



Western Australia Container Deposit Scheme

Discussion paper



Disclaimer

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Message from the Minister

The McGowan Labor Government came to power committed to the implementation of a container deposit scheme (CDS) in this State to help address the scourge of litter and encourage a recycling culture. The reality is that Western Australia's waste performance needs to be strengthened, and we intend to work with the Waste Authority, industry, the community and local governments to turn this track record around. Through the introduction of this scheme we will achieve greater environmental outcomes, create employment and build businesses, and enable charities and community organisations to raise money to fund their important community work.

According to the 2015–16 Keep Australia Beautiful Litter Index, beverage containers make up 35.2 per cent of the total volume of all litter in WA. This is more than double the figure in South Australia (17 per cent), where a CDS has been in place since 1977. Many Western Australians already participate in kerbside and other recycling programs. The CDS will complement existing recycling opportunities and provide additional facilities and incentives for people to recycle away from home.

The success of this scheme will require a large degree of buy-in from consumers, retailers, suppliers, and collection, waste and recycling industries. The WA scheme will be designed in collaboration with stakeholders and will commence on 1 January 2019. I encourage all of you to submit your ideas throughout the consultation process so you can contribute to the design and implementation of WA's container deposit scheme. With your input, we can make sure this scheme delivers the best possible outcome for all Western Australians.

A stylized, handwritten signature in black ink, appearing to read 'Stephen Dawson'.

Hon Stephen Dawson MLC
Minister for Environment



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Purpose of this discussion paper

The McGowan Labor Government has committed to implementing a container deposit scheme (CDS) for Western Australia. The scheme is planned to start in January 2019. This discussion paper is an opportunity for the community and other stakeholders to provide input on options and a possible conceptual model.

Consultation

About stakeholder consultation

The Department of Water and Environmental Regulation (DWER) is seeking feedback on 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.

DWER 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.

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 Monday 23 October 2017. No late submissions will be considered.

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

Manager, Container Deposit Scheme
Department of Water and Environmental Regulation
Locked Bag 33 CLOISTERS SQUARE WA 6850

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

Introduction

Managing and reducing litter from discarded packaging is a challenge facing all states and territories. Reducing litter from packaging, and diverting it for recycling, is a common goal for all jurisdictions.

The Environment Protection and Heritage Council examined options for improving the management of packaging. In May 2012, the Australian Government finalised the [*Packaging Impact Consultation Regulatory Impact Statement*](#).¹ In December 2014, the Australian Government released the [*Packaging Impacts Decision Regulatory Impact Statement*](#).² Jurisdictions could not reach agreement on a national approach.

In the absence of a national approach, Western Australia, New South Wales, the Australian Capital Territory and Queensland have announced state-based schemes to address the issue of beverage containers as litter. South Australia and the Northern Territory already have schemes in place.

Beverage containers make up 35.2 per cent by volume of the litter stream in Western Australia based on the results from the 2015-16 National Litter Index and are manufactured from readily recyclable materials such as glass, plastic, aluminium and cardboard. A CDS allows consumers to take empty beverage containers to a refund point for a refund, providing an incentive to return these containers. A CDS also promotes an incentive for people to collect littered containers and earn extra income.

A CDS is intended to operate with kerbside recycling and complement existing services as much as possible. For communities without kerbside recycling services, it provides an opportunity to participate in recycling activities.

A CDS is also likely to encourage people to collect and recycle drink containers that are consumed away from home.

There has been considerable effort by jurisdictions to align key elements of a CDS to maximise the ease of implementation; address competition and constitutional issues; reduce industry costs; and provide consumers with a consistent experience.

In Western Australia, the proposed CDS will complement the [*Waste Strategy: Creating the right environment*](#)³ and the [*Litter Prevention Strategy for Western Australia 2015–2020*](#).⁴

1 www.nepc.gov.au/consultation/packaging-impacts-consultation-regulation-impact-statement-ris.

2 www.environment.gov.au/protection/nepc/publications/packaging-impacts-decision-ris.

3 www.wasteauthority.wa.gov.au/publications/western-australian-waste-strategy-creating-the-right-environment.

4 www.kabc.wa.gov.au/news/7/litter-prevention-strategy-for-western-australia-20152020-launched/.





What is a container deposit scheme?

A CDS is an example of an extended producer responsibility scheme where producers take responsibility for post-consumer management of product waste.

In the existing and proposed Australian schemes, the majority of small additional costs paid by consumers can be recouped through the refund. The balance of costs pays for the container collection system that can be reasonably accessed by all users of beverage containers. Container Deposit Schemes may take different forms depending on their objectives and design.



Objectives of a Western Australian container deposit scheme



Reducing Litter

Reducing litter protects the environment, improves amenity and lowers clean-up costs to local government, industry and communities.

