

## SINGAPORE GOVERNMENT CONSULTATION ON BEVERAGE CONTAINER RETURN SCHEME.

### RELOOP SUBMISSION. OCTOBER 2022

Reloop is pleased to provide the following observations and comments regarding the above-mentioned container return scheme (CRS) consultation.

Singapore's decision to introduce a CRS is welcomed and aligned with numerous other progressive governments seeking solutions to their and the world's significant packaging waste challenges. It is estimated around 40% of marine litter is attributed to beverages and CR schemes are globally proven to significantly reduce this and return used containers for Circular Economy (CE) outcomes.

The following comments are limited to aspects of the consultation Reloop believes its' expertise can be applied, to make a contribution toward the government's final determination on scheme design, eligible containers, targets and deposit values. We look forward to continuing to support the Singapore Government in its design and implementation of a CRS and additional packaging recovery policies.

### WHAT CONTAINERS WILL BE INCLUDED IN THE SCHEME - ELIGIBLE CONTAINERS

Reloop would suggest the adoption by Singapore of a DRS offers a unique opportunity to capture all container materials including glass, and there are a number of important justifications for this.

1. As the table below outlines<sup>1</sup>, the current glass recycling rate in Singapore is only 14% and large volumes of this material are going to landfill, rather than beneficial reuse. As landfill constraints are a significant driver for the proposed DRS why not capture as much of this material as possible?
  - a. As there is no alternate glass recovery program it would again make sense to include glass in the Singapore CRS from day one.
  - b. I understand there are concerns with infrastructure and space constraints, though these could be overcome as they have in other jurisdictions, and any additional scheme would have to overcome these in any case.
2. There is a risk of consumer confusion in the case that some drinks are covered by the CRS and some are not, and consumers ask the obvious question as to why plastics and metal containers have a refund value and glass drink containers do not.
3. Finally, there is a risk of material shifting as producers opt to provide more glass packaging (instead of plastic or metal) into the Singapore market in order to avoid the EPR fees etc stemming from a CRS

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<sup>1</sup> <https://www.mse.gov.sg/resources/key-environmental-statistics.pdf>

<b>Waste Stream</b>	<b>Amount of Waste Generated (Mil tonnes/yr)</b>	<b>Amount of Waste Recycled (Mil tonnes/yr)</b>	<b>Recycling Rate (%)</b>
<b>Construction &amp; Demolition</b>	<b>1.44</b>	<b>1.43</b>	<b>99</b>
<b>Ferrous metal</b>	<b>1.28</b>	<b>1.27</b>	<b>99</b>
<b>Paper/Cardboard</b>	<b>1.01</b>	<b>0.45</b>	<b>44</b>
<b>Plastics</b>	<b>0.93</b>	<b>0.04</b>	<b>4</b>
<b>Food</b>	<b>0.74</b>	<b>0.14</b>	<b>18</b>
<b>Wood</b>	<b>0.44</b>	<b>0.29</b>	<b>66</b>
<b>Horticultural</b>	<b>0.40</b>	<b>0.29</b>	<b>73</b>
<b>Ash &amp; sludge</b>	<b>0.25</b>	<b>0.03</b>	<b>10</b>
<b>Textile/Leather</b>	<b>0.17</b>	<b>0.01</b>	<b>4</b>
<b>Used slag</b>	<b>0.13</b>	<b>0.13</b>	<b>98</b>
<b>Non-ferrous metal</b>	<b>0.13</b>	<b>0.12</b>	<b>99</b>
<b>Glass</b>	<b>0.08</b>	<b>0.01</b>	<b>14</b>

## DEPOSIT VALUE

The Singapore Government has outlined a preference for a deposit of either 10c or 20cents. Reloop would strongly suggest legislating the higher figure, at least, and for the following reasons:

1. A lower deposit will quickly lose its 'value' (to consumers) due to overall inflationary effects and will have to be increased in the short term, which will require an additional government regulatory process and the obvious time and other resources allocated to implement.
2. Singapore's GDP per capita is similar to Australia's (around US\$50,000 p.p.), so consumer spending power and ultimately their motivation to collect, store and redeem their containers for a refund will be similar.
  - a. Unfortunately, Australia's low return rates of between 50%-76% are very poor and the country's low deposit value is a significant factor in this poor performance.
3. Reloop recently surveyed New Zealand consumers<sup>2</sup> about their attitudes to various features of that country's proposed CRS. 52% said they wanted the government to legislate a 30cent refund (the NZ Government have proposed starting their scheme at 20cents).

