20 May 2022

Transforming recycling consultation
Waste and Resource Efficiency Division
Ministry for the Environment
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Email: transformingrecycling@mfe.govt.nz

Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on *Te panoni I te hangarua Transforming recycling: Container return scheme, Improvements to household kerbside recycling, Separation of business food waste.*

Yours sincerely

Katherine Rich
Chief Executive

Te panoni I te hangarua Transforming recycling: Container return scheme, Improvements to household kerbside recycling, Separation of business food waste

Submission by the New Zealand Food & Grocery Council

20 May 2022

INTRODUCTION

1. The New Zealand Food & Grocery Council ("NZFGC") welcomes the opportunity to comment on the following main discussion document and the related documents:
    - *Te panoni I te hangarua Transforming recycling: Container return scheme, Improvements to household kerbside recycling, Separation of business food waste*
    - *Interim regulatory impact statement: a beverage container return scheme for Aotearoa New Zealand* (including the *Cost benefit analysis* by Sapere Research Group)
    - *Interim regulatory impact statement: improving household and business recycling.*

2. NZFGC represents the major manufacturers and suppliers of food, beverage and grocery products in New Zealand. This sector generates over $40 billion in the New Zealand domestic retail food, beverage and grocery products market, and over $34 billion in export revenue from exports to 195 countries – representing 65% of total good and services exports. Food and beverage manufacturing is the largest manufacturing sector in New Zealand, representing 45% of total manufacturing income. Our members directly or indirectly employ more than 493,000 people – one in five of the workforce.

EXECUTIVE SUMMARY

3. NZFGC is strongly supportive of recycling efforts in New Zealand evidenced by its Sustainability Committee comprising over 100 companies participating and members setting objectives for resource recovery and recycling through their businesses.

4. We support the vast majority of aspects of each of three proposals in the Consultation Document (Container Return Scheme (CRS), Kerbside recycling (6 proposals and implementation) and Separation of business food waste) as the following attests but there are a number of significant concerns with each of the three.

PART 1 – Container Return Scheme

5. NZFGC is supportive of a CRS that is not-for-profit, industry-led and with voluntary, multi-network drop-off points (not mandated retail points) contributing to the overall ambition of transforming recycling and leading to a circular economy. We have serious concerns that the design of the scheme proposed (high cost) and the cost-of-living impact will not deliver the desired outcomes. We are very concerned that the data supporting the financial case (litter and willingness-to-pay) appears inaccurate, outdated and misapplied.

6. We agree with the proposed definition of a beverage and the definition of an eligible beverage container but this should not include medical nutrition beverages and should also confirm how containers must be presented to be eligible for redemption.

7. NZFGC strongly opposes the proposed refund amount of 20 cents. This excludes costs of running the CRS which would add another 8.5-12 cents per container. The cost of a container would increase by around 30 cents per container and the cost-of-living impact would be significant. CRS scheme costs need to be absolutely minimised whilst achieving the stated objectives of maximising recovery and recycling and reducing litter. We therefore strongly support a 10 cent deposit rate, which we believe will still enable achievement of all stated objectives, at a lower impact on the on the broader economy including consumers and industry.

8. Further, adopting a different deposit value in New Zealand than Australia has several very significant negative impacts:
   - consumers in New Zealand will pay substantially more for recycling beverage containers than Australian consumers making New Zealand an even higher cost country in comparison than it already is.
   - trans-Tasman manufacturing brands will need to put different deposit rates on pack.
   - there is a high incidence of arbitrage across borders where deposits differ based on experience in other markets.

9. NZFGC recommends that refunds for containers be subject to further investigation beyond this consultation so that consumer preference can be matched with technological capability.

10. Nonetheless, NZFGC supports variable fees to incentivise the move to more recyclable packaging and the scheme design follows the Guiding Principles for the Eco-modulation of Extended Producer Responsibility fees for packaging[1] namely:
   - fees should be charged per material type, considering material value
   - all fees, levies and costs enforced on manufacturers should be determined on a net cost basis to ensure the scheme remains not-for-profit, with a view to minimising costs flow to consumers and inflationary impacts
   - there should be no cross subsidisation of fees
   - the legislative framework should mandate the Managing Agency to disclose transparent information detailing how fees are calculated per material type.

11. There are differing views within NZFGC about what should or should not be included in the CRS but any decision needs to be based on two factors:
   - the most efficient way of recycling materials (maximises returns at lowest cost)
   - the minimisation of the impact on cost-of-living.

12. The rationale for:
   - glass out: already have efficient glass recycling systems for single use and returnable glass containers, the oldest recycling system in New Zealand (Lion's Swappa crate) has delivered a model that works, there is an efficient kerbside glass collection system and 75% glass containers are recovered, streaming glass by colour is important for efficient recycling and New Zealand has an on shore glass manufacturer which converts 61% bottles back to bottles[2].
   - glass in: simple and removes confusion, glass comprises a significant component of the total proposed recycled waste, without it, collection costs may well increase and glass could be included but in a separate RVM or depot for glass only.

13. NZFGC agrees:
   - the material types listed (glass, many plastics, metal and liquid paperboard) should be recycled. and that public awareness and promotion programmes will be vital to success
   - that refillables should be exempt at this stage conditional on a review of the total carbon footprint to ensure that a move to refillables also meets the desired objective to move to a low-carbon economy.
   - in principle with the size of eligible beverages containers being 3 litres or less.

[1] The Consumer Goods Forum Guiding-Principles-for-the-Ecomodulation-of-EPR-Fees-February-2022.pdf (theconsumergoodsforum.com)

[2] Glass Packaging Forum Accreditation Report 2021

14. NZFGC recognises that recycling plastic liquid milk containers in a separate stream would support the recovery of food grade containers due to the pre-sorted nature of the collection. There remains an obvious discrepancy that will arise with containers of non-dairy milks being subject to the additional costs of a CRS but dairy milk containers are not. This could lead to market distortion and potentially be considered anti-competitive. As well, this could be considered discriminatory for consumers with dairy allergies.

15. NZFGC considers that lids and caps are an intrinsic part of the beverage container and if the intent of the CRS is to reduce litter and make the CRS simple, then the container, and its lid (either on or off), must be returned for refund.

16. NZFGC strongly opposes mandated retail participation which would would result in New Zealand having **4 times** as many collection points as any jurisdiction in Australia per population and instead supports collection networks made up of many voluntary return point operators and collection points. A mandated supermarket scheme is particularly significant with the recent publication of the Grocery Market Study Report (March 2022) concerning the supermarket duopoly in New Zealand.

17. The larger the number of drop off points, the higher the operational costs and at the rate of mandated retail drop off points, NZFGC believes the handling fee would be well over 10 cents per container. This would be a major impost on cost-of-living impacts. NZFGC favours a not-for-profit system but not a for-loss scheme.

18. NZFGC supports collection networks made up of many return-point operators. The voluntary return model allows accessibility and customer convenience which is widely available elsewhere (fuel stations, dairies, farming supply centres in rural New Zealand and hardware outlets). This allows for a mix of local and community solutions to be applied.

19. NZFGC is concerned at the lack of analysis of recovery by channels such as hospitality and public events and is concerned about the lack of scrutiny given to network costs in the proposed CRS. Without addressing these areas of supply, it is difficult to understand how the government expects to reach targets of 90% redemption.

20. NZFGC supports a refund financial model for the CRS. NZFGC members are intimately involved in a broad range of government cost recovery schemes. All have guiding principles and we therefore support cost recovery parameters which includes:
    - a scheme run by a Managing Agency that is not-for-profit with defined powers to collect beverage containers
    - beverage manufacturers paying a Managing Agency set fee for every container they sell
    - a Managing Agency setting fees for each material type to fully cover the costs of collection and ensure recycling for each material type
    - a fee that is inclusive of GST
    - payment in arrears by beverage producers.

21. NZFGC strongly agrees that the scheme should be a not-for-profit and industry led scheme and strongly advocates for high recovery targets to ensure recovery is maximised but that there must also be recycling targets – collection targets on their own do not increase the recycling rate.

22. NZFGC supports implementation of a CRS conditional on:

- consideration of the deposit amount to minimise the impact on cost of living and harmonise with Australia
- ensuring that the collection system is made up of many voluntary return point operators and a diversity of return point options not a "high degree of mandated retail participation"
- the litter data which underpins the report is validated
- consideration being given to the scheme objective being recovery and recycling, not litter.

PART 2 – Kerbside Collections

23. NZFGC agrees
    - in principle with proposals to standardise kerbside collections and the intent to increase the quality and quantity of recovered material
    - with the Government's recognition that "kerbside recycling collections are a key part of our resource recovery system[3]".

24. All materials which have a value in the circular economy should be collected with recycling made easy for the consumer. New Zealand should continue to invest in technology which allows us to achieve this, but NZFGC also supports separate kerbside collections of fibre and glass to improve the quality of recovered materials.

Kerbside Collections Proposal 1: Collecting a Standard set of materials

25. NZFGC agrees in principle that a standard set of materials should be collected for household recycling at kerbside but this should be a minimum set only and only with the intent that this is to:
    - maximise the quality of recovered materials
    - increase the quantity of the targeted materials being recycled and
    - increase public engagement and trust in kerbside collections.

26. This principle does not extend to reducing recovery to the lowest common denominator of those councils that have limited collections. The proposals would currently see **48% of councils having to reduce what they collect to get down to the level of the others**. This is counter-intuitive to 'transforming recycling' and more akin to 'reducing recycling'. As well, taking recycling options away from the majority of New Zealanders in the 28 councils offering a broad service also does not make sense.

27. NZFGC is strongly opposed to any move to stop Councils accepting post-consumer aerosols in recycling collections. This is a retrograde step for the environment and out of step with international practice. If councils currently have valuable end-markets for materials collected at scale such as aluminium and steel aerosol cans, we believe that those kerbside collections should continue and NOT be determined by other regions/ lowest common denominator.

28. Aligning what is collected at kerbside with the CRS will minimise consumer confusion and lead to higher recovery rates. On this basis NZFGC believes that Liquid Paper Board should be included in both the CRS and kerbside collections. According to MFE the market for LPB has seen a 34% growth in New Zealand in the last two years. Excluding their product formats from kerbside recycling would undermine the efforts of companies to take responsibility for their packaging and discourage investment to address the growing waste issues that this proposal is aiming to resolve,

[3] Interim regulatory impact statement: Improving household and business recycling

29. NZFGC believes that to achieve a level of national consistency across local authorities, regulation, voluntary measures and continuing investment from the Government is required to ensure all regions have the collection and processing technology required.

30. NZFGC is concerned that the criteria proposed by MfE for kerbside collection may close-off options for near future developments. NZFGC considers the proposed standardised collection list to be minimum and not an exclusive or maximum set of materials. New Zealand should be looking to align our kerbside collection materials with global best practice sortation systems. NZFGC strongly suggests that kerbside recycling in New Zealand must be harmonised with Australia, particularly as both countries are implementing the Australasian Recycling Label on packaging.

31. NZFGC recommendations about additional materials which should be collected at kerbside are in line with MfE's criteria namely that for kerbside recycling:
    - materials have sustainable end markets and
    - materials have viable processing and sorting technologies with investment to achieve recycling capability comparable with other markets such as Australia, Ireland, UK and Canada. These countries are developing standardised approaches or (as in the case of British Columbia, Canada), already have them in place.

32. NZFGC agrees that the any set of materials for recycling should be regularly reviewed based on consideration of 4 of the 7 factors proposed for determining whether a class of materials should be accepted at kerbside in the future (sustainable end markets, circular end markets; viable processing technologies and manual and automated MRF processing). We are strongly of the view that decisions relating to which materials are added (or deleted) must be made by an independent board which comprises a broad stakeholder base.

33. NZFGC considers there is no justification for factoring in "no adverse effects on local authorities, including financial" (none is included in the consultation). Nor do we believe that "supply chains should contribute appropriately to recovery and end-of-life solutions for their products" when 'appropriately' is not defined and 'end-of-life solutions' are likely to change dramatically in coming years with new technologies and initiatives. The transition to a circular economy is a public good and therefore should be public funded.

34. NZFGC strongly supports the extension of resource recovery facilities.

Kerbside Collections Proposal 2: All urban populations should have access to kerbside food scraps collections

35. NZFGC agrees that we should maximise the diversion of food and garden waste from landfills to help reduce waste and to reduce the biological methane emissions from organic waste.

36. The scale and scope of a national scraps collection system must be based on a full cost benefit analysis rather than an indicative cost benefit analysis (CBA). NZFGC strongly recommends ring-fenced funding for food scraps collections and technical support, to avoid cross-subsidisation of systems - there should be no cross-subsidisation between recycling schemes. Decisions around household food scraps collection also need to be informed by what households are prepared to do.

37. NZFGC agrees that
    - food scrap collections should be mandatory in urban areas (defined as towns with a population of 1000 plus) based on a full cost benefit analysis which considers the cost of collection and availability of end markets

- the best way to minimise food waste is to encourage households to reduce avoidable waste.

Kerbside Collections Proposal 2 Implementation

38. NZFGC supports a phased approach both geographically and temporally, as the most efficient way to the roll-out of kerbside food scraps collections. This would allow processes and infrastructure to be piloted and scaled up in a sequenced, controlled and cost-effective way. An important consideration for timing is not a target but whether expansion of a food scraps collection service is matched by end-of-life solutions and cost.

39. NZFGC agrees:
    - with the exclusions to food scrap collections proposed (eg newspaper, food-soiled cardboard containers, cardboard etc) except for tea bags. If tea bags are sealed without plastic, they meet the criteria of 'assisting to divert food waste from landfill and the other criteria' listed in the Consultation Document
    - with the factors in the consultation document for deciding on which non-food products or packaging be accepted in a food scraps bin or a food and garden waste bin and particularly favours the application of the Australasian Recycling Label (ARL) to assist consumers determine the correct recycling steps to take with a product's packaging
    - that kerbside food and garden bins should include products that: meet New Zealand standards for compostability, are certified in their final form, are clearly labelled as to compostability and have a technology or process available to easily identify and sort compostable from non- compostable products
    - in principle that producers and users of the products and packaging contribute to the cost of collecting and processing but as with other proposals in the Consultation Document, detail around what this entails is critical.

Kerbside Collections Proposal 3: Reporting on household kerbside collections offered by the private sector

40. NZFGC is working with its members to have robust data on the amount of packaging which is consumed annually. We have estimated that around 94,000 tonnes of plastic packaging is collected but we are unable to access reliable data on what is recovered by resin type.

41. NZFGC agrees
    - it is important to capture collection data from both the public and private sector however this must be accompanied by recycling data. Without recycling data, the target is collection, but recycling rates may not increase
    - collection and recycling data should be publicly available unless disclosure would release commercially sensitive information
    - reporting should be by material type and linked to the GS1 reporting data so that New Zealand can track recovery against consumption.

42. With one of the key policy objectives being to deliver a public behaviour change and a more positive attitude to recycling, collectors should report
    - recycling rates
    - percentage processed in New Zealand and where
    - what the materials have been converted into.