Based on experience in South Australia and the Northern Territory, a CDS has the potential to reduce litter. In South Australia, which has had a CDS in place for 40 years, 17 per cent of litter by volume was beverage containers in 2015–16,⁵ while the Northern Territory, which also has a container deposit scheme recorded 24 per cent. In Western Australia, beverage containers made up 35 per cent of litter by volume in the same year.⁶



Recycling

Australian container deposit schemes complement existing kerbside recycling services and provide recycling for communities without kerbside services. They also encourage beverage containers consumed away from home to be recycled – diverting waste from landfill.



Protecting the environment

Discarded beverage containers create environmental risks to wildlife. Ingestion of plastic particles is a significant problem for birds, fish and reptiles. Broken glass and metal cans present an injury risk to people and animals. Litter also adversely affects amenity and enjoyment of the environment, and incurs significant clean-up costs for local governments and other land managers.



Community participation

Container deposit schemes provide opportunities for the public to collect empty beverage containers for a refund, and for charitable and community groups to raise funds.

⁵ Keep Australia Beautiful National Association. (2016). *National Litter Index 2015–2016 States and Territories Survey Specifics*. Retrieved from issuu.com/keepaustraliabeautiful/docs/nli_15-16_surveys_states_and_territ.

⁶ Ibid.



Agreed arrangements

Some key features of the Western Australian CDS have been decided to align with the existing and proposed schemes in other states and territories. This consistency will facilitate implementation of the scheme, reduce industry costs and provide consumers with a consistent experience. These features are:

- the types of containers that are eligible for refund;
- the types of containers that are excluded from the CDS;
- the refund amount; and
- the need for a refund mark to identify eligible containers.

Further information on these features are outlined in this discussion paper.

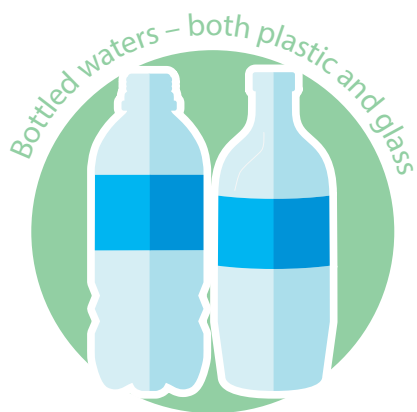


Image courtesy C. Fryer, 2017

Types of containers included in the scheme

The scheme targets beverage containers most commonly seen as litter, helping to reduce litter, boost recycling and protect our environment. Beverage containers included in the Western Australian CDS are consistent with those in other jurisdictions, comprising beverage containers between 150 millilitres and three litres in volume with similar exceptions to those in the New South Wales, South Australian and Northern Territory container deposit schemes. Excluded containers are those generally consumed at home, and less likely to be littered. For example, containers below 150 ml (such as small fermented milk drinks) are seldom seen in the litter stream and the 10 cent deposit is disproportionate for these small containers.

Examples of beverage containers eligible for the refund:

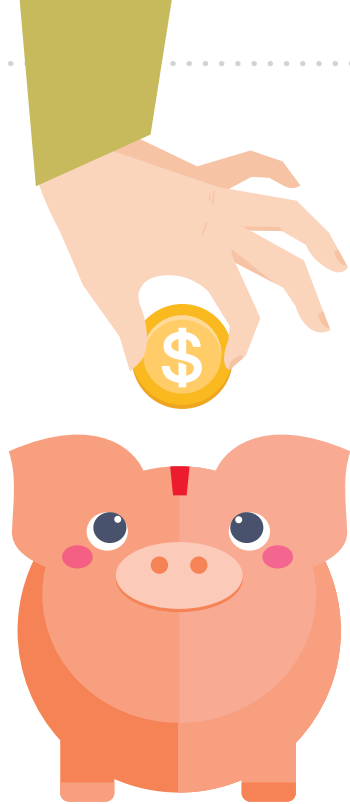


Containers that are not part of the scheme include:



(Defined as products listed or registered in the Australian Register of Therapeutic Goods, such as liquid vitamin supplements.)





Refund amount

A 10 cent refund is available for eligible drink containers returned to refund points. This is consistent with the refund amount in South Australia and the Northern Territory, and those proposed in New South Wales, Queensland and the Australian Capital Territory.

Refund mark

The scheme will require eligible containers to display an approved refund mark to advise consumers they can be exchanged for a refund.

A common refund mark across all participating states and territories will reduce costs for beverage suppliers, increase scheme recognition for the public, and enable shared marketing campaigns. Western Australia is working with other jurisdictions on the type and design of the refund mark.

Many containers sold in Western Australia already carry the marking used in South Australia and the Northern Territory.





Have your say

The McGowan Labor Government is seeking public input on features of the CDS that have not yet been determined. Input is welcome on any aspect of the scheme, and a series of questions has been developed to guide feedback around certain key issues.

