. Purpose of this discussion paper

In April 2021, Environment Ministers agreed to the harmonisation of beverage containers covered by CDSs across jurisdictions to ensure consistent recycling collection strategies. In October 2021, Heads of Environment Protection Agencies (HEPA) supported jurisdictions consulting relevant stakeholders on an expanded scope of eligible containers for their CDSs.

The proposed expanded scope of eligible containers includes:

- all beverage containers between 150 millilitres (ml) and 3 litres, other than plain milk and registered health tonics.

The proposed expanded scope would change the Western Australian CDS by including:

- grape wine and spirits in glass bottles up to 3 litres
- grape wine in plastic containers 250 ml–3 litres
- grape wine in sachets 250 ml–3 litres
- grape wine in casks 1–3 litres
- water in casks 1–3 litres
- all fruit and vegetable juice, flavoured milk and cordial containers up to 3 litres.

Consultation in South Australian showed strong support for the proposal to increase the scope of containers to be included in its CDS.

The purpose of this paper is to seek community and stakeholder feedback about this proposal. The feedback will inform the Government of Western Australia's position.

3. Consultation

3.1 About stakeholder consultation

The Department of Water and Environmental Regulation (the department) is seeking feedback on the proposal to extend the scope of the CDS and will analyse submissions and make recommendations to the Minister for Environment.

Stakeholder consultation promotes transparency, improves design and ensures risks are identified early and managed. It also allows innovative ideas to be put forward for consideration.

There are two ways to provide your feedback: via an anonymous online survey and/or a detailed written submission to the department.

By making a written submission you are consenting to the submission being treated as a public document. Your name will be published; however, your contact address will be withheld for privacy. If you do not consent to your submission being treated as a public document, you should either mark it as confidential, or specifically identify the parts that you consider confidential, and include an explanation.

The department may request that a non-confidential summary of the material is also given. It is important to note that, even if your submission is treated as confidential by the department, it may still be disclosed in accordance with the requirements of the *Freedom of Information Act 1992*, or any other applicable written law.

The department reserves the right before publishing a submission to delete any content that could be regarded as racially vilifying, derogatory or defamatory to an individual or an organisation.

3.2 How to make a submission

The online survey may be accessed at www.dwer.wa.gov.au/cds

Written submissions must be received by 5pm (WST) on 1 May 2023. No late submissions will be considered.

Written submissions can be lodged by email (preferred) to [cgs@dwer.wa.gov.au](mailto:cds@dwer.wa.gov.au) or hard copies can be mailed to:

Manager
Container Deposit Scheme
Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC
JOONDALUP WA 6919

For more information, email cgs@dwer.wa.gov.au.

4. Container deposit scheme - current status

4.1 Introduction

There is increasing international recognition that society needs to move away from a linear model of value creation that begins with resource extraction and ends with waste disposal. This ‘take, make, use and dispose’ economic model is energy intensive and results in significant environmental impacts through pollution, destruction of habitat, litter and loss of biodiversity.

There is a global move towards a circular economy in which materials are reused and recycled, obtaining maximum value for resources and drastically reducing environmental impacts associated with resource extraction and waste disposal.

The [Waste Avoidance and Resource Recovery Strategy 2030](#) (waste strategy) is Western Australia’s strategy to move our state towards becoming a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste.

Promoting the recovery of more value and resources from waste is one of the eight headline actions in the waste strategy. This includes setting targets to increase material recovery to 70 per cent by 2025.

The CDS has proved to be an effective tool for increasing resource recovery and recycling. By the end of June 2022, Containers for Change had resulted in the recycling rate of eligible beverage containers increasing from the pre-scheme baseline of 34 per cent to 61 per cent in the 2022 financial year. The recycling rate continues to increase as the scheme matures and the challenge is to reach 85 per cent recovery by 2024.

The CDS is an extended producer responsibility scheme funded by the beverage industry and run by an independent, not-for-profit scheme coordinator, WA Return Recycle Renew Ltd (WARRRL). WARRRL is responsible for developing and maintaining the collection network, recycling and community education, and financial management. The department is responsible for assessing container approval applications to ensure recycling streams are not contaminated as well as providing regulatory oversight of the scheme.