It makes sense to provide the right incentives for consumers from day-one and to not have to revisit the scheme design elements again. Starting at 20cents is logical and given most similar European economies already regulate deposit values of between 30-40cents this proposal is not out of step with other global schemes. (In appendices is a table of a sample of global deposit values as a proportion of per capita GDP)

An indicative survey of SG drinks prices (non-supermarket) showed the following:

PET Bottle – Coke, Volume - 500 ml

Price - S\$3.50

<sup>2</sup> A briefing outlining the findings from this survey including the deposit value preference is available upon request

PET Water bottle – Evian, Volume - 500 ml  
Price - S\$3.50

Metal Can – Heineken, Volume - 350 ml  
Price - S\$5.00

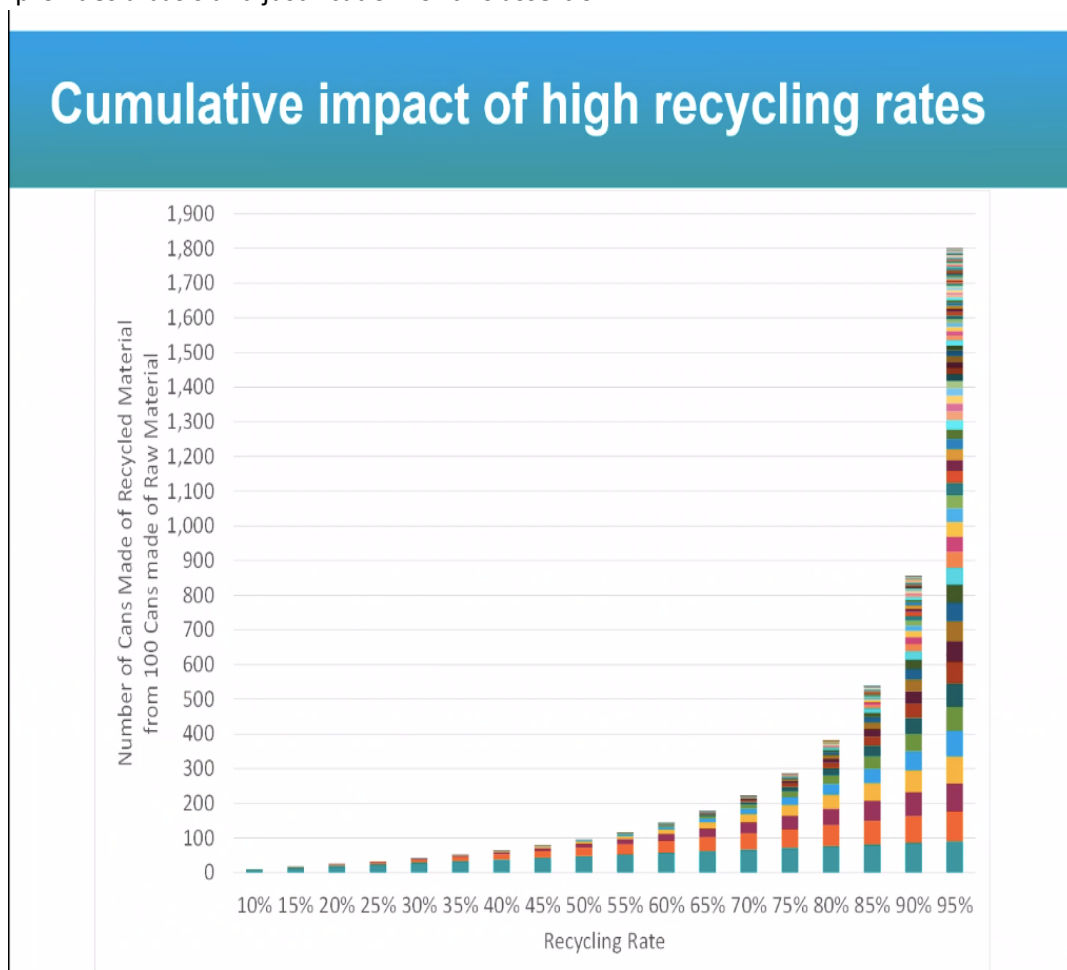
A 20cent fully refunded deposit is not under these market conditions an excessive impost and aligns with the purchasing power of SG consumers.

The government should additionally allow for a legislated means to periodically (e.g. every 5 years) increase the deposit amount to ensure it keeps-up-with-inflation. This could be an increment that reflects the sum of the previous five years annual inflation rates.