Questions on consumer preferences are summarised below, and responses can be made through an online survey.

Questions on the design of the scheme are in the subsequent sections. These policy questions invite open-ended input, and the evidence and reasons provided to support your views are as important as the views themselves. These questions therefore require written submissions.

Consumer preference questions

The following questions are intended to help develop an understanding as to which options best suit consumers:

1. Do you support the implementation of a container deposit scheme for Western Australia?
2. What do you think the most important benefit of a container deposit scheme will be to Western Australia?
3. Where do you think you would most likely go to recycle your eligible containers?
4. How would you like to receive your refunds for containers?
5. Are there any other refund payment methods you would like to use?
6. How far do you normally travel for shopping, sporting or other regular activities?
7. What is your postcode?

Access the consumer preference online survey at: www.dwer.wa.gov.au/cds.



Written response questions

The questions below summarise the consultation points raised through the following sections. While there may be some overlap between these questions and the survey, this section provides an opportunity to provide more detail and the evidence and reasons provided to support your views. Written submissions do not need to address all questions.

Accessibility and operation of the collection network

1. What would be reasonable access for metropolitan, regional and remote areas of the State to balance convenience and cost? Are there any considerations you believe should be included in deciding this?
2. What full cash value refund options should be considered?
3. What other refund options should refund points consider offering?
4. What options are there for the retail sector to participate in the scheme?
5. What features are important for commercial container deposit points?
6. What advantages and concerns do you see for the verification approaches described above? Are there alternative approaches that should be considered?
7. Should containers be required to have a barcode to be approved for sale under the scheme?

Scheme Costs

8. How should handling fees be determined?
9. How should costs be allocated to beverage suppliers?

Kerbside Recycling

10. How should the number of eligible containers in kerbside recycling be determined? Who should be responsible for ensuring that periodic audits of any estimation methodologies are conducted?

Containers from other states and territories

11. Should Western Australia permit redemption of scheme containers from other participating states and territories?



Other design features

The McGowan Labor Government is seeking public input on features of the CDS that have not yet been determined. These features are discussed below.

Administration and governance

Administration and governance includes scheme structure, assigned roles and responsibilities of involved parties, performance measures, and accountability frameworks. These features vary across Australian jurisdictions.

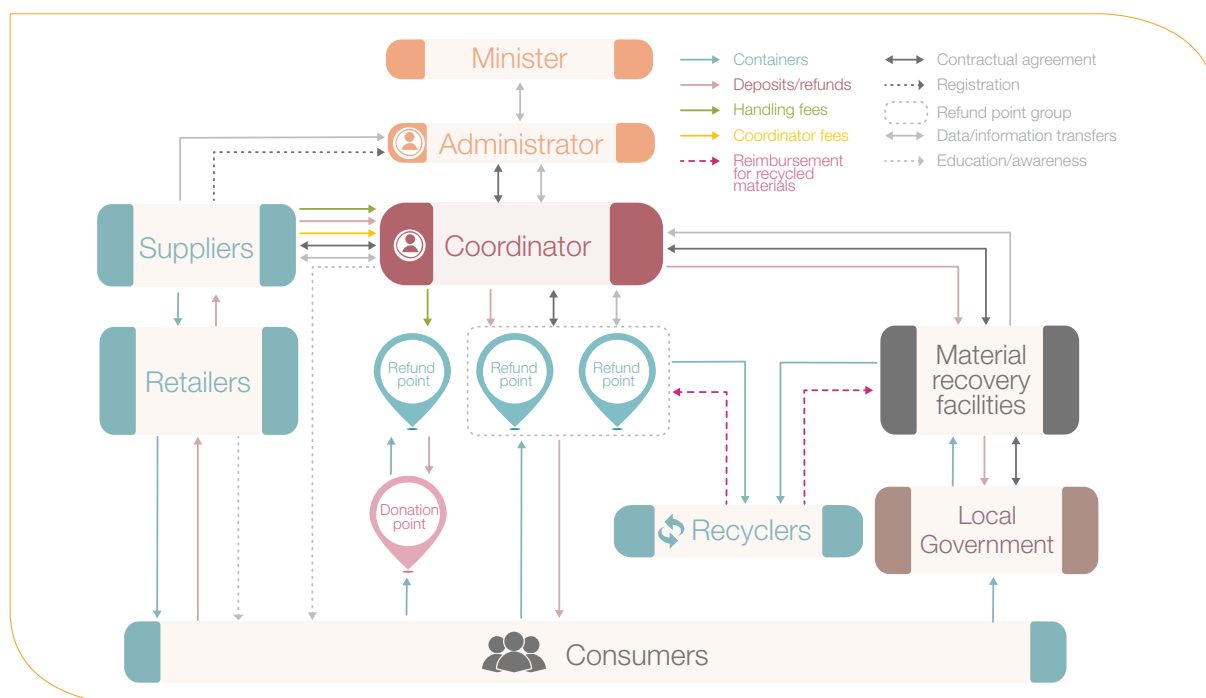
The scheme will require appropriate checks and balances to ensure effective management and delivery of its objectives. Excessive controls can increase scheme costs and unnecessarily inhibit participants' ability to manage their costs. Conversely, a lack of appropriate controls can lead to the scheme failing to meet its objectives or maintain its integrity.

