



Ministry for the
Environment
Manatū Mō Te Taiao

Te panoni i te hangarua Transforming recycling

Proposal for a New Zealand
Container Return Scheme

**Have your say on the
proposals**

Submissions close:

11.59pm on 08 May

The webinar will begin at 12:00 pm

Karakia

Tuia ki runga,

Tuia ki raro,

Tuia ki roto,

Tuia ki waho

Tuia ki te here tangata

Ka rongo te pō

Ka rongo te ao

Haumi e! Hui e! Tāiki e!

Let us connect to the heavens above

Let us connect to the earth below

Let us connect within

Let us connect externally

Let us connect to the essence of humanity

Exploring the unknown (night) connection

Realising the potential (day) of connection

Uniting as one, Uniting!

Today's session

New Zealand Container Return Scheme proposal:

- presentation
- Q&A session

Webinar Housekeeping

- You are welcome to type questions and/or comments into the **Q&A panel** at the bottom of your screen.
- This webinar will be **recorded** so those that can't attend the session today can view it and the powerpoint slides will be on our website.
- For any questions after the session, email transformingrecycling@mfe.govt.nz

Have your say on our proposals to make recycling easier and better

The consultation closes **8 May 2022**. We are consulting on three proposals related to transforming recycling in New Zealand:

1

Part 1

Container Return Scheme

2

Part 2

Improvements to household kerbside recycling

3

Part 3

Separation of business food waste

After this one, we have two more on the below topics and dates.

Webinar dates	Topics
Tuesday 22 March	Introducing the consultation
Thursday 24 March	Standardising materials
Tuesday 29 March	Container Return Scheme
Tuesday 5 April	Household and business food waste
Thursday 7 April	General overview webinar repeated



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Part One: Container Return Scheme



What do we want to achieve and why?

The aim is to reduce beverage container litter and increase container recycling.

- Estimated 2.57 billion beverages sold in 2020/21.
- Estimated that less than half (45 per cent) are recycled.
- ~1.7 billion beverage containers were either stockpiled, littered or sent to landfills.
- Our existing recovery systems do not incentivise nor enable people to recycle beverage containers when they are away from home.
- Beverage containers are a significant and visible source of litter.
- At an 85 per cent recovery rate, a NZ CRS would recover and recycle >2 billion beverage containers annually and reduce beverage container litter by at least 60%.



2.57 billion beverage containers

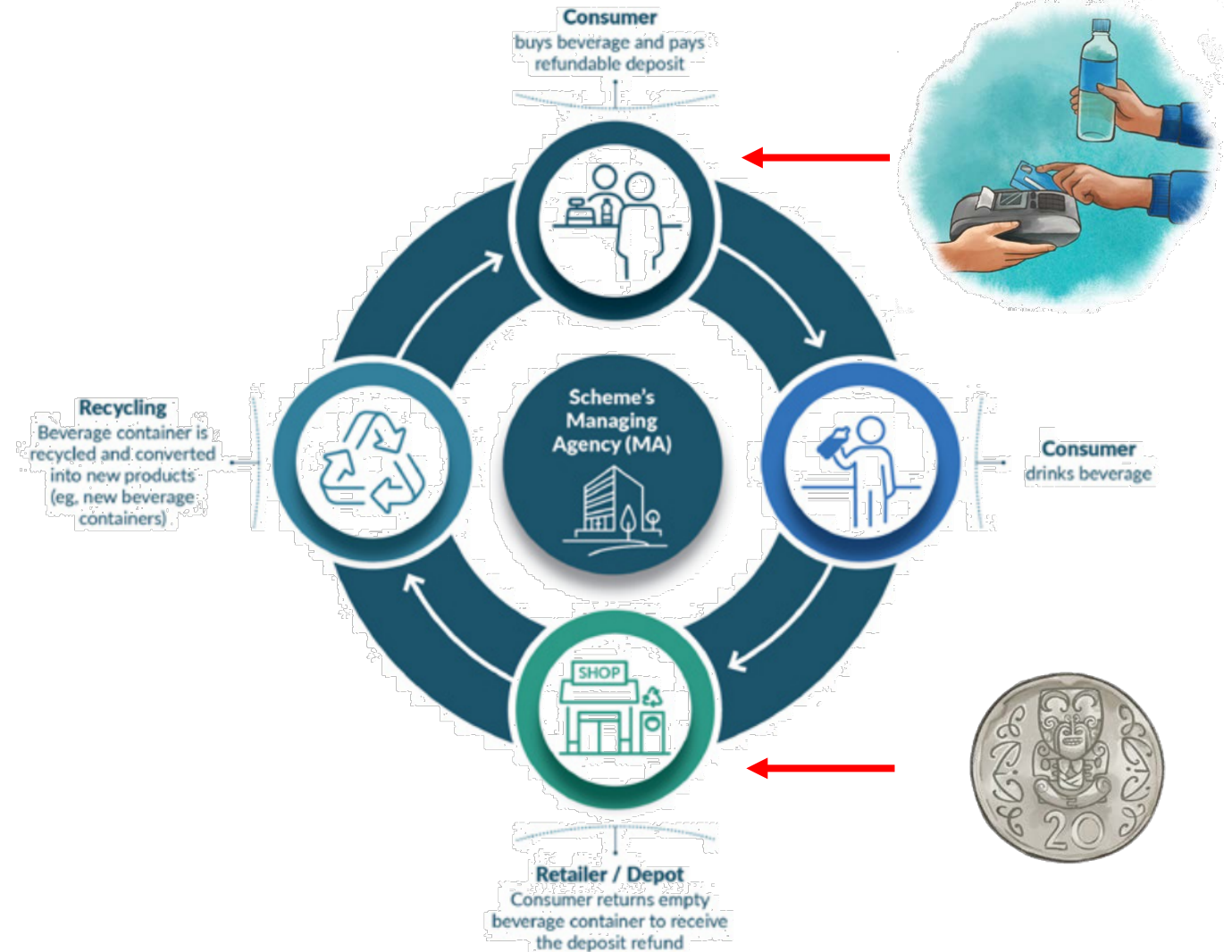
New Zealand beverage container type sales estimates (in millions)