Kerbside Collections Proposal 4: Setting Targets (or performance standard) for councils

43. NZFGC agrees:
    - there should be a minimum performance standard for kerbside recycling services but this must be collection and recycling not just collection
    - the minimum performance standard should be set at 50 per cent for the diversion of dry recyclables and food scraps for recovery AND recycling.

44. The date for territorial authorities to achieve the minimum performance target should be aligned with the implementation of the CRS and the Plastic Priority Product Scheme and not delayed until 2030. Producers and industry are required to have their schemes in place by 2025 but a delay for territorial authorities to 2030 would mean councils are not required to even reach minimum targets by 2025 - counter to the concept of a New Zealand Inc solution.

45. NZFGC agrees a high-performance target be set for overall collection performance for territorial authorities - New Zealand's collection performance must seek to achieve international best practice. An aspirational diversion rate should be set at 85% consistent with the CRS not 70% (or both targets should be 70%).

46. The consequences for territorial authorities that do not meet minimum performance standards might include some barrier to central government funding for developments and incentives.

Kerbside Collections Proposal 5: Separate collection of glass and paper/cardboard

47. NZFGC supports separate glass and separate paper/cardboard collections as this prevents the need to try to 'unscramble the omelette' at the MRF.

48. If the decision is for glass or paper/cardboard is to be collected separately, this should commence immediately. NZFGC has been advocating for this since the introduction of commingled collections. Forty-eight councils currently collect glass separately or separate at kerbside so with only 19 councils not separating glass, the impost on an immediate commencement is minimised.

Kerbside Collections Proposal 6: Should all urban populations have access to a kerbside dry recycling collection?

49. NZFGC agrees that:
    - all councils should offer household kerbside recycling services for a minimum set of materials but all councils should be subject to a full Cost Benefit Analysis
    - services should be able to be offered at a minimum to all population centres of more than 1,000 people
    - councils without any council-funded kerbside recycling collections should implement these collections within two years of their next Waste Management and Minimisation Plan.

Kerbside Collections Implementation support for proposals 1-6

50. We have suggested areas of research throughout the foregoing, particularly in undertaking full cost-benefit analyses of the elements and ensuring that different recycling programmes are cost recovered and not cross subsidising broader activities. Underpinning all of the proposals is the need for best-in-class education with the goal that people alter their thinking from looking at items as waste to looking at items as a resource. NZFGC therefore supports a major nationwide consumer awareness campaign which educates people:

- about the ARL
- how to present materials for recycling (whether at kerbside, CRS or drop off recycling) – clean, dry and empty
- showcases the new products made from recycled materials.

51. NZFGC notes the timeline for 2022 presumes a ‘standard list of materials agreed’. We are supportive of a standard list of materials but not that such a list be finite. The list should be the minimum categories of materials collected. If the standardised list of materials is a finite list, such a step will increase the waste being sent to landfill by closing off existing avenues for recycling. This would be a significant backward step.

PART 3: Separation of Business Food Waste

52. Not every business and town has access to commercial food scraps collections.

53. NZFGC does not support mandating businesses to separate their waste. We consider this to be unnecessary regulation and contrary to regulatory best practice by proposing a regulatory overlay. We agree that separation of food waste should be phased in, depending on access to suitable processing facilities (eg, composting or anaerobic digestion). In any event the additional cost will contribute to CPI throughout the country.

54. Many of our members’ businesses are already separating their waste and reporting on their food waste diversion in their Annual Sustainability Reports. We believe other measures including the annual increase of the waste levy over the next 3 years, will be effective in changing behaviour. It would be more efficient to review the situation in 2025 to assess effectiveness and, in the interim, develop mechanisms for the three metropolitan areas without waste food processing facilities (Wellington pop 0.217m, Lower Hutt pop 0.113m and Dunedin pop 0.133m) to build the waste food processing facility infrastructure.

55. Commercial businesses in towns with populations of more than 1000 residents should be able to divert food waste from landfills by 2030 so long as the end use has been researched and found to be feasible and sustainable. The necessary infrastructure would also need to be in place.

56. NZFGC does not agree that businesses that produce food have a shorter lead-in time than businesses that do not. All should proceed in parallel for system simplicity. Businesses that do not produce food will likely meet expectations in advance of the deadline set anyway.

57. NZFGC agrees there may be good reasons to exclude some businesses from the requirements or a selection of the requirements to separate waste due to the other risks to the community that the waste they generate might present eg hospitals and care facilities.

58. In terms of support provided to help businesses reduce their food waste, the timing should be appropriate, they should be able to access timely toolkits and advice, perhaps encouraged to attend workshops or have council officers (perhaps Food Safety Officers) provide one-to-one advice.

DETAILED COMMENTS

PART 1 – Container Return Scheme (CRS) (*Transforming recycling* p23)

Why do we need a Container Return Scheme (CRS)

Policy Objectives for a NZ CRS
Alignment with kerbside collection systems
Co-design project for a NZ CRS
Key elements of the proposal
Next steps after consultation

59. NZFGC is supportive of a CRS that is not-for-profit, industry-led and with voluntary multi-network return points (not mandated retail points) contributing to the overall ambition of transforming recycling and leading to a circular economy. We have serious concerns that the design of the scheme proposed (high cost) and the cost of living impact will not deliver the desired outcomes and further that the data supporting the financial case (litter) appears inaccurate.

60. These concerns are amplified by the Interim Cost Benefit Analysis and the use of unaudited litter data from several sources summed and/or averaged, the age of the data and its scope relating to willingness to pay (2010 and 2011 summed and averaged) and the resulting cost benefit delivering an excessively high benefit NZ$1.391 billion over 30 years.

61. On its face, taking two thirds for 20 years and converting to A$ and the cost benefit analyses for the three most recent Australian schemes that undertook similar analyses, the comparison is stark (see Figure 1). See also a brief commentary on data at Attachment A (also referenced in response to Question 28).

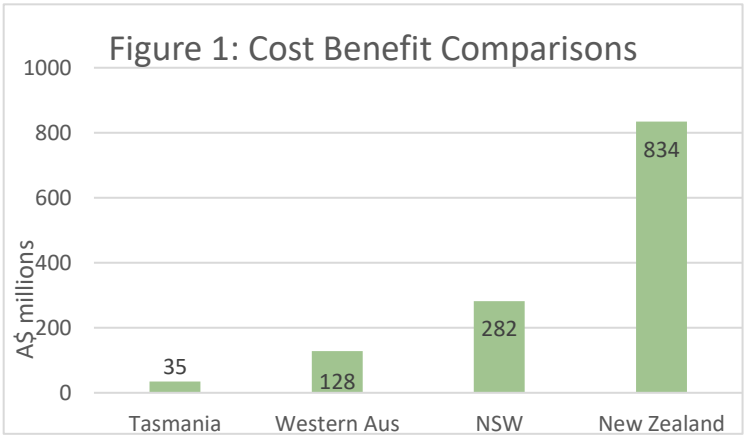


Figure 1: Global deposit rates, converted to NZD. Source: data extracted from bottlebill.org

Proposals for a NZ CRS (*Transforming recycling* p31)

What do we mean by 'beverage' and 'beverage container'

Q1. Do you agree with the proposed definition of a beverage?

1. Yes, **NZFGC agrees** with the proposed definition of a beverage as "a liquid substance that is intended for human consumption by drinking." We also agree that the proposed definition include concentrates and cordials (given that it does not specify that a beverage needs to be 'ready to drink') and beverages such as drinkable yoghurt, smoothies etc. Clarification is required for other products about what is "drinkable" or when it becomes "not drinkable" for example soup, stock, yoghurts.

Q2. Do you agree with the proposed definition of an eligible beverage container?

2. Yes, **NZFGC agrees** with the definition that an eligible beverage container refers to a vessel or casing of a beverage (regardless of whether it is sold alone or in a multipack) that is sealed in an airtight and watertight state at the point of sale. This differentiates such containers from open cups and containers such as ice cream tubs. A more detailed list such as is promulgated by the Western Australian Government[4] would be helpful. This definition also needs to cover how beverage containers are presented to be eligible for redemption – for example whole, undamaged and uncontaminated. Experience overseas for example in Queensland shows that people may try to return parts of containers.

3. The definition should not include medical nutrition beverages which are used in hospitals and for 'at home' and institutional patient care. At present these would be included under the definition which NZFGC believes would not be the Government's intention given these containers are unlikely to be returned for deposit and may also be contaminated.

4. All eligible beverage containers should be registered with the Managing Agency and/or the Ministry for the Environment, to protect against fraud and anti-competitive behaviour. This is a safeguard that is a feature of all Australian schemes.

Proposed refundable deposit amount (*Transforming recycling* p31)

5. The consultation document, *Transforming recycling,* leaps from a proposed CRS to the refundable deposit amount and does not provide sufficient detail around the calculations that excluded other amounts (e.g. 10 cents or 30cents) before proposing 20cents. We find *Transforming recycling* deficient and misleading in this area.

6. We are also concerned that the data used on which costing is based is at high risk of over-estimating the value of reduced litter from the CRS by a factor of 3.5 to 5 and support the analysis and research commissioned by the Packaging Forum in this area.

Q3. Do you support the proposed refund amount of 20 cents?

7. **NZFGC strongly opposes the proposed refund amount of 20 cents**.

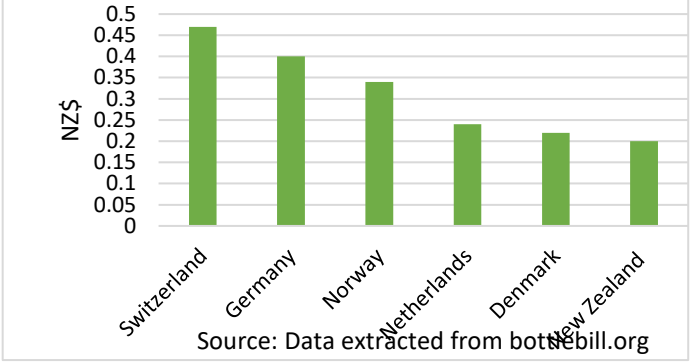
8. The 20 cent refund is exclusive of the costs of running the CRS and GST. This would add another 8.5-12 cents per container. On a can or a bottle it might be 30 cents but on a 24 container multi-pack it is $7.20 - $8. We are particularly concerned that consumer insights show that the higher the deposit, the lower the support for the system on the basis of the significant impact on cost of living.

9. The food price index issued on 13 April 2022 reflected an annual increase of 7.6 per cent, the largest increase since July 2011 (which was partly attributed to an increase of 2.5% in GST). With a total increase on containers of 30 cents off-set only in part by the deposit (since the commercial consuming sector may well be unlikely to return containers for a deposit), the cost-of-living impact could be substantial, possibly frightening.

[4] https://www.wa.gov.au/system/files/2022-04/CDS-beverage-container-list.pdf

10. In any case, at 20 cents, the New Zealand deposit would be in the top 6 worldwide of CRS schemes[5] (see Figure 2).

Figure 2: Deposit fee Comparison



Source: Data extracted from bottlebill.org

11. Scheme fees are additional and cover handling, transport (from point of deposit to processing [whether domestic or export[6]], scheme material consolidation facility costs and scheme administration. These operational costs are estimated at 8.8 cents per container PLUS GST. We consider this a conservative estimate and that costs could be up to 12 cents per container including GST. On this last point, we also refer to the INNOWA (Institute of Innovation and Responsible Development) Scandinavian guidance for effective deposit systems which recommends that the deposit should not be subject to Value Added Tax (which is overseas version of GST) as it does not generate any additional economic value. In Australia the deposit includes GST.

12. Adding the above operational costs of running the CRS could increase the cost of a container by around 30 cents per container. The cost-of-living impact would be significant as noted above.

13. Adopting a different deposit value in New Zealand than Australia has several very significant negative impacts:
    - Consumers in New Zealand will pay substantially more for recycling beverage containers than Australian consumers making New Zealand an even higher cost country than it already is.
    - Trans-Tasman manufacturing brands will need to put different deposit rates on pack.
    - Further experience in other markets shows that where deposits differ, there is a high incidence of arbitrage for example where beverage containers are moved between markets to capture the higher deposit rate. New Zealand is vulnerable to being taken advantage of by fraudulent operators dumping deposit containers from Australia and Pacific Islands.

14. In Australia, the national cost of kerbside collection for all waste streams is $1.2bn. Yet the combined costs for Australian CDSs is $2.0bn recovering only 3 materials and a few beverages excluding milk and fruit juice. Increasing redemption from 10 to 20 cents lifts the cost for Australian schemes to $4.0bn and adding milk at 10 cents takes the cost to $6.0bn.

Q4. How would you like to receive your refunds for containers? Please select all that are relevant and select your preference:

a. Cash
b. Electronic funds transfer
c. Vouchers
d. Donations to local community organisations/charities
e. Access to all options

[5] *Global Deposit Book 2020*

[6] Sapere CBA Update Feb 2022: Table 4: Overview of costs and benefits

f. Other

15. NZFGC recommends that refunds for containers be subject to further investigation beyond this consultation so that consumer preference can be matched with technological capability and concerns about security, safety (bin-diving), scavenging and crime.

16. We note that 40% of consumers say they would like cash, but it is not clear whether the Reverse Vending Machines (RVM) can provide cash. In any case, cash raises considerable social and security concerns that have all been faced by other automated cash outlets such as banks, exposing them, and users, to sporadic crime and the potential for ram raids.

17. If the RVM provides a redeemable voucher, then consumers have to follow two steps or processes – queue to deposit their containers and then queue in the store to redeem their voucher. Horizon Research[7] conducted in April 2022 found that 44% of respondents were not prepared to queue any length of time to drop off their beverage containers at a recycling facility and 41% were prepared to wait only 10 minutes.

Scheme fees (*Transforming recycling* p34)

Q5. Do you support the inclusion of variable scheme fees to incentivise more recyclable packaging and in the future reusable packaging?

18. In principle yes, NZFGC supports variable fees to incentivise the move to more recyclable packaging but further details on the proposals are required. Variable scheme fees could be significant in ensuring the scheme remains not-for-profit and operates on a net-cost principle. This does not extend to supporting the added phrase, *"plus the associated environmental costs".* This undefined addition could seriously compromise the integrity of the scheme's Managing Agency by introducing potentially competing objectives and more subjective decision making.

19. We recommend that the scheme design considers and reflects the *Guiding Principles for the Eco-modulation of Extended Producer Responsibility Fees* for packaging[8] namely:

- **Each material type should "pay its own way",** meaning Extended Producer Responsibility fees should consider the cost to collect and sort each material for recycling in order to achieve expected targets as well as revenues or gate fees. Differentiation by material type may become granular, e.g. by distinguishing between different plastic resins or colours of glass. There should be no cross subsidisation of fees for the different material types. Fees should always be charged per material type.