In all existing and proposed Australian schemes, participation is ensured through the requirement for beverage suppliers to have containers approved by government. The costs of Australian schemes are paid by beverage suppliers and may be passed on to consumers in beverage prices.

Accountability for the administrative and governance arrangements for existing and proposed Australian schemes is to the relevant Minister, which in Western Australia would be the Minister for Environment. Regulatory oversight and periodic evaluation of the scheme is provided by the 'scheme administrator', most commonly an environmental agency. An industry-run coordinator is responsible for the scheme's operation, including financial and performance management.

Figure 1 provides a conceptual model for how these arrangements could be structured in Western Australia. The arrows show the relationships between each participant in the scheme. Key governance roles are discussed in more detail below.

Figure1 Conceptual container deposit scheme model





Scheme administrator

The scheme administrator would be responsible for:

- selecting and contracting with the coordinator;
- approving eligible beverage containers;
- monitoring compliance with the legislative framework and undertaking enforcement;
- conducting periodic reviews; and
- reporting performance to the Minister for Environment.

This oversight role would be provided through a state government agency, proposed to be DWER. This is similar in other Australian schemes.



Scheme coordinator

Refunds, handling fees and administration costs are paid by beverage suppliers to a commercial entity (scheme coordinator role for the Western Australian scheme). The coordinator's responsibilities would include:

- operating the scheme in an efficient and cost-effective manner;
- managing the scheme's finances, including allocating scheme costs to beverage suppliers;
- paying the refund amounts and associated handling costs for returned containers to refund points;
- establishing and maintaining a network of refund points by entering into arrangements with refund point and material recovery facility operators, while minimising handling fees;
- monitoring and reporting against the scheme requirements and performance targets set by government;
- minimising fraud, including managing verification mechanisms to prevent inflated container return claims; and
- informing consumers about scheme requirements.

The existing and proposed schemes in Australia differ in how a coordinator's role is delivered. The role is proposed to be provided by a single coordinator in New South Wales and Queensland. The Northern Territory has multiple coordinators with reciprocity agreements. South Australia has three super-collectors with allocated responsibility largely based on beverage categories. A single coordinator makes it easier for beverage suppliers to contract for the collection of containers. Government can also ensure accountability for return rates, refund point coverage, consumer access targets and public information.

Multiple coordinators may increase competition, but this can also increase overall scheme costs, as well as costs for suppliers who must manage multiple relationships. It increases the complexity for accountability of targets as the operation of coordinators overlaps.

The coordinator role must be established so as to promote transparency and impartiality, avoid conflicts of interest with the beverage supply industry and providers of the collection network (including material recovery facilities), and support the scheme's efficient operation.

In Queensland, it is proposed that the coordinator role (termed the Product Responsibility Organisation) be a company with a nine person board with certain representative requirements. Legislation sets out requirements for the assessment of applications and appointment.

New South Wales proposes to appoint a coordinator through a tender and contract process. Tenderers are required to articulate how any potential or actual conflicts of interest would be avoided and/or managed.



Accessibility and operation of the collection network



Accessibility and coverage

The container collection networks of Australian schemes have varying degrees of coverage (refund point locations) and accessibility (hours of operation). There is a balance between maximising container return rates (through an extensive collection network that provides high levels of accessibility and coverage), and optimising cost efficiency (as an excessive collection network can increase overall scheme costs).

Options to be considered include phased rollout of infrastructure, standardised equipment and tailored collection arrangements to accommodate local requirements.

Western Australia has particular challenges due to its size and the remoteness of some communities. It is intended that the Western Australian scheme provide reasonable access, noting that this would differ between metropolitan and regional or remote locations. Factors in considering reasonable access include how far people would be willing to travel, determining cost-effective and convenient locations for refund points, and staffing costs to operate the refund points.

New South Wales is considering providing a formula to help define reasonable access based on population size, distance between population centres, and minimum opening hours. Queensland plans to set minimum requirements for the number and location of refund points to ensure reasonable access for consumers.

Consultation
point

1

What would be reasonable access for metropolitan, regional and remote areas of the State to balance convenience and cost? Are there any considerations you believe should be included in deciding this?