### THE RECOVERY TARGET

The consultation paper states the government is proposing the scheme achieve an 80% recovery target aligned with 'high performing' schemes globally. Germany achieves a rate of 98% and most European CRS states are recovering 90%+. ReLoop would suggest this figure does represent high performing schemes, and 80% is an average result at best.

An 80% target, as proposed in the consultation paper, is insufficient for the circular economy outcomes the government wants to achieve. This target should be set at least 90%. The following graph provides a basis and justification for this assertion.



The graph above shows the number of times a container is 'recycled' through a CRS when the scheme hits various recovery rates.

As an example, two containers are placed on the market and in the case of a CRS achieving a 50% recycling rate, one of these is lost to the environment or landfill and one is recovered for recycling. If a CRS achieves an 80% recovery rate a single container is effectively recycled four times, however if a CRS achieves a 90% recovery rate this result more than doubles again to a container being effectively recycled almost nine times and at 95% this climbs to 18 times! This is because at 95% recovery for each 'round' of sales to market only 5% of containers are not coming back to be recycled into new containers.

The CE outcomes of lifting the Singapore target from 80% → 90% are more than double, and this outcome is also manifestly achievable, as shown by well-designed schemes globally.

At 80% Singapore would still be sanctioning around 200 Million containers to be littered or landfilled every year. Most European schemes achieve 90%+ and there is no reason Singapore could not aim and achieve the same outcome.

### THE COLLECTION NETWORK

The Singapore Government has outlined a global best practice approach to the consumer collection network by proposing to obligate supermarkets over a 200sqm threshold to take back containers. This network of return points will provide consumers with a maximised level of convenience to engage in the scheme.

One of the principal criticisms of Australia's CRS is the lack of this consumer convenience. A recent academic study, *The Uptake of Container Deposit Schemes: A Case Study in Perth Western Australia*<sup>3</sup>, highlighted the lack of convenience of the West Australian scheme as a key barrier to its success. The same findings would be true of most other Australian states and territories. The WA scheme is a single entity Scheme Operator governance model, with no retail obligation and no secondary Network Operator to oversee the collection network. Collection points are minimised, open at less than convenient times and in less accessible locations.

The university report details the inadequate consumer accessibility to refund points in WA including the following indicative observation from a WA resident:

*'The facility in my area is not located in a convenient place – it is not connected to the nearest shopping center or supermarket and can only be easily accessed via car ... it is too far to walk from the main shopping complex.'*

The Singapore government is meeting this challenge with its return to retail proposal. It's expected this approach will provide around 400 collection points across the country. This amounts to good quality sites but low quantity with a population to collection point ratio of only 1:14,000

If the Government were intent on seeing additional sites established under the proposed Producer Responsibility Organisation (PRO) model, there may be options to do so. Indeed, additional retail based sites will be valuable to consumers and additional options may also be important for the significant volumes of away-from-home consumption that occurs in Singapore at restaurants, entertainment, and sports venues etc. These kinds of establishments are more likely to contract waste contractors and need to dispose of/ recycle large bulk volumes of containers.

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<sup>3</sup> <https://www.mdpi.com/2071-1050/14/19/11863/htm>

Such large bulk container redemptions are more efficiently redeemed through automated depots and Singapore might seek to ensure a number of such sites across the country, geographically separated to again ensure customer convenience.

The following outlines a couple of possible approaches to consider in Singapore generating additional consumer and business collection points. The following however should be read in conjunction with the points made below around governance, as this aspect of the scheme is key. The scheme design must embody the appropriate governance arrangements to ensure Singapore adopts the most effective model for consumers.

#### **a. Additional obligations for consumer-based collection points**

In addition to the supermarket obligations and thresholds outlined the Singapore Government might also require 'Hawker Centres' (again over a certain size, and to be determined) to take back containers and have some form of redemption point for consumers to access their refunds. Australia has also adopted a model whereby smaller stores can voluntarily enter the collection network and describe these sites as 'Over the Counter' (OTC) sites. New South Wales has a few hundred of these kinds of redemption points.

These OTC's simply take bag loads of used drink containers from consumers – consumers having previously registered with the scheme are paid their refund directly from the PRO via Pay Pal or some equivalent payment platform. The OTC is paid a reduced handling fee (e.g. perhaps A0.03cents per container) for the service and the PRO (or Network Operator) collects and transports etc.

There is little for the OTC to do, but they are willing to engage for the additional financial outcomes, as a consumer service to encourage additional foot traffic to their store. These containers are finally counted and sorted at large automated counting facilities ensuring accurate counting and auditing.

The most important aspect of any additional sites is to ensure the SO is either motivated (through some kind of penalty regime) to contract additional sites; or the government legislates such additional sites as preferred.