- **Extended Producer Responsibility systems should operate on a net cost basis,** meaning the Extended Producer Responsibility fees should reflect the revenue that is generated by the sale of materials for reprocessing. The market value of a given material may relate to its recyclability but not necessarily; market values are driven by many factors, including the prices of virgin alternatives.

[7] Horizon Research poll of 1001 people conducted between 8-18 April 2022

[8] The Consumer Goods Forum Guiding-Principles-for-the-Ecomodulation-of-EPR-Fees-February-2022.pdf (theconsumergoodsforum.com)

20. Eco-modulation of scheme fees needs to be regularly reviewed and based on an objective assessment of the material that considers the full life cycle, beyond recycling and litter targets, to ensure that the scheme is holistically sustainable. The Managing Agency should periodically review fees, making adjustments on an ongoing basis (if necessary) to reflect real costs.

21. If variable scheme fees are used, clear guidelines about each affected packaging type should be provided to manufacturers well in advance, to allow manufacturers to prepare.

Beverage container materials proposed for inclusion (*Transforming recycling* p38)

22. On the basis of the large number of containers sold into the market (total estimations of plastic, liquid paperboard, metal and glass – 2.57 billion[9]) and the relatively low return rates for containers, MfE proposes that a New Zealand CRS includes a broad scope of container materials on the basis that for businesses and consumers this is:
    - easiest to understand
    - convenient
    - effective.

Q6. Do you agree with the proposed broad scope of beverage container material types to be included in the NZ CRS?

23. Our members have differing views about what should or should not be included in the CRS. There are valid reasons for some exclusions and some of the differing views are reflected in this submission. The decision needs to be based on two factors:
    - the most efficient way of recycling materials (maximises returns at lowest cost)
    - the minimisation of the impact on cost of living.

24. Some members propose glass be in a separate collection stream. The rationale is:
    - New Zealand already has efficient glass recycling systems
    - New Zealand has an efficient kerbside glass collection system
    - Streaming glass by colour is important for efficient recycling
    - A comprehensive CRS that includes all the listed material types could be undermined by parallel kerbside collections particularly of glass which, by weight, would be a major input to the viability of a CRS.

25. Other members propose all beverage container materials are included in the CRS:
    - recycling all proposed beverage containers is simple and removes the prospect of confusion
    - glass comprises a significant component of the total proposed recycled waste and without it, collection costs increase
    - glass could be included but in a separate RVM for glass only alongside the RVM for plastic and cans. However, multiple RVMs could be costlier and potentially confusing to consumers
    - economic equity – level playing field between packaging types
    - unintended consequences via beverage producers moving packaging formats simply to evade the CRS costs.

26. Members will respond with their own position.

[9] *Transforming recycling* p69

27. In relation to liquid paperboard, industry and liquid paperboard manufacturers such as Tetra Pak have made significant investments to set up recycling / repurposing facilities in New Zealand. The liquid paperboard market has seen a 34% growth in New Zealand in the last 2 years. Excluding their product formats from either the CRS or kerbside recycling would undermine the efforts of companies to take responsibility for their packaging sending a signal to other producers not to invest or innovate.

28. The reality is that manufacturers invest in technology with a lifetime of 20 years or more. Changing packaging format and materials in the short-medium term is not viable. Government support will be required to help drive significant change, and realistic timeframes need to be considered.

Q7. If you do not agree with the proposed broad scope, please select all container material types that you think should be included.

a. Glass
b. Plastic (PET, HDPE, PP and recyclable bio-based HDPE and PET)
c. Metal (aluminium and non ferrous metals)
d. Liquid paperboard

29. All NZFGC members agree the material types listed should be recycled to the greatest extent possible. As noted above, NZFGC members have differing views on some materials being included together rather than in separate schemes.

30. All NZFGC members agree that public awareness and promotion programmes will be vital to success. Almost all Australian jurisdictions are significantly increasing the awareness campaigns they commenced schemes with and targeting different channels and behaviours as well as general awareness.

Proposed to be excluded at this stage (*Transforming recycling* p40)
Beverage types proposed for exemption (*Transforming recycling* p41)

31. MfE proposes that several containers that meet the definition of 'beverage container' be exempt:
    - Beverage containers intended for refilling
    - Fresh milk in all packaging types

Q8. Do you support a process where alternative beverage container packaging types could be considered on a case-by-case basis for inclusion within the NZ CRS?

32. Yes, NZFGC supports a case-by-case review as part of the New Zealand CRS management.

Q9. Do you agree with the proposal to exempt fresh milk in all packaging types from the NBZ CRS?

33. NZFGC recognises that a well-structured CRS would certainly assist to improve the capability of food grade recovery due to the pre-sorted nature. There remains an obvious discrepancy that will arise with containers of non-dairy milks which are alternatives to dairy being subject to the additional costs of a CRS but dairy milk containers are not. This could lead to market distortion and potentially be considered anti-competitive. As well, this could be considered discriminatory for consumers with dairy allergies. If dairy

milk containers are exempt then alternative milks such as nut, soy and coconut should also be exempt.

34. If the intent of the CRS is to provide a simple message to consumers, it is likely that consumers may be confused about what they can return to a CRS if nut milks and other plant-based milks are included but fresh milk is exempt. This has been the experience in other regions. For example:
    - in Hawaii, where milk products are exempt if milk is the first listed ingredient, there has been ongoing public confusion about what "milk" drinks are included
    - British Columbia has added milk containers and milk substitutes to their 10 cents refund scheme from 1 February 2022[10] with the intent to increase the recycling rate for containers particularly from away from home outlets
    - in Scotland, the proposed scheme to commence in 2023 excludes HDPE plastic containers and liquid paper board cartons which are how most milk is packaged. This means in practice few dairy items will be included but milk in PET and single use glass containers will be included.

35. It is also our understanding that the recycling rate for HDPE milk bottles in New Zealand is no better than for PET drinks bottles and therefore to exclude them on the basis of having a higher recycling rate does not make sense. Recycling HDPE milk bottles could be greatly assisted by tracer-based marker systems to sort food and non-food polypropylene packaging.

36. Trials of tracer-based marker systems technology used containers provided by brand owners that achieved very high sorting purity, the first step to meeting food standards requirements and an indication of future traceability systems. Digital watermarks – imperceptible stamp-sized codes printed on plastic packaging – can also help with recycling by carrying information about the packaging material. As plastic waste enters a recycling centre, high resolution cameras installed in sorting units can detect and decode this information and sort the plastic accordingly. This is the result of trials in Denmark and France called 'Holy Grail 2.0'[11]. Several of our members are parties to the development of this technology. As this intelligent sorting increases the purity of the recycling feedstock, the plastic waste can then enter different recycling streams—such as mechanical or chemical recycling.

37. Nonetheless, at this time, it seems more likely that fresh cow's milk containers are excluded because of concerns about increasing the unit sales price of fresh milk.

38. NZFGC is also very concerned about the cost-of-living increase which is likely from a CRS on all beverage containers. One clear factor to be addressed in designing a CRS will be to ensure that scheme costs are absolutely minimised.

Q10. Do you support the Ministry investigating how to target the commercial recovery of fresh milk beverage containers through other means?

39. Yes, if fresh milk is not included in the CRS, it should be further investigated and potentially included in the Plastic Priority Product Scheme to increase the recovery of HDPE bottles for recycling. It is imperative that in designing a solution for milk containers, the scheme costs are absolutely minimised so work must be done by MfE to determine whether a CRS or separate scheme is more cost-effective to reduce the cost of living impact.

[10] https://www.return-it.ca/beverage/products/
[11] HolyGrail 2.0 (endplasticwaste.org)

Q11. Do you support the Ministry investigating the option of declaring fresh milk containers made out of plastic (e.g. plastic milk bottles and liquid paper board containers) a priority product and thereby including them within another product stewardship scheme?

40. Yes. If fresh milk is not included in the CRS, it should be included in the Plastic Priority Product Scheme to increase the recovery of HDPE bottles for recycling.

Q12. 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?

41. Yes, NZFGC agrees that refillables should be exempt at this stage. This would be conditional on a review of the total carbon footprint to ensure that a move to refillables also meets the desired objective to move to a low-carbon economy.

42. The ABC refillable beer bottles/crates system operated by Lion and DB has been in place for over a century. This already operates on a deposit system whereby ABC charges breweries a deposit for each crate of bottles delivered and the deposit is discounted off the next “Swappa” crate. The average recovery rate is between 87% and 92%. Millions of bottles are involved and get reused dozens of times. This is New Zealand’s oldest, sustainable packaging story with its own infrastructure and should not be included in a CRS.

43. NZFGC also considers that in order to foster innovation in the refillables space, they must be excluded from a CRS or they will be subject to a layer of fees and compliance that will potentially stifle the opportunity. This is the course taken in most other overseas CRS systems noting there are exceptions e.g. Germany which now includes refillables. Our members are not aware of any central government initiatives to facilitate refillable networks, the funding and operation of these networks is typically undertaken by industry co-ops or consortiums, such as ABC in New Zealand.

Q13. Should there be a requirement for the proposed NZ CRS to support the New Zealand refillables market (eg, a refillable target)?

44. No, there should not be a requirement for a CRS to support the New Zealand refillables market. We do not support the use of funds collected via a CRS for the purpose of supporting and funding recycling infrastructure to be diverted to the refillable market at this stage. There are other mechanisms available for this AFTER further investigation of this developing innovation.

45. In terms of targets, there appears to be limited knowledge of existing rates in the various schemes that exist. Furthermore, little work appears to have been done on the actual sustainability value of a refillable vs recycled material, so any target at this point would need to understand these facts. For example, a refillable scheme that only returns 65% is still likely to be much more environmentally friendly than recycling 80% of returned glass due to the multiple uses that refillables will achieve over time. So, setting a target as high as has been done for CRS, would not be equivalent.

46. For these reasons, as noted above, NZFGC does not support any target which has not been assessed by a complete life cycle assessment on refilling versus remaking. This

would need to include the impact of changing from single to refillable items on the original specification (for instance, weight) as part of such an assessment.

Q14. 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?

47. In terms of incentivising new refillable markets, the continued exclusion of these containers will allow for innovation and growth in their own right. Many new schemes start from a localised existence and then eventually expand regionally then nationwide. This is often due to localised demand of products in the initial stages.

48. The Glass Packaging Forum has recently published Refillable Glass Containers in Aotearoa New Zealand[12]. It outlines some of the challenges and possible solutions to expanding the refillables market in New Zealand. As noted by Blumhardt (2020) establishing a baseline on what environmental impacts are created by single-trip glass containers as opposed to refillable glass containers is vital to informed decision making. Government could fund a cradle-to-cradle lifecycle analysis in the New Zealand context for all environmental impacts and onshore circularity of refillables vs single trip containers (all packaging types). This would allow businesses and consumers to make the most informed decisions.

49. Refill machines need to be available at places where shoppers are already shopping, not require people to go out of their way to find them (for example Alison's Pantry bulk foods supply at supermarkets). The current store refilling experience tends to be fairly low tech with customers having to manually refill products which is both time consuming and results in spillage. There are innovative new refilling machines emerging and we suggest that the Government should identify ways to incentivise uptake utilising the Waste Minimisation Fund.

Q15. Are there any other beverage packaging types or products that should be considered for exemption?

50. Yes. As outlined in our response to Q2, medical nutrition beverages which are used in hospitals for "at home" and institutional care should be exempt. Nonetheless, the simplicity of a system warrants minimal exemptions.

Container size (*Transforming recycling* p45)

51. MfE proposes containers of 3 litres or less will be included.

Q16. Do you agree that the size of eligible beverages containers would be 3 litres and smaller?

52. NZFGC agrees in principle with the size of eligible beverages containers being 3 litres or less.

Beverage lids (*Transforming recycling* p46)

[12] https://www.glassforum.org.nz/refillables-what-could-the-future-hold/

53. MfE suggests that consumers should be encouraged to reduce litter and increase lid recycling.

Q17. Do you think that consumers should be encouraged to put lids back on their containers (if possible) before they return them for recycling under the scheme?

54. Yes. NZFGC considers that lids and caps are an intrinsic part of the beverage container and if the intent of the CRS is to reduce litter and make the CRS simple, then the container, and its lid (either on or off), must be returned for refund. Sapere has included bottle caps, lids and tabs as litter 'to be reduced' in its cost benefit analysis. These small items make up 68% of the beverage container litter items (6.8 items per 1000m^2) in the CBA analysis by volume. Management of the lids should be covered under the handling fee.

55. Our members have been redesigning packaging to ensure that both lid and container are recyclable, and this investment will be wasted if the lid is not accepted by the CRS system or at kerbside. The technology exists to handle containers and lids/caps, it just needs to be applied. Horizon Research (April 2022) reports 83% of consumers want a solution for recycling lids and caps and do not want to put them in the rubbish.

56. Plastic and metal bottle caps, lids and tabs represent between 5.3% of total litter (KNZB National Litter Audit 2019) and 6.5% of litter (Waste Not Consulting National Litter Survey 2018).

57. Leaving caps on contributes to a cleaner environment and makes it easier to preserve the shape of the bottle for the return points such as RVM or depot. However, there are those who advocate for separate return. They state that crown seals cannot be replaced, and there are safety and purity reasons for ensuring containers are not returned with lids on such as cost – requiring operators to remove is costly if they must be processed separately.

58. Overseas CRS schemes vary in their approach:
    - in NSW, lids are on
    - Queensland and Western Australia are examples of schemes where lids are returned, but separate to the container (WA has separate slots for caps and lids), and are sent separately for recycling
    - Canada advises people to leave the caps on plastic and glass containers and tabs on aluminium cans to ensure small pieces are recycled[13]
    - Lithuanian[14] consumers are advised to return bottles with caps on.

Q18. Do you agree that the scheme should provide alternative means to capture and recycle beverage container lids that cannot be put back on containers? If so, how should they be collected?

59. Lids are an integral part of packaging which are easily recyclable. While most CRS systems are clean streams, where this is not the case, investment in technology at materials recovery facilities (MRFs) is necessary to ensure value plastic resins and metal caps are recovered. We cover this in our responses in Part 2.

[13] https://www.return-it.ca/beverage/products/
[14] https://grazintiverta.lt/en/faq/73

Proposed recovery network design (*Transforming recycling* p47)

60. Creating a network of return points (container return facility – CRF) for consumers and businesses to return and collect refunds is necessary. Factors for consideration proposed by MfE are:
    - a network should only be established once
    - number and location of CRFs can change over time
    - effectiveness and efficiency
    - flexibility
    - standards and compliance management
    - carbon footprint
    - convenience (location and travel distance) and accessibility (hours of operation
    - variety of return options to cater to consumer preferences / add convenience.

61. The main types of CRFs are reverse vending machines (RVMs), over-the-counter (eg dairies) and depots (manual or automated). MfE proposes a mixed return model comprising:
    - mandated retail participation by supermarkets
    - voluntary return points including depots and over-the-counter options.

Q19. Do you agree that a NZ CRS should use a 'mixed-return model' with a high degree of mandated retail participation to ensure consumers have easy access to container return/refund points, as well as the opportunity for voluntary participation in the network by interested parties?