Payment of refund

Refund points pay consumers a refund for each eligible container returned. There are a variety of ways this payment can be made. Some methods, such as cash, transfer to a nominated bank account, or a voucher redeemable for cash, give the consumer the full 10 cents value. To qualify as a refund point, at least one refund method must provide the full 10 cents refund value to the consumer.

Not all refund point operators are expected to offer cash refunds in all circumstances. For example, refunds for commercial volumes of containers may need to be made via transfer to a nominated bank account. This would minimise the amount of cash held at any given time, and reduce the security risk to both the site operator and the person receiving the refund amount.

There may also be scope for methods for small payments at low or no cost.



Image courtesy of DEC Karratha, 2008

Consultation
point

2

What full cash value refund options should be considered?



Refund points may also use other ways to reward consumers, for example:

- giving the refund to a nominated charity;
- vouchers redeemable for goods or services;
- loyalty program points;
- other credit such as transport card top-up; and
- prize draw entry.

In Oregon in the United States of America, some 'BottleDrop redemption centres' offer an extra 20 per cent above the refund amount for store shopping vouchers funded by the store.



Consultation
point

3

What other refund options should refund points consider offering?

Collection network design

The existing and proposed schemes in Australia differ in how collection infrastructure is provided.

South Australia uses permanently located depots for returning drink containers. Queensland and New South Wales are promoting reverse vending machine technology located at retail outlets, shopping centres or public places. Reverse vending machines allow consumers to deposit their drink container directly into a machine and receive the refund amount in vouchers exchangeable for cash or as an electronic fund transfer.



Reverse vending machine supplied by Envirobank photographed at Curtin University's Bentley Campus
Image courtesy of R.Richardson, 2017

The Northern Territory uses mobile refund points to provide access to remote areas with small populations, as well as to service regular and ad hoc entertainment events.

As with other states and territories, it will take time to build up suitable infrastructure to provide reasonable access for all communities, and a phased rollout of the collection network may be appropriate.

Refund points would be facilities for consumers to return containers and claim refunds. Containers would be sent from the refund point to recycling processors, and claims for the refunds and handling fees sent to the coordinator. Returned containers would be required to be recycled, contributing to the scheme's objective of improving recycling rates.

Currently in Western Australia most aluminium and plastic is sorted, crushed, baled and exported. Some plastic is sent to other States for processing. Glass is generally crushed and used as building products. The CDS will make available clean streams of recyclable material which may enable new recycling initiatives in Western Australia.

Refund points may send materials to a regional hub for aggregation, crushing, baling or other processing if this is more efficient or reduces transport costs. Hubs could be combined with commercial (bulk) container deposit points or may be stand-alone operations.

It is expected that operators of refund points and hubs would establish relationships with recycling processors to sell the containers received, and minimise the need for (and expense of) double handling of containers. Under this scheme design it is probable that some refund points may share logistical arrangements, and several points may be owned by one business.

In addition to refund points, it is expected that Western Australia's scheme would provide for donation points, where consumers can take their containers to a nominated charity or not-for-profit incorporated organisation who can then receive the refund. Donation point operators would take the containers to a refund point. Donation points would not be required to tender or contract with the coordinator, and would not be eligible for payment of handling fees.

Charities or not-for-profit organisations can choose to participate as either donation points, refund points or both. To qualify as a refund point, they need to make available a method of paying for returned containers if a consumer does not want to donate them, and meet the necessary verification, audit and compliance requirements.

Eligible containers would also continue to be deposited in local government kerbside recycling systems, as discussed below.

Retail sector involvement

The retail sector is expected to have an important role in the container deposit scheme.

Refund points at retail facilities promotes consumer convenience and accessibility, as consumers can return empty containers as part of their regular shopping activities. Retailers could locate a reverse vending machine or other facility at which consumers could return empty containers. These facilities provide benefits to retailers (as well as consumers) through increased foot traffic through the store. The provision of refunds in the form of a voucher providing credit from participating stores could be an additional incentive.

Retailers could also play a key role in informing consumers about the scheme, including providing information on the scheme and refund point locations to their consumers at the point of sale of beverages.

Some international jurisdictions mandate that beverage retailers (above a certain size) provide refund point facilities. Schemes with retail involvement may improve customer convenience and contribute to better return rates.

Consultation
point

4

What options are there for the retail sector to participate in the scheme?



Commercial container deposit points

The scheme could include refund points designed to receive bulk volumes of beverage containers from businesses such as pubs and hotels. Bulk refund points are likely to improve the convenience of the scheme for larger volume commercial clients and therefore increase return rates.

Commercial deposit points may be well placed to offer hub services such as aggregation, crushing, baling or other processing to other refund points.

Commercial container deposit points could potentially be single material collection points (for example, only collect glass or aluminium).



Consultation
point

5

What features are important for commercial container deposit points?