## GOVERNANCE

### THE SCHEME OPERATOR

The proposal to appoint a Scheme Operator (SO) works, as long as this entity is not relied upon to determine and establish key scheme parameters including the recovery target, deposit value and collection network.

This is because there are inherent conflicts of interest if an SO is in such a position, as the liable companies (producers) in a CRS are financially motivated to pay as few schemes costs as possible. Scheme costs include refunds to consumers, handling fees and producer fees. Keeping these costs as low as possible may be achieved by keeping scheme return rates as low as possible.

Avoiding producers (and the SO) having control of key scheme features is important and can be achieved through the following mechanisms.

#### Retail collection obligation

1. Singapore's proposed return-to-retail collection model / legislation substantially reduces the conflict of interest by removing the ability of the PRO to determine the collection network and therefore implement a less than convenient collection network.

- a. However, in the case of additional 'non legislated' sites additional mechanisms will be required to ensure such sites are established. The following options might be available and are offered for the governments consideration;

#### A for-profit SO

- 2. Singapore could establish a for-profit SO. This could consist of for instance a financial entity, commercial auditing provider, accounting firm, waste management company or some other configuration of entities.
  - a. The profits made by such a for profit entity are minor compared to the overall costs of running the CDS
  - b. This entity will be more motivated to meet the government's targets and ensure the scheme operates well and for the benefit of consumers than a NFP PRO, which will only ever be a beverage industry consortium.

#### Targets and Penalties

- 3. Establish legally binding collection targets with penalties commensurate with the financial gain by producers in the event of a failure to meet the target.
  - a. Financial penalties are insufficient as they are always less than the benefit gained by a low performing scheme
  - b. For example, approximately four billion containers in Australian CDS are still being littered or landfilled p.a. (due to the poor performance of these schemes) amounting to avoided consumer refunds of around \$400Million and additional avoided handling fees of around \$300Million.
  - c. There is no possibility a government would fine a SO anything like that value in the event of a failure to reach a target. Producers therefore remain better off when the scheme is performing poorly even if they do get fined.
  - d. **A more effective penalty is a legislated deposit increase in the event a target not being met. In this case the Singapore government would include in legislation (this then becomes an automatic/ legislated trigger) that, for example, after three years if the 85% interim target is not met the refund value rises from 20cents to 30cents.**
  - e. Avoiding higher deposit rates is a primary objective of drinks producers and the SO should be sufficiently motivated to avoid this penalty to support a successful scheme.
  - f. The Government could also legislate a Norwegian style tax penalty on the % of containers below the target, again in order to maximise returns. (More details of Norway's pigovian-tax would be available upon request)

#### Network Operator Model

- 4. Singapore could also adopt a Network Operator (NO) model whereby the government appoints a SO and separately contracts a NO to design and manage the collection network.
  - a. This NO model is valuable in removing the conflict of interest of the SO determining the collection network (this is mitigated to some degree in Singapore with the proposed R2R model), but would also allow the government to contract additional collection points to those proposed retail-based sites
  - b. The Australian experience is that SO's (in the case of the single entity governance model) only ever contract the minimum number of sites legislated / regulated. In the case of Queensland this has caused some consternation between the Ministers office and the SO (Container Exchange) – as the Minister expected the minimum would be a baseline and the SO was only ever obligated to achieve this 'minimum' result and was unmotivated to ever increase it.
  - c. A NO could be separately contracted to both roll out the R2R sites legislated, and also contracted to implement or contract additional operators for additional collection points. The NO, being paid through handling fees, is inherently motivated

to maximise the recovery rate and this means maximising consumer access and convenience to the collection network.

- d. The NO would be contracted on the basis of an 'access-agreement' stipulating a minimum additional number of sites, the geographic spread of these, opening hours etc

There are numerous values of a NO model (as long as it is underpinned by certain legislative obligations such as the proposed return-to-retail collection obligation) including:

- As outlined above, a level of government control over the design of the scheme, especially in relation to 'additional' collection points outside the legislated retail sites
- A NO is motivated to create a collection 'network', that works as a functioning entity rather than a series of disparate and separate collection points that may overlap and cannibalise volumes of other collection points
  - o We've seen this lack of coordination in Australian states of Queensland and Western Australia. In these states, the SO contracted separate collection point operators that established sites within very close proximity
  - o The effect of this lack of coordination is to under serve consumers, put the different operators at financial risk as they compete for volume, BUT provided the SO with the ability to meet their local or regional obligations for numbers of sites

#### Additional Legislated Collection Obligations

5. Singapore may also legislate for additional sites to implement collection systems. For instance, all Hawker Centres may have a requirement to offer collection points at these sites.
  - a. The same approach could be taken with housing cooperatives, whereby a pool of a number of apartment complexes may also be required/legislated to establish collection centres.
  - b. The government may also be able to achieve the same results through the contracts between the government and the SO.