62. NZFGC **strongly opposes** mandated retail participation and supports an open and competitive network. This is particularly significant with the recent publication of the Grocery Market Study Report (March 2022) concerning the supermarket duopoly in New Zealand. Mandating supermarkets simply consolidates their position in the system and could also favour a revenue stream for supermarkets which have already been shown to be making above normal profits from New Zealand consumers. A voluntary system would generate competition for return points in order to increase customer visits.

63. In proposing to mandate supermarkets, the rationale is accessibility (hours of operation and distance to return point) and customer convenience. What is overlooked are the many other retail facilities that could participate such as fuel stations, dairies, farming supply centres in rural New Zealand and hardware outlets. Also overlooked is the willingness of charities and community organisers to be involved, which would enhance the community benefit objective of the scheme.

64. The important factor to consider alongside accessibility is choice. Figure 8 in *Transforming recycling*[15] does not support the argument that return to retail increases collection unless the deposit is significantly raised. Moreover, many schemes around the world, particularly in the United States, have mandatory return to retail models which consistently yield very low return rates. Return to retail is not a strong indicator of return rate and can in fact reduce the flexibility of the scheme and its ability to reach into communities and businesses to draw out containers that otherwise would not be collected.

65. Further, mandating retailers participate in the scheme as collection points undermines the producer responsibility objective of the scheme by transferring ongoing retailer

[15] *Transforming recycling* p33

compliance and enforcement responsibilities from the Managing Agency to the Government. It is not possible for Government to delegate law enforcement and prosecution responsibilities to a third party. This is a significant issue in many European and North American schemes with mandated retailers often refusing to accept containers or making it unclear or inconvenient for consumers to return them.

66. Enforcement and prosecution of non-compliant retailers often takes years to complete and seldom results in significant changes in behaviour. By contrast, an open and competitive network transfers responsibility for collection point compliance onto the Managing Agency which can enforce standards through contract law and, ultimately, removal from the scheme. This results in a higher quality and more flexible scheme, with significantly reduced compliance monitoring required by Government.

67. A mandated return to retail model can also potentially lead to poorer outcomes as many retailers will be reluctant participants and will likely discourage consumers from returning through various means as observed in a number of Northern American and European return to retail type schemes. In a voluntary network, operators are willing participants aiming to maximise their collections.

68. However, the Managing Agency might want to rationalise 'volunteers' to minimise scheme collection costs by ensuring that sites are strategically located based on population and distance to drop off and to ensure that two adjacent facilities (e.g. supermarkets) do not both establish return points within close proximity to each other. Applying standards such as the following might be applied across a voluntary system:
    - Population based – minimum number of collection points in network operation area and regional and rural towns requiring a minimum of one return point
    - Distance based – maximum distance a regional and rural return point can be located from the town
    - Operating hours – minimum operating hours across week in all areas and flexibility to operate for longer hours
    - Accessible network – network operator(s) deliver a network of return points for consistent base-level service and retain flexibility to innovate and tailor services.

69. MfE's initial geo-spatial analysis is used to show the distance of percentage of people to supermarkets. It is not clear what the source of the data for supermarkets is but it is not aligned with the Grocery Market Study (pp 27 and 28)[16] and it excludes other grocery retailers (p29 of the Grocery Market Study). It would appear that the data in the consultation document *Transforming recycling,* would result in one depot for every 7,364 people. This would be higher than all of the CRS schemes in Australia which have on average one depot per 13,000 people.

70. Australia represents the most comparable market to New Zealand in that with, the exception of South Australia, all of the Australian jurisdictions that have implemented schemes have done so within the last decade. Many of the CRS schemes in Europe, Canada and the USA were implemented in the last century and have developed their network over 20 years or longer.

[16] Commerce Commission *Grocery Market Study Final Report*. March 2022

71. For example, Queensland (population 5.24 million (2021) and area 1,853 thousand km^2) has a return point for every 12,000 people and very few in retail. By comparison, a mandated retailer system in New Zealand (population 5.127 million and area 268 thousand km^2) would see a return point for every 7,000 people – almost double the density of return points per population and four times the density by area – see Figure 3.

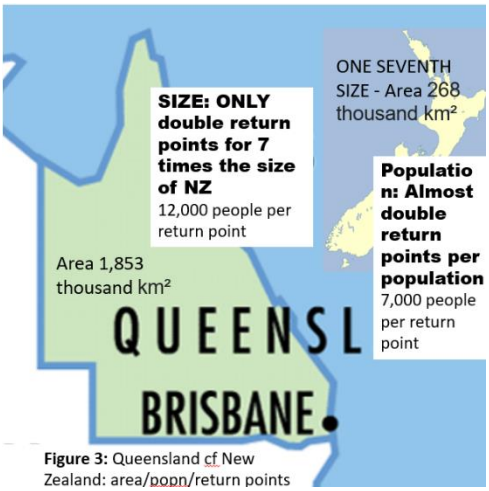


Figure 3: Queensland cf New Zealand: area/popn/return points

72. The voluntary return model allows for accessibility and choice for the different settings for New Zealand and allows greater opportunity for a mix of local and community solutions to be applied.

73. We note, for example, that Western Australia has adopted a tiered to refund point access from metropolitan centres (with large, dense populations) through to remote communities (with smaller, more widely distributed populations). Access and coverage targets need to be developed with consideration of New Zealand's size and diversity, the cost of service delivery and the importance of community involvement. Community groups and charities should be encouraged to participate in the CRS. There are various ways such groups can be involved such as running donation points, refund points and organising litter clean up initiatives. These options are effectively closed off by a mandated return system.

74. In proposing to mandate retail collection, there appears to be confusion between high recovery rates with return-to-retail in overseas markets. Lithuania, which appears to be MFE's chosen model, has a reported 95% return rate. However, 30% of returns in Lithuania come from the Polish border area, which only accounts for 6% of beverage sales. The real return rate is 70%. Norway has a retailer mandate and has a reported 90% recovery rate. However, 10% is reported as "recovered" through incineration meaning the real return rate is approximately 80%.

75. MfE needs to be aware that return-to-retail is not the key driver of high collection rates in Europe. All European schemes have mandated return-to-retail (except Iceland) but they also impose bans or very high charges for businesses to landfill containers. By contrast, all USA schemes also have mandated return-to-retail but no landfill prohibitions. As a result, their return rates are typically much lower. Interestingly Iceland has prohibitions on landfilling containers, a depot collection network and high return rates, suggesting prohibitions on landfilling containers are a strong driver of high collection rates but return-to-retail is not.

76. Further, MfE should be aware that in a mandated return-to-retail environment, the ongoing responsibility of compliance monitoring and prosecution of non-compliant retailers will rest with the Government (and possibly MfE) as the Managing Agency will be unable to enforce legislation. However, in a voluntary collection network, the Managing Agency will be able to enforce compliance and standards via contract law, which will provide faster and more flexible enforcement options and no involvement from government.

77. New Zealand is different to Europe where many CRSs have been in place for over 20 years and shoppers benefit from open borders and competitive global retail markets resulting in different shopping and recycling habits.

78. NZFGC supports collection networks made up of many voluntary return point operators e.g. run by community groups and private operators across any businesses, alongside the existing kerbside collection network. There is already a network of community recyclers and metal recyclers up and down the country that are already in place to implement the CRS. NZFGC is concerned that the drive for retail-led drop off is coming from RVM manufacturers. This should not influence the network design.

79. RVMs are not the silver bullet for a CRS. Industry reports that in NSW, where RVMs have been introduced, frequency of the collection service becomes a major issue when RVMs are at capacity or broken down resulting in a build-up of containers around the site and the related litter and health safety issues.

80. In pursuing the 'mandated retail' pathway, the New Zealand CRS network would be 4 times as large as comparable in Australia. The larger the number of return points, the higher the operational costs. At the rate of mandated retail drop off points, we believe the handling fee would be well over 10 cents per container because higher handling fees need to be paid to cover the fixed costs of operating collection services when fewer containers are collected per collection point. This would be a major impost on cost-of-living impacts – NZFGC favours a not-for-profit system but not a for-loss scheme.

81. Finally, NZFGC is concerned at the lack of analysis of recovery by channels. Little consideration has been given to the problem of containers supplied through businesses, cafes, restaurants, hotels, pubs, clubs and venues or public spaces and events which we understand covers approximately 30% of New Zealand's total beverage container supply. Policy without this analysis is policy-making in a vacuum. We are also concerned about the lack of scrutiny given to network costs in the proposed CRS. Related to the point above, around 30% of beverage containers are consumed via food services and hospitality where the time taken to return containers is likely to outweigh any commercially financial benefit of doing so. Without addressing these areas of supply, it is difficult to understand how the government expects to reach targets of 90% redemption.

Q20. Where would you find it easiest to return eligible beverage containers? Please select all that are relevant and rank these from most preferred.

- commercial recycling facility (eg, depot, more likely to be located in industrial zone)
- waste transfer station
- other community centres/hubs (eg, town hall, sports club, etc)
- local retail outlet that sells beverages (eg, dairy, convenience store, bottle shop, petrol station)
- supermarket
- community recycling/resource recovery centre
- shopping centre/mall other (please specify)

82. NZFGC strongly favours all and any of these points being available to give consumers choice. This will give the Scheme Managing Agency the opportunity to balance the collection points with options for consumers and the costs involved. As noted above, in pursuing the 'mandated retail' pathway, the New Zealand CRS network would be 4 times as large as any comparable in Australia, but without the variety and choice provided by a mix of the sites mentioned above. The larger the number of drop off points, the higher the operational costs.

83. NZFGC also recommends consumer research is utilised to ensure a CRS will actually be used by consumers. Horizon Research (April 2022) found that 25% of people are not prepared to travel any distance to a container refund place whilst 34% are only prepared to travel less than 10 minutes. As noted above, 85% people are not prepared to queue for any length of time or more than 10 minutes to drop off their containers.

Q21. Retailers that sell beverages are proposed to be regulated as part of the network (mandatory return-to-retail requirements). Should a minimum store size threshold apply? And, if yes, what size of retailer (shop floor) should be subject to mandatory return-to-retail requirements?

- 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)

84. As noted above, NZFGC **strongly opposes mandated** retail participation and therefore opposes any constraints on minimum size of retailer. This is particularly significant with the recent publication of the *Grocery Market Study Report* (March 2022) concerning the supermarket duopoly in New Zealand. Mandating supermarkets/retailers according to size simply consolidates the position of supermarkets in the system further reducing market competition.

85. NZFGC supports collection networks made up of many return point operators run by community groups and private operators, alongside the existing kerbside collection network. There is already a network of community recyclers and metal recyclers up and down the country that are already in place to implement the CRS.

Q22. Do you think the shop-floor-size requirements for retailers required to take back beverage containers (mandatory return-to-retail) should differ between rural and urban locations?
If yes, what lower size threshold should be applied to rural retailers for them to be required to take back containers?

- Over 60m² (as in Lithuania)
- 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)

86. As noted above, NZFGC strongly opposes mandated retail participation and opposes any constraints on minimum size of retailer whether that's urban/rural or not. This is particularly significant with the recent publication of the *Grocery Market Study Report* (March 2022) concerning the supermarket duopoly in New Zealand. Mandating supermarkets/retailers according to size simply consolidates the position of supermarkets in the system by favouring a revenue stream for supermarkets which have already been shown to be making above normal profits from New Zealand consumers.

Q23. Do you agree that there should be other exemptions for retailer participation? (For example, if there is another return site nearby or for health and safety or food safety reasons).

87. As noted above, NZFGC strongly opposes mandated retail participation and opposes any other constraints on retailer participation until the scheme Managing Agency is in place and can make such decisions.

Proposed scheme financial model (*Transforming recycling* p53)

88. MfE proposes the supply chain deposit model over council or ratepayer funded systems which requires up-front costs to establish governance and management.

Q24. Do you agree with the proposed deposit financial model for a CRS?

89. The proposed model is not clear as to whether it is a deposit model or a refund model having elements of both. NZFGC members are intimately involved in a broad range of government cost recovery schemes. All have guiding principles and we therefore support scheme cost recovery parameters which include:
    - the scheme is run by a Managing Agency that is not-for-profit (see Q25) with defined powers to collect beverage containers
    - beverage manufacturers pay a fee, set by the Managing Agency, for every container they sell
    - the Managing Agency sets fees for each material type to fully cover the costs of collection and ensure fair cost recovery for each material type.
    - the model must ensure that beverage companies are invoiced in arrears not in advance. The Managing Agency should be the only entity permitted to issue invoices. If the payment terms for the deposit are not deemed to be in arrears, there is a high likelihood of liquidity issues as happened in NSW where government had to bale out a number of companies due to deposits not being deemed in arrears. This is particularly important for small businesses.

90. Redemption rates are expected to be lower in the initial years and the scheme design should allow for this. Conversely, once succeeding well, the Managing Agency must not be permitted to retain large surpluses. Any unredeemed funds should have a narrow scope for application i.e. only against the scheme costs and not to be applied to other areas like pursuing refillables infrastructure etc.

91. NZFGC recommends the scheme's design considers the global EUCLID Competition Law[17] advice prepared for EXPRA (Extended Producer Responsibility Alliance) which is an alliance of 26 non-profit packaging and packaging waste recovery systems from 24 countries across Europe.

92. In summary, the EXPRA advice counsels caution about vertical integration of Producer Responsibility Organisations where waste management companies and recyclers are associated with Producer Responsibility Organisation management.

Proposed model for managing and governing the scheme (*Transforming recycling* p56)

Q25. Do you agree with a NZ CRS that would be a not-for-profit, industry-led scheme?

93. Yes, NZFGC is firmly of the view that the scheme should be a not-for-profit, industry led scheme. Where schemes are 'for profit' (e.g. Bulgaria, Estonia, Germany, Poland, Romania, Slovenia) there has been an increase in Producer Responsibility

[17] https://euclid-law.eu/study-on-the-vertical-integration-of-producer-responsibility-organisations-and-their-effect-on-the-market/

Organisations operating as vertically integrated entities (see Q26) competing with each other to attract companies to sign up to their own scheme and even, as in the case in Estonia, to compete on the infrastructure by offering their own containers to consumers.

94. NZFGC recommends the following guiding principles be considered when establishing the Managing Agency:
    - it should be established well ahead of scheme implementation, allowing for it to assist with developing the scheme design details alongside the regulations
    - the legislative framework should establish Government oversight of the Managing Agency, either through a statutory board with industry and community representation or via Ministerial oversight
    - there should be legally enshrined proportionate fetters on the powers of the Managing Agency, including but not limited to best-practice audit requirements, mandated governance reporting, and transparency obligations with respect to the setting of fees.

Recovery targets (*Transforming recycling* p58)

Q26. Do you agree with the recovery targets for a NZ CRS of 85 per cent by year 3, and 90 per cent by year 5?