Packaging type (beverage containers)	Plastic	Liquid paperboard	Metal	Glass	Total
2018/19 total estimated containers	515	147	547	982	2,192
2019/20 total estimated containers	572	164	677	986	2,398
2020/21 total estimated containers	587	168	820	995	2,570
Estimated growth in container volume 2018/19 – 2019/20	11%	11%	24%	0.4%	9%
Estimated growth in container volume 2019/20 – 2020/21	3%	3%	21%	1%	7%

What is a container return scheme?

Consumer perspective:

- A container return scheme (CRS) is a resource recovery scheme that incentivises people to return their eligible empty beverage containers for recycling and/or refilling in exchange for a refundable deposit (eg, 10-cents, 20-cents, 30-cents).
- A 20-cent refundable deposit incentive is proposed for the New Zealand Container Return Scheme (NZ CRS).



What's been happening internationally?

- About 50 CRS operating or in the process of being implemented, globally.
- It has been estimated that by 2020, 291 million people had access to a CRS for one-way beverage containers. This number is expected to increase by an additional 207 million by the end of 2023.
- Germany has the best performing CRS in the world (98% recovery rate), followed by Netherlands (95%), Finland (93%), Denmark (92%) and Lithuania (92%).
- Every Australian state has or is in the process of implementing a CRS.



Proposal for a NZ CRS: key design considerations

- Proposed definitions
- Scope of beverage containers
- Exemptions
- Scheme fees
- Not for profit scheme
- Deposit level
- Recovery and recycling targets
- Network: mixed-return model (a hybrid)
- Scheme Governance

Proposed ‘beverage’ and ‘beverage container’ definitions

Beverage

A ‘beverage’ means a liquid substance that is intended for human consumption by drinking.

This proposed definition would include liquid concentrates and cordials and beverages such as drinkable yoghurt, smoothies, etc.

Beverage container

An eligible ‘beverage container’ refers to a vessel or casing of a beverage (regardless of whether it is sold alone or as a unit in a multipack) that is sealed in an airtight and watertight state at the point-of-sale.

These proposed definitions will be considered again if a NZ CRS proceeds.

Scope of containers proposed to be 'eligible' to carry the refundable deposit

We are proposing to include a broad scope of beverage containers in a NZ CRS, to make it easy and convenient for people to understand and use the scheme.

The size of eligible beverage containers is proposed to be 3 litres and smaller.

The beverage container types proposed to be included are all single-use:

- metal – all metals such as aluminum cans and any other metals such as steel, tinplate and bimetals
- glass (all colours)
- plastics (PET 1, HDPE 2 and PP 5; and recyclable bio-based PET 1 and HDPE 2)
- liquid paperboard beverage containers.

Included



All single-use metal beverage containers
(eg, aluminium and metals such as steel, tinplate and bimetals)



All single-use glass beverage containers
(all colours of glass)



All single-use plastic beverage containers
(PET 1, HDPE 2, and PP 5; recyclable bio-based PET 1 and HDPE 2)



All single-use liquid paperboard beverage containers
(except fresh milk)

Container types not included:

Excluded for now: Any “beverage container” (as per the proposed definition) made from materials other than metal, glass, plastics (PET 1, HDPE 2 and PP 5; recyclable bio-based PET 1 and HDPE 2) and LPB.

Exempt: Fresh milk, in all packaging types

Exempt: Beverage containers intended for refilling and have an established return/refill scheme or system

Out of scope: Any container that does not meet the proposed definition of “beverage container” (for example, cups and non-beverage containers)

Not included

×



Any beverage container made from a material other than metal, plastic, glass, or liquid paperboard (including pouches, bladders, and compostable or biodegradable plastics)

EXCLUDED FOR NOW

×



Fresh milk in all packaging types

EXEMPT

×



Beverage containers that are intended for refilling and have an established return/refillables scheme

EXEMPT

×



All cups (including coffee cups)

OUT OF SCOPE

Rationale for proposed exemption



- Consistent with overseas schemes – most schemes do not include fresh milk
- *Often* considered a household staple
- A refundable deposit could have unwarranted financial impacts on households who are already recycling most of their milk containers through kerbside recycling systems (about 86% recovery of plastic fresh milk beverage containers at kerbside)
- The biggest gap in recovery is in the **commercial and hospitality sectors** – we are proposing to target commercial recovery through other means, which could mean investigating a separate scheme for milk containers used in the commercial sector.

Seeking feedback on:

- Do you agree with the proposal to exempt fresh milk in all packaging types from the NZ CRS?
- Do you support the Ministry investigating how to target the commercial recovery of fresh milk beverage containers through other means?
- Do you support the Ministry investigating the option of declaring fresh milk beverage containers made out of plastic (eg, plastic milk bottles and liquid paperboard containers) a priority product and thereby including them within another product-stewardship scheme?

