

Consultation on Delivering Scotland's Circular Economy: Route Map to 2025 and beyond

Analysis of consultation responses

July 2023

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Executive Summary

Introduction

The Scottish Government is committed to developing Scotland's circular economy and recognises that moving from a "take, make and dispose" model to one where materials are kept in use for as long as possible is imperative in addressing the climate and nature crises. To deliver this vision, Scotland has several ambitious 2025 waste and recycling targets. While significant long-term progress towards these targets has been made, progress has slowed in recent years, and more action is required if these targets are to be met in full.

In May 2022, the Scottish Government published proposals for a Route Map, which set out a range of proposed additional legislative and non-legislative measures that have the potential to contribute to the delivery of the targets and make progress towards carbon reduction and delivery of a circular economy. Scottish Government also consulted in parallel on a Circular Economy Bill to bring forward the primary legislation needed to underpin some of key policy measures.¹

Proposals in the Route Map were grouped into seven change packages, which span action across the whole circular economy:

- Promote responsible consumption and production (including reducing consumption of single-use items, promoting product design and stewardship and mainstreaming re-use)
- Reduce food waste from households and businesses
- Improve recycling from households
- Improve recycling from commercial businesses
- Embed circular construction practices
- Minimise the impact of disposal of waste that cannot be reused or recycled
- Cross-cutting themes: Strengthen our data and evidence, sustainable procurement practices, and skills and training.

The consultation

The Scottish Government sought views on the proposed Route Map through a [public consultation](#) exercise, which was an opportunity to understand a wide variety of stakeholders' views on the proposed strategic approach to advancing a circular economy in Scotland and delivering existing targets by 2025. The consultation contained eight closed questions with an open response component and 12 open questions. In total, 160 consultation responses were received; this included submissions from individuals, and those representing organisations across public, private and third sectors, including waste management companies, retail and packaging organisations and local authorities.

An analysis of responses to the consultation was undertaken by social research agency, The Lines Between.

¹ Delivering Scotland's circular economy: Proposed Circular Economy Bill: Consultation analysis

Overview of findings

A high-level summary of responses to the closed questions in the consultation is presented in Table A below; it sets out the percentage of respondents who answered 'agree' or 'strongly agree' when asked the extent to which they agreed with the proposed measures and actions set out in each of the packages.

Table A: Level of support for packages

Package	% who agree or strongly agree
Package 1: Promote responsible consumption, production and re-use	85%
Package 2: Reduce food waste	85%
Package 3: Improve recycling from households	82%
Package 4: Improve recycling from commercial businesses	69%
Package 5: Embed circular construction practices	79%
Package 6: Minimise the impact of disposal	87%
Package 7: Cross-cutting measures	93%

Table A shows high levels of support for all seven Packages, ranging from 69% for Package 4, to 93% for Package 7.

More nuance was provided in responses to the open-ended questions, with respondents setting out the reasons they either agreed or disagreed with measures, raising questions or concerns about some of the proposed measures, or providing caveats to their support.

Package 1: Promote responsible consumption, production and re-use

Package 1 was largely well-received by respondents; it was described by some as comprehensive and ambitious. Several respondents embraced the strong focus on reuse, and others shared knowledge of similar interventions to those set out in the package having successful outcomes in other countries. However, there was some criticism of Package 1; some felt that too much responsibility is placed on the individual consumer, and requested more measures targeted at producers and manufacturers. Others raised concerns that disincentivising the use of products which contain environmentally damaging materials such as plastic may increase the use of substitutes made of other materials which potentially have a more detrimental environmental impact across their life cycle.

Package 2: Reduce food waste

Generally, Package 2 was well-received; respondents agreed that reducing food waste should be seen as a priority, and there was broad consensus that, if delivered successfully, the proposals described in Package 2 will contribute to a reduction of food waste in Scotland. However, as with other packages, a few respondents were critical of the perceived lack of urgency within the measures and called for stronger action. There were also requests for measures aimed at retailers to be introduced into the Route Map, and it was suggested that the package should have a greater focus on how primary producers and the agricultural sector can contribute to food waste prevention and reduction.