95. No, we do not support the high recovery targets proposed. We do support the scheme having clear recovery targets. Nonetheless, it is difficult to set recovery targets when the scheme is still in development and the final scope is yet to be agreed. The proposed recovery targets are very ambitious as they are based on international recovery rates for well-established schemes (Germany implemented its scheme in 2003; and Finland implemented its scheme in the 1950s, involving automated bottle return machines and expanding the system to include plastic bottles in the 2000s). Changing the behaviour of New Zealanders in the short term will be challenging. As well, there are regional and geography/demography challenges. Collection in central Auckland is going to be much easier than collection in Fiordland.

96. We recommend basing the targets on Australian recovery rates, given many Australian jurisdictions' schemes are relatively new and New Zealand behaviours may be more aligned with those of our trans-Tasman neighbours.

97. While targets should encourage recovery and hold the Managing Agency to account, enforcing penalties if targets are not met, such as increasing the deposit amount, would be unfair if the targets are unrealistic. If recovery is lower than expected, a full review assessing all aspects of the scheme should be conducted to determine the reason behind the low return rates. Western Australia conducted a review of its scheme 6 months after implementation.

98. Accessibility of return facilities and consumer education are crucial for the scheme and all these factors have a role in overall success.

Q27. If the scheme does not meet its recovery targets, do you agree that the scheme design (including the deposit level) should be reviewed and possibly increased?

99. Yes, regular reviews of the scheme will be crucial to improve recovery rates, particularly in the first few years after introduction. If the scheme does not meet recovery targets, this may not be due to the deposit level. There are many levers. Accessibility of return

facilities, consumer education among other aspects of the scheme, should be considered before increasing the refund amount. Increasing the refund amount will have a significant inflationary impact, and there will be significant administrative costs in making such a change. Reviews should also include broad representation from all key stakeholders.

100. We agree with setting targets, but recovery targets must be accompanied by recycling. Experience in Canada is that collection targets on their own do not increase the recycling rate. It is worth noting that the return rates for Canadian provinces range between 68% and 85% after over 20 years of CRS implementation[18].

Q28. Do you support the implementation of a container return scheme for New Zealand?

101. Before NZFGC can affirm support for the implementation of a CRS there needs to be a rigorous and independent review of the data and assumptions underpinning the cost benefit analysis to ensure that the benefits outweigh the costs. We are concerned about the confusion of economics demonstrated throughout the proposal and that the strong reliance on welfare gains of $2.348 billion over 30 years is even remotely achievable. These gains are several times higher than any similar gains calculated in the last 5 years for Australian schemes (see Figure 1 above). NZIER provided to the Packaging Forum an alternative estimate of welfare gain from reduced litter of about $458 million to $665 million which is around 20 to 28% of the estimated welfare gain from reduced litter in the Sapere Cost Benefit Analysis of $2,348 million[19]. Some of the data and calculation issues are set out in Attachment A.

102. Attachment A is a brief commentary on the base litter data and its use for the Cost Benefit Analysis by Sapere, the issues with the decade old willingness-to-pay studies from Australia and the UK and the period over which the analysis is applied (30 years).

103. We recommend that the Government, in particular, reassesses the assumptions made around litter abatement in terms of how the amount of litter has been calculated and the use of outdated "willingness to pay" research conducted in the UK and Australia in 2010 and 2011. The "willingness to pay" data is fundamental to deriving the welfare benefit and averaging the data from 2 reports from diverse countries then extrapolating the result into current day NZ dollars is an unrealistic basis on which to proceed. We repeat that NZFGC fully supports a CRS objective to increase the recovery and recycling of beverage containers.

Q29. If you do not support or are undecided about a CRS, would you support implementation of a scheme if any of the key scheme design criteria were different? (eg, the deposit amount, scope of containers, network design, governance model, scheme financial model, etc). Please explain.

104. We support a scheme subject to a reconsideration of the deposit amount to reduce it to 10 cents in order to minimise the impact on cost-of-living, harmonise with Australia and ensure that the collection system is made up of many voluntary return point operators not a "high degree of mandated retail participation".

[18] *Global Deposit Book 2020*

[19] p22 *A container return system for New Zealand: cost benefit analysis update,* Sapere February 2022

Q30. If you have any other comments, please write them here.

105. NZFGC is extremely concerned that the design of the CRS has been predicated on a cost benefit analysis which is based not only on an over-estimation of the percentage of litter but also uses "willingness to pay" data which was calculated in 2010 (Australia) and 2011 (Leeds, UK). As noted above, the "willingness to pay" data has been extrapolated by Sapere to suggest New Zealand households would be prepared to pay between $59 and $102 extra per year to reduce litter by 15%.

106. "Willingness to pay" was a question in the most recent Horizon Research which found that 81% of New Zealanders were not willing to pay more than $50 extra. This research indicated that on average New Zealanders are willing to pay $31.18 per year for a reduction in litter. This aligns strongly with a recent Australian study by the Centre for International Economics[20] which estimated willingness to pay for a 20% reduction at about $23 to $32 per household per year. NZIER estimates that Sapere's Cost Benefit Analysis overstates the value of reduced litter from the CRS by a factor of 3.5 to 5.

107. Further, the Packaging Forum has been commissioning Horizon Research for over a decade to conduct consumer analysis to inform its work. In March 2022, 21% of people said there was a problem with litter in their area which is a significant reduction from 44% of people which was recorded in 2019 before the implementation of three litter projects (1. Packaging Forum & Be a Tidy Kiwi, 2. Keep NZ Beautiful and 3. Sustainable Coastlines) with the support of Waste Minimisation Funding.

PART 2 – Te whakapiki i te hangarua paeara ā-kāinga Kerbside Collections

108. NZFGC supports proposals to standardise kerbside collections (with changes) and the intent to increase the quality and quantity of recovered materials. We agree with the Government's recognition that "kerbside recycling collections are a key part of our resource recovery system[21]". However, there needs to be clear definition of the relationships between existing kerbside operators, councils, manufacturers, and the Managing Agency. For example, if kerbside operators are getting paid by council to operate, there should be no handling fees charged on kerbside collected containers (i.e. no double dipping). Also, there needs to be strong fraud protections. The NSW MRF protocols are a good starting point[22].

109. It is our view that all materials which have a value in the circular economy should be collected with recycling made easy for the consumer and that we should be investing in technology which allows us to achieve that. This is entirely consistent with the Local Government Waste Manifesto which recommended New Zealand "invest in onshore and local infrastructure for the processing of recovered materials"[23] We also support separate kerbside collections of fibre and glass to improve the quality of recovered materials.

[20] *Willingness to pay for reduced litter and illegal dumping: final report, stated preference report.* Prepared for NSW EPA, Sustainability Victoria, and Queensland Department of Environment and Science. CIE, February 2022. https://www.thecie.com.au/publications-archive/willingness-to-pay-for-reduced-litter-and-illegal-dumping

[21] *Interim regulatory impact statement: Improving household and business recycling*

[22] https://www.exchangeforchange.com.au/material-recovery-facilities/mrf-obligations.html

[23] Local-Government-Waste-Manifesto-2020.pdf (wasteminz.org.nz)

110. It is important to appreciate at the outset that New Zealand's main trading partner in the food and grocery sector is Australia. As a result, we strongly believe that the New Zealand and Australian packaging and recycling systems should be aligned to the greatest extent possible in both markets.

111. The following comments are underpinned by NZFGC's Sustainability Committee initiated research into the impact of the WasteMINZ proposals for standardising kerbside collections which were published in August 2020. In this respect we have had discussions with the Australian Packaging Covenant (APCO) which manages the Australasian Recycling Label (ARL) and its PREP verification tool about which materials are collected at kerbside in Australia and why.

112. NZFGC is also part of a global network of Extended Producer Responsibility organisations which comprise the Australian Food & Grocery Council; UK Food & Drink Federation; Food, Health & Consumer Products of Canada; Food Industry Asia; Food & Drink Ireland; and the Consumer Brands Association of the USA.

113. The NZFGC's Metal Packaging Sub Committee and an ARL Working Group involve representatives from the Waste Management Industry Forum and the Association of Metal Recyclers.

114. Our responses to *Transforming recycling are* evidence-based and reflects this research.

PART 2 – Kerbside Collections

Proposal 1: Collecting a Standard set of materials (*Transforming recycling* p67)

New Zealanders are confused about what can be recycled
People risk losing confidence in recycling
Contamination levels are high
Recycling is put in the rubbish bin

Standard materials should be collected at kerbside (*Transforming recycling* p68)

115. NZFGC notes that under the heading 'How successful has voluntary implementation been?' in *Transforming recycling*[24] it states that "*Less progress has been made on standardising other materials such as aluminium foil and aerosol cans*." Table 4 in *Transforming recycling*[25] reports that 63% of councils accept aerosol cans meaning the vast majority of New Zealanders have access to recycling aerosol cans currently (see also Table 1 below). That is progress. The Aerosol Association of Australia (which represents companies involved in the manufacture and marketing of aerosol products, or the supply of aerosol components, services and ingredients) estimates that around 18.7 million aerosols were imported into New Zealand[26] in calendar year 2021 and that 59% (or around 11.3 million units) of those were from Australia.

116. Whilst it does do not attempt to split these between steel and aluminium cans, based on Australian and European market information, the Aerosol Association of Australia estimates that around 50–55% – essentially personal care products – of these would have been in aluminium cans.

[24] *Transforming recycling* p68
[25] *Transforming recycling*, p72
[26] Import statistics, Statistics New Zealand

117. NZFGC is strongly opposed to any move to stop Councils or the CRS accepting post-consumer aerosols in recycling collections and believes that it would be a retrograde step for the environment and one well out of step with international practice. For example, we are advised that in the UK, for the last 5 or so years, 95% of local authorities have accepted empty aerosol containers in their household kerbside recycling, leading to an estimated 69.0% recycling rate for aluminium aerosols in 2020, and 78.7% for steel (the UK's aerosol fillings for 2020 were in excess of 1.5 billion units). Last year, the French Aerosol Association reported an aerosol recycling rate of 76 percent.

118. With regards to safety concerns, as well as the foregoing empirical evidence of several decades of aerosol recycling internationally, extensive safety research was undertaken before aerosols were introduced into the recycling stream in Europe and the US. Internationally respected independent safety bodies like Factory Mutual Research Corporation (now 'FM Global'), TÜV, TNO (the Netherlands Organisation for applied scientific research), LEREM (Laboratoire d'Etudes et de Recherches des Emballages Métalliques – Metal Packaging Research Laboratory) and Burgoynes (international partnership of safety investigations) had been commissioned to investigate the safety implications of accepting post-consumer aerosols into the recycling process. Whilst now several decades old, this research, spanning the period from 1994 to 2001, consistently demonstrated that post-consumer aerosols could be safely recycled, provided that:
    (i) simple common-sense safety practices – largely around ventilation – were followed in MRFs and
    (ii) the aerosols were collected and processed as part of the wider steel and aluminium can stream, essentially 'diluting' them.

119. In the review of Standardising Recyclables discussion paper, all parties agreed that aerosols were low risk with emphasis on them being empty. NZFGC is therefore surprised and disappointed that these items have been proposed for exclusion.

120. Educating consumers to only put 'empty' aerosols into their recycling is undoubtedly part of this safety case too and recent moves by the Australasian Recycling Label (ARL) to modify the logo for aerosols to include an instruction to "Empty to Recycle" [see Figure 4] and to exclude toxic aerosols from carrying the ARL are steps in the right direction.

Figure 4: Instructions to empty can

Q31. Do you agree with the proposal that a standard set of materials should be collected for household recycling at kerbside?

121. No. NZFGC agrees in principle that a standard set of materials should be collected for household recycling at kerbside but this should be a <u>minimum</u> set only and only with the intent that this is to:
- maximise the quality of recovered materials
- increase the quantity of the targeted materials being recycled and
- increase public engagement and trust in kerbside collections.

122. This principle does not extend to reducing recovery to the lowest common denominator of those councils that have limited collections. Of the 67 local councils the following reflects the current situation:

- 9 councils offer no or limited collections or rely on private user-pays recycling collections
- 6 councils only collect one material
- 52 councils currently offer a kerbside collection for a range of dry recyclables
    - 11 councils collect the materials proposed in the consultation so there would be no change
    - 19 councils collect five out of six of the proposed standard materials
    - 28 councils collect all the standard materials AND accept other materials which they would need to stop collecting under the MfE proposal.

123. This means that, of the councils which currently collect more than 1 material at kerbside, **48% will have to reduce what they collect to get down to the level of the others**. This is counter-intuitive to 'transforming recycling' and more akin to 'reducing recycling'.

124. To reduce the collections of almost half New Zealand's councils also does not seem to be the way to increase the quality and quantity of recycling given that the 28 councils that collect all the standard materials AND accept other materials probably also have higher populations.

Q32. Do you agree that councils collecting different material types (in addition to a standard set) might continue to cause public confusion and contamination of recycling?

125. Absolutely not. If councils currently have valuable end-markets for materials collected at scale such as aluminium and steel aerosol cans, we believe that those kerbside collections should continue and NOT be determined by other regions/ lowest common denominator which may not be able to access these markets due to, for example, logistical issues. The public in the councils collecting at scale are clearly not confused. According to Horizon Research[27], 67% people say it is easy or very easy to understand what items can be recycled and 69% people check the label on pack most of the time or all of the time before recycling.

126. It is preferable that investment in all collection systems and MRFs around the country allow these materials to be universally collected. However, taking recycling options away from the majority of New Zealanders in the 28 councils offering a broad service also does not make sense.

127. Smaller councils would benefit from a regional approach to collection and processing.

Q33. Do you think that national consistency can be achieved through voluntary measures, or is regulation required?

128. NZFGC believes that to achieve a level of national consistency across local authorities, both regulation and investment from the Government will be required to ensure all regions have the collection and processing technology required. Local authorities should have to apply the gains they will receive from the CRS refunds to improvement of collection and sortation standards, measured in purity of their outputs.

129. Voluntary measures also have their place in transitioning to broader collection arrangements. There is no silver bullet to transforming recycling. All measures, both regulatory and non-regulatory have a place.

[27] Horizon Research Survey 2-14 March 2022

How we are thinking about standardising the materials collected (*Transforming recycling* p69)

130. MfE is considering the following criteria:
    - Minimise disruption during transition
    - Materials collected should have sustainable end markets
    - Materials must have viable processing and sorting technologies.

131. NZFGC is concerned that the criteria may close-off options for near future developments eg by saying that "very small items cannot be separated out of recycling facilities" does not contemplate the recyclability of small items and their possible co-processing with larger items – aluminium tabs and metal lids are a case in point. We would also point to the very rapid development globally of processing and sorting technologies and the importance both of keeping options open and public-private investment in such facilities. This is the model developing in Australia. It is not practical or realistic that all MRFs will be able to simultaneously upgrade their sorting technology as additional materials transition to the recycling kerbside collection system and the system must be designed with flexibility at the outset not as an afterthought at some point in the future.