Verification of return claims

It is proposed that operators of refund points would sell the returned containers directly to recyclers, avoiding double handling of containers. Appropriate controls would be required to ensure accurate claims of container returns.

It is expected that verification would require comparison of container counts (converted to average weights) with evidence from recycling facilities. The onus would rest with the refund point operator to provide verifiable evidence of the number of containers accepted and recycled. Some refund points may require that all containers received have a scannable barcode, and the information accessible through the barcode provides an alternative verification mechanism.



Image courtesy of R.Kasai, 2017

Another approach to verification could be the use of automated high speed counting and sorting machines. Large numbers of containers can be quickly and accurately counted and sorted, providing an accurate and transparent record of the containers processed.

The system should be designed to crush containers as soon after refund as possible to prevent containers being recirculated for further refund. Reverse vending machines can crush containers after reading the barcode, or can hold the containers securely until containers can be transported to a recycling facility or hub. After crushing, the barcodes will no longer be readable, preventing containers being presented again for refund. This is an important fraud prevention mechanism.

Automated systems have significant benefits where large numbers of containers are received, as they provide more robust verification (reducing the risk of error or fraud) in addition to making the process more efficient. However, the costs associated with establishing and maintaining automated systems may be such that they are not suitable in situations where a relatively small volume of containers is received.

Consultation
point

6

What advantages and concerns do you see for the verification approaches described above? Are there alternative approaches that should be considered?

Use of barcodes



Barcodes allow efficient identification of eligible containers, assisting collection of information on material type, brand and weight. This can improve efficiency at refund points and coordinator verification of recycled materials. Barcodes also enable a wider range of automated sorting machines and reverse vending machines, as such infrastructure often sorts materials on the basis of barcodes.

While most containers already have barcodes, some beverages sold in bulk have the sale barcode on the bulk packaging rather than individual containers. New South Wales is considering using 'non-sale' barcodes on individual containers to facilitate scanning in the collection network. In South Australia, most containers are sorted manually and do not require barcodes. The Northern Territory does not require eligible containers to carry a barcode, however it has introduced regulations so that where a container does have a barcode, that information is made available throughout the collection network.

The benefits of requiring all eligible containers to be produced with a barcode include:

- efficient and cost effective identification of eligible containers;
- automated data collection for reporting and auditing;
- support for increased automation in the collection network; and
- improved transparency and accountability throughout the scheme.

Barcodes may become unreadable where containers are aged, damaged or distorted and also where containers are crushed (for example, to transport to a recycling facility, particularly in regional and remote areas). It is expected refund points would be able to accept containers with barcodes that are not readable.

Consultation
point

7

Should containers be required to have a barcode to be approved for sale under the scheme?

Scheme costs

Scheme costs are borne by suppliers, although it is expected that at least a portion of these costs will be passed through to consumers. Minimising the scheme costs is in the community's best interests; however, there is a risk that excessive cost minimisation could undermine the scheme's effectiveness (for example, costs could be kept low by minimising the collection network to a level that makes it difficult to return containers).

There are also risks that costs may be unreasonably excessive where stakeholders require certain outcomes of the scheme to be funded by industry without adequate consideration of the resultant costs (for example, requiring sorting, transporting and verification of a large number of categories).

It is important that the governance arrangements address these issues to enable industry to minimise its costs while ensuring a viable scheme overall. To achieve this, the government may choose to maintain control over some elements of the scheme, and/or set requirements that allow the industry to manage costs while still delivering the desired objectives of the scheme.

Scheme costs include three elements: the refund (set by government); the coordinator's fee; and the handling fee for refund point operators. These three cost elements are included in all Australian schemes, although the detail varies.

It is proposed that in Western Australia the coordinator's fee would be a rate per container, and would be one of the selection criteria for this role.

Handling fees are required to support collection, processing and transport of containers for recycling, and would be set at a rate per container. The handling fee is expected to vary based on location of the refund point and by container type, reflecting impacts on transport costs and potential returns from recycling the materials.

There are a number of approaches to determining handling fees. These include:

- The handling fee could be set through a competitive process between refund point operators. A competitive process should encourage innovation and allow more efficient operators to deliver minimised scheme costs and provide opportunities for suppliers to control their costs. However, if there is insufficient competition in a particular market, this mechanism may not offer optimal outcomes and excessive fees may result.
- The handling fee could be set by the coordinator. A handling fee set by the coordinator may not accurately reflect costs for the refund point and lacks the incentive for cost minimisation. However, this approach would minimise the risk of excessive fees if there was insufficient competition.



- A hybrid approach, where a competitive process is generally used, but a limit or cap can be set on fees.
- The handling fee could be set by the administrator (on behalf of government); however, government may not have adequate information to understand local cost drivers and market dynamics.

Consultation point

8

How should handling fees be determined?

Costs for the scheme should be allocated among beverage suppliers for the containers that have been collected. There are several ways this can be accomplished.