Rationale for proposed exemption

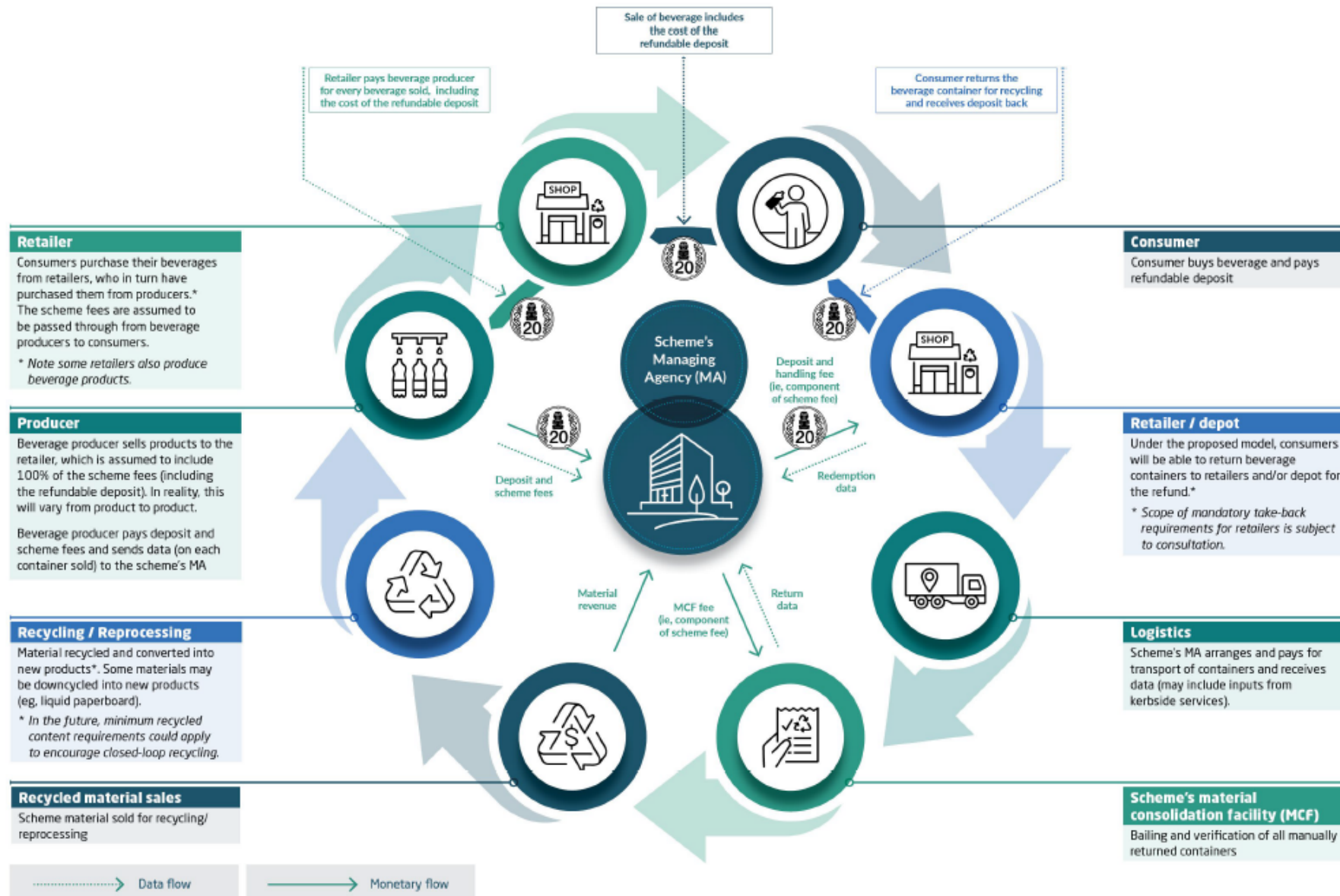


- **An exemption** would not prevent existing refillable systems from operating or stop new beverage producers from moving into the refillable market
- **Refillables have an important role to play**, but, there is **limited information is available on the options for New Zealand**
- **Future-proofing provisions** are proposed to be included within any new CRS legislation (for example, through eco-modulation fee and/or refillable targets)