132. NZFGC also notes that in the summary of responses to the "Standardising Recyclable" report in 2019, only 24 councils did not accept lids. They also noted that metal recyclers take all forms of metal lids provided these were clean and free of food waste and that there were markets for plastic lids.

Proposed list of dry recyclables (*Transforming recycling* p70)

Q34. Please tick below all the items from the proposed list which you agree should be included in the standard set of materials that can be recycled in household kerbside collections.

- ✓ glass bottles and jars
- ✓ paper and cardboard
- ✓ pizza boxes
- ✓ steel and aluminium tins and cans
- ✓ plastic bottles 1 (PET) and 2 (HDPE)
- ✓ plastic containers and trays 1 (PET) and 2 (HDPE)
- ✓ plastic containers 5 (PP)

133. NZFGC considers the above to be **minimum** and not an exclusive or maximum set of materials. We note MfE's commentary on contamination[28] but also note that there is no indication of when the last national public awareness campaign was conducted that might have raised awareness about contamination. However, the statement[29] that "*National consistency would enable the government to undertake national education and communication campaigns for recycling*" should not be used to justify an exclusionary list of materials for kerbside collection.

134. The statement that overseas, experience is that voluntary arrangements are only 'partially effective' underlines the point made at the outset of this section: that all measures should be considered with many working in concert or as an important precursor to other, regulatory and non-regulatory measures. No single measure has the monopoly on solutions.

[28] *Transforming recycling* pp67-69
[29] *Transforming recycling* p68

135. Confusion about what to recycle and its condition for recycling is not the result of the recycling collection system but the absence of efforts to educate and raise awareness. Some councils individually undertake this, but a national campaign could assist in addressing much of the confusion. Victoria, Australia notes that "*a well designed community education campaign on kerbside collection services can significantly reduce contamination and increase diversion rates*"[30].

136. NZFGC is firmly of the view that recycling efforts have to be viewed as a package and not reliant on any one mechanism or measure to provide the ultimate solution. Partial effectiveness from education can be added to other measures delivering other parts of effectiveness.

Q35. If you think any of the materials above should be excluded, please explain which ones and why

137. NZFGC does not consider any of the materials listed in Q34 should be excluded. As noted above, we do not believe 48% of Councils should reduce collection and that a standard set of materials to collect should be a minimum not a finite list. If materials currently collected have viable further uses, then that collection should continue.

Q36. If you think any additional materials should be included, please explain which ones and why.

138. It is our view that all materials which have a value in the circular economy should be collected at kerbside with recycling made easy for the consumer. New Zealand should be investing in more collection and recycling technology which allows us to achieve that. New Zealand should aim for digitally enabled systems, including integration with business processes and kerbside recycling, that avoids being stuck in legacy systems still used in some areas. Digitisation and barcoding needs to be fully factored into systems and the prospect of barcoding bins and containers underpinned by open data standards, such as GS1 barcodes, already widely used by the industry needs to be considered for transforming recycling.

139. NZFGC has reviewed the arrangements for materials collection at kerbside in Australia, Canada, Ireland and the UK. We are aware that digital CRS solutions have been trialled but that there are a range of related issues that would need to be considered before embarking down this route including cost, data use and marketing. Such a system would need to utilise the existing collection infrastructure.

140. We note the UK has consulted twice in recent years (2019 and 2021) on standardising kerbside collections and stated in the 2021 consultation that "recyclable waste streams must, without exception, be collected separately from other household waste and they must be collected for recycling or composting. In order to achieve high-quality recycling, these recyclable waste streams must be collected separately from each other, except where this is not technically or economically practicable, or where there is no significant environmental benefit from separate collection."[31]. We are also working with our network of industry associations and the MRFs in each region to identify best practice in terms of sortation systems.

[30] Sustainability Victoria | Kerbside recycling
[31] Consultation on Consistency in Household and Business Recycling in England (defra.gov.uk), p10

141. New Zealand should be looking to align our kerbside collection materials with global best practice sortation systems. This can be deduced from the many examples available including:
    - the Canadian province of British Columbia (population 5.07 million) has a standardised kerbside residential collection program for packaging and printed paper. It also has container bins for aluminium and steel containers and another for glass. The standardised list of accepted materials is here.
    - NZFGC strongly recommends that kerbside recycling in New Zealand be harmonised with Australia particularly as both countries are implementing the Australasian Recycling Label (ARL) on packaging. Information about what can be recycled through kerbside collections under ARL is available on https://recyclingnearyou.com.au/arl/.
        - 60% of Australian councils accept liquid paperboard while only two councils in New Zealand do – but with a 34% expansion in liquid paperboard containers in the last 2 years, this material should be collected at kerbside consistent with its inclusion in the CRS.

142. New Zealand and multinational companies signed up to the Plastic Packaging Declaration in 2018 with commitments for all packaging to be reusable, recyclable or compostable by 2025. According to MfE's latest guidance on compostable products, (which is consistent with NZFGC's guidance to members), compostability is not an achievable target by 2025.

143. If we exclude even more materials and components from kerbside, it will be impossible to achieve the target for many businesses since certain materials which were once collected for recycling are no longer accepted and no caps, lids or closures are proposed to be accepted.

144. An assessment of a range of products in 2021 by Mad World[32] against the proposals set out in the 2020 WasteMinz report found that 53% of products had removable lids or caps which may not be collected at kerbside under the Government's proposals irrespective of material or size.

145. Metal packaging and its components is particularly impacted by the proposals. In 2021, NZFGC established a Metal Packaging Sub Committee[33] This Sub Committee has worked with MfE, the Australian Packaging Covenant Organisation (APCO) and the Waste Management Industry Forum to assess and analyse the amount of metal packaging and components placed on the market in New Zealand. This group has also assessed the value of the resource which will be lost if these items are not collected at kerbside.

146. A summary of the tonnage sent to landfill and the value lost is contained in Table 1. As can be seen, the total tonnage is 8,995 tonnes to landfill and an estimated export $3.4316 million lost.

Table 1: Value of Metal Product Waste per annum (2021)

Item	Qty (million)	Mass/ unit (g)	Total mass (t)	Scrap value $ ('000/t)	Value $ ('000)	Export sales value (est)
Closures						
Wine screw tops (aluminium)	250	4.6	1150	600	690	793.5[1]

[32] https://madworld.co.nz/case-studies

[33] NZFGC Metal Packaging Subcommittee representatives from member companies, the Association of Metal Recyclers, the Sustainable Business Network and Cosmetics NZ.

Crown seals (bottle tops) (Steel)	300	2.2	660	250	165	189.75[1]
28mm screw tops (aluminium)	35	28	980	600	588	676.2[1]
Food caps (metal jar lids)	23	15	345	200	69	79.35[2]
Can lids (tin)	180	15	2700	250	675	776.25[3]
Total Lids and Caps	**788**				**2,187**	**2,515.05**
Foil and trays (aluminium)	4	95	380	1,000	380	437[4]
Capsules (aluminium)	100	1	100	150	15	17.25[1]
Aerosols – Household	14	180	2,520	150	378	434.7[5]
Aerosols – Personal care	3	50	160	150	24	27.6[5]
Total Aluminium Packaging	**121.2**		**3,160**			**916.55**
TOTAL PACKAGING						**3,431.6**

Notes: 1. Industry information
2. Industry information – market
3. Industry information – retail
4. Industry data and IRI sales – supermarkets only
5. IRI data and uplift for wholesale – industry information

NZFGC Summary of Recommended Inclusions

147. Our recommendations (see Table 2 below) are in line with MfE's criteria namely that:
    - materials have sustainable end markets and
    - materials have viable processing and sorting technologies with investment to achieve recycling capability comparable with other markets such as Australia, Ireland, UK and Canada. These countries are developing standardised approaches or (as in the case of British Columbia, Canada), already have them in place.

Metal Packaging

148. The proposals could exclude 9,000 tonnes of steel and aluminium packaging per annum with a combined value of $3.4 million on the export market (Table 1).

149. NZFGC is working with Hayes Metals which has invested in world first technology that will process metal packaging including bottle tops, lids, aluminium coffee capsules and foil trays into graded metal for export (see Attachment B – Commercial-in-Confidence). This will increase the export sales value of these materials. NZFGC welcomes this private investment in world leading technology and supports the inclusion of these materials in kerbside collections.

Plastic Packaging

150. NZFGC recommends consideration be given to the inclusion of soft plastic / flexible plastic LDPE packaging at kerbside noting that trials in Australia to collect soft plastic in separate bags[34] has proven successful in increasing recovery levels and Ireland has introduced a kerbside collection.

151. We are seeing major investment overseas in advanced recycling solutions to convert plastic, including soft plastic, back into synthetic oil which can be reutilised in food grade plastic packaging manufacture. It is important that our collection systems anticipate, keep pace with and accommodate the technology to process plastic.

152. We note that the proposals exclude rigid LDPE but are silent on rigid High-Density Polyethylene (HDPE) tubes. NZFGC members are re-engineering toothpaste tubes, so they are made out of recycled HPDE. Traditionally, most toothpaste and other similar tubes are made from a combination of plastic and aluminium, which gives the packaging its flexibility but also makes it difficult to recycle. Instead of aluminium, the new tubes use a material made mostly of HDPE), which is one of the most widely recyclable plastics

[34] https://www.curbyit.com/

globally. It will also be the thinnest plastic material available on the toothpaste market at 220-microns, which will reduce the amount of plastic needed for each tube.

153. To encourage wider industry change in the toothpaste market, the innovation is being shared across companies to encourage wide adoption. There are around 17 million toothpaste tubes consumed annually in New Zealand (IRI NZ Grocery Scan data 2021) and as this new recyclable toothpaste product is being rolled out globally (most to be completed by 2025), there are increasing efforts to include it in kerbside collections. New Zealand should not act hastily to exclude this rigid HDPE which is also used in other personal care products including cosmetics.

Liquid paperboard

154. Liquid paperboard products are commonly consumed in the home (e.g. UHT milk and milk alternative products) so are not key litter contributors. If liquid paperboard is included in the CRS to increase its recovery (which the NZFGC supports), then it should be included in kerbside collection in line with the alignment Principle.

155. Industry and liquid paperboard manufacturers have made significant investments to set up recycling facilities in New Zealand. Excluding their product formats from either the CRS or kerbside recycling would undermine the efforts of companies to take responsibility for their packaging.

Table 2: Inclusions in kerbside recycling recommended by NZFGC

Material	Recommend Inclusion	Rationale
Steel	Tin Lids – food cans	• Australian MRFs accept metal items over 20mm. Steel Lids are a valuable resource • Guidance in Canada is to remove lids, drop into can and squeeze slightly • Guidance in UK is empty, rinse, put tin lids inside the tin, labels can be left on
Aluminium	Aluminium Foil & Trays	• In Australia, UK and Canada, kitchen foil and foil food trays should be clean and empty (like food cans or pizza boxes) and guidance is often to scrunch into a 20mm+ ball. • Market growth - there is a shift globally to aluminium foil containers away from plastic packaging and lined fibre packaging. • 31% councils accept aluminium foil trays compared to 51% in 2019.
Aluminium/ Steel	Aerosols – household & personal care used for food, air fresheners, shaving cream, deodorant, hairspray etc	• Many MRFs and metal recyclers accept empty aerosols and importantly markets currently exist to maintain this valuable resource in global circulation. • Aerosols are classified as recyclable under the ARL, in the UK and Canada. • 56% councils accept aerosols meaning the majority of New Zealanders have access to recycling currently
Metal	Items over 20mm including bottle tops and lids; aluminium coffee capsules.	• 5,835 tonnes of metal bottle tops are consumed annually and if recovered would generate $2.5m annually in export sales. • Under the ARL, the PREP tool accepts all metal items greater than 20mm in 2D because the items can be separated by eddy currents and magnets at the front end of the MRF. • Trials in Australia to collect aluminium coffee capsules at kerbside in Curby Bags[35] have been successful and in other

[35] https://www.curbyit.com/coffeecapsules/

		countries capsules are included in the kerbside collection bins directly.
Liquid Paperboard	LPB containers	• If liquid paper board containers are accepted in the CRS, they should be accepted at kerbside under the proposed alignment principle.
Plastic	Lids - PET/PP/HDPE	• If "lids on" is accepted through the CRS, they should be accepted at kerbside for consistency. • In Canada, guidance is screw caps and tops on bottles and jars and lids on tubs • In UK, advice is replace lids and tops. If they stay on the container, they will get recycled. • Manufacturers are investing heavily to ensure that their lids are made from recyclable material.
Plastic	Soft Plastic	• Trials in Australia[36] to collect soft plastic packaging at kerbside have been successful. The Curby programme was initiated by FGC member Nestle. Some soft plastic collected in the Curby trial was then tested as a feedstock for Cat-HTR™ process at Licella's pilot plant on the NSW Central Coast. • To maximise recovery of soft plastics we aspire to collect soft plastics at kerbside as a feedstock for a full circular economy where flexible plastic is converted back into polymers for remanufacture into new plastic packaging. • Ireland has introduced kerbside collection of soft plastics with investment in sortation systems at their MRF to segregate these materials. The FGC will be working with the Irish Business & Employers Federation and their recycling partners to monitor performance.

Process for adding materials to this list (*Transforming recycling* p74)
Alternatives to Kerbside recycling (*Transforming recycling* p75)

156. Resource recovery parks and drop off schemes could be additional to kerbside recycling.

Q37. Do you agree that the standard set of materials should be regularly reviewed and, provided certain conditions are met, new materials added?

157. Yes, NZFGC agrees that the any set of materials for recycling should be regularly reviewed. NZFGC is represented by members on the Australasian Recycling Label (ARL) Advisory Group and review of 'recyclable' materials is a fundamental part of ensuring new packaging design and new recycling and processing technology is reflected in decision making.

Q38. What should be considered when determining whether a class of materials should be accepted at kerbside in the future? (Tick all that apply)

- ✓ sustainable end markets
- ✓ end markets solutions are circular and minimise environmental harm
- ✓ viable processing technologies
- ✓ processing by both automated and manual material recovery facilities
- • no adverse effects on local authorities, including financial

[36] https://www.curbyit.com/softplastics/

- supply chains contribute appropriately to recovery and end-of-life solutions for their products
- other (please specify).

158. NZFGC supports consideration of 4 of the 7 factors proposed for determining whether a class of materials should be accepted at kerbside in the future: sustainable end markets, circular end markets; viable processing technologies and manual and automated MRF processing.

159. We see no justification for factoring in "no adverse effects on local authorities, including financial". This should not determine the class of materials accepted at kerbside in the future but clearly councils are key stakeholders in the system and their concerns should be considered at the system level.

160. The implementation of a CRS and a Plastic Packaging Product Stewardship Scheme will have a major impact on kerbside collections in terms of what is collected and volumes. The CRS will remove volume from the kerbside recycling bins, depending on the inclusions, and the co-design of a plastic packaging scheme to be funded by producers will influence materials collected. The environmental impact of not undertaking particular materials collection at kerbside should be the key consideration. The intent of the package of measures for transforming recycling should be to increase the capacity of councils to expand collection of other materials over time. We believe the higher concerns for consumers and the environment should take precedence.