The scheme pays a 10 cent refund for eligible containers returned to approved refund points.

4.2 Objectives of the scheme

The objectives of the scheme are to:

- increase the recovery and recycling of empty beverage containers
- reduce the number of empty beverage containers that are disposed of as litter or to landfill
- ensure suppliers take product stewardship responsibility

- provide opportunities for social enterprise and community organisations
- create opportunities for employment
- complement existing collection and recycling activities.

4.3 Beverage container return rate

The 'return rate' is the key performance indicator of the CDS and used to measure how the scheme is performing in recovering eligible beverage containers sold in Western Australia. The return rate is calculated by dividing the total number of containers returned for a refund and recovered through kerbside recycling by the total number of containers sold.

The CDS Regulations require the scheme coordinator, WARRRL, to set a preliminary container recovery rate for each financial year before 2023–24 (after which a return rate of 85 per cent is prescribed). WARRRL nominated a target of 65 per cent for the financial year ending June 2022, achieving 61 per cent.

By way of comparison, New South Wales achieved a return rate of 61 per cent in its first full financial year of operation (2018–19) and Queensland achieved a return rate of 60 per cent in its first full financial year of operation (2019–20).

WARRRL has nominated a target of 71 per cent for the financial year ending June 2023 and prepared an Implementation Plan to reach this target based on their [Strategic Plan 2021–2024](#).

Figure 1 presents the overall numbers of containers returned through refund points and material recovery facilities (MRF), from the scheme's start in October 2020 to June 2022. During this period, more than 2.5 billion eligible beverage containers have been sold in WA and nearly 1.5 billion containers have been recovered to be recycled. Of these, 78 per cent of the containers have been returned to refund points and 22 per cent collected by kerbside recycling. Since the introduction of the scheme, nearly 600 million additional containers have been recycled compared with the pre-scheme recycling baseline of 34 per cent.