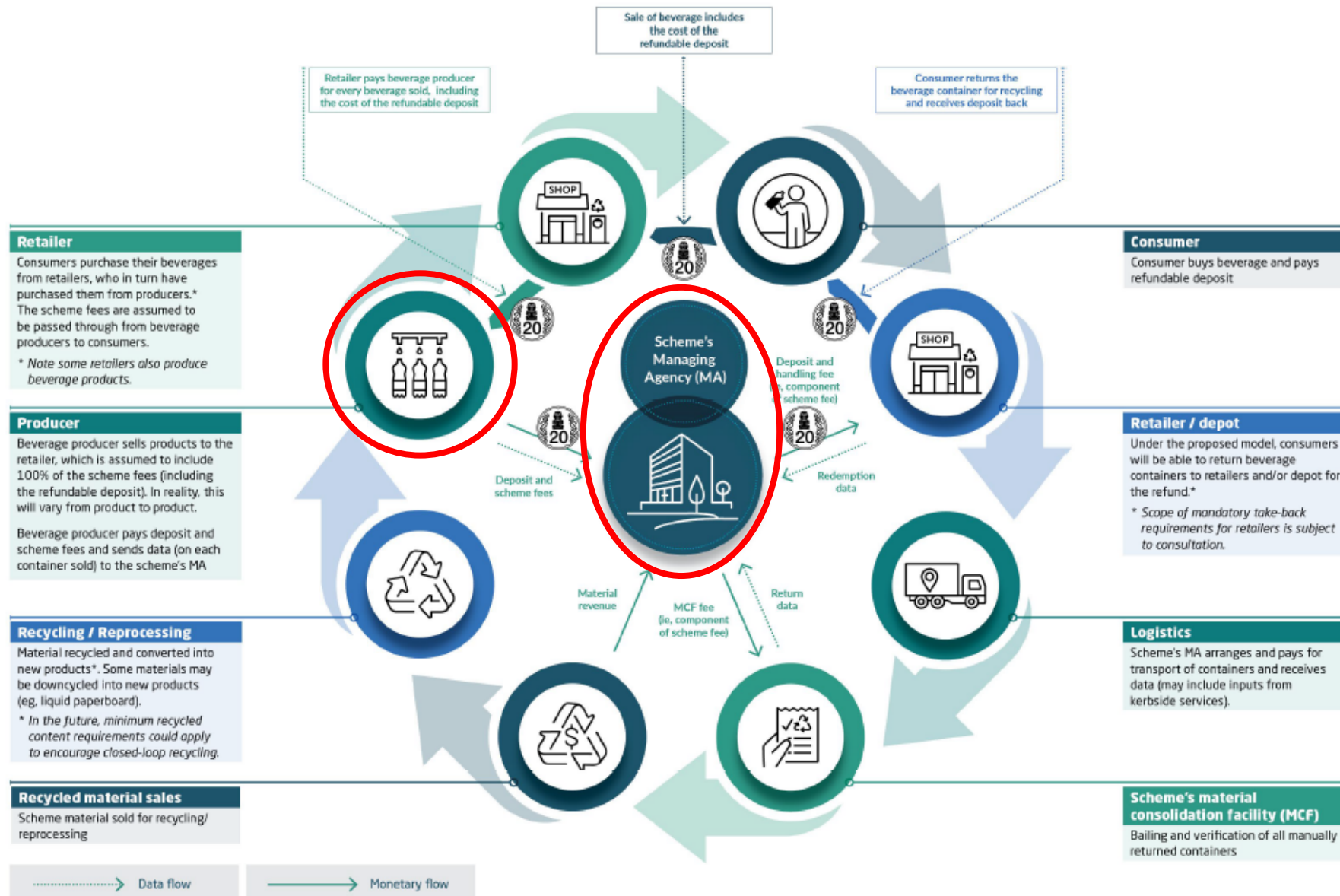
Seeking feedback on:

- We are proposing that beverage containers that are intended for refilling and have an established return/refillables scheme would be exempt from the NZ CRS at this stage. Do you agree?
- Should there be a requirement for the proposed NZ CRS to support the New Zealand refillables market (eg, a refillable target)?
- Do you have any suggestions on how the Government could promote and incentivise the uptake of refillable beverage containers and other refillable containers more broadly?