161. NZFGC does not believe that "supply chains should contribute appropriately to recovery and end-of-life solutions for their products" when 'appropriately' is not defined and 'end-of-life solutions' are likely to change dramatically in coming years with new technologies and initiatives. Supply chains are already contributing and will continue to do so as solutions develop overtime.

Q39. Who should decide how new materials are added to the list?

162. NZFGC is strongly of the view that decisions relating to which materials are added (or deleted) must be made by **an independent board** which comprises a broad stakeholder base.

163. Good Regulatory Practice sets operational matters at levels that do not involve Ministers. MfE officers oversee the operation of the system but do not undertake the operation and it would be appropriate for the independent board to have reporting obligations on these matters.

164. The existing Waste Advisory Board does not represent the food and grocery sector and the FMCG (Fast Moving Consumer Goods) supply chain. NZFGC has raised similar concerns about the consultation groups which MFE references in its various consultations, for example, the 2021 Waste Strategy where neither producers nor brand owners were included in the consultation process.

Q40. Do you agree that, in addition to these kerbside policies, New Zealand should have a network of convenient and easy places where people can recycle items that cannot easily be recycled kerbside? For example, some items are too large or too small to be collected in kerbside recycling.

165. Yes, NZFGC strongly supports the extension of resource recovery facilities as this approach is already in place in many areas. There is an existing network of environment hubs, community recycling centres, metal recyclers, IT and battery recyclers which will be augmented by container return centres.

166. We reiterate, however, our position that kerbside collections provide the easiest method for households to recycle and can result in greater recovery rates with an effective communication system in place. Education and awareness is essential to success. The kerbside collection system is already widespread with 90% of New Zealanders saying this is how they recycle[37]. Kerbside collections are highly efficient (cost and carbon footprint) and should be leveraged as strongly as possible through the upgrade of MRF sorting technologies. It is more cost effective to invest in the network of MRFs rather than for multiple manufacturers spending billions to upgrade manufacturing and packaging plant to introduce tethered lids or move to alternate materials.

PART 2 – Kerbside Collections

Proposal 2: All urban populations should have access to kerbside food scraps collections (*Transforming recycling* p76)

We are wasting valuable resources
New infrastructure is needed
Urban food scraps collection

Q41. Do you agree that food and garden waste should be diverted from landfills?

167. NZFGC agrees that we should maximise the diversion of food and garden waste from landfills. This would help to reduce waste and the biological methane emissions from organic waste noting that food scraps make up 9% of waste sent to class 1 landfills but account for 22% of these landfill's emissions.

168. We consider that ring-fenced funding for food scraps collections and technical support, as is the case with Wales[38], is essential to avoid cross-subsidisation of systems.

169. The scale and scope must be based on a full cost benefit analysis rather than an indicative cost benefit analysis. MfE estimates that capital expenditure of $65-$85 million is required to implement the six household kerbside recycling proposals and that the largest costs relate to establishing new food scrap processing infrastructure and collection vehicles. In addition, the Ministry estimates that $24-$38 million additional processing infrastructure will be needed to process commercial food scraps.

170. Collection of dry recyclables such as metals, glass, plastic and fibre will be offset by the value of these dry recyclable materials. The full cost benefit analysis will need to demonstrate how the infrastructure investment to collect and process food scraps will be funded and what it will be processed into. New Zealand may have a limited need for compost.

171. We are concerned that the scope for a mandatory food scraps collection will result in increased CO^2 emissions, from the added transport movements and added handling required. Emissions savings achieved by processing food scraps in anaerobic digestion plants (versus gas capture facilities at managed landfills) could be cancelled out,

[37] Horizon Research March 2022
[38] *Interim Cost benefit analysis: kerbside collection* p 34

particularly when new infrastructure is located at significant distance from population centres.

172. This underlines the need for the development and implementation of the food scraps collection programme to be guided by a comprehensive net carbon impact assessment alongside or as part of the cost benefit analysis.

173. In Toronto, the municipal fleet is run on the biofuel generated from the city's food waste. MfE proposes that all urban populations should have kerbside food scraps collections but there is very little information on what it is planning to do with the food waste it proposes be collected.

Q42. Do you agree that all councils should offer a weekly kerbside food scraps collection to divert as many food scraps as possible from landfills?

174. No, rather NZFGC agrees with councils offering a regular (that might be weekly) kerbside food scraps collection which meets the needs of households for storing food waste. It might also depend on factors such as seasons and temperatures.

175. We agree however that the best way to minimise food waste is to encourage households to reduce avoidable waste. One of the ways to achieve this is to ensure that food is correctly packaged to protect and preserve food and increase shelf life. This is a key focus for the global food manufacturing industry and New Zealand food manufacturers are closely linked into developments both offshore and within New Zealand. Facilities such as the New Zealand Food Safety and Science Research Centre play pivotal roles in such developments which is co-funded by industry and government.

176. We also need to ensure that the introduction of a mandated plastic packaging scheme does not paradoxically increase food waste if businesses eliminate plastic packaging. The intersection of research and regulation is an important factor to consider.

177. Decisions around household food scraps collection also need to be informed by what households are prepared to do. Horizon Research found that only 21% of people were happy to have a food waste bin at home which increased slightly to 27% for a food and garden waste bin – but this was still less than the 29% that would like a soft plastic recycling bin. Arguably, far greater education and awareness will be necessary for food scraps collection to address rot, smell vermin and other infestations. Food waste diversion from households will only happen if people are willing to participate or it will otherwise require considerable "policing".

Q43. Do you agree that these collections should be mandatory in urban areas (defined as towns with a population of 1000 plus) and in any smaller settlements where there are existing kerbside collections?

178. Yes, based on a full cost benefit analysis which considers the cost of collection and availability of end markets. The cost benefit analysis will also need to consider people's willingness to having organic waste facilities close to where they live.

179. See Q41. above.

Q44. Do you think councils should play a role in increasing the diversion of household garden waste from landfills? If so, what are the most effective ways for councils to divert garden waste?

- Offering a subsidised user-pays green waste bin?
- Making it more affordable for people to drop-off green waste at transfer stations
- Promoting low-waste gardens (eg, promoting evergreen trees over deciduous)?
- Other (please specify)?

180. NZFGC's scope does not extend to garden waste. However, the same principles of cost-recovery, education and awareness and accessibility need to be factored into a full cost benefit analysis of the proposals. There should be no cross-subsidisation between recycling schemes.

Implementation

Q45. We propose a phased approach to the roll-out of kerbside food scraps collections. The timeframes will depend on whether new processing facilities are needed. Do you agree with a phased approach?

181. NZFGC supports a phased approach both geographically and temporally, as the most efficient way to the roll-out of kerbside food scraps collections. This would allow processes and infrastructure to be piloted and scaled up in a sequenced, controlled and cost-effective way.

Q46. Do you agree that councils with access to suitable existing infrastructure should have until 2025 to deliver food scraps collections?

- Yes, that's enough time
- No, that's not enough time
- No, it should be sooner

182. It is not clear from the *Transforming recycling* consultation document how many councils would be affected by a 2025 deadline. We also note MfE proposes it would work with Councils "to phase in the adoption of food scraps collections before 2030" (p78) but again it is not clear how many councils are involved with this later deadline.

183. The more important consideration for timing, is a need to determine an understanding of whether expansion of a food scraps collection service is matched by end-of-life solutions. We are aware of councils that cannot find recipients for the compost which is created at this time let alone increasing the production.

Q47. Do you agree that Councils without existing infrastructure should have until 2030 to deliver food scraps collection?

- Yes, that's enough time
- No that's not enough time
- No, it should be sooner

184. See NZFGC's response to Q46.

Q48. Are there facilities, in addition to those listed below, that have current capacity and resource consent to take household food scraps?

- Envirovert – Tuakau
- Hampton Downs – Waikato
- Mynoke Vermicomposting site – Taupo
- Enviro NZ – new facility planned for BoP
- Living Earth – Christchurch
- Timaru Eco Compost Facility – Timaru

185. NZFGC is not aware of other facilities that could take household food scraps. However the issues facing Living Earth in Christchurch (closure and relocation due to neighbour complaints) cannot be seen in isolation. It is reported that closure of the current compost facility and plans to shift it to a new site could take up to six years. This time is required to find an alternative location and to design and get consent for a new plan[39].

What food and/or garden waste should be collected?
We need to protect our soils
Deciding what to collect
Proposed materials
Alternative collection options for compostable packaging
Determining suitability for kerbside collection

186. MfE proposes to exclude the following non-food products and any packaging from any kerbside collection bins used to divert food scraps and/or green waste from landfills:
    - kitchen paper towels / hand towels / serviettes
    - newspaper and shredded paper
    - food-soiled cardboard containers (eg, pizza boxes)
    - cardboard and egg cartons
    - compostable plastic products and packaging
    - compostable fibre products and packaging
    - compostable bin liners
    - tea bags.

187. NZFGC agrees with the exclusion of the above from food scraps bins except for tea bags. We understand that compostable plastic products and packaging, and compostable bin liners are included in the gazette criteria for a Plastic Product Stewardship scheme and given the lack of collection systems compostable fibre products and packaging would still go to landfill even though these are compostable. This is likely to greatly confuse consumers.

188. That aside, NZFGC members involved in tea bag manufacture and/or distribution confirm that they do not currently use or are phasing out plastic closures and/or meet national standards for composability eg AS 5810 for Home Composting by the Australasian Bioplastics Association which in turn certifies such products (see (https://bioplastics.org.au/certification/who-is-certified-in-aus-nz/). Any such certification needs to include the tea bags, label and string. If tea bags are sealed without plastic, they would appear to meet the criteria of 'assisting to divert food waste from landfill and the other criteria' listed in *Transforming Recycling* Table 5. Before this exclusion is pursued, further research into the New Zealand tea bag market should be undertaken.

Q49. Are there any additional materials that should be excluded from kerbside food and garden bins? Please explain which ones and why?

[39] https://www.stuff.co.nz/the-press/news/128473200/stinking-organics-plant-could-close-while-new-site-sought

189. NZFGC has no further inclusions or exclusions to this area.

Q50. For non-food products or packaging to be accepted in a food scraps bin or a food and garden waste bin, what should be taken into consideration? Tick all that apply.

- ✓ products help divert food waste from landfills
- ✓ products meet New Zealand standards for compostability
- ✓ products are certified in their final form to ensure they do not pose a risk to soil or human health
- ✓ products are clearly labelled so that they can be distinguished from non-compostable products
- ✓ a technology or process is available to easily identify and sort compostable from non- compostable products
- ✓ producers and users of the products and packaging contribute to the cost of collecting and processing

190. See indications made. We particularly favour the application of the Australasian Recycling Label (ARL) to assist consumers determine the correct recycling steps to take with a product's packaging.

Q51. If you think any of the materials listed above should be included in kerbside food and garden bins, please explain which ones and why.

191. NZFGC considers all four of the products listed should be included in kerbside food and garden bins. We agree that if a technology or process is available to easily identify and support separation of compostable from non-compostable products then that might change the inclusions. We agree in principle with the last factor listed (producers and users of the products and packaging contribute to the cost of collecting and processing) but as with other proposals in *Transforming recycling*, detail around what this entails is critical.

PART 2 – Kerbside Collections
Proposal 3: Reporting on household kerbside collections offered by the private sector (*Transforming recycling* p85)

How well are households recycling
We propose reporting to central government
Implementation
Where will this information be published?

Q52. Do you agree that it is important to understand how well kerbside collections are working?

192. Yes. NZFGC is working with its members to have robust data on the amount of packaging which is consumed annually.

193. In 2020 and in 2021, we conducted research which has found that our members consume around 94,000 Tonnes of plastic packaging annually. We are, however, unable to access reliable data on what is recovered by resin type.

Q53. Do you agree with the proposal that the private sector should also report on their household kerbside collections so that the overall performance of kerbside services in the region can be understood?

194. It is important to capture collection data from both the public and private sector however this must be accompanied by recycling data. Without recycling data, the target is collection but recycling rates may not increase.

195. Canada now requires all product stewardship frameworks to set recycling targets, not just recovery targets.

Q54. Do you agree that the information should be published online for transparency?

196. Yes, as noted above, NZFGC supports open data sources underpinned by open data standards such as GS1 barcodes already widely used by the industry and believes this information should be publicly available unless disclosure would release commercially sensitive information.

Q55. Apart from diversion and contamination rates, should any other information be published online?

197. The reporting should be by material type and linked to the GS1 reporting data so that New Zealand can track recovery against consumption.

198. With one of the key policy objectives being to deliver a public behaviour change and a more positive attitude to recycling, collectors should report
    - recycling rates
    - percentage processed in New Zealand and
    - where processed in New Zealand, what the materials have been converted into.

199. This will provide the consumer with confidence and the Government with evidence of system sustainability, that the materials consumers are putting out or taking back for recycling are actually being recycled into new containers or products.

PART 2 – Kerbside Collections

Proposal 4: Setting Targets (or performance standard) for councils (*Transforming recycling* p87)

A minimum performance standard
A high-performance target
How does this fit with the proposed targets in the waste strategy?
Timeframe for achieving the minimum standard
Consequences of not meeting minimum standard

Q56. Should kerbside recycling services have to achieve a minimum performance standard (eg, collect at least a specified percentage of recyclable materials in the household waste stream)?

200. Yes, there should be a minimum performance standard based on achieving a specified percentage of diversion from landfill across all households in the council region but this must be collection and recycling not just collection as in Q52. above. Further consideration must also be given to where recycling takes place and how that is measured.

201. As with the private sector, NZFGC supports open data sources underpinned by open data standards such as GS1 barcodes and which could track products from production through to recovery. This would ensure the system enables productivity and innovation.

Q57. Should the minimum performance standard be set at 50 per cent for the diversion of dry recyclables and food scraps?

202. Yes, a minimum performance standard set at 50 per cent for the diversion of dry recyclables and food scraps should be the minimum performance standard for recovery AND recycling.

Q58. We propose that territorial authorities have until 2030 to achieve the minimum performance target, at which time the target will be reviewed. Do you agree?

203. No. This should be aligned with the implementation of the CRS and the Plastic Priority Product Scheme and not delayed until 2030. It seems that whilst producers and industry are required to have their schemes in place by 2025, councils are not required to even reach minimum targets by 2025. This is counter to the concept of a New Zealand Inc solution.

Q59. In addition to minimum standards, should a high-performance target be set for overall collection performance to encourage territorial authorities to achieve international best practice?

204. Yes, New Zealand's collection performance must seek to achieve international best practice.

Q60. Some overseas jurisdictions aim for diversion rates of 70 per cent. Should New Zealand aspire to achieve a 70 per cent target?

205. NZFGC believes the aspirational diversion rate should be set at 85% consistent with the CRS.

Q61. What should the consequences be for territorial authorities that do not meet minimum performance standards?