END

APPENDICES: Global deposit values as a portion of per capita GDP

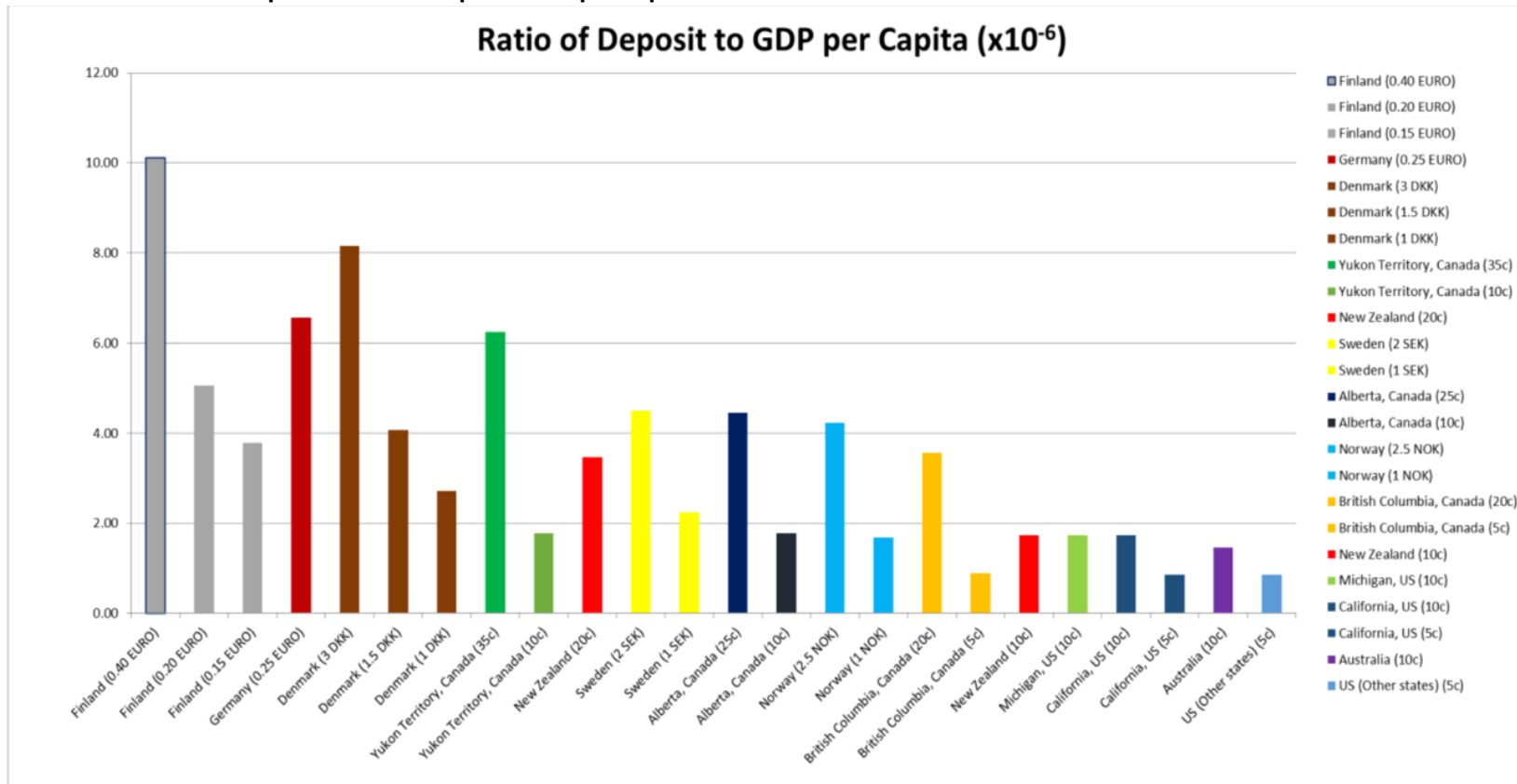


Fig. 1. Ratio of deposit to GDP per capita (Source: The World Bank, 2016 data)

Legislating a 20cent refund for Singapore makes sense. It places this refund amount in the sensible middle ground equivalent to New Zealand’s proposed refund, above Australia’s increasingly meaningless rate though below all European schemes.