When the Northern Territory scheme started in 2012 containers were separated into brands, with the supplier for each brand charged by one of the coordinators for their containers collected through the scheme. This proved to be cumbersome and expensive. The Northern Territory scheme now uses a model where containers are sorted by material type, and beverage suppliers are billed in proportion to their territory-wide sales for each material type.

The scheme planned for New South Wales proposes to collect sales data on a regional basis. Regional sales data could be used as a basis to allocate costs. This model would allow beverage suppliers to be charged in proportion to their regional sales, which is likely to result in a more refined cost allocation than using statewide sales ratios. Calculation of regional return rates facilitates identification of underperforming regions or regions where fraud may have inflated return rates.

If adopted in WA, the regional approach would ensure a beverage supplier that only sells in the Kimberley would not be bearing the costs for a portion of container fees in other regions where no sales were achieved.

Where barcode data are available, it may be possible to charge beverage suppliers directly for the containers bearing their barcode. While this is the fairest option, some containers may not have a barcode and some refund points may not provide for barcode scanning.

Consultation point

9

How should costs be allocated to beverage suppliers?





Dirk Hartog Island National Park. Copyright Tourism Western Australia

Timing of payment by beverage suppliers

The existing and proposed container deposit schemes in Australia are predominately run on a commercial basis. The scheme costs incurred by the coordinator (refund payments, handling fees and administration costs) are funded by beverage suppliers, which pay the coordinator per container.

The coordinator will be expected to pay refund points promptly for verified claims in advance of the claiming the refund and handling fees from beverage suppliers. To enable this, a mechanism is required to ensure the coordinator's ability to pay refunds.

Under the South Australian, Northern Territory and proposed New South Wales schemes, beverage suppliers pay the coordinator in advance (based on predicted returns). Beverage suppliers' liability is determined on actual returns with adjustments made in arrears.

Queensland proposes that beverage suppliers contribute to a float or fund (based on predicted returns) at the start of the scheme, and held by the coordinator. Beverage suppliers would then be invoiced in arrears based on actual container returns. This method would be expected to have lower transaction costs.

Under the existing container deposit schemes in South Australia and the Northern Territory, refund and handling fees are paid by beverage suppliers on return of the container. Beverage suppliers would be expected to recover costs for the proportion of returned containers by consumers only. As such, any financial benefit from unredeemed deposits should accrue to consumers in the form of lower beverage prices.

Alternatively, container deposit schemes may require beverage suppliers to pay the refund and handling fees into a designated account administered by the scheme coordinator when each container is supplied to the market. Under this approach, the refunds not collected (because the containers are not returned) can be offset against the operating costs of the scheme, such as the handling fee for refund points and/or education about the scheme.

It is understood that New South Wales and Queensland intend to follow the South Australia and Northern Territory model, and require payment on return of the containers. Western Australia also intends to follow this approach to maximise alignment with other Australian schemes.



Targets and measurement of performance

It is proposed that the Western Australian scheme would measure the following:

- state wide return rates for each class of container material (glass, aluminium, PET, HDPE, liquid paperboard, steel, other);
- regional return rates for each class of container material;
- changes to beverage container volume in the litter stream;
- accessibility and geographical coverage of the scheme; and
- costs of the scheme.



The return rate is key to measuring the success of a scheme. The South Australian scheme achieved a container return rate around 80 per cent between 2009 and 2017, with the current return rate for 2016-17 being 79.9 per cent. The Northern Territory had a return rate of 54 per cent which has steadily increased since the introduction of its scheme.

It is proposed that the Western Australian scheme would also measure regional return rates for each class of container material. This would allow container return rates to be determined and published on a region by region basis, providing a more detailed understanding of the scheme's performance against targets.

The proportion of beverage containers in the litter stream would be another key measure of the performance of the scheme. Measuring the proportion of beverage containers in the litter stream provides an indicator of whether the scheme is meeting the objective of reducing litter.

Other potential measures include accessibility (hours of operation) and geographical coverage criteria to evaluate whether targets set to provide reasonable access to the scheme for metropolitan, regional and remote areas of the State are being met, and costs of the scheme to ensure cost effectiveness.



Kerbside recycling

The majority of local governments in Western Australia provide kerbside recycling services to their residents. Local governments may use waste contractors to collect kerbside recycling (or collect it themselves) and deliver recyclable material to a material recovery facility (MRF). Waste contractors and local governments may also provide kerbside recycling services to businesses. Recyclable materials delivered to a MRF are sorted, processed and packaged at the MRFs ready for sale on the commodities market.

Under a container deposit scheme, some residents and businesses may choose to continue to recycle eligible containers through existing kerbside recycling services, rather than collect refunds. Claims may be made for the refund amount from the coordinator for eligible containers collected through kerbside recycling using an approved process. Containers in kerbside recycling do not attract a handling fee as collectors are already being paid by the local government to collect the recycling.

