

Container Return Scheme (CRS) Technical Advisory Group (TAG) – Final Advice on the Project Team's CRS Design and Consideration of the 'Final Evaluation Process Summary Report'

Background

This report is the Technical Advisory Group's (TAG) final advice on the Project Team's recommendations¹ for the design of a beverage container return scheme (CRS) for Aotearoa New Zealand². The Ministry notes that the TAG provided wide ranging feedback and, in some cases, differing views on aspects of the design are held (refer Table 1).

First, the TAG's feedback and independent advice on the Design report and recommendations is presented. This advice was developed by the TAG using its consolidated feedback on the Design, in step with, and independent of, the Scheme Design Working Group's (SDWG) process. The advice is based on 12 months of iterative report reviews and includes the TAG's overall position on key areas of the Design, next steps within the process toward implementation, and additional advice given consideration of the Scheme Design Working Group's (SDWG) key feedback on the Design. Table 1 presents the TAG's individual views and collective advice on the key design components of the Project Team's Design.

Second, given the SDWG process did not achieve consensus through their evaluation of the Design, Appendices A, B, C and D include the TAG's further advice given consideration of the SDWG's evaluation summary and minority report on the Design. The process to develop this advice included consideration of the Project Team's 'Final Evaluation Process Summary Report' and in particular the minority and majority group feedback summary tables (updated to include the TAGs feedback).

This final advice concludes the TAG's current role in the co-design process of a NZ CRS. The advice will be considered by the Ministry for the Environment when developing it's advice the Ministers on options for the design of a NZ container return scheme.

The Technical Advisory Group's overall position

The TAG is supportive of a container return scheme for New Zealand and for it to include a broad scope of beverage containers (glass, aluminium, plastic and liquid paper board). The TAG considers the broad scope of containers to be critical to the success of the scheme and to the overall cost efficiency of the scheme, further that exemptions can create confusion for consumers and create inequalities in the beverage industry.

Irrespective of whether they are in or out of the scheme, TAG members also note that refillables offer an important opportunity for further emission reductions and moving up the waste hierarchy. However significantly more work needs to be done on refillables (as soon as possible) in order to understand how best that should be done (e.g, what are the regulatory levers, incentives, research and system infrastructure required to make it happen and then, how could that be supported, integrated or otherwise incentivised through a CRS).

¹ The Project Team's report (including recommendations) for the design of a beverage container return scheme bespoke to New Zealand is referred to as the 'Project Team's Design' and/or the 'Design'. The Project Team refers to their report as the 'CRS Design'.

² NB: All TAG members independently reviewed the Final TAG Advice by 22 January 2021 and responded with their approval and agreement that this is the final advice as agreed at the TAG meeting on 16 December 2020.

The TAG generally considers that the proposed Design would create positive and desirable outcomes for New Zealand. These include, but are not limited to, increased recycling of beverage containers, increased refillable beverage containers, reduced emissions associated with recycling and reduced litter.

However, the TAG has also noted with varying degrees of concern that areas of the Design could be improved to ensure a higher level of confidence in scheme performance and beneficial outcomes. Key areas for further consideration include: the deposit level; the scheme financial model; the form and establishment of the network (return point convenience and accessibility); and scheme governance arrangements.

Individually and collectively, the TAG has provided wide-ranging and independent feedback on how the Design could be improved in order to be more confident that the Design will achieve the project's stated key project outcomes³, principles⁴, and opportunities⁵. Given the SDWG co-design process did not achieve consensus, the TAG considers there is an opportunity to change aspects of the Design at this stage and to make further recommendations to the Ministry and Minister.

The TAG also noted that further work is required in several critical areas should a Minister/Cabinet decision to move into the next phase be made.

TAG feedback on the key areas of the Design

Deposit level and targets

- The full TAG (six members) support the proposed 85% container return target, however the full TAG also agree that further incentives and/or targets are needed to create a clear pathway to achieving the 85% target. For example, five TAG members doubt a 10-cent deposit is sufficient to achieve the 85% return rate.
- The full TAG supports the aspirational 95% container return target, however TAG members
 questioned its achievability in the absence of other key scheme design drivers such as a higher
 deposit rate, network convenience, further incentives for returning containers, significant
 research on material flow analysis and a clear road map toward achieving this target.
- Five of six TAG members agree the initial deposit should be established at 20c. This would help ensure consumers are willing to participate in the scheme given the network is proposed to not include mandatory return to retail element, which is a characteristic of high performing schemes globally. A 20c deposit is also is supported by the Project Team's research (survey and literature review), cost benefit analysis and Scheme Design Working Group (SDWG) 'majority group' feedback.
- On balance, the TAG (excluding one member) supports a 20-cent deposit rate at the outset
 and noting that international evidence cited in the Project Team's research indicates that
 generally higher deposit rates (up to a point) usually generate higher return rates and noting
 that there are some exceptions globally. However, the TAG also regards the deposit rate,
 network convenience, and accessibility as intrinsically linked and these aspects form key
 parameters of a Project Team's Design that ultimately determines whether a high return rate
 will be achieved and the overall success of the scheme.

³ **Key project outcomes**: change the way Aotearoa New Zealand values beverage containers that will see increased recycling and new opportunities for refilling; reduce the volume of plastics and other container litter currently ending up in our streams, marine environment, public spaces and landfills; and give effect to circular economy outcomes and any future priority product guidelines.

⁴ **Key guiding design principles**: to make it easy and convenient to return containers across NZ; a solution that is cost effective and efficient; improve the quality and marketability of recyclables and assess the impact of the Design on current kerbside and other collection and processing systems; and create new opportunities for employment, community participation and fund-raising for charities and social enterprises.

⁵ **Key design elements**: use technology and innovation to optimise performance of the NZ CRS; support greater investment in remanufacturing and regional development; align objectives with the Treaty of Waitangi and Te Ao Māori; and where able, mitigate climate change.

- Five of the six TAG members agree that a 20-cent deposit rate is especially important for achieving the 85% return rate target in a scenario where the scheme does not include a substantial proportion of retail-based network convenience (i.e. irrespective of whether it retail participation is mandatory or voluntary).
- The TAG notes that while a 10-cent starting deposit rate scenario may reduce initial upfront
 costs, the Cost Benefit Analysis clearly shows that the benefits of a higher 20-cent deposit
 scenario outweighs the costs, whereas in the 10-cent deposit scenario the benefits over costs
 are less apparent.
- The full TAG (six) agree that incentives are particularly important to achieving the 85% return rate target in the situation of a lower 10-cent deposit rate. If decision-makers choose to commence with the Design recommendation for a 10-cent starting deposit rate (which includes a phased approach to increasing the deposit level to 20-cents if container return targets are not met), the TAG recommends that mandatory trigger points need to be specified in regulation and/or legislation in order to automatically increase the deposit rate to 20-cents if container return targets are not met.
- The TAG agree that a phased approach to increasing the deposit level with mandatory and automatic trigger points would help to create a clearer pathway to achieving the desired 85% return rate if starting at 10c.

TAG's advice: On balance, the majority of the TAG (5 of 6) agree that the deposit level should be set at 20c per beverage container from the outset as this is more likely to deliver the desired 85% return rate.

Governance arrangements

- The TAG had differing views on the proposed governance arrangements and a number of alternative options were offered for further consideration. There was a recognition amongst the TAG that the Governance aspect is linked to other CRS design elements and it is therefore difficult to consider in isolation.
- Three TAG members broadly support the proposed governance arrangements with refinements, noting that governance is interlinked with other policy levers. The TAG members' difference of opinion in part stems from the absence of clarity around the extent to which Government proposes to be involved in the establishment and operations of the scheme.
- For example, with respect to establishing the convenience and material flow efficiency of the scheme's network, and thereby positively or negatively impacting scheme emissions, the Government could:
 - Follow through with the proposed voluntary approach to take-back requirements where the Managing Agency (MA) undertakes a procurement process for the network in collaboration with the Government and bares full responsibility for the associated aspects of convenience and accessibility. Under this scenario it has been proposed by the CRS Project Team that full Government appointment of the broadly representative Governance Board ensures the desired outcomes are delivered. Alternatives within this scenario could see partial or full devolvement of Governance Board appointments to industry.
 - Follow through with the proposed voluntary approach to take-back requirements and instead separate the network procurement from the MA function. Under this scenario the Government runs the procurement for the MA and network separately and plays a larger and ongoing role in the scheme establishment (to ensure the desired outcomes are met), which is a feature of the NSW scheme. Appointment of a broadly representative MA Governance Board could either be retained by Government, partially or fully devolved to industry. In any case, the contracts (and the appropriate allocation of incentives) in place for the network operator and MA become the Government's primary tool for ensuring accountability and delivery. We note under the model in NSW, as the government has full accountability for scheme performance, it has not specified a collection target.

- Regulate for the full or partial establishment of the network through mandatory take-back (return to retail) and the associated higher levels of convenience. The appointment of a broadly representative MA Governance Board can either be retained by Government, partially or fully devolved to industry. While full-take back requirements are an option, so are partial take-back requirements (within defined limits) to ensure large centres have high levels of convenience and regional/local participation opportunities exist for stakeholders such as those in the charitable, zero waste network or scrap metal industry.
- In this (non-exhaustive) set of scenarios, the balance of design considerations can swing between full Government appointment of the MA Board to ensure the scheme is managed towards the expected outcomes (including network procurement) through to a potentially fully industry-appointed Governance Board with a scheme including mandated take-back requirements (either full or partial). In between there are a range of other options such as a two-tiered model (industry-led agency accountable to a Government-appointed body) or a balanced representation model (stakeholder appoint representatives to a Board).
- The TAG also discussed that a key challenge and concern with the proposed fully Government appointed Board is how issues of accountability are dealt with should the scheme underperform and conversely, how is the scheme accountable to industry for ensuring cost effectiveness for example?
- There are a range of other Governance options that may be more appropriate pending changes to other aspects of the design that increase its likelihood of performing well e.g. such as embedding a convenient and accessible network and higher deposit level. Some alternative models have been provided by the TAG and are detailed in the TAG's "Consolidated Feedback on the Draft Design" document. In any case, in the absence of a Government position on its preferred level of involvement within a scheme, the TAG advises that it is desirable to consider the balance within the overall design when considering the spectrum of Government involvement and regulatory options within the design.
- While Minister's will need to consider the balance, it is the TAG's majority view that a fully Government-appointed Governance Board is less preferable to a more balanced representative (with industry) approach. However, in line with the recommendations of the Project Team in this scenario, should a change in the Governance aspect of the proposed design occur in a way which gives industry effective control, given the conflicts of interest within a scheme for the beverage industry, it also means reconsidering more of the key design recommendations across the full design.

TAG's advice: If a scheme is to proceed, the Government needs to make a first principle decision about the overall structure and style of scheme it wishes implement. In the scenario the Governance arrangements change from what is proposed to a more industry-led model, the Government should also reconsider either the balance of controls and incentives within the design as appropriate to the goal of achieving an 85% target or whether Government-led procurement of the network is a necessary step. In all instances the Government should play a leading role in shaping the network design.

Refund/Deposit financial model

- The TAG has no clear majority view on the scheme financial model. Two TAG members support the Design's recommendation for a refund model; three TAG members support a deposit model over a refund model; and one TAG member is impartial, noting that there are positives and negative aspects to both models. The TAG agrees that the financial model is not the most important design consideration relative to the network convenience, the deposit level, and scheme governance.
- The TAG discussed that the actual costs of the scheme needs to be charged to beverage
 producers, however TAG members have differing views about whether the full costs should be
 charged up front as in the deposit model, or only charged on containers returned (the
 refund/cost recovery model).
- The deposit model reduces the incentive for producers involved in the scheme to keep recovery
 rates low in order to keep scheme costs low (noting that this can be managed other ways with

- targets and penalties for not achieving targets) and the refund model reduces the initial costs of the scheme passed onto consumers.
- The TAG also discussed that scheme costs should include other costs such as support for refillables infrastructure and funding Local Government and NGOs with environmental clean ups, etc. Under a deposit model, this can be achieved through funding from unredeemed deposits. Under a refund model, this can be achieved if costs are included in the Managing Agency's budget and passed on through the scheme fee.
- Three TAG members are of the view that product stewardship and 'polluter-pays' principles are clearer under a deposit model because beverage producers are required to pay into the scheme the refundable deposit irrespective of redemption rate (assumes a not for profit model).
- Two TAG members noted that with a return rate of 85% or higher, the scheme financial operation of the deposit and refund models merge.
- The project team's recommendation if the scheme Governance Board is to remain in a fully Government-appointed scenario then the refund model is the recommended approach. Should industry have influence over scheme Governance (the ability to appoint beverage industry representation), then the deposit model is recommended.

TAG's advice (similar to the Project Team): The TAG agrees that the financial model is not the most important design consideration relative to the network convenience, the deposit level, and scheme governance as if the scheme achieves a high recovery rate, the two financial models merge. The TAG also agrees that further consideration should be given to the refund/deposit model option should other elements of the proposed design change.

Network convenience and accessibility

- It is recognised widely and by the TAG that network convenience and accessibility (along with the deposit level), are key determinants for the overall success of the scheme. Key outcomes for a scheme include the proportion of containers recovered for refilling and recycling to be embedded in performance targets (e.g., 85% recovery for single use containers). A high recovery rate is important for a number of reasons, including the reduced environmental and societal impact of litter and GHG emissions from the extraction and production of new materials and circular economy outcomes⁶. More containers recovered also provides more employment opportunities associated with the management of the materials that would otherwise be disposed of and results in a least cost-scheme for consumers.
- The Project Team has recommended the network procurement be led by the MA with a fully Government-appointed Board. It has also recommended a voluntary participation model where potential network participants would be 'enlivened' to the opportunity through a roadshow led by the MA and 16 regional coordinators.
- This model is a bespoke proposal for New Zealand; however it also relies on stakeholders coming forward with the right value proposition, in the right locations, and at a convenience level of the proposed 415 sites (at approximately 1 per 12,500 residents) across New Zealand. The informal collection network is also expected to play a significant role, feeding into the 415 formal sites.
- The matter for further consideration is that while some schemes internationally have come close
 with a voluntary network, irrespective of the deposit level, schemes do not typically achieve
 over 85% recovery without some form of mandated return to retail element within the design.
- The TAG discussed that a less convenient network would increase the cost to consumers
 through a greater use of people's time and making it harder (less likely) to obtain a refund. An
 inconvenient network would also increase GHG emissions due to longer travel distances
 needed to visit container return facilities, and would therefore limit the opportunity for a CRS to
 mitigate climate change (a specified 'NZ CRS Design Opportunity' in the Design).

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⁶ The Ellen Macarthur Foundation notes that a circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. https://www.ellenmacarthurfoundation.org/circular-economy/what-is-the-circular-economy/

- The TAG agrees that retail participation in the return network is important for creating a convenient scheme but disagree on whether retail participation should be voluntary or mandatory.
- While two TAG members are supportive of the proposed voluntary return to retail model, two
 members recommend additional controls as options to ensure the overall container return
 facility network will still be sufficiently convenient, specifically:
 - mandatory return to retail could be considered for densely populated city centres in NZ
 - the deposit rate could be increased to 20c ensure return rates are met.
- One TAG member commented that full mandatory return to retail schemes are very high cost and inefficient. Another TAG member disagrees, commenting that schemes that do not include a substantial proportion of retail-based network convenience are inconvenient and high cost to consumers (on the basis deposits are harder to be refunded).

TAG's advice: The full TAG agrees that retail participation in the return network is important for creating a convenient scheme but disagree on whether retail participation should be voluntary or mandatory. Given the importance of establishing a convenient network at the outset and the potential for a voluntary network to fall short of an 85% target (even at a 20c deposit scenario), the Government should consider undertaking further work on the potential locations and carbon implications of different network scenarios. This could for example include modelling voluntary and partially mandatory (in cities) approaches and/or a high level EOI process to test the market.

Next steps within the process toward implementation of a NZ CRS

- The TAG has noted throughout the process that many areas require further work in phase two
 and, pending clarity on the Government's preferred direction on key design variables noted
 above, this work should be undertaken quickly. The Project Team has provided a more
 exhaustive list, however key areas for further work include:
 - a refillables feasibility study/investigation and development of a business case to support refillables (irrespective of whether refillables are in or out of scope for a CRS).
 The feasibility study should make recommendations for further regulatory levers, incentives, and system infrastructure requirements needed to specifically support and promote the uptake of refillables across New Zealand
 - further engagement and detail on the principles and objectives of the Treaty of Waitangi and Te Ao Māori and how these are being met through the scheme design
 - further detail on opportunities for climate mitigation through both the establishment of a convenient network and the use of zero/low emission technologies in transport and manufacturing, and through minimising transport and handling costs
 - Investigations into:
 - onshore infrastructure to deliver a NZ CRS (collection and consolidation facilities)
 - materials re-processing capacity, including assessment of projected growth capacity
 - development of high-value markets for onshore re-processed products so that down-cycling of materials does not occur
 - investigation into the subsidies that may be required to support greater onshore reprocessing capacity and associated opportunities
 - investigation and development of incentives or requirements around the highest and best resource use in line with the adoption of circular economy principles.

Additional advice considering the key Design feedback of the Scheme Design Working Group

Having received and reviewed the Evaluation Process Summary and Minority Report (see Appendices for detailed commentary) the TAG notes that the substance of their advice remains unchanged notwithstanding the minority group opposing the Project Team's Design, the TAG retains its overall support for a Container Return Scheme for New Zealand.

The TAG notes that the CRS co-design process was a novel approach and while it did generate useful outcomes, the TAG recommends consideration of a lessons learned from those involved to assist with future co-design projects. This could include consideration of greater use of independent facilitation.



Table 1: TAG's individual views and collective advice on the key design components of the Project Team's Design

The Project Team's Design component	s 9(2)(ba)(i)	s 9(2)(ba)(i)	s 9(2)(ba)(i)	s 9(2)(ba)(i)	s 9(2)(ba)(i)	s 9(2)(ba)(i)	TAG advice
Deposit level	20c	10c	20c	20c	20c	20c	Five members support 20c, one member supports 10c
Scope of containers and refillables	Supports the scope of containers Refillables should be included as an eligible scheme container, acknowledging further work and research is needed	Supports the scope of container Supports the exclusion of refillables as an eligible scheme container at this stage, acknowledging further work and research is needed	Supports the scope of containers Refillables should be included as an eligible scheme container	Supports the scope of containers Supports the exclusion of refillables as an eligible scheme container at this stage, acknowledging further work and research is needed	Supports the scope of containers Refillables should be included as an eligible scheme container	Supports the scope of containers Supports the exclusion of refillables as an eligible scheme container at this stage, acknowledging further work and research is needed	Overall, the TAG supports the scope of containers, but holds differing views about refillable containers being included within the scheme Three members are of the view that refillable containers should be included as an eligible scheme container. These members views, in part stem from a concern for the diminished opportunity for refillables within the MA's remit and the ability to leverage the CRS return point network, should they be excluded Three members were of the view that refillable containers should be excluded because a refillables scheme has different and more complex supporting infrastructure and logistical needs Regardless of whether refillables are in or out of scope, all TAG members acknowledge that further work and research is needed to provide options for incentivising and/or incorporating refillables within a scheme
Refund model (financial model)	Deposit model	Refund model	Prefers deposit model but notes that there are pros and cons to both models	Pros and cons to both	Deposit model	Refund model	No consensus on the financial model
Voluntary return to retail	Supports voluntary	Supports voluntary – also suggested that regulations specify the network standards for return to retail in densely populated areas	No strong view for voluntary or mandatory return to retail, can see pros and cons to both approaches Noted that international evidence points to the success of mandatory return to retail schemes Notes that a voluntary return to retail scenario would further heighten the case for a 20c deposit Suggested that mandatory return to retail may not be necessary in smaller centres	No strong view for voluntary or mandatory return to retail Supports voluntary with a high deposit rate. Noted that some limited mandatory options could be beneficial, although questioned how this would be achieved	Supports mandatory	Supports mandatory if 10c deposit Supports voluntary if 20c deposit	No consensus. Two TAG members support voluntary; two TAG members have no strong view and can see pros and cons to both mandatory and voluntary approaches (one of which suggested mandatory and a 20c deposit in densely populated centres); one TAG member supports mandatory; and one TAG member supports mandatory with a 10c deposit or voluntary with a 20c deposit The TAG notes that this aspect is difficult to consider in isolation of other design considerations There are benefits to both mandatory and voluntary retail return models The TAG agrees that further work is needed.

			and/or if there are many informal locations set up However, suggests consideration of mandatory return to retail in major cities / densely populated areas.				
415 formally registered CRFs	Supports 415 as the minimum number to begin with	Supports	Supports 415 as the minimum number to begin with	Supports 415 as the minimum number to begin with Uncertain how the informal network will play out	Supports 415 as the minimum number to begin with	Supports 415 as the minimum number to begin with Noted that 415 is inadequate if the deposit is 10cents	The TAG supports 415 formal CRFs with five of six considering 415 as the 'minimum number' to begin with
85% container return rate target	Supports Noted that the higher the target the better.	Supports	Supports, but noted there are not enough incentives	Supports	Supports	Supports	The TAG supports the 85% target
95% aspirational container return rate target	Supports the 95% more than the 85% Getting the change for the last 10% could be done through education.	Supports, noting that there are uncomfortable realities and costs associated with getting from the 85% target to the 95% target	Supports the aspirational target but would like to see a clear roadmap with targets and timeframes to ensure its achievability Noted that a higher deposit and a greater convenient network would help to achieve this target	Supports	Supports, but is uncertain of its achievability	Supports, with further incentives	The TAG supports the 95% target but questions its achievability in the absence of other key drivers within the design. Examples included a higher deposit rate, greater network convenience, further incentives, and a clear pathway toward achieving the container return target
Governance structure	Supports, noting that the Governance Board needs to be empowered through legislation	Proposed an alternative governance model (PRO structure)	Supports with refinements (the appointment of board members should be undertaken by an independent party to ensure wide representation)	Supports, noting the governance board should be empowered through legislation	Proposed two alternative options	Supports with refinements Also proposed possible industry-led alternative	No consensus on governance structure
Managing Agency	Broadly supports	Broadly supports with refinements	Broadly supports with refinements	Broadly supports with refinements	Does not support	Broadly supports with refinements	Broad support

Appendix A: TAG Advice on the SDWG Minority Group 'Core Design Considerations' of the Project Team's Design⁷

Key Draft Design feedback from the SDWG Minority Group	Project Team response	TAG Advice on the SDWG Minority Group's key design feedback
Detailed standards required for operational material sorting	The following is reported in the NZ CRS Design: "Establishing a scheme MCF, MRF and General Refuse Processing Facility protocol, including all auditing requirements and determine a protocol review period. The benefit of this approach for a NZ CRS is to enable the Managing Agency to have complete transparency and visibility of scheme material processing facility operations as they relate to the successful functioning of the scheme". "Establishing a clear and consistent collection, quality control and auditing processes integrating all scheme participants to maintain material quality. The benefit of this approach to a NZ CRS is to ensure that the Managing Agency coordinates and manages all scheme participants to ensure integrity of the scheme to ensure accurate and auditable count of containers and payment to collection depots".	The TAG agrees that detailed standards should be required for different material types and forms of return facilities (including MRFs) for operational material sorting, pending a decision to implement a scheme.
Promoting and advancing refillables should not be the responsibility of the Managing Agency	The following is reported in the NZ CRS Design: "At this stage of the NZ CRS design process and acknowledging SDWG feedback, refillables will not be included as an eligible scheme container and therefore will not be part of the NZ CRS design. However, the NZ CRS Managing Agency will promote and encourage the development of the refillables market" (NOTE: further investigatory work regarding the Aotearoa New Zealand refillable market has been recommended in Section 17 of the NZ CRS Design and item 20 of Appendix C of this document to better understand how the NZ CRS can facilitate the refillable market.	The TAG raised concerns that if refillables is not the role of the MA, then is unclear who would pick up this responsibility. Contrary to the Minority Group, the TAG therefore suggests it is the legitimate role of the MA to be responsible for promoting and advancing refillables. The TAG notes that the network needs to be established in a way which both prevents barriers to refillables and a future refillables market, and which also proactively supports future alignment with refillables. Furthermore, the TAG agreed that there is substantially more work and research (including a refillables feasibility study) required and is of the view that it is the role of the MA to undertake this work. The TAG noted that there needs to be an expressed responsibility for refillables in order to ensure that this occurs and to ensure sufficient budget. Overall, the TAG supports the scope of containers, but holds differing views about refillable containers being included within the scheme. Three members are of the view that refillable containers should be included as an eligible scheme container. These members views, in part stem from a concern for the diminished opportunity for refillables to be within the MA's remit and leverage the network of return points should they be excluded. Three members were of the view that refillable containers should be excluded because a refillables scheme has different and more complex supporting infrastructure and logistical needs. The key message for Ministers in any case is that all TAG members support a broad scope of containers be included in the scheme and refillables offer an important opportunity for further emission reductions and moving up the waste hierarchy. Irrespective of whether they are in or out of the scheme, significantly more work needs to be done on refillables (as soon as possible) in order to understand how best that should be done (eg, what are the regulatory levers, incentives, research and system infrastructure required to make it happen and then, how could that be s

⁷ The table is drawn from Table 5 in the Project Team's 'Final Evaluation Process Summary Report' (11 December 2020). The Minority Group did not reach consensus (21%) and generally made comments about the number of container return facilities, standards for material sorting, the number of scheme Material Consolidation Facilities, excluding glass from the NZ CRS, and aspects of the design that would require confirmation of the detail during the implementation phase.

		feasibility study should make recommendations for further regulatory levers, incentives, and system infrastructure requirements needed to specifically support and promote the uptake of refillables across New Zealand
Exclude glass from the NZ CRS	The following is reported in the NZ CRS Design: "Eligible containers to include all material types (e.g., glass, liquid paperboard, metal and plastic) to ensure consumers have clarity in understanding what containers are included in the NZ CRS thereby reducing potential confusion and/or ambiguity regarding what containers are included in the NZ CRS."	The TAG is supportive of a Container Return Scheme for New Zealand and for it to include a broad scope of beverage containers (glass, aluminium, plastic and liquid paper board). The TAG considers the broad scope of containers to be critical to the success of the scheme and to the overall cost efficiency of the scheme, further that exemptions can create confusion for consumers and create inequalities in the beverage industry.
	"The results of a ConsumerNZ survey undertaken in early 2020 notes 64% of 2,114 respondents noted that all containers made of plastic, glass and metal should be included in the NZ CRS, with drop in support for plastic and glass at 15%, plastic only at 6% with the remaining 15% either noting other types of materials or were undecided."	
Disagreement with the use of Ministry for the Environment funded Keep New Zealand Beautiful national litter data	The following is reported in the NZ CRS Design: "It is acknowledged that there are several Aotearoa New Zealand litter reports available. The NZ CRS Design Document has used the Ministry for the Environment funded Keep New Zealand Beautiful that uses internationally approved methodology with data meeting environmental reporting requirements of the Ministry and Stats NZ".	The TAG understands this matter is being considered as part of the Glass Packaging Forum NZIER submission.
Glass impacts as presented in the design unreliable	All Aotearoa New Zealand glass data provided for in the NZ CRS Design Document (e.g., NZGPF case study data) was made available to the SDWG for review and feedback. The New Zealand Glass Packaging Forum have not challenged the glass data and or the assumptions used to determine this.	The TAG reiterates the view of the Project Team and notes that no alternative evidence has been provided that warrants the exclusion of glass from a scheme. The TAG recommends the CRS includes all material types (glass, aluminium, plastic and liquid paper board).
The Managing Agency should not be engaged in promoting and enabling education and life skills that directly and indirectly benefit the NZ CRS. This is considered out of scope for the Managing Agency	The following is reported in the NZ CRS Design: "The Managing Agency will be responsible for the establishment and ongoing implementation of a NZ CRS education and awareness plan including the provision of educational resources suitable for use in curriculum settings (e.g., interactive NZ CRS web portal)". "The establishment of a scheme specific education and awareness plan will support the NZ CRS to provide the Aotearoa New Zealand community with more than simply a container recycling scheme. Instead the provision of NZ CRS educational resources will encourage and promote the social good within Aotearoa New Zealand communities that also directly and indirectly drives awareness of and support for the NZ CRS. Additionally, these educational resources will, in a post-COVID-19 economy provide Aotearoa New Zealand communities and individuals with opportunities to diversify skills and provide a mechanism to develop new and/or additional life skills that enhance opportunities to participate in Aotearoa New Zealand's economy".	The TAG is of the view that it is appropriate for the Managing Agency to have responsibility for running education, marketing, and awareness campaigns to encourage the success of a scheme, and that this should be measured through key performance indicators (and notes that this is common in many schemes internationally). The TAG notes that these costs will be managed through the scheme, and that these expected costs will be proportional to the need to drive performance of the scheme.
The number of container return facilities (415) is too high	The following is reported in the NZ CRS Design: "Sufficient container return facilities will be located across Aotearoa New Zealand at suitable locations to enable customers to redeem their containers in a secure and efficient manner with minimal transaction times and at the same time ensure the return facilities are cost-effective and financially viable. Based on learnings from overseas, feedback from the design process and the outputs from financial modelling it is proposed that the NZ CRS initially establish approximately 415 (i.e., a projected population of 5.213million as at 2023 and a ratio of 12,500 people per container return facility) registered container return facilities across Aotearoa New Zealand	The TAG supports 415 formal CRFs with five of six considering 415 as the 'minimum number' to begin with. The TAG notes that this number is based on lessons from overseas, notwithstanding that if a decision to implement is made then further work may be required to determine the number and location of container return facilities.

noting that each of the approximately 415 registered sites are anticipated to have informal dropoff points located to increase customer convenience and provide additional volumes of
containers to improve financial viability. The NZ CRS Managing Agency will be required to
monitor the performance of each geographical area such as containers returned as a proportion
of what is available in the area and take appropriate action as required. This action would
include working with container return facilities, establishing more return sites and increasing
awareness. It is further recommended that no later than
9-months before the scheme commences a final review is undertaken by the regulatory authority
to confirm if the establishment of approximately 415 container return facilities is still appropriate".

Governance Board needs greater representation of beverage producers

The following is reported in the NZ CRS Design:

"The NZ CRS Managing Agency and Governance Board is a single organisation with a clear separation between the management (i.e., operation, performance and executive management) and governance functions (i.e., scheme Governance Board, strategic direction, and legislative accountability)."

"The responsibility for the scheme legislative instruments and for oversight of the performance of the NZ CRS is anticipated to fall with central government."

"The Governance Board will comprise 9-government appointed members (including an Independent Board Chair and representation from, but not limited to, lwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer) and be aligned to the representation of the Te Tai Ōhanga – The Treasury Living Standards Framework (i.e., Natural Capital, Social Capital, Human Capital and Financial/Physical Capital), including upholding Te Tiriti o Waitangi – The Treaty of Waitangi.

• The government appointment of NZ CRS Governance Board members gives greater empowerment and responsibility to the government of the day to ensure the make-up of the Board reflects the current and future needs of Aotearoa New Zealand. It should be noted that the 'appointment' of directors to the NZ CRS Governance Board does not mean that the government has any greater or lesser control of the scheme Managing Agency that if it has 'approved' the Governance Board members. Any control by the government is via the bespoke scheme legislation and provisions within this to intervene with appropriate measures, should that be required. These measures could include, for example, replacing one (1) or more Governance Board members."

"The NZ CRS governance structure aligns with the requirements of the General Guidelines for Product Stewardship Schemes for Priority Product Notice 2020.

Specifically, the NZ CRS Governance aligns with the requirements of 'Directors and Governance Boards' whereby the Governance of the NZ CRS will ensure it represents the interests of producers, consumers and the wider community noting that the wider community includes, but is not limited to, local government, lwi, environmental non-government organisations." (emphasis added)

"A critical component of Governance Board membership is the appointment process. Noting the NZ CRS Governance Board will be appointed by central government with control provided through appropriate legislative instruments, it is proposed that the nomination process as used for the Manatū Mō Te Taiao - Ministry for the Environment Waste Advisory Board be used as the starting point."

"The implementation of a NZ CRS design will require alignment with existing legislative frameworks such as the New Zealand Waste Minimisation Act 2008 and the principles of Te Tiriti o Waitangi – The Treaty of Waitangi. Further, the Governance Board through its constitution (or equivalent) will include a requirement that it will align and uphold the principles of Te Tiriti o Waitangi – The Treaty of Waitangi."

The TAG notes and understands the position generally reflected by the Minority Group that industry should play a stronger role in the governance of the scheme. The optimal governance arrangements depend upon the considerations and decisions about scheme design.

If a scheme is to proceed, the Government needs to make a first principle decision about the overall structure and style of scheme it wishes implement. In the scenario the Governance arrangements change from what is proposed to a more industry-led model, the Government should also reconsider either the balance of controls and incentives within the design as appropriate to the goal of achieving an 85% target or whether Government-led procurement of the network is a necessary step. In all instances the Government should play a leading role in shaping the network design

"Managing Agency Governance Board structure will consider conflicts of interest that may arise from entities/individuals that stand to profit/benefit from the operation of the scheme (i.e., entities/individuals are not independent)."

Are concerned about the role of competition in a single Managing Agency that owns the scheme material. The following is reported in the NZ CRS Design:

"The Managing Agency will be established as a single independent, government appointed Governance Board, not-for-profit organisation supported by clear regulatory conditions including consequences for not delivering on the minimum container return rate target of 85% and to strive towards the aspirational container return target of 95% (including the establishment of drivers and levers to achieve the aspirational target such as level of deposit). Consequences include, but are not limited to, the government:

- Replacing one (1) or more of the scheme Governance Board members; and
- Increasing the level of container deposit (e.g., an increase of 10-cents)."

"The independent not-for-profit Managing Agency organisation will comprise of an Executive Management Team comprising senior managers of the organisation, including but not limited to, the Chief Executive Officer, Financial Manager, Operating Manager, Marketing and Communications Manager, Sustainability/Environment Manager, Audit and Risk Manager, Community and Social Enterprise Manager, Collection Facility Manager, Mana Whenua Relationship Manager (noting that relationships with Mana Whenua will be interconnected throughout the NZ CRS with the Managing Agency and scheme Governance Board accountable for achieving this)."

"The Managing Agency employees, including the Chief Executive Officer will be independent of any individual or organisation involved with the scheme Governance Board and must not own, be employed by or have any involvement in any organisation that is financially gaining from the NZ CRS. Any family, relatives, etc that are employed by the scheme Managing Agency and where such relationships exist must be fully disclosed and approved by the scheme Governance Board and not at the discretion of the Managing Agency Chief Executive Officer to approve."

"Annual reviews of the Managing Agency will be undertaken by the respective central government department responsible for 'owning' the NZ CRS."

"The roles and responsibilities, including Managing Agency review periods will be set in the specific container return scheme legislative instruments."

"The Governance Board will comprise 9-government appointed members (including an Independent Board Chair and representation from, but not limited to, Iwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer) and be aligned to the representation of the Te Tai Ōhanga – TheTreasury Living Standards Framework (i.e., Natural Capital, Social Capital, Human Capital and Financial/Physical Capital), including upholding Te Tiriti o Waitangi – The Treaty of Waitangi.

• The government appointment of NZ CRS Governance Board members gives greater empowerment and responsibility to the government of the day to ensure the make-up of the Board reflects the current and future needs of Aotearoa New Zealand. It should be noted that the 'appointment' of directors to the NZ CRS Governance Board does not mean that the government has any greater or lesser control of the scheme Managing Agency that if it has 'approved' the Governance Board members. Any control by the government is via the bespoke scheme legislation and provisions within this to intervene with appropriate measures, should that be required. These measures could include, for example, replacing one (1) or more Governance Board members."

"The scheme Governance Board will be established separate from the scheme Managing Agency Executive Management Team and comprise skills, experience and expertise from, for example, lwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local

The TAG is of the view that the Managing Agency needs to ensure tracking the mass flow balance of materials in order to prevent fraud and risk, and to set quality standards, and is held accountable for ensuring the best end use of material. Therefore, the TAG agrees with the Design recommendation that the simplest way of achieving this is for the MA to own the scheme material, noting that further clarity is required on the contracts and arrangements between MRFs and councils.

The TAG agrees that the Managing Agency should have a requirement to promote market competition in all parts of the scheme network, and that driving market mechanisms can help to achieve scheme objectives

government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer to ensure that schemes strategic direction is underpinned by social, economic, cultural and environmental outcomes."

"The scheme Governance Board will provide strategic oversight and direction to the scheme Managing Agency Executive Management Team to support the development and continual improvement of the scheme while also being responsible for reporting to the respective government agency on scheme performance. Additionally, the scheme Governance Board is to monitor and oversee the commercial and operational risks of the NZ CRS (e.g., cashflow, fraud mitigation measures)."

"Managing Agency Governance Board structure will consider conflicts of interest that may arise from entities/individuals that stand to profit/benefit from the operation of the scheme (i.e., entities/individuals are not independent)."

[To ensure compliance with legislation and outcomes] "Annual reviews of the scheme Governance Board by the respective central government department responsible for 'owning' the NZ CRS." [will be undertaken]

"Implementation of regulated scheme review periods [will be undertaken by the Managing Agency] comprising of two (2) initial scheme review periods to assess scheme performance and operation (e.g., eligible scheme container return rates, consumer accessibility) and strategic direction set at the end of the year-3 and year-5 financial periods, then every 5-years thereafter."

"Critical to ensuring the establishment of services supporting a consumer focussed scheme is the requirement for robust procurement and probity processes ensuring a competitive and transparent process is provided for by the scheme Managing Agency while ensuring equality amongst potential service providers.

- The specific details of the procurement and probity processes are to be established during the NZ CRS implementation stage, the Establishment Governance Board and the interim Managing Agency Chief Executive are expected to ultimately approve the processes in alignment with any central government requirements. The outcomes of the procurement process will be a series of contractual arrangements, including commercial contracts, licencing and registration agreements.
- It is recognised that a NZ CRS will be a new scheme to Aotearoa New Zealand and one
 that may present significant opportunities to market sectors not traditionally involved in
 resource management. A bespoke procurement process will be established for the NZ
 CRS, broadly comprising both informal and formal engagement with the market:
 - o Informal market engagement
 - Stimulate interest in the market in advance of any formal procurement process to ensure, for example, the market is aware of the opportunities presented by the NZ CRS and to canvas a wide range of potential service providers.
 - o Formal market engagement
 - Implementation of a formal procurement and probity process."

There needs to be end market security for collected materials

The following is reported in the NZ CRS Design:

"Ensuring all scheme material sold to markets will be owned by the Managing Agency.

• The reason why this is good for Aotearoa New Zealand is that the Managing Agency is in the best position to manage this risk and promote the beneficial use of material over the long term. This is beneficial for the Aotearoa New Zealand environment as it will encourage the supply of scheme materials to Aotearoa New Zealand based manufacturers. The Managing Agency may, for example, enter long-term supply arrangement with material re-processors that results in certainty of supply to enable and assist investment in infrastructure."

The TAG agree that there needs to be end market security for collected materials, and noted that the Managing Agency needs to manage complexities associated with the following, to ensure market security:

- onshore infrastructure to support a NZ CRS collection and consolidation facilities
- · materials re-processing capacity, including assessment of projected growth capacity
- development of high-value markets for onshore re-processed products so that down-cycling of materials does not occur
- the subsidies that may be required to support greater onshore re-processing capacity and associated opportunities
- · sortation standards to ensure high quality of scheme material

"Ensuring that all recovered scheme material is beneficially reused through measures such as legislative drivers, establishment of long-term contractual arrangements, encourage the use of scheme recycled material for the production of containers, ensure scheme material can have adequate quality to be used again for food packaging, undertake regular inspections of approved scheme re-processors ensuring that minimal scheme material is wasted.

The benefit of this approach to Aotearoa New Zealand is that the NZ CRS promotes a
holistic end-to-end solution requiring the Managing Agency to take ownership and
accountability of the end fate of scheme material and the Managing Agency is enabled
to promote the outcomes of the pūnaha whakarōpū para - waste hierarchy."

"Working with the material re-processor to optimise scheme collection and sorting methodologies to lift material quality.

 The reason why this is good for Aotearoa New Zealand is to require scheme participants and associated industries to carry out more robust sorting and collection of materials to reduce contamination levels whilst encouraging the production of higher value products (e.g., PET flakes and PET pellets) for sale to markets and material re-processors."

"Optimising the establishment of contractual arrangements to include material end fate and recyclability requirements of scheme material.

The reason why this is good for Aotearoa New Zealand is that the Managing Agency will
encourage and promote Extended Producer Responsibility through the use of an
Advanced Material Recycling Fee to ensure producers cover the true cost to beneficially
use their respective container materials. This approach will also help encourage
producers to move to more recyclable materials, thereby promoting and delivering the
objectives of the scheme."

"The Managing Agency will promote and encourage the development of the refillables market through options including, but not be limited to:

- Funding and promoting the benefit and awareness of refillables as a preferred choice to New Zealanders.
- Working closely with existing and future New Zealand refillable schemes to identify and remove barriers to their growth, irrespective of whether existing or future refillable schemes choose to be included within a NZ CRS or not. This approach recognises and provides for individual companies to manage and promote their own unique refillable containers and where companies may wish to share a universal bottle.
- Support[ing] and facilitat[ing] the uptake of reusables through the integration of strategic directives embedded within the NZ CRS scheme performance indicators.

"Application of an Advanced Material Recycling Fee (AMRF) recognises that not all container packaging materials are equal with some more recyclable and valuable than others. In practice this means that materials that are difficult to recycle or problematic such as liquid paperboard may need to incur additional cost to see them successfully recycled in keeping with the outcomes of the NZ CRS design while other materials may receive a net income such as aluminium.

The reason why this is beneficial for Aotearoa New Zealand is that this in an open and transparent way to ensure container material choices by beverage producers are recognised and reflect any net cost or revenue that is expected to ultimately be passed on to the customer. Also, in keeping with the outcomes of the NZ CRS design, the non-financial impacts associated with container material choice must be factored in or at the very least provided for to help shape the direction and choice of container material in the future."

Adverse impact on employment opportunities

The following is reported in the NZ CRS Design:

The TAG notes that a CRS will create a shift in employment and acknowledges while a CRS may have an impact on kerbside recycling jobs, agrees that the Design will create a net increase in employment (including a diverse range of skills and jobs), community participation, and fund-raising for charities.

"An independent analysis commissioned by the NZ CRS Project Team estimated that the Two TAG members noted that there will be some regional development and employment scheme would generate a net increase of approximately 1,300 jobs. While the type and nature of opportunities as a direct result of the scheme (eg. more collection and consolidation facilities in the these potential employment opportunities will require further investigation during the regions) implementation stage, the NZ CRS has the potential to provide the Aotearoa New Zealand One TAG member noted that the job creation potential of a refillables scheme (including the fact that economy in a post COVID-19 environment with an avenue to create meaningful work and those jobs are likely to be localised and dispersed and thus meet regional development goals) is enterprise opportunities for people in their own communities." under-considered in the Design report, but will be boosted through investment in refillables (and could be further boosted through regulatory incentives to grow reuse). One TAG member noted that a CRS may not create new employment but an employment shift from providing kerbside collection systems to be providing container return facilities and anticipates further research in the implementation stage to address this risk. Risk of stranded The following is reported in the NZ CRS Design: The TAG notes that experience from overseas shows that this concern is not realised, and that there can be benefits with revenue sharing arrangements and opportunities to make recycling businesses more assets (e.g., fixed and sustainable in the long-term. mobile plant, buildings, "The Managing Agency will contract the scheme Material Consolidation Facility. By exception it may directly own and operate these. All scheme material sold to markets will be owned by the etc) Managing Agency. For clarity, where the processing facility is based on utilising an existing The TAG notes the interconnection between a CRS and the Government's proposals for kerbside Material Recovery Facility then the contractual arrangement would reflect the appropriate standardisation and the need for clarity in light of any changes and how to best manage potential impacts on delineation of that site to ensure separation of existing sorting activities and materials from the industry. NZ CRS. The reason why this is appropriate for the NZ CRS design is that contracting the services of the scheme Material Consolidation Facility by the Managing Agency will minimise the risk of fraud, maximise the use of existing infrastructure, maximising the number of Material Consolidation Facilities around Aotearoa New Zealand and minimising the scheme carbon footprint." "Where appropriate and practicable, the Managing Agency will give effect to prioritising the use of existing infrastructure in Aotearoa New Zealand to reduce scheme costs and maximise the opportunity for reuse. For clarity, the Material Consolidation Facility and Material Recovery Facility will not be able to operate as one (1) operation but will be able to be situated on the same land footprint with clear delineation between the two entities such as fences and separate equipment to mitigate the risk of fraud. Incorporating where possible, Aotearoa New Zealand's existing infrastructure (e.g., Territorial Local Authority owned/contracted resource recovery infrastructure), will assist in establishing a cost-efficient scheme whilst ensuring recognition of businesses already providing relevant services." "The Managing Agency will be responsible for managing the establishment of collection service contracts and/or agreements (e.g., contracted back-haul arrangements, transportation of material by the material purchaser) to be managed by the Managing Agency to deliver the service needed to transport eligible scheme containers from the scheme Material Processing Facility and either the scheme Material Consolidation Facility, material re-processor or direct to end-markets. The establishment of transportation service contracts will ensure that the NZ CRS benefits from a consistent transportation service." Forms of refund The following is reported in the NZ CRS Design: The TAG notes that the scheme design should allow for a range of payment options, and that it is important payment to customers to ensure refund options are embedded in regulation. Regulation and legislation should be adaptable to future technological advancements and refund options. (e.g., supermarket "Container refund options must include cash, electronic funds transfer, supermarket voucher vouchers) is too (including a 2-year expiration date) and donation. The scheme Managing Agency will be prescriptive empowered to have flexibility to expand the range of refund options such as a scheme credit

	system, loyalty card and gift cards. Alternative refund options must be supported by robust information (e.g., consumer surveys) and in consultation with the scheme Governance Board and the Government department responsible with scheme oversight. • The reason why this is good for New Zealanders is to provide consumers with a range of options to receive the appropriate container refund amount rather than limiting these options". "The ConsumerNZ 2020 survey asked 2,114 survey respondents how they would like to receive the deposit. The options provided were reflective of those offered across the global container return schemes, with 40% of respondents supporting cash, 21% direct payment to a bank account, 16% voucher, 6% charity and the remaining 17% reporting other methods, all of those methods noted or no preference to the method."	
Number of Material Consolidation Facilit (16) is too many and not justified		The TAG is concerned that the number of material consolidation facilities may be too many and too prescriptive, given the consideration of the optimal number is a function considerations such as transport logistics efficiencies, opportunities for using existing infrastructure and the primary form of container verification.

Appendix B: TAG advice on the SDWG Minority Group 'Wider Design Considerations' of the Project Team's Design⁸

Key Design Feedback from Minority Group	Project Team response	TAG Advice on Minority Group feedback
Further climate change assessment and carbon modelling needed	The following is reported in the NZ CRS Design: "Mapping of container collection facility locations, Material Consolidation Facility (MCF) and Material Recovery Facility (MRF) locations overlaid with transportation route optimisation modelling and consumer travel journeys (e.g., multi criteria analysis to help inform the optimal container return facility network infrastructure, carbon footprint). To reduce scheme related greenhouse gas emissions and progress Aotearoa New Zealand's obligations under the Kyoto Protocol".	The TAG recommended that an area of further work includes further detail on opportunities for climate mitigation through both the establishment of a convenient network and the use of zero/low emission technologies in transport and manufacturing, and through minimising transport and handling costs. The TAG also recommended investigation and development of incentives or requirements around the highest and best resource use in line with the adoption of circular economy principles.
Continuous improvement – ongoing technology and collection methodology reviews required	The following is reported in the NZ CRS Design: "Detailed investigation of new technologies to support scheme activities (e.g., the use of blockchain technology)". Additionally, Appendix C items 21, 22, 24, 25, 28, 48, 58 specify several additional areas requiring further investigation during the NZ CRS Implementation Stage.	The TAG agrees that continuous improvement needs to be an obligation of the MA, and that this needs to be embedded in regulation and legislation and part of the MA's ongoing strategic planning. For example, the TAG recommended investigation and development of incentives or requirements around the highest and best resource use in line with the adoption of circular economy principles.
Undertake further detailed economic analysis	The NZ CRS Design acknowledges and recommends a range of additional economic assessments be undertaken during the Implementation Stage. These items are listed in Appendix C of this document with specific reference to items 13, 14, 17, 28, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40.	The TAG agrees that further detailed economic analysis is needed as a part of the implementation stage.

⁸ The table is drawn from Table 6 in the Project Team's 'Final Evaluation Process Summary Report' (11 December 2020). The Minority Group did not reach consensus (21%) and generally made comments about the number of container return facilities, standards for material sorting, the number of scheme Material Consolidation Facilities, excluding glass from the NZ CRS, and aspects of the design that would require confirmation of the detail during the implementation phase.

Key Design Feedback from Minority Group	Project Team response	TAG Advice on Minority Group feedback
Ensure Te Tiriti o Waitangi - the Treaty of Waitangi is reflected in the NZ CRS and/or lwi should be represented on the Governance Board	Te Tiriti o Waitangi - the Treaty and inclusion of Mana Whenua in the scheme Governance is discussed further in Section 14 and Section 15 of the NZ CRS Design Document. Additionally, consultation and engagement with Mana Whenua at a regional level will be carried out during the NZ CRS implementation stage to explore and identify opportunities that empower participation in the NZ CRS (see items 53 and 54 of Appendix C). The following is reported in the NZ CRS Design: "The Governance Board will comprise 9-government appointed members (including an Independent Board Chair and representation from, but not limited to, lwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer) and be aligned to the representation of the Te Tai Ohanga – The Treasury Living Standards Framework (i.e., Natural Capital, Human Capital and Financial/Physical Capital), including upholding Te Tiriti o Waitangi – The Treaty of Waitangi. • The benefit to the NZ CRS of a 9-member Governance Board includes, but is not limited to, the ability for different industry groups to be represented. Notwithstanding the diverse make-up of the governance board, members are selected for the skills and experience and expertise they bring." "The independent not-for-profit Managing Agency organisation will comprise of an Executive Management Team comprising senior managers of the organisation, including but not limited to, the Chief Executive Officer, Financial Manager, Operating Manager, Marketing and Communications Manager, Sustainability/Environment Manager, Audit and Risk Manager, Community and Social Enterprise Manager, Collection Facility Manager, Mana Whenua Relationship Manager (noting that relationships with Mana Whenua will be interconnected throughout the NZ CRS with the Managing Agency and scheme Governance Board accountable for achieving this)." "The NZ CRS governance structure aligns with the	The TAG notes that the CRS co-design process did not reflect a true partnership approach and alignment with the Tiriti, and advises that further engagement and detail is needed on the principles and objectives of the Treaty of Waitangi and Te Ao Māori and how these are being met through the scheme design. The TAG agrees that further engagement with Māori is needed prior to implementation, and that the best form of representation on the governance board will emerge from this engagement process.

Appendix C: TAG Advice on the SDWG Majority Group 'Core Design Considerations' of the Project Team's Design^o

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
Deposit level (10-cents) is too low	The following is reported in the NZ CRS Design: "Notwithstanding the original recommendation of a 20-cent deposit to be applied to the NZ CRS, on balance and taking into consideration feedback from stakeholders, the Project Team are of the view that the NZ CRS commence with a 10-cent deposit noting this level may be increased under specific situations as detailed in Section 11.14 of the NZ CRS Design Document".	On balance, the TAG (excluding one member) supports a 20-cent deposit rate at the outset and noting that international evidence cited in the Project Team's research indicates that generally higher deposit rates (up to a point) usually generate higher return rates, and noting that there are some exceptions globally.
NZ CRS must include glass	The following is reported in the NZ CRS Design: "Eligible containers to include all material types (e.g., glass, liquid paperboard, metal and plastic)".	The TAG is supportive of a Container Return Scheme for New Zealand and for it to include a broad scope of beverage containers (glass, aluminium, plastic and liquid paper board). The TAG considers the broad scope of containers to be critical to the success of the scheme and to the overall cost efficiency of the scheme, further that exemptions can create confusion for consumers and create inequalities in the beverage industry.
Return-to-retail should be mandatory	The following is reported in the NZ CRS Design: "While the NZ CRS research findings note high-performing schemes are typically associated with a mandatory return-to-retail option, the NZ CRS Project Team had originally proposed a voluntary return-to-retail underpinned by a mandatory approach. However, feedback received from the SDWG noted a lack of support for this option and instead preferred a voluntary return-to-retail approach to be applied across all of New Zealand, including rural/regional areas. Acknowledging the feedback received from the SDWG and there being no global precedence of a voluntary return-to-retail underpinned by a mandatory approach, the Project Team, on balance, considers the NZ CRS return-to-retail option to include a voluntary approach only. However, under a voluntary approach it will be a requirement of the NZ CRS Managing Agency (see Section 14 of the NZ CRS Design Document for further discussion) to ensure any arrangements with retailers to host a container return facility represents a win-win outcome (see Section 4 of the NZ CRS Design Document for further discussion regarding return-to-retail as a container return facility). Return-to-retail is based on voluntary participation by retailers. For completeness this also applies to rural Aotearoa New Zealand".	The full TAG agrees that retail participation in the return network is important for creating a convenient scheme but disagree on whether retail participation should be voluntary or mandatory. Two TAG members support voluntary; two TAG members have no strong view and can see pros and cons to both approaches (one of which suggested a 20c deposit would be especially appropriate in a voluntary return to retail scenario, and that densely populated centres could also have a mandatory approach); one TAG member supports mandatory; and one TAG member supports mandatory with a 10c deposit or voluntary with a 20c deposit The TAG notes that this aspect is difficult to consider in isolation of other design considerations Given the importance of establishing a convenient network at the outset and the potential for a voluntary network to fall short of an 85% target (even at a 20c deposit scenario), the Government should consider undertaking further work on the potential locations and carbon implications of different network scenarios. This could for example include modelling voluntary and partially mandatory (in cities) approaches and/or a high level EOI process to test the market.

⁹ This table is drawn from Table 3 in the Project Team's 'Final Evaluation Process Summary Report' (11 December 2020). The SDWG Majority Group reached consensus (evaluation score of 87%) and generally, made comments about the deposit level, inclusion of all container material types, container return facility types, and aspects of the design that would require confirmation of the detail during the implementation phase. The feedback from this group highlighted areas important to them including opportunities for enhancing the design and matters that would be addressed as part of the implementation phase.

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
Deposit model preferred over refund model	The following is reported in the NZ CRS Design: "The refund model to provide the consumer with a scheme that is more cost effective and efficient but that a refund model must be linked to strong scheme Governance and central government oversight. The reasons for the refund model include, but are not limited to, providing a smoother transition of price at the consumer level as the scheme establishes. Further, if however, it was decided by the Government of the day that the NZ CRS be controlled and managed by the beverage industry, it is then recommended that a deposit model is adopted. This is to ensure that the beverage industry is held accountable to ensuring container return rates meet and where possible exceed scheme targets as set in the bespoke NZ CRS legislative instrument".	The TAG agrees that the financial model is not the most important design consideration relative to the network convenience, the deposit level, and scheme governance as if the scheme achieves a high recovery rate, the two financial models merge. The TAG also agrees that further consideration should be given to the refund/deposit model option should other elements of the proposed design change.
There should be a range of different types of container return facilities	The following is reported in the NZ CRS Design: "A range of manual and automated container return facility types (e.g., RVM, manual collection depots, return-to-retail, community recycling network) and/or other means of collection (e.g., charity, marae or school collection) will be established to reflect the most appropriate collection solution that also factors in Aotearoa New Zealand's broad geography (e.g., rural, residential, central city areas). • A range of container return facility types is beneficial to Aotearoa New Zealand by providing consumers the option to choose how they would like to return their eligible containers, for example, through a self-service reverse vending machine through to direct person-to-person contact. Additionally, a range of facilities seeks to support, for example, wide scheme participation from a range of businesses, encourage business innovations and create employment opportunities."	The TAG agrees that there should be a range of different types of container return facilities and that these need to be accessible and convenient, while also considering the opportunities for existing infrastructure.
The NZ CRS needs to ensure the creation of new employment opportunities	The following is reported in the NZ CRS Design: "An independent analysis commissioned by the NZ CRS Project Team estimated that the scheme would generate a net increase of approximately 1,300 jobs. While the type and nature of these potential employment opportunities will require further investigation during the implementation stage, the NZ CRS has the potential to provide the Aotearoa New Zealand economy in a post COVID-19 environment with an avenue to create meaningful work and enterprise opportunities for people in their own communities."	The TAG notes that a CRS will create a shift in employment and acknowledges while a CRS may have an impact on kerbside recycling jobs, agrees that the Design will create a net increase in employment (including a diverse range of skills and jobs), community participation, and fund-raising for charities. • Two TAG members noted that there will be some regional development and employment opportunities as a direct result of the scheme (eg, more collection and consolidation facilities in the regions) • One TAG member noted that the job creation potential of a refillables scheme (including the fact that those jobs are likely to be localised and dispersed and thus meet regional development goals) is under-considered in the Design report, but will be boosted through investment in refillables (and could be further boosted through regulatory incentives to grow reuse). • One TAG member noted that a CRS may not create new employment but an employment shift from providing kerbside collection systems to be providing container return facilities and anticipates further research in the implementation stage to address this risk.
Importance of Governance structure being diverse and/or not dominated by the beverage industry	The following is reported in the NZ CRS Design:	The TAG had differing views on the proposed governance arrangements and a number of alternative options were offered for further consideration. There was a recognition amongst the TAG that the Governance aspect is linked to other CRS Design elements and it is therefore difficult to consider in isolation. The TAG agrees that there needs to be diverse representation on the Governance Board. The TAG agrees that there needs to be strong representation from industry, but industry should not be dominant.

"The Managing Agency will be established as a single independent, government appointed Governance Board, not-for-profit organisation supported by clear regulatory conditions including consequences for not delivering on the minimum container return rate target of 85% and to strive towards the aspirational container return target of 95% (including the establishment of drivers and levers to achieve the aspirational target such as level of deposit). Consequences include, but are not limited to, the government:

- Replacing one (1) or more of the scheme Governance Board members; and
- Increasing the level of container deposit (e.g., an increase of 10-cents)."

"The independent not-for-profit Managing Agency organisation will comprise of an Executive Management Team comprising senior managers of the organisation, including but not limited to, the Chief Executive Officer, Financial Manager, Operating Manager, Marketing and Communications Manager, Sustainability/Environment Manager, Audit and Risk Manager, Community and Social Enterprise Manager, Collection Facility Manager, Mana Whenua Relationship Manager (noting that relationships with Mana Whenua will be interconnected throughout the NZ CRS with the Managing Agency and scheme Governance Board accountable for achieving this)."

"The Managing Agency employees, including the Chief Executive Officer will be independent of any individual or organisation involved with the scheme Governance Board and must not own, be employed by or have any involvement in any organisation that is financially gaining from the NZ CRS. Any family, relatives, etc., that are employed by the scheme Managing Agency and where such relationships exist must be fully disclosed and approved by the scheme Governance Board and not at the discretion of the Managing Agency Chief Executive Officer to approve."

"The Governance Board will comprise 9-government appointed members (including an Independent Board Chair and representation from, but not limited to, lwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer) and be aligned to the representation of the Te Tai Ōhanga – The Treasury Living Standards Framework (i.e., Natural Capital, Social Capital, Human Capital and Financial/Physical Capital), including upholding Te Tiriti o Waitangi – The Treaty of Waitangi.

• The government appointment of NZ CRS Governance Board members gives greater empowerment and responsibility to the government of the day to ensure the make-up of the Board reflects the current and future needs of Aotearoa New Zealand. It should be noted that the 'appointment' of directors to the NZ CRS Governance Board does not mean that the government has any greater or lesser control of the scheme Managing Agency than if it has 'approved' the Governance Board members. Any control by the government is via the bespoke scheme legislation and provisions within this to intervene with appropriate measures, should that be required. These measures could include, for example, replacing one (1) or more Governance Board members."

"The scheme Governance Board will be established separately from the scheme Managing Agency Executive Management Team and comprise skills, experience and expertise from, for example, lwi, recyclers, financial, regulatory, customer, retail, community, waste sector, local government, beverage, experienced strategists and other stakeholders as well as the Managing Agency Chief Executive Officer to ensure that schemes strategic direction is underpinned by social, economic, cultural and environmental outcomes."

"The NZ CRS governance structure aligns with the requirements of the General Guidelines for Product Stewardship Schemes for Priority Product Notice 2020. Specifically, the NZ CRS Governance aligns with the requirements of 'Directors and Governance Boards' whereby the Governance of the NZ CRS will ensure it represents the interests of producers, consumers and the wider community noting that the wider community includes, but is not limited to, local government, lwi, environmental non-government organisations."

The TAG agrees that further engagement with Māori is needed prior to implementation, and that the best form of representation on the governance board will emerge from this engagement process.

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
Include and/or further incentivise refillable containers in NZ CRS	"At this stage of the NZ CRS design process and acknowledging SDWG feedback, refillables will not be included as an eligible scheme container and therefore will not be part of the NZ CRS design. However, the NZ CRS Managing Agency will promote and encourage the development of the refillables market (NOTE: further investigatory work regarding the Actearoa New Zealand refillable market has been recommended in Section 17 (of the NZ CRS Design) to better understand how the NZ CRS can facilitate the refillables market): 1. Funding and promoting the benefit and awareness of refillables as a preferred choice to New Zealanders. 2. Working closely with existing and future New Zealand refillable schemes to identify and remove barriers to their growth, irrespective of whether existing or future refillable schemes choose to be included within a NZ CRS or not. This approach recognises and provides for individual companies to manage and promote their own unique refillable containers and where companies may wish to share a universal bottle. 3. Further to item 2, investment in, or funding of, infrastructure by addressing and removing barriers such as the return, re-washing and refilling of bottles. 4. Ensuring that the method of return by customers is convenient, accessible and where appropriate and practicable is compatible with existing NZ CRS container return facilities. 5. Establishment of NZ CRS container return facilities that, where practicable, can accept, sort and store for transportation both eligible single-use beverage containers and reusable beverage containers. 6. Support and facilitate the uptake of reusables through the integration of strategic directives embedded within the NZ CRS scheme performance indicators. 7. Securing the funding to achieve the above from the scheme fee." Appendix C, Item 20, of this document further details the additional assessment required during the NZ CRS Implementation Stage: "Detailed assessment and feasibility study of the potential to include refillables within the NZ CR	Overall, the TAG supports the scope of containers, but holds differing views about refillable containers being included within the scheme. Three members are of the view that refillable containers should be included as an eligible scheme container. These members views, in part stem from a concern for the diminished opportunity for refillables to be within the MA's remit and leverage the network of return points should they be excluded. Three members were of the view that refillable containers should be excluded because a refillables scheme has different and more complex supporting infrastructure and logistical needs. Regardless of whether refillables are in or out, all TAG members acknowledge that further work and research is needed to provide options for incentivising and/or incorporating refillables within a scheme.

Appendix D: TAG Advice on the SDWG Majority Group 'Wider Design Considerations' of the Project Team's Design¹o

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
NZ CRS should require tethered lids Importance of using technology to track and trace containers	The following is reported in the NZ CRS Design: "Container lids to be removed by the consumer at the point of return. The reason why this is beneficial to the NZ CRS is to ensure clean uncontaminated streams of material are received for processing. The lids are to be collected by the container return facility with the Managing Agency supporting recycling of lids via identified pathways. Additionally, the scheme will set requirements for eligible scheme containers, including tethered caps, bottle caps on or bottle caps off". The following is reported in the NZ CRS Design: "All eligible containers to be labelled which may include a unique scheme label indicating the deposit amount and, for example, a barcode, and/or QR code, and/or security logo". "Detailed investigation and selection of a unique NZ CRS scheme identification label and/or barcode and/or QR code and/or other form as applicable, including the potential to incorporate Te Reo Māori and/or Māori imagery [to be undertaken in the Implementation Stage]". "Detailed investigation of new technologies to support scheme activities (e.g., the use of blockchain technology) [to be undertaken in the Implementation Stage]". "Information technology (IT) investigation into an appropriate IT platform to maximise scheme accountability, maximise security, manage and track online sales and free-riding, maximise receipting transparency of scheme costs and minimise scheme fraud, and the sale of scheme collected and processed material [to be undertaken in the Implementation Stage]".	The TAG endorses the Project Team's response and agrees that tethered caps should be actively monitored as new technologies emerge. The TAG agrees that this is a part of the continuous improvement of a scheme.
Continuous improvement - NZ CRS to monitor progress of international container return schemes	The following is reported in the NZ CRS Design: "Annual reviews of the Managing Agency will be undertaken by the respective central government department responsible for 'owning' the NZ CRS. The benefit of this approach is to ensure the Managing Agency is held accountable for the performance and operation of the scheme with appropriate financial incentives, for example, to meet and where possible exceed set targets".	The TAG agrees that this is a part of the continuous improvement of a scheme.
Undertake detailed assessment of the impact on kerbside collection systems	The potential impact of the NZ CRS on kerbside systems is discussed in further detail in Section 17 of the NZ CRS Design Document which also sets out several key assessments to enable the implementation of the NZ CRS alongside and complimentary to existing kerbside systems (see Appendix C items 4, 9, 10, 11, 31, 55, 59 of this document).	The TAG notes that experience from overseas shows that this concern is not realised, and that there can be benefits with revenue sharing arrangements and opportunities to make recycling businesses more sustainable in the long-term. The TAG notes the interconnection between a CRS and the Government's proposals for kerbside standardisation and the need for clarity in light of any changes and how to best manage potential impacts on industry.

¹⁰ The table is drawn from Table 4 in the Project Team's 'Final Evaluation Process Summary Report' (11 December 2020). The Project Teams' table summarises several other matters raised during the evaluation considered relevant to the Majority Group members that are outside of the primary scope of the CRS project (as determined by the Terms of Reference).

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
Continuous improvement – importance of ongoing technology and collection methodology reviews	The following is reported in the NZ CRS Design: "Detailed investigation of new technologies to support scheme activities (e.g., the use of blockchain technology) [to be undertaken in the Implementation Stage]". Additionally, Appendix C items 21, 22, 24, 25, 28, 48, 58 specify several additional areas requiring further investigation during the NZ CRS Implementation Stage.	The TAG agrees that this is a part of the continuous improvement of a scheme.
Undertake further detailed economic and environmental analyses	The following is reported in the NZ CRS Design: The NZ CRS Design acknowledges and recommends a range of additional economic assessments be undertaken during the Implementation Stage. These items are listed in Appendix C of this document with specific reference to items 13, 14, 17, 28, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 42-50.	The TAG agrees that further detailed economic analysis is needed as a part of the implementation stage.
Undertake detailed assessment of end-market supply and capacity arrangements	The following is reported in the NZ CRS Design: "Applicability and legality of long-term material re-processor supply arrangements to enable the NZ CRS Managing Agency to have ownership, clarity and transparency on the full huringa mataora—life-cycle of the material to ensure scheme eligible material is used for beneficial use [to be undertaken in the Implementation Stage]. Detailed investigation of the investment required to support greater onshore re-processing capacity and opportunities to understand the feasibility of a NZ CRS supporting and facilitating onshore re-processing of scheme material and the potential value of re-processed material for export sales and to support the principles of the pūnaha whakarōpū para - waste hierarchy [to be undertaken in the Implementation Stage]".	The TAG agrees that this is needed as a part of the implementation stage.
Ongoing consultation and participation with Iwi needed	The following is reported in the NZ CRS Design: "Consultation and engagement with Māori at a regional level [is recommended] to explore and identify opportunities that empower participation in the NZ CRS".	The TAG notes that the CRS co-design process did not reflect a true partnership approach and alignment with the Tiriti, and advises that further engagement and detail is needed on the principles and objectives of the Treaty of Waitangi and Te Ao Māori and how these are being met through the scheme design. The TAG agrees that further engagement with Māori is needed prior to implementation, and that the best form of representation on the governance board will emerge from this engagement process.
Optimise transportation logistics to provide best climate and environmental outcomes	The following is reported in the NZ CRS Design: "Mapping of container collection facility locations, Material Consolidation Facility (MCF) and Material Recovery Facility (MRF) locations overlaid with transportation route optimisation modelling and consumer travel journeys (e.g., multi criteria analysis to help inform the optimal container return facility network infrastructure, carbon footprint). To reduce scheme related greenhouse gas emissions and progress Aotearoa New Zealand's obligations under the Kyoto Protocol.	The TAG support this and notes that this is needed as a part of the implementation stage.
Need to apply an eco- levy on single-use plastics	The following is reported in the NZ CRS Design: "Assess options for the implementation of an 'eco-fee' across all packaging, including those within the NZ CRS.	The majority of the TAG (except one) reiterates that an eco-levy could be used as a tool and economic instrument to incentivise refillables (material agnostic) in the absence of refillables being included as an eligible scheme container (as well as or alongside the proposed Advanced Material Recycling Fee).

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
	 Establish incentives to help producers, where possible, transition from single-use packaging to other packaging types, including, for example, refillables and more sustainable/recyclable packaging." 	
Targets should be set for measurable carbon reduction	The following is reported in the NZ CRS Design: "[The Managing Agency to] Investigate and assess the feasibility to use recycled scheme material in the production of new single-use beverage containers. Develop guidance for brands on designing for recyclability and assess applicability of international standards, for example, ISO 18604:2013 Packaging and the environment. • To encourage and promote Extended Producer Responsibility by requiring and/or incentivising container producers to use recycled scheme material in the production of new containers." "Investigate and set NZ CRS baseline and target for Greenhouse Gas (GHG) emissions mitigation. • To reduce scheme related greenhouse gas emissions and progress Aotearoa New Zealand's obligations under the Kyoto Protocol."	
Support greater investment in	"Opportunities for reductions in scheme carbon footprint through uptake and promotion of electric vehicle fleets. • To reduce scheme related greenhouse gas emissions and progress Aotearoa New Zealand's obligations under the Kyoto Protocol." The following is reported in the NZ CRS Design:	
remanufacturing and regional development	The Managing Agency as owner of the recovered scheme material will give effect to the following: "Ensuring that all recovered scheme material is beneficially reused through measures such as legislative drivers, establishment of long-term contractual arrangements, encourage the use of scheme recycled material for the production of containers, ensure scheme material can have adequate quality to be used again for food packaging, undertake regular inspections of approved scheme re-processors ensuring that minimal scheme material is wasted."	
	"Ensuring the Managing Agency controls and/or has full transparency of the end fate of scheme materials (i.e., closed loop system) via, for example, contractual relationships or competitive tendering processes with re-processors (e.g., long-term contracts, process to achieve market rates with known contracted parties), encouraging minimum scheme recycled material for the production of containers, repurposing of materials, ensure scheme material can have adequate quality to be used again for food packaging, undertaking regular inspections of approved scheme re-processors ensuring that minimal scheme material is wasted."	
	"Optimising the establishment of contractual arrangements to include material end fate and recyclability requirements of scheme material."	
	"Container manufacturers use and maximise the proportion of post-consumer recycled scheme material in the manufacturing of new containers as required by the beverage producers. The minimum proportion target of post-consumer recycled material to be based on best international practice. • The benefit to Aotearoa New Zealand is further investment and diversification in existing New Zealand re-processing capacity and encouragement in innovative solutions that support onshore employment opportunities."	

Key Draft Design Feedback	Project Team Response	Technical Advisory Group Advice
	"Regional development implications – investigation of opportunities to leverage the NZ CRS to stimulate regional economies and employment particularly in the regions with higher degrees of unemployment or low incomes. • To help stimulate new economic growth and employment opportunities in Aotearoa New Zealand post COVID-19."	
	The potential impact of the NZ CRS on kerbside systems is discussed in further detail in Section 17 of the NZ CRS Design Document which also sets out several key assessments to enable the implementation of the NZ CRS alongside and complimentary to existing kerbside systems (see Appendix C items 4, 9, 10, 11, 31, 55, 59 of this document).	

TAG additional advice after considering the key design feedback of the SDWG

Having received and reviewed the Evaluation Process Summary and Minority Report (see above Appendices for detailed commentary) the TAG notes that the substance of their advice remains unchanged notwithstanding the minority group opposing the Project Team's Design, the TAG retains its overall support for a Container Return Scheme for New Zealand.

The TAG also notes that the CRS co-design process was a novel approach and while it did generate useful outcomes, the TAG recommends consideration of a lessons learned from those involved to assist with future co-design projects. This could include consideration of greater use of independent facilitation.