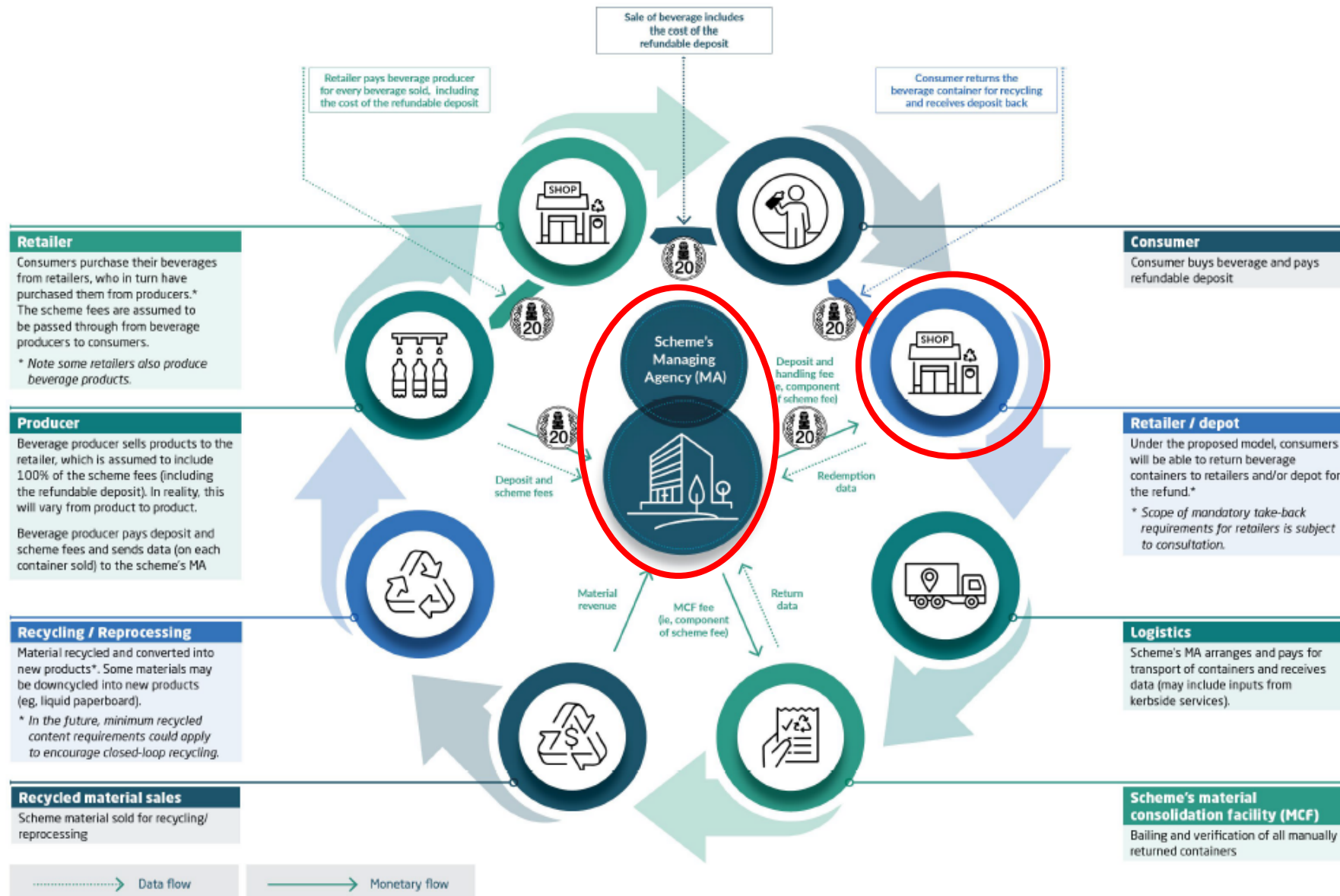
Scheme fees – how it works



Scheme fees – how it works



Scheme fees – how it works



Not for profit scheme



$$100\% = 85\% + 15\%$$



Scheme financial model – simplified explanation

Beverage producers pay 100% of deposits (20c) and pay an “offset” scheme fee cost (+3c) into the managing agency on every container sold = 23c +GST per container (year 1 @100% pass through)



100%



Consumers redeem 85% of containers, managing agency pays consumers their deposit refunds back (via RVM, OTC and depots)



85%



15% of unclaimed deposits (landfill and litter) offset scheme costs for everyone



15%



20-cent refundable deposit



90%



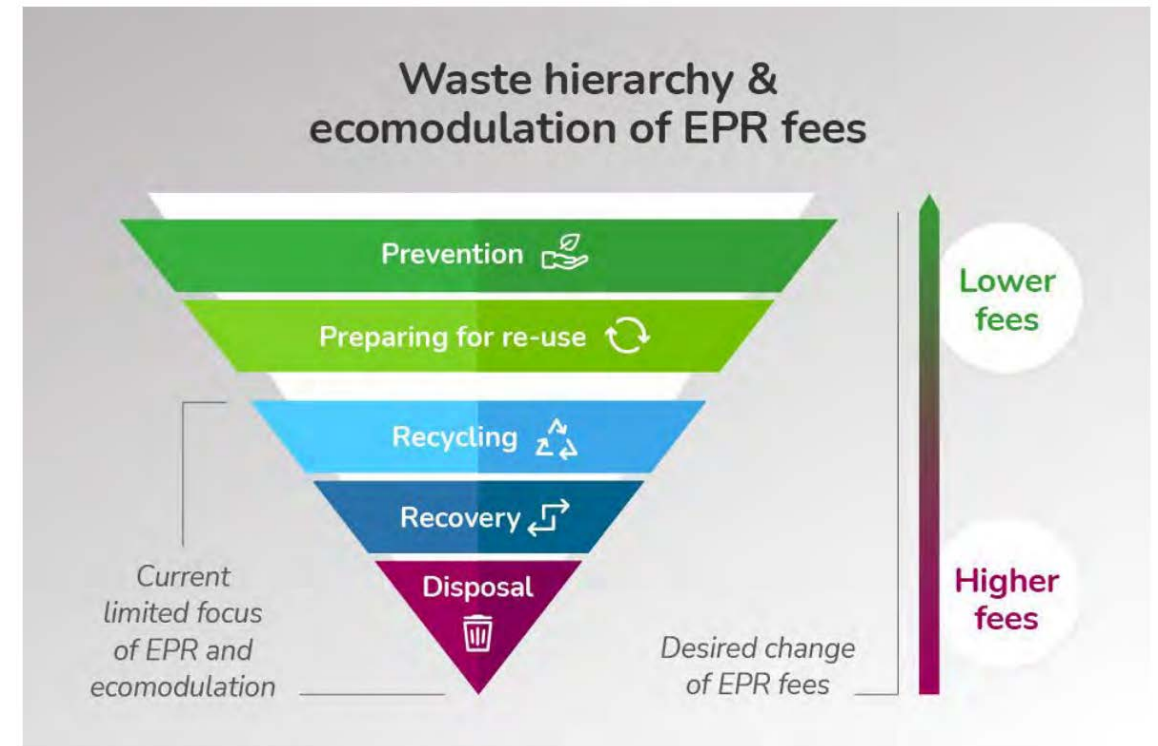
85%



Country/state	NZD conversion (cents)	Recovery
Germany	42	98.0%
Netherlands	42	95.0%
Finland	17-67	93.0%
Denmark	22-67	92.0%
Lithuania	17	92.0%
Norway	33-49	89.5%
Croatia	11	89.0%
Michigan (USA)	15	88.7%
Iceland	17	87.4%
Estonia	17	87.2%
Oregon (USA)	15	85.8%
Sweden	16-33	84.9%
Alberta	12-29	84.9%
Prince Edward Island	6-12	84.6%
Northern Territory	11	84.0%
Maine (USA)	7-22	84.0%
Northwest Territories	12-30	83.9%
Saskatchewan	12-46	83.7%
Nova Scotia	6-12	82.9%
Yukon	6-29	82.3%
British Columbia	12-23	82.2%
Ontario	12-23	78.9%
South Australia	11	76.7%
Vermont (USA)	7-22	75.0%
California (USA)	7-15	75.0%
Quebec	6-23	73.8%
New South Wales	11	70.0%
New Brunswick	6-12	69.5%
Newfoundland and Labrador	6-12	68.3%
New York (USA)	7	64.0%
Iowa (USA)	7	64.0%
Hawaii	7	62.7%
Queensland	11	58.0%
Australian Capital Territory (ACT)	11	50.4%
Connecticut (USA)	7	50.0%
Massachusetts (USA)	7	50.0%