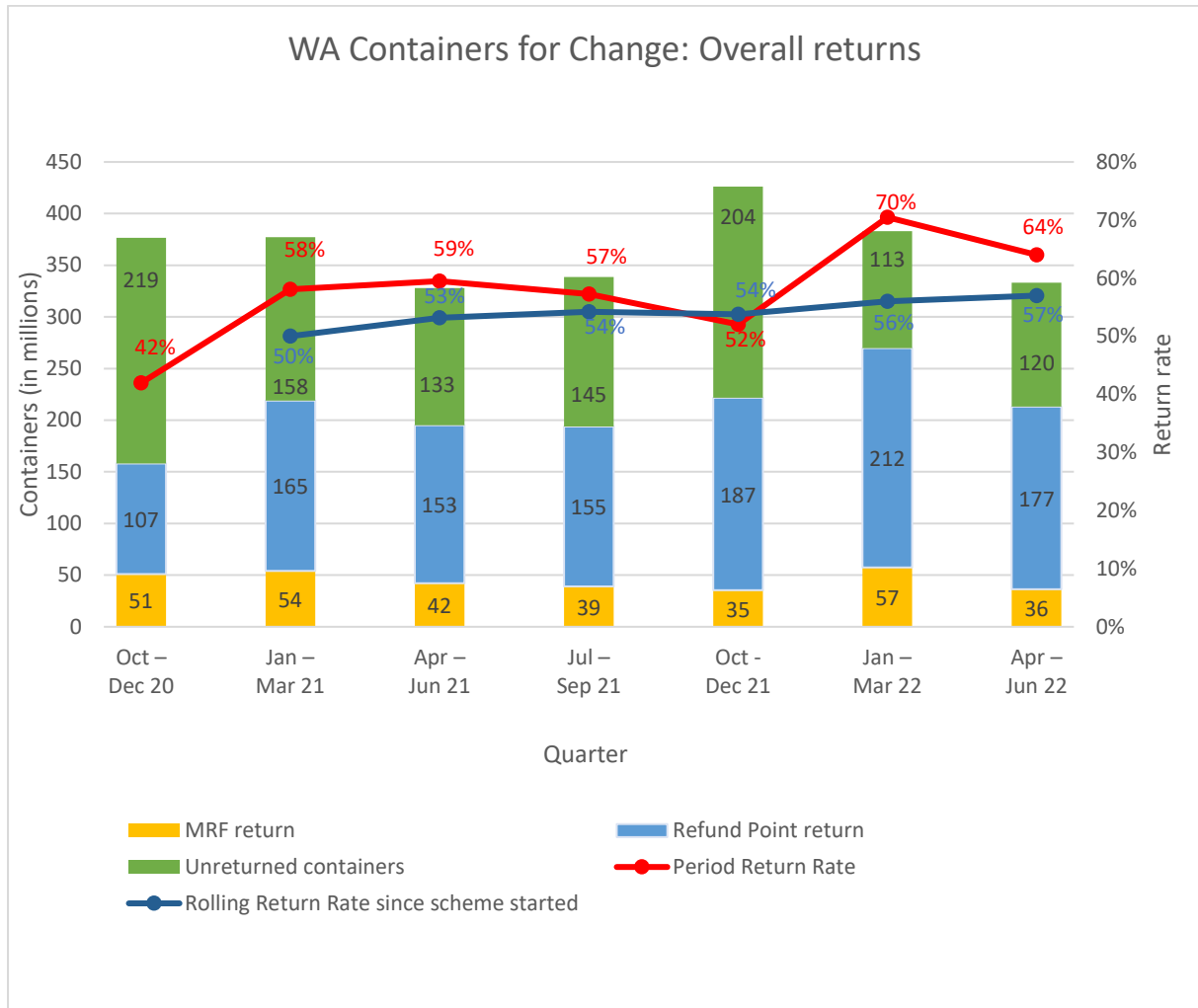


Figure 1 Overall numbers of containers returned through refund points and MRFs with period and rolling return rates (October 2020–June 2022)

5. Expanding the CDS to include more beverage products

Currently most aluminium, glass, polyethylene terephthalate (PET), high-density polyethylene (HDPE), steel and paperboard drink containers between 150 ml and 3 litres are covered by Containers for Change. However, the inclusions and exclusions are relatively complex. Detailed lists of eligible and excluded beverage containers are in Appendices 1 and 2.

It is proposed to expand the scope of eligible containers to include all beverage containers between 150 ml and 3 litres, other than plain milk and registered health tonics.

Table 1 lists the containers which are currently ineligible for the CDS but are proposed to be covered by an expanded scope.

Beverage types	Container material types	Container capacity
Wine (grape)	Glass	150 ml–3 L
Wine (grape)	Sachet or plastic	250 ml–3 L
Wine (grape)	Cask/aseptic packs	1–3 L
Pure spirit	Glass	150 ml–3 L
Flavoured milk	Any	1–3 L
Pure fruit/vegetable juice (at least 90% juice)	Any	1–3 L
Cordial (concentrated/undiluted)	Any	150–3 L
Water	Cask/aseptic packs	1–3 L

Table 1 Proposed changes: beverage containers proposed to be included in Containers for Change

5.1 Resource recovery benefits

To improve the waste management system in Western Australia, the waste strategy was introduced in 2019 to move our state towards becoming a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste. The waste strategy sets recovery targets which include to increase material recovery to 70 per cent and 75 per cent in 2025 and 2030 respectively.

The CDS supports the implementation of the waste strategy and complements the kerbside recycling system in multiple ways, including providing recycling for communities without kerbside services. Under the *Waste Avoidance and Resource Recovery Act 2007*, all beverage containers returned through Containers for Change must be recycled and must not be disposed of to landfill.

Containers for Change separates beverage containers from other recyclable materials at the earliest stage of resource recovery. The containers returned through Containers for Change are sorted by material types and are typically cleaner than those collected through the co-mingled recycling system. This source separation reduces contamination and improves the value of the material as feedstock for recycling and reprocessing.

Based on sampling from two Perth metropolitan MRF, the kerbside recycling system collects about 70 million containers each year that would become eligible for the CDS through the expanded scope. The breakdown by material type is presented in Table 2.