206. The list of councils which do not meet minimum performance standards would be published alongside the councils which meet the targets in order to provide ratepayers with information.

PART 2 – Kerbside Collections

Proposal 5: Separate collection of glass and paper/cardboard (*Transforming recycling* p90)

Separating glass improves recycling quality
The choice of collection bin impacts the quality of recycling
Options we are considering
The impact of a NZ CRS on glass collections

Q62. Should either glass or paper/cardboard be collected separately at kerbside in order to improve the quality of these materials and increase the amount recycled?

- Glass separate
- Paper/cardboard separate
- Separate but councils choose which one to separate
- Status quo – they remain comingled for some councils.

207. NZFGC supports separate glass and separate paper/cardboard collections. According to Horizon Research (see Figure 5), 50% people want a separate glass recycling bin and 42% would like a separate fibre bin.

208. Separate kerbside collection prevents the need to try to “unscramble the omelette” at the MRF.

209. The issues relating to commingled glass collections resulting in broken glass contaminating other materials are well known. NZFGC’s Paper Packaging Sub Committee has produced guidance for our members about the use of paper and fibre packaging to help maximise its recovery.

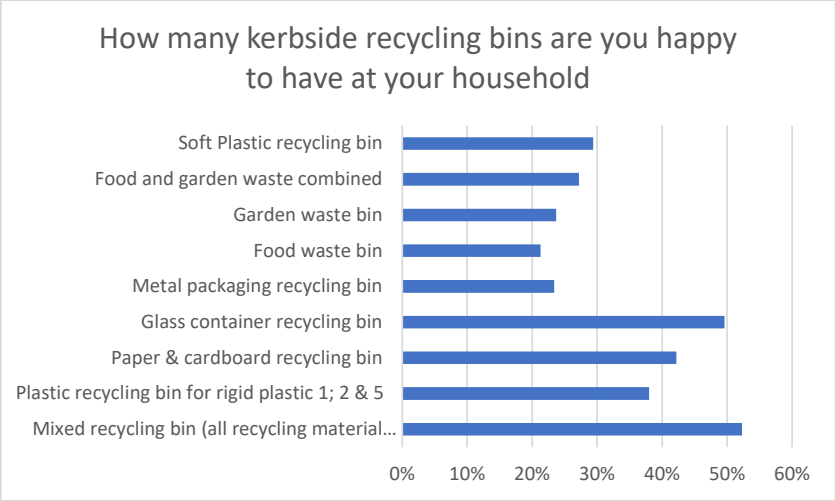


Figure 6: Horizon Research – Preparedness for multiple kerbside bins

210. We understand that, based on the yet to be published latest research commissioned by the Government as part of its infrastructure gap analysis in 2021 by Eunomia Consulting, the recycling rate for paper is 68% which has reduced since 2009 when it was last recorded under the Packaging Accord. Since 2009, commingled collections were introduced in Auckland and other parts of the country resulting in lower quality fibre collections and contributing to this reduction in the recycling rate.

Q63. If glass or paper/cardboard is to be collected separately, should implementation:
- Begin immediately
- Wait for any CRS scheme to be finalised
- Wait until the impact of a CRS scheme has been observed.

211. If glass or paper/cardboard is to be collected separately, this should commence immediately. NZFGC has been advocating for this since the introduction of commingled collections. We note that 48 councils currently collect glass separately or separate at kerbside[40]. With only 19 councils not separating glass, the impost on an immediate commencement is minimised.

PART 2 – Kerbside Collections

Proposal 6: Should all urban populations have access to a kerbside dry recycling collection? (*Transforming recycling* p93)

Kerbside recycling is the main way households recycle

Implementation

Q64. Should all councils offer household kerbside recycling services?

212. NZFGC generally considers that yes, all councils should offer household kerbside recycling services although work around remote areas such as the Chatham Islands may need specific consideration given geographical location. All councils should be subject to a full Cost Benefit Analysis.

[40] *Transforming recycling* p91

213. Whilst harmonisation across 67 councils is desirable, in reality recycling, like everything else in the supply chain, is impacted by geography. According to Horizon research (2022), 90% of New Zealanders recycle at kerbside. Based on the Government's data, 77% of councils have access to recycling for more than1 material type.

214. As noted above, the Chatham Islands service is likely to be more problematic than the Auckland Council service.

Q65. Should these services be offered at a minimum to all population centres of more than 1,000 people?

215. Yes, services should be able to be offered at a minimum to all population centres of more than 1,000 people but again NZFGC's principle is that we should be maximising the materials collected at kerbside not reducing these to meet a self-imposed standard. In any event, setting a population threshold would effectively exclude the Chatham Islands which had a population of 663 at the 2018 New Zealand census.

Q66. Do you agree that councils without any council-funded kerbside recycling collections should implement these collections within two years of their next Waste Management and Minimisation Plan?

216. Yes, we agree that councils without any council-funded kerbside recycling collections should implement these collections within two years of their next Waste Management and Minimisation Plan.

PART 2 – Kerbside Collections

Implementation support for proposals 1-6 (*Transforming recycling* p96)

Research
Funding
Technical support
Behaviour change

Q67. What research, technical support or behaviour change initiatives are needed to support the implementation of this programme of work?

217. We have suggested areas of research throughout the foregoing, particularly in undertaking full cost-benefit analyses of the elements and ensuring that different recycling programmes are cost recovered and not cross subsidising broader activities.

218. Underpinning all of the proposals is the need for best-in-class education with the goal that people alter their thinking from looking at items as waste to that of a resource. This is why NZFGC has taken a lead role in advocating for the widespread use of the Australasian Recycling Label (ARL) in New Zealand which forms an important part of educating the consumer about what can be recycled, how and where including information about conditions attached to recyclability eg store drop off or how materials should be presented.

219. It is pleasing to note that 52% of people surveyed by Horizon Research already have seen the ARL on pack even though there has been no consumer awareness campaign behind this in New Zealand whereas Australia has had the benefit of such campaigns.

220. Noting that 69% people already check for recycling labels on pack most or all of the time, the NZFGC supports a major nationwide consumer awareness campaign which educates people about the ARL; how to present materials for recycling (whether at kerbside, CRS or drop off recycling) – clean, dry and empty – and showcases the new products made from recycled materials.

Innovation
Implementation Timeline

221. We note the timeline for 2022 presumes a 'standard list of materials agreed'. We are supportive of a standard list of materials but not that this be finite. The list should be the minimum categories of materials collected.

222. We also note the 'Case Study on improved on-pack labelling'[41] suggests that "Standardised household kerbside recycling will eliminate the need for any products to have a 'check your local council website label". We contend that if the standardised list of materials is a finite list, such a step will increase the waste being sent to landfill by closing off existing avenues for recycling. This would be a significant backward step.

PART 3: Te whakawehe i ngā para kai ā-pakihi Separation of Business Food Waste (*Transforming recycling* p105)

We all have a responsibility to reduce waste
Businesses' access to food scraps collection
What are we seeking feedback on
Policy objectives
Options considered

We propose source separation is phased in for all businesses (*Transforming recycling* p108)

Phasing in of requirements
How do we identify businesses who produce more food waste?
Should any businesses be exempt
Support for businesses to reduce food waste
Pushing up the waste hierarchy

Q68. Should commercial businesses be expected to divert food waste from landfills as part of reducing their emissions?

223. MfE estimates that around 75,000 tonnes of food scraps sent to landfill come from businesses. Not every business and town has access to commercial food scraps collections. Many NZFGC members are already sending their food waste to compost facilities, food rescue organisations and charities on a voluntary basis. For example, the New Zealand Food Network[42] is strongly supported by NZFGC members providing bulk surplus food to food rescue organisations, charities and iwi working with the Kore Hiakai Zero Hunger Collective, Aotearoa Food Rescue Alliance and MSD. Other members

[41] *Transforming Recycling* p100
[42] https://www.nzfoodnetwork.org.nz/s/about-us?language=en_US

provide surplus food whether because of oversupply, cancelled orders, or because food is nearing its best before date to Kiwi Harvest[43] which we note is funded by MfE.

224. Companies are already reporting on their food waste diversion in the Annual Sustainability Reports.

225. Although the question says "expected to divert food waste", the consultation document *Transforming recycling* proposes mandating businesses to separate food scraps and that this be phased in.

226. **NZFGC does not support mandating businesses to separate their waste**. We consider this to be unnecessary regulation and contrary to regulatory best practice because it is a regulatory overlay to existing regulation such as the waste levy.

227. Many of our members' businesses are already separating their waste and we believe other measures, including the annual increase of the waste levy over the next 3 years, will be effective in changing behaviour. It would be more efficient to review the situation in 2025 to assess effectiveness and, in the interim, develop mechanisms for the three metropolitan areas (Wellington pop 0.217m, Lower Hutt pop 0.113m and Dunedin pop 0.133m) to build the necessary waste food processing facility infrastructure.

Q69. Should all commercial businesses be diverting food waste from landfills by 2030?

228. Commercial businesses in towns with populations of more than 1000 residents should be able to divert food waste from landfills by 2030 depending on:
    - Processing infrastructure being in place
    - end use has been researched and found to be feasible and sustainable. By sustainable, for example, we may well reach a saturation point for compost (or may have already reached this).

Q70. Should separation be phased in, depending on access to suitable processing facilities (eg, composting or anaerobic digestion)?

229. Yes. but as proposed, this is dependent on access to suitable processing facilities (eg, composting or anaerobic digestion). This additional cost will contribute to consumer price index costs throughout the country.

Q71. Should businesses that produce food have a shorter lead-in time than businesses that do not?

230. No, all should proceed in parallel for system simplicity. In any case businesses that do not produce food will likely meet expectations in advance of the deadline set.

Q72. Should any businesses be exempt? If so, which ones?

231. Yes, as noted at the outset, there may be good reasons to exclude hospitals and care facilities from the requirements or a selection of the requirements due to the other risks to the community that they present.

[43] https://www.kiwiharvest.org.nz/about-us

Q73. What support should be provided to help businesses reduce their food waste?

232. Businesses should be able to access toolkits and advice about reducing their food waste. They might also be encouraged to attend workshops or have council officers (perhaps Food Safety Officers) provide one-to-one advice.

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Attachment A

Data Concerns

NZFGC has three key concerns with the data used for *Transforming Recycling*:

- Litter data
- Willingness to pay and social benefit
- Study period.

Litter data

The Cost Benefit Analysis prepared by Sapere Research (2022) for MfE states that

> *"The first step was to estimate the proportion of litter explained by beverage containers. We used the 2019 Keep New Zealand Beautiful (KNZB) national litter audit and then calibrated assumptions on proportion of consumption that becomes litter with the 190,000 tonnes litter that was collected in 2016."*[44]

Sapere appears to have overlaid the 2016 data with the 2019 snapshot audit to derive a range of metrics. NZFGC contends this approach is fundamentally flawed for the following reasons:

A. The 2016 litter collection amount of 190,000 tonnes was a "guesstimate" based on:
   a. volunteers picking up or counting rubbish items (including fly tipping), estimating the weight and supplying the information to KNZB over the course of 2016
   b. the rubbish items included shopping trolleys, scooters, bikes, discarded whiteware and other "heavy" items greatly inflating the tonnage.
B. There was no auditable collection or weighing methodology of the KNZB process in 2016. For example, by the numbers, each (86,000) volunteer would have had to have collected 6.6kg of litter each and every day for the 365 days in 2016 without rest.
   - the data cannot be validated or verified.
C. The KNZB 2019 National Litter Audit is an independent and audited sample on 2% of New Zealand's area. It recorded items, weight and volume.
D. After Sapere "*calibrated assumptions on proportion of consumption"* it took the three derived datasets of weight, volume and item count and created an average number supposedly to remove bias of selecting one metric.
E. Weight is an important reference for landfill costs (and for benefit-cost ratios which increase markedly with weight) but has no relevance to litter – people see the number of items and the space it occupies not the weight of a litter item.
F. Sapere states that the weight of litter is not relevant to its cost benefit analysis "…actual tonnes of litter have little impact on the benefits and costs modelled, as the benefit calculation for litter reduction is based on the percentage reduction in litter expected"[45] yet the calculations refer to weight.
G. The maximum diversion rate from kerbside refuse and recycling volumes is set at 83.9% and current state 8.4% less "and the quantity of beverage containers that become litter is reduced" but not estimated by Sapere.

Sapere used this as the basis for its calculations in its Cost Benefit Analysis. As the Packaging Council's commissioned work from Grant Thornton demonstrates, this does not stack up and could result in estimates over 50% higher than they should be.

[44] p23 Appendix 2 Cost-benefit analysis (Sapere Research Group) in *Interim Regulatory impact statement: a beverage container return scheme for Aotearoa New Zealand.* MFE, 2022

[45] p6 op cit

Willingness to pay and social benefit

To calculate the welfare gain, Sapere used an Australian study by PWC (2010) and a Leeds University study (2011) on the basis that these were frequently cited eg by NSW, WA the ACT Government. The issues with this are:

A. Sapere did not mention or take into account the critical reviews of the 2010 PWC study by the Australia Bureau of Agriculture and Resource Economics (ABARE) which identified a number of issues associated with aggregation factors, protest responses, selection bias and hypothetical bias (choices made in hypothetical markets). As a result, the willingness to pay results are over-inflated. The NSW EPA reviewed the study and recalibrated estimates to correct for some of these, notably sample self-selection and hypothetical bias in the original study[46].

B. The 2011 study undertaken by Wardman, Bristow & Shires was commissioned by the UK DEFRA (Department of Environment, Food and Rural Affairs). The purpose of the study was to estimate the economic value of 10 local environmental amenity factors one of which was litter but which also included graffiti, dog-fouling, chewing gum, lighting and odour. The highest values were not used by the NSW EPA "in order to be as realistic as possible and to maintain a degree of conservatism with regard to benefit transfer estimates"[47].
   - Sapere did not make any adjustments for this study and its breadth of scope unlike the NSW EPA.

C. Sapere used the unadjusted, inflated average of these two studies (not recalibrated or applying conservatism) and multiplied this by the forecast average reduction in litter to calculate the "benefit"
   - This is an inflated response in all areas.

Study Period

Sapere used 30 years as the study period as the author's estimate. No rationale is given for a 30 year period. No Australian cost-benefit for a CRS used 30 years, they all used 20years. The NSW Treasury guidance states that "caution should be exercised in adopting a project period, longer than 20 years."

Recommendations]

As is reflected in the body of the NZFGC submission, we recommend:

- repeating the cost benefit analysis using KNZB National Litter Audit 2022 (to be released in October) based on units and volume.
- Repeat the cost benefit analysis based on research conducted more recently in Australia (such as the February 2022 Centre for International Economics report) or in New Zealand to assess willingness to pay. Horizon Research (April 2022) finds 47% people are not prepared to pay any extra and a further 34% are not prepared to pay more than $50 extra per year.

[46] P48 Consultation Regulation Impact Statement: New South Wales Container Deposit Scheme (nsw.gov.au)

[47] p51 Op cit