Eco-modulation of the scheme fee

- Eco-modulation is a variable fee pricing mechanism that can be used to improve waste minimisation and circular economy outcomes.
- For the NZ CRS, the scheme fees are proposed to be eco-modulated to reflect the actual end-of-life management costs to recycle all beverage containers.
- In the future the mechanism could also recognize the full life cycle costs of different packaging options.
- The scheme fees would be modulated based on criteria linked to the waste hierarchy and/or modulated through specific scheme recycling targets to be developed alongside other scheme regulations.
- The modulation would encourage more sustainable product design and incentivise recyclable and, in the future, reusable packaging.



Source: Sachdeva A, Araujo A, Hirschnitz-Garbers M. 2021. Extended Producer Responsibility and Ecomodulation of Fees. Ecologic Institute.

Recovery targets

To ensure the success of a NZ CRS, it is proposed that:

- a recovery target of 85 per cent of beverage containers is achieved by year 3 following scheme implementation,
- and a 90 per cent recovery target by year 5,
- if these targets are not met at either year 3 or 5, or maintained after year 5, then the Government would review the proposed deposit amount of 20 cents and the structure of return points and consider an increase in the deposit amount.

Deposit rate	Population per return facility				
	>12,500	12,500 - 10,000	10,000 - 7,500	7,500 - 5,000	5,000 - 2,500
10c	75%	76%	77%	78%	79%
15c	78%	79%	80%	81%	82%
20c	81%	82%	83%	84%	85%
30c	87%	88%	89%	90%	91%
40c	93%	94%	95%	96%	97%

Container return facilities ('the formal network')

A 'mixed-return model' is proposed

- **Regulated take back** requirements for retailers such as supermarkets (typically use RVMs).
- **Voluntary participation**/return points that would be established through procurement by the managing agency. Including **depots** to service commercial recovery volumes and consumer drop offs, and any additional **over-the-counter** return facilities to fill service-level gaps in the network.