Material type	Estimated number of ‘expanded scope’ containers recovered through the kerbside recycling system in 2021 (million)
Glass	45.2
PET	14.3
HDPE	9.2
Mixed plastics (PET, HDPE and other plastics)	0.5
Total	69.2

Table 2 Estimated numbers of ‘expanded scope’ containers recovered through the kerbside recycling system per year

Extrapolation of MRF sampling results

The pre-scheme baseline sampling of eligible CDS containers recycled through MRF and scrap metal dealers estimated a recycling rate of 34 per cent. Using this recycling rate, it is estimated that expanding the scope of the CDS would make an additional 203 million of the containers supplied in WA annually eligible for the CDS.

The return rate for 2021–22 was 61 per cent, suggesting an additional 123 million containers would be recovered for recycling, a 12 per cent increase in total Containers for Change throughput.

In 2021–22 about 20 per cent containers were recovered through MRF and 80 per cent through refund points. This ratio suggests 98 million additional containers would be recovered through refund points and 25 million containers recovered through MRF.

If the baseline recycling rate for the expanded scope of containers was significantly higher, at about 50 per cent, we would expect an additional 140 million containers.

5.2 Litter

The [Litter Prevention Strategy for Western Australia 2020–2025](#) (litter strategy) sets a target of a 30 per cent reduction in litter levels between 2020 and 2025. Containers for Change supports the litter strategy by targeting one of the most visible forms of litter.

The proportion of beverage containers in the litter stream is a measure of the scheme's impact on reducing litter.

Keep Australia Beautiful Council (KABC) has monitored litter levels in Western Australia through two annual audits of litter levels through the National Litter Index (NLI) until 2019–20. According to the 2019–20 KABC monitoring, beverage containers made up 41 per cent of the total volume of all litter in Western Australia. From 2020–21, all Australian jurisdictions agreed to use a new methodology, the Australian Litter Measure. After testing the new methodology as a pilot litter audit in 2021, a full-scale litter survey was conducted in 2022. The 2022 litter survey measured the volume of beverage containers at 5 per cent, whereas the 2019–20 NLI measured it at 41 per cent.

Further, in the 2022 survey, about 77 per cent of the containers surveyed were not currently eligible for the CDS, compared with 23 per cent that were eligible.

While the change in survey methodology limits the conclusions that can be drawn, the most recent litter survey result suggests a significant drop in the presence of CDS containers in the litter stream since the introduction of Containers for Change in 2020, and that most containers being littered are outside of the current scope of the CDS.

5.3 CDS economic analysis

The CDS provides a range of economic and social benefits through the reduction of litter and the source separation of beverage containers materials from other recyclable and non-recyclable materials at the front end of the resource recovery process. In addition, there are benefits for reducing costs associated with local government kerbside recycling, including reducing cross-contamination of valuable materials such as paper and cardboard in the co-mingled kerbside bin.

In Western Australia during 2021–2022 about 731 million containers were returned through refund points and about 170 million containers were recovered through MRF. This resulted in payments to MRF of about \$17 million (including GST) and revenue of more than \$45 million in handling fees paid to refund point operators. Refunds paid to consumers amounted to about \$73.1 million.

Since the start of the scheme on 1 October 2020 to 30 June 2022, more than 1.47 billion containers have been collected with more than 315 million recovered through MRF and more than 1.15 billion returned through refund points. This equates to more than \$72 million paid in handling fees to refund point operators based on a fee of 0.0625 cents per container in 2022. In addition, more than \$31 million was paid to MRF and more than \$147 million paid in refunds to consumers.

Revenue from sorting and recycling CDS containers for MRF in Australian jurisdictions has been making up for the shortfall caused by restricted export of recyclable materials to Asian countries since 2018. The CDS has, and will continue to, provide a significant revenue stream which helps ensure resource recovery and recycling of kerbside recyclables remains financially viable.

Based on the scenarios explored in section 5.1 for potential additional containers recovered through an expanded scope of eligible containers, MRF could generate an extra \$1.7–\$2.5 million per year. Refund point operators could generate an additional \$4.5–\$6.5 million in handling fees based on the 2023 handling fee of 0.0671 per container.