Some MRFs are not designed to separate eligible containers from other items of the same material type, for example aluminium beverage cans (eligible for refund) from aluminium aerosol containers (not eligible for refund). There would be a significant capital cost to install infrastructure so that MRFs could separate material container types, and there could also be ongoing additional operating costs.

In South Australia and the Northern Territory, eligible containers are physically separated from the kerbside waste stream and presented to refund points. New South Wales and Queensland have proposed an estimation methodology to quantify the number of eligible beverage containers in kerbside recycling to reduce handling costs.

It is proposed that the Western Australian scheme would include a regulated estimation method to allow MRFs to estimate the number of each type of eligible container in the kerbside recycling material received. To ensure accountability, there would need to be periodic audits of the accuracy of the estimation method.

Consultation
point

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How should the number of eligible containers in kerbside recycling be determined? Who should be responsible for ensuring that periodic audits of any estimation methodologies are conducted?



Local government

Material from kerbside recycling bins is processed by MRFs under contract from local governments. As the number of eligible containers would be estimated at the MRF, the CDS coordinator would pay the MRF operator for these containers. However, as the collector of the containers, the local government is likely to expect a share of the refunds.

Under the New South Wales scheme, the coordinator pays container deposits to MRF operators who are required to negotiate a revenue sharing agreement with local governments. It is anticipated that the Western Australian scheme would adopt a similar approach.

Containers from other states and territories

Consumers travelling from other states and territories may bring beverage containers into Western Australia.

This provides a potential opportunity for arbitrage, as beverage containers outside of the State will not have contributed a deposit into the scheme through their purchase. If this occurred in large numbers it could undermine the financial security of the scheme.

New South Wales is considering a range of measures to decrease the risk of arbitrage, including statutory and administrative measures to reduce potential returns.



Image courtesy of R. Richardson, 2017



Queensland is considering allowing refund of eligible containers from other jurisdictions participating in a CDS. Queensland shares borders with both New South Wales and the Northern Territory which each have their own existing or proposed schemes.

Schemes within South Australia and the Northern Territory also anticipate allowing refunds for containers purchased in other jurisdictions that have container deposit laws recognised as corresponding laws.

It is expected that Western Australia would allow refunds for eligible containers from other jurisdictions participating in a CDS. The ability for consumers to redeem containers between states improves consumer convenience, and reduces the risk of littering.

Western Australia borders South Australia and the Northern Territory, where container deposit schemes already operate, reducing the incentive for import of containers. The considerable transport distances involved would also reduce the potential returns from arbitrage.

Consultation
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Should Western Australia permit redemption of scheme containers from other participating states and territories?

Transition arrangements

When the scheme commences, there will be a period where eligible containers without a refund mark are in circulation. Transition arrangements will be needed for industry to sell stock without a refund label, and to provide consumers with adequate time to consume the beverages and return unmarked containers bought after the start of the scheme.

These arrangements are expected to align with schemes in New South Wales and Queensland to minimise industry costs.



Glossary

Terms used in Discussion Paper	Definition
Donation point	Donation points are expected to be operated by charities, not-for-profit and community organisations, which may take containers to a refund point to receive refunds.
Eligible container	A beverage container that meets the requirements to receive a 10 cent refund.
Handling fees	Fees to support the collection, processing and transport of eligible containers from refund points to recycling facilities.
Material recovery facility	Facility at which recyclable materials are sorted, processed and packaged for sale to recyclers.
Refund amount	The monetary value of a refund, currently 10 cents, paid to return an eligible container to a refund point.
Refund mark	The identifying mark indicating that a container is eligible for a 10 cent refund.
Refund point	A location at which empty drink containers can be returned in exchange for a 10 cent refund. A refund point may be a permanent or mobile facility. Automated refund points are referred to as reverse vending machines.
Refund point operator	An approved operator of a refund point.
Return rate	The number of eligible containers returned under the container deposit scheme divided by the total number sold.
Reverse vending machine	A device that accepts empty beverage containers and provides a refund (typically in the form of a voucher exchangeable for cash). A RVM may be a single container/material feed machine or accept bulk feed/material types.
Scheme administrator	The role which provides regulatory oversight and evaluation of the container deposit scheme. In most jurisdictions, this is the environmental agency responsible for administering the CDS legislation.
Scheme coordinator	The role that is responsible for the operation of the container deposit scheme, including financial and performance management and fraud minimisation.





Access the online survey at: www.dwer.wa.gov.au/cds.

Submissions can be lodged by email (preferred) to
cds@dwer.wa.gov.au or
hard copies can be mailed to:
Manager, Container deposit scheme
Department of Water and Environmental Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850

For more information, please email your request to
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