Retail take back – Reverse Vending Machines (RVMs) for high volume retail sites



Depots (automated) – for both residential and commercial volumes

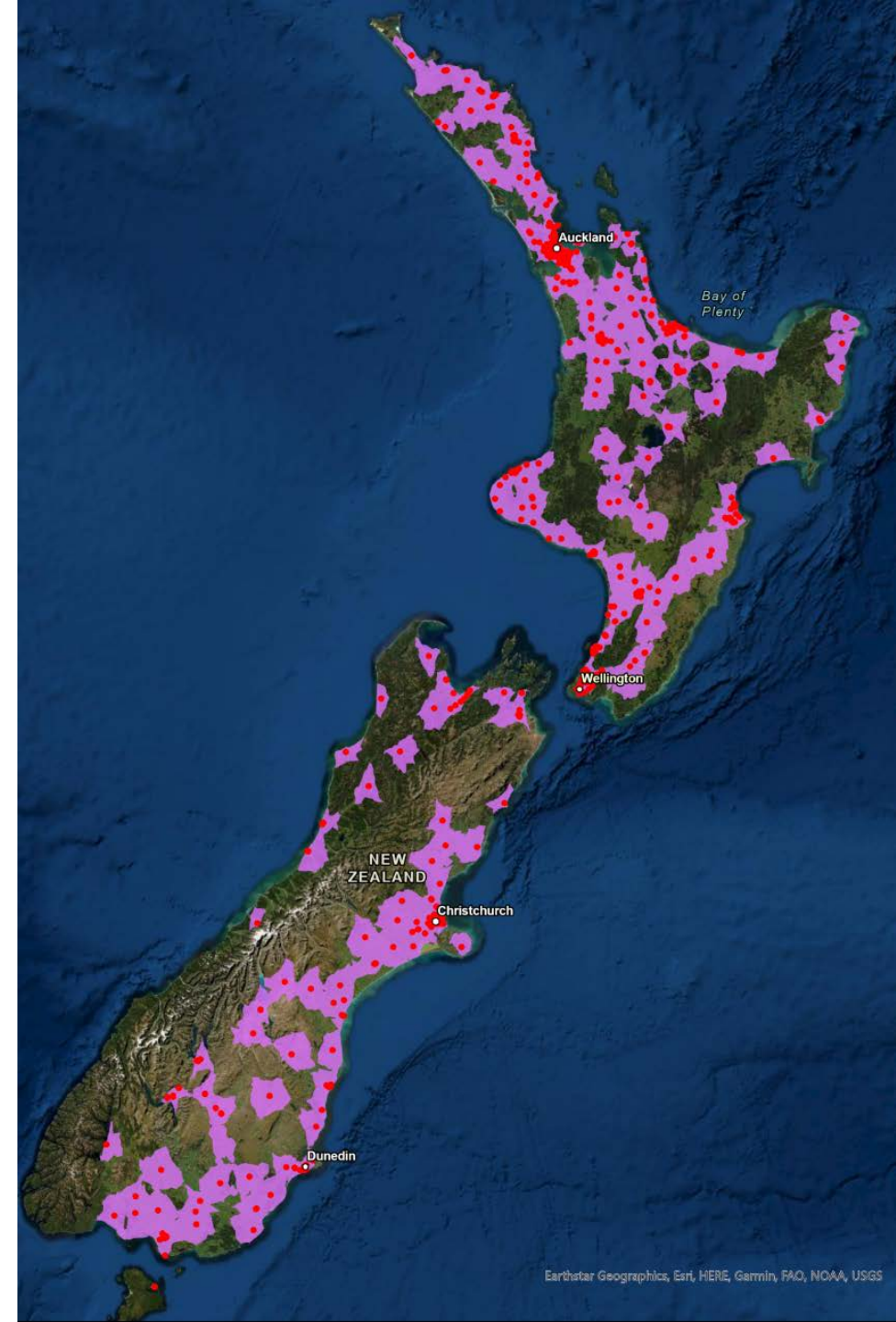


Retail - Over The Counter (OTC) for low volume sites

What the network could look like – retailer participation

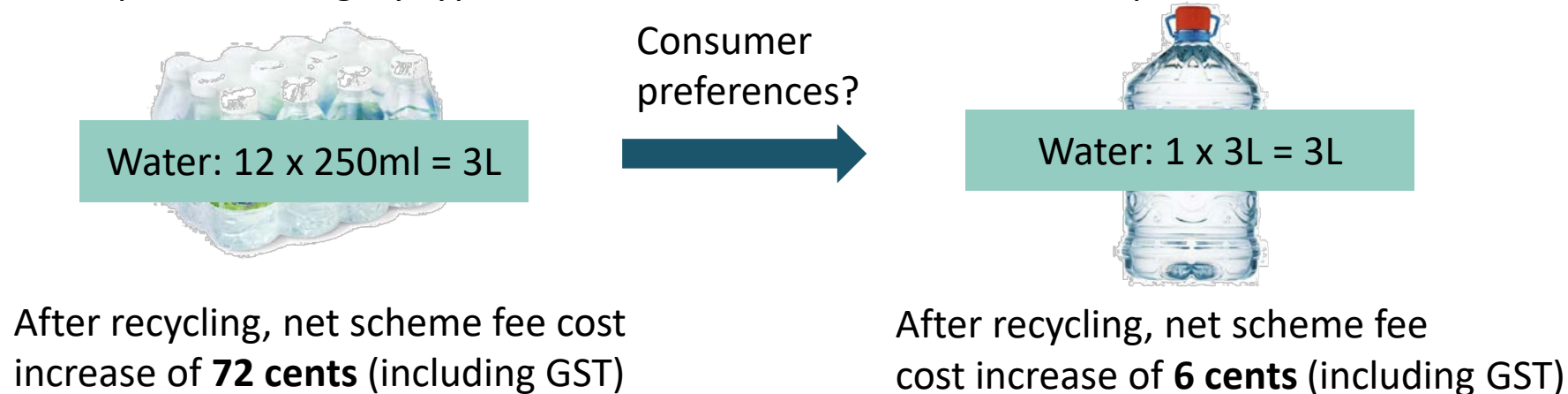
The consultation document is also seeking feedback on the degree of mandatory retail participation in a NZ CRS:

- Do you support a mixed model with a high degree of retail take back?
- Where would you find the easiest location to return eligible containers?
- If retailers that are required to take back containers, should a minimum store size threshold should apply?
 - Over 100m² (many smaller dairies likely exempt)
 - Over 200m² (many dairies and some petrol stations likely exempt)
 - Over 300m² (many retailers, dairies, petrol stations and smaller supermarkets likely exempt)
- Should there be different requirements for urban and rural locations?
For example, a lower floor size threshold for rural retailers, such as over 60m² (as in Lithuania)
- Do you think there should be other exemptions for retailers, for example if there is another retail take back site nearby, or for health and safety or food safety reasons?



Per household impact – 2025

If all scheme costs (23 cents +GST per container) are passed through at 100%, the NZ CRS scheme is **estimated to have a net cost of around \$1.50 (including GST) per week** for participating households after deposits are refunded. **However, this is unlikely to manifest as an actual cost to households.** Rather, consumers are expected to change their consumption behaviour, as has been observed overseas. This can happen a number of ways, including through product switching within a product category type. Bottled water is an illustrative example:



The Queensland Productivity Commission (2020) found that Queensland households experienced net cost increase of **93 cents per household, per month** and **reduced their consumption of non-alcoholic beverages by about 1 litre per month (about 6.5%)** – albeit this was at a (AUD) 10 cent deposit level.

Governance: Non-for-profit, industry-led

- It is proposed that the NZ CRS would be a **not-for-profit, industry-led scheme**.
- The NZ CRS could be led by retailers, beverage producers, recyclers or any combination of industry representatives. The structure provided by key regulated design elements creates the framework necessary for high recovery rates.
- We would expect the scheme governance to be well-balanced among members from different industry sectors, particularly beverage producers and retailers.
- While there may be a dominant group or groups represented in the governance and leadership of a scheme, **governance can be more broadly representative, including consumers and representatives of iwi and community groups**.
- The scheme is proposed to be well regulated (retail take back, 20 cent refundable deposit, broad scope of containers, etc) with high degrees of transparency and accountability to Government.

Cost benefit analysis

Cost benefit analysis shows that for the 20-cent deposit scenario and a 30 year timeframe, society is expected to be better off by \$1.39 billion in present value terms. The proposed scheme has a benefit cost ratio (BCR) of 1.61. Sensitivity testing has been carried out on a number of key parameters including the glass out scenario. Results show there is a range of potential benefits (brackets below), and that the analysis is largely robust to sensitivity testing.