Key objectives of the CDS include creating employment as well as opportunities for social enterprise and benefits for community organisations. More than 4,900 charities and community groups registered for a scheme ID have received about \$5 million in donations up to 31 July 2022. It would be expected that a proportion of the additional beverage containers included in an expanded scope would also be donated, as this represents an important part of the value proposition inherent in the scheme. Community groups and charities would also benefit from direct donation of beverage containers.

Employment outcomes from the scheme include the creation of more than 821 direct jobs, including 264 positions, or 32 per cent, allocated to people living with disabilities, Aboriginal people and the long-term unemployed.

Analysis of potential employment benefits arising from an expanded container scope has not been undertaken for Western Australia. However, South Australian [economic analysis](#) (Environment Protection Authority South Australia, 2020) has estimated that the recovery of additional containers would assist in creating a further 55 (FTE) jobs within the refund points and scheme coordinator-related work, and 164 (FTE) jobs in creating new containers or industrial products from recycled materials.

South Australian economic analysis provided in the September 2021 [discussion paper](#) (Environment Protection Authority South Australia, 2021) assumed that consumers are moderately sensitive to additional cost. On this basis the proposed expanded scope would reduce beverage sales of cordial, juice and flavoured milks with a retail price of \$3 by 1.67 per cent; and glass wine sales with a retail price of \$15 by 0.33 per cent. This analysis also expected to reduce sales of spirits in glass bottles with a retail price of \$30 by 0.17 per cent.

Conversely, broadening the CDS scope was expected to increase container recovery from 77 per cent to 78 per cent annually in South Australia. It is also expected to contribute to diverting beverage containers away from a kerbside recycling system which would save local government \$34 million for their waste management costs.

6. Appendices

6.1 Appendix 1 - Beverage products included in the scheme

The Containers for Change targets beverage containers most commonly seen as litter. The types of beverage containers covered in the scheme include plastic and glass bottles, paper-board cartons, and steel and aluminium cans between 150 ml and 3 litres. Eligible beverage containers in the scheme include:

- soft drinks, energy drinks, health drinks, sports drinks – 150 ml–3 litres (all container types)
- water: still, sparkling, flavoured or alcoholic – 150 ml–3 litres (all container types)
- beer, cider, spirit based mixed drinks (alcoholic or non-alcoholic) – 150 ml–3 litres (all container types)
- grape wine in
 - aluminium cans – 150 ml–3 litres
 - plastic containers – 150–250 ml
 - sachets – 150–250 ml
 - cask or aseptic pack containers – 150 ml–less than 1 litre
- non-grape wine (e.g. fruit wine, rice wine, barley wine, palm wine) – 150 ml–3 litres (all container types)
- Pure spirits in plastic containers – 150 ml–3 litres
- wine-based beverages in
 - cask or aseptic pack – 150 ml–less than 1 litre
 - all other container types – 150 ml–3 litres
- fruit and vegetable juice less than 90 per cent pure – 150 ml–3 litres (all container types)
- fruit and vegetable juice 90 per cent or greater – 150 ml–less than 1 litre (all container types)
- flavoured milk – 150 ml–less than 1 litre (all container types).

6.2 Appendix 2 - Beverage products currently excluded from the scheme

- Grape wine in glass bottles
- Grape wine in plastic containers or sachets 250 ml or greater

- Grape wine in casks 1 litre or greater
- Pure spirits in glass bottles
- Cordial
- Flavoured milk (all containers) 1 litre and above
- Fruit and vegetable juice equal to or more than 90 per cent pure (all containers) 1 litre and above
- Plain milk (all plain animal and plant-based milk)
- Registered health tonics (Therapeutic Goods Administration)

7. References

Environment Protection Authority South Australia 2021, [*Improving South Australia's Recycling Makes Cents*](#)

<https://yoursay.sa.gov.au/70705/widgets/344994/documents/215352>

Hudson Howell 2020, South Australian Environment Protection Authority, [*Container Deposit Scheme Economic Analysis Review December 2020*](#)

Keep Australia Beautiful Council 2020, [*Litter Prevention Strategy for Western Australia 2020–2025*](#)

Keep Australia Beautiful Council 2022, [*Australian Litter Measure, Litter Survey*](#), May 2022 report and analysis

Waste Authority 2019, [*Waste Avoidance and Resource Recovery Strategy 2030*](#)