Package 3: Improve recycling from households

Respondents were broadly supportive of the current commitments and proposed new measures set out in Package 3. The plans were described by some as “logical”, “appropriate” and “well-considered.” However, there were some calls for greater urgency in improving household recycling rates across the country, and recurring questions from public sector organisations (including most local authorities) about how the Scottish Government intends to fund the measures, given the increased responsibilities that they will impose on local councils.

Package 4: Improve recycling from commercial businesses

The first three proposals set out within Package 4 were largely well-received by respondents; with particularly strong support for a national compositional study of waste from commercial premises. Respondents described this as an ‘essential’, ‘valuable’ and ‘important’ exercise in terms of addressing data gaps within commercial recycling and improving service provision. However, the proposal to pilot a commercial zoning approach was met with some strong opposition. While there was some recognition of the potential benefits of commercial zoning, concerns such as loss of competition and potential monopoly price escalation were raised by respondents from various sectors, including those in the waste management sector and local authorities.

Package 5: Embed circular construction practices

A clear majority agreed with the package of proposals to embed circular construction practices. It was suggested that the Scottish Government should work with industry to accelerate the adoption of best practice standards and explore options for compliance. Mixed views were expressed on mandatory vs voluntary standards. Many emphasised the knowledge within the sector and described who should be involved; and some highlighted the challenges of working with stakeholders. On the proposal to investigate options to incentivise refurbishment of buildings, most welcomed this, but some questioned the cost implications of this approach. Mixed views were evident on the development proposal to coordinate a Scottish programme for reuse of construction materials and assets, and there was also a lack of consensus across comments on using recycling bonds to divert material from landfill. Respondents’ comments on suggested further measures centred on how Scotland’s planning system and standards could embed circular construction practices.

Package 6: Minimise the impact of disposal

Most consultation participants agreed with the measures to minimise the impact of the disposal of residual waste. Some respondents described different aspects of the Residual Waste Plan that they would like to see, asking for more detail about scope, approach and implementation, or noting further aspects of this proposal for the Scottish Government to consider. There were few comments on the proposal to restrict the incineration of fossil materials through the development of a sector-led plan by 2024, and to investigate fiscal measures to incentivise low carbon disposal, including the potential to include energy from waste in the UK Emissions Trading Scheme.

Package 7: Cross-cutting measures

Almost all consultation respondents agreed with the proposed cross cutting measures. Some highlighted specific issues to include within, or consider in, the development of the Circular Economy Strategy. There were also suggestions about what a monitoring and indicator framework should measure or how to gather the data; and mention of specific areas to explore in any research into waste prevention, behaviour change, fiscal incentives and material-specific priorities. On support for green skills, respondents described existing skills training, identified skills gaps and discussed the wider needs of the sector.

Beyond 2025

The final section of the consultation document outlined four key principles to underpin the transformational change required in the years ahead: (1) Achieve net zero by 2045 (2) Reduce the material footprint of our resources and waste (3) Maximise the value of our circular economy and (4) Align with the EU. High levels of agreement were expressed by respondents; most endorsed the principles, and some provided details of the actions they felt would be necessary to achieve the extent of change required. Several respondents called for the inclusion of a 5th key principle; to 'achieve nature positive by 2030'.

1. Introduction

1.1 The policy context

The Scottish Government is committed to developing Scotland's circular economy and recognises that moving from a "take, make and dispose" model to one where materials are kept in use is imperative in addressing the climate and nature crises. In the update to Scotland's 2018-2032 Climate Change Plan, published in 2020, the Scottish Government set out a vision for a circular economy; one where demand for raw material in products is reduced; reuse and repairs are encouraged through responsible production; and waste and energy is recycled to maximise the value of any waste that is generated.

To deliver this vision, Scotland has several ambitious 2025 waste and recycling targets. While significant long-term progress towards these targets has been made, progress has slowed in recent years, and more action is required if these targets are to be met in full.

A range of transformational measures are already in place or underway in Scotland, including bans on problematic single-use plastic items, implementation of Scotland's Deposit Return Scheme, reform of extended producer responsibility for packaging and a £70 million investment in local authority recycling infrastructure. However, in order to meet the ambitious 2025 targets and deliver emissions reductions, the Scottish Government has proposed further system-wide changes.

In May 2022, the Scottish Government published a Route Map, which set out a range of proposed additional legislative and non-legislative measures that have the potential to contribute to the delivery of the targets, make progress towards emission reduction, and deliver a circular economy. Proposals in the Route Map were grouped into seven change packages, which span action across the whole circular economy:

- Promote responsible consumption and production (including reducing consumption of single-use items, promoting product design and stewardship and mainstreaming reuse)
- Reduce food waste from households and businesses
- Improve recycling from households
- Improve recycling from commercial businesses
- Embed circular construction practices
- Minimise the impact of disposal of waste that cannot be reused or recycled
- Cross-cutting themes: Strengthen our data and evidence, sustainable procurement practices, and skills and training.

1.2 The consultation

The Scottish Government sought views on the Route Map through a [public consultation](#) exercise, which ran between 30 May and 22 August 2022. The consultation was an opportunity for the Scottish Government to understand a wide variety of stakeholders' views on the proposed strategic approach to advancing a circular economy in Scotland and delivering existing targets by 2025. It contained eight closed questions with an open response component and 12 open questions.

The Lines Between was commissioned to provide robust, independent analysis of the consultation responses to inform the final Route Map. This report sets out a collation of the key feedback from respondents, including quantitative analysis of responses to the closed questions and qualitative analysis of respondents' open text comments.

1.3 Respondent profile

In total, 160 consultation responses were received. Most were submitted via the online consultation platform, Citizen Space. Those received in an alternative format, for example an email or PDF document, were reviewed separately by the research team.

Individuals provided 48 responses to the consultation; the remaining 112 were from organisations. To aid analysis, each organisation was assigned a sector or type. The largest share of organisational responses came from retail and packaging organisations, the third sector, and the construction and development sector. The following table shows the number of respondents per group; more detail is provided in Appendix B.

Table 1: Sectoral classification

Sector	n=	%
Retail & packaging	23	14%
Third sector	19	12%
Local Authority	17	11%
Construction & development	12	8%
Waste management	10	6%
Other - Membership / representative body not aligned with the sectors above	9	6%
Public body	7	4%
Other – Manufacturing	5	3%
Other – Energy	3	2%
Other – Consulting	2	1%
Other - Technology	2	1%
Other	3	2%
Individuals	48	30%

1.4 Approach to analysis

1.4.1 Quantitative analysis

There were eight closed questions in the consultation. A full breakdown of the number and percentage response to each question can be found in Appendix C at the end of this report. Please note that figures in the tables may not add to 100% due to rounding.

As not all respondents answered each closed question, the quantitative analysis in the main report is based on those who answered each question. Each table shows:

- The number of respondents from the **total sample** of 160 who selected each response, and the corresponding percentage.
- The number and percentage response **among those answering each question**, broken down by individual and organisation responses and by type of organisation.

1.4.2 Qualitative analysis

Qualitative analysis outlines the key themes identified in responses to each question. The analyst team coded each response against a coding framework which was developed based on a review of the consultation questions and a sample of responses. Where appropriate, quotes from individuals and organisations are included to illustrate key points and to provide useful examples, insights and contextual information.

A few organisations provided detailed responses reflecting their specific industry or subject matter expertise. There is not scope in this report to fully summarise these responses; however, the responses are referenced where possible.

Additionally, some respondents commented on existing actions and current measures, however the focus of the analysis presented in this report is on respondents' views of new proposed measures set out in the Route Map.

Full responses to the consultation, where permission for publication was granted, can be found on the Scottish Government's website.

Qualitative analysis of open-ended questions does not permit the quantification of results. To assist the reader in interpreting the findings, we use a framework to convey the most to least commonly identified themes across responses to each question:

- The most common / second most common theme; the most frequently identified.
- Many respondents; more than 30, another prevalent theme.
- Several respondents; 10-29, a recurring theme.
- Some respondents; 5-9, another theme.
- A few / a small number of respondents; <5, a less commonly mentioned theme.
- Two/one respondents; a singular comment or a view identified in two responses.

It is important to note that while many of the open text comments focussed on concerns or queries raised about specific proposals or aspects of the Route Map, analysis of the quantitative responses does still indicate a high level of overall support for the Route Map.

2. Feedback on Route Map Proposals

2.1 Package 1: Promote responsible consumption, production and re-use

Measures in Package 1 relate to challenging the current approach to consumption and production by improving product design, mainstreaming reuse and repair, and incentivising sustainable choices.

Q1. To what extent do you agree with the measures proposed in this package to promote responsible consumption, production and re-use? Please provide evidence to support your answer if possible.

Q1. Are there any further measures that you would like to see included in the Route Map to promote responsible consumption, production and re-use?

2.1.1 Overview of responses to Qu

The breakdown of responses to the quantitative element of Q1 was as follows:

Q1. To what extent do you agree with the measures proposed in this package to promote responsible consumption production and re-use?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	61	59	15	7	0	18
% breakdown among:							
All respondents (%)	160	38	37	9	4	0	11
All answering (%)	142	43	42	11	5	0	-
- Individuals	47	70	21	2	6	0	-
- Organisations	95	29	52	15	4	0	-
- Retail & packaging	20	10	55	30	5	0	-
- Third sector	16	63	25	13	0	0	-
- Local Authority	16	44	56	0	0	0	-
- Construction / Dev	8	13	88	0	0	0	-
- Waste management	8	25	50	13	13	0	-
- Public body	6	17	50	33	0	0	-
- Other	21	24	52	14	10	0	

Over four fifths (85%) of those answering Q1 agreed with this package of proposals, with 43% strongly agreeing and 42% agreeing. Individuals were notably more likely to strongly agree – 70% compared to 29% among organisations. Third sector organisations were mostly likely to strongly agree (63%), followed by local authorities (44%), while retail and packaging organisations were least likely to strongly agree (10%).

Q1 received 110 open text responses, from a mix of individuals and organisations in different sectors². Many respondents expressed support for Package 1, describing the current commitments and proposed new measures as comprehensive and ambitious. Several embraced the strong focus on reuse, and others shared knowledge of similar interventions to those set out in this package as having successful outcomes in other countries.

However, there was some criticism of Package 1. Some respondents argued that the package places too much responsibility on the individual consumer, suggesting that more measures should be targeted at addressing the actions of producers and manufacturers. Others, including Common Weal and Friends of the Earth Scotland, felt that the measures do not reflect the seriousness of the climate emergency and called for tougher and more urgent actions to be set out.

More specific feedback on each of the 10 proposals in Package 1 is set out below.

Feedback on Proposal 1. We will take powers to introduce charges for environmentally damaging items

Many respondents grouped their feedback on the first three proposals together under the overarching theme of reducing the use of single-use or environmentally damaging items through charges and bans. Therefore, some of the points raised under this sub-heading are also relevant under Proposals 2 & 3.

Several respondents welcomed Proposal 1, recognising the role that charges can play in promoting responsible consumption and reuse. There was agreement among a number of individuals and a range of organisations, including Plastic Free Helensburgh, Scottish Borders Council and Scottish Water, that introducing charges for environmentally damaging items is likely to encourage consumers to embrace more sustainable options, as has been evidenced by the introduction of the 10p carrier bag charge.

“Scottish Borders Council supports the principle of setting charges for environmentally harmful items to drive behavioural change. Using fiscal measures to change behaviour has been proven to work extremely well; for example, the landfill tax and carrier bag charges.” – Scottish Borders Council

However