	Glass-in scenario	Glass-out scenario
Total benefits	\$3,667 (\$2,376 to \$4,958)	\$1,753 (\$1,130 to \$1,386)
Total costs	\$2,282	\$1,587
Net benefits	\$1,391 (\$100 to \$2,682)	\$167 (-\$388 to \$671)
Benefit-cost ratio	1.61 (1.04 to 2.18)	1.10 (0.79 to 1.43)

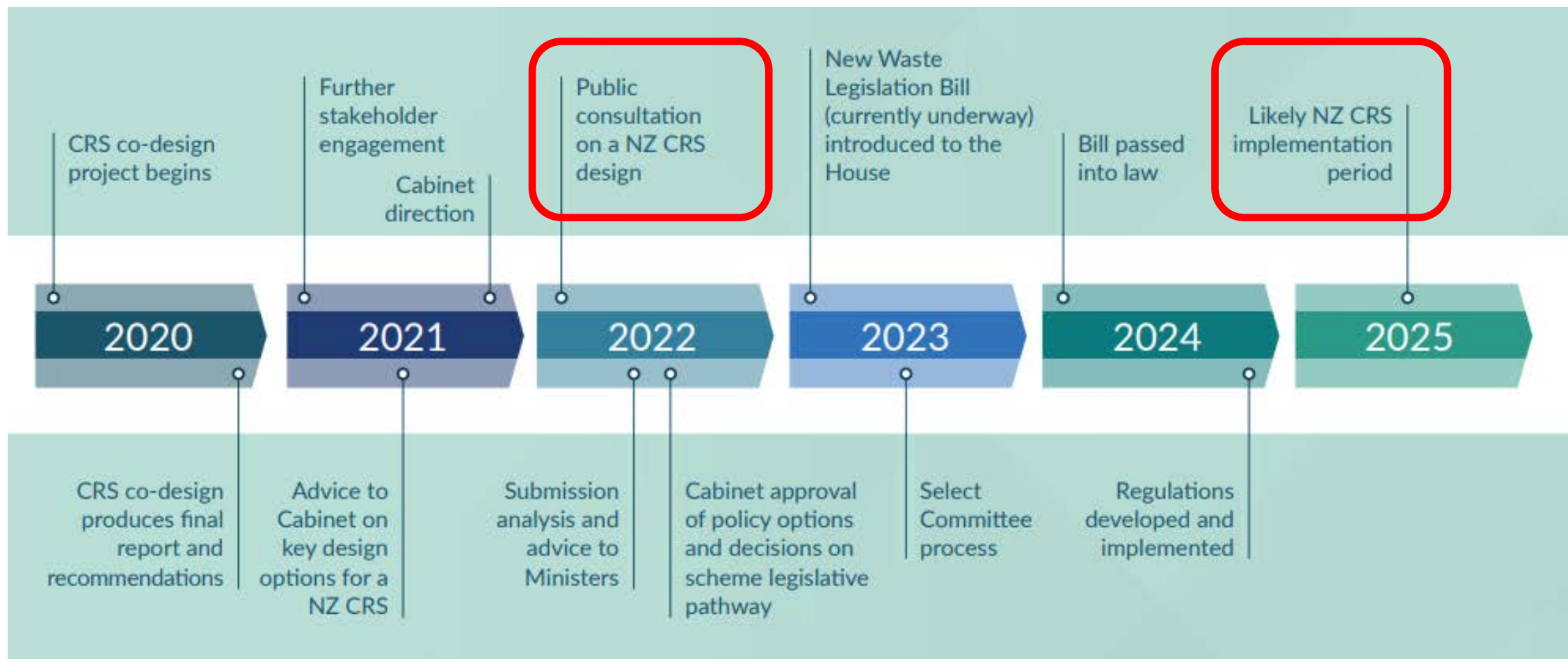
Source: Sapere Research - A Container Return Scheme for New Zealand, cost-benefit analysis update
<https://environment.govt.nz/publications/a-container-return-system-for-new-zealand-cost-benefit-analysis-update/>

Outcomes

**An estimated 7 million beverage containers
are consumed in NZ every day**



Timeline (if a scheme proceeds)



Additional resources

- Financial modelling report, prepared by PricewaterhouseCoopers
- Cost benefit analysis (CBA), prepared by Sapere Research Group
- Reports generated as part of the co-design process undertaken in 2020, on the Marlborough District Council's website
- Interim regulatory impact statement

How to have your say

- Three short summary documents and three short survey forms
- One long consultation document and one long survey form
- You can find out more and have your say here: <https://environment.govt.nz/news/transforming-recycling/>
- Submissions close 8 May 11.59pm

Tips for making submissions

- If uploading a submission in an essay type format, please make it clear which questions you are answering, by copying and pasting the question into your document.
- If you have supporting evidence, let us know ideally by giving us the link or placing in an appendix. You can upload additional information as a pdf.
- If you decide to use parts of a template submission, state upfront that you support the submission of and name the organisation.
- But, also, if there are some areas where you don't agree with the form submission, it is helpful that you make that clear too.



Pātai / Questions

Q&A

Upcoming Webinars

Following on from today's session, you can attend two more webinars.

Webinar dates	Topics
Tuesday 5th April	Household and business food waste
Thursday 7th April	General overview webinar repeated

Karakia

Kia whakairia te tapu
Kia wātea ai te ara
Kia turuki whakataha ai
Kia turuki whakataha ai
Haumi e. Hui e. Tāiki e!

Restrictions are moved aside
So the pathways is clear
To return to everyday activities

Have your say

Submissions close 11.59pm on 8 May

Online: consult.environment.govt.nz

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Email the team at transformingrecycling@mfe.govt.nz for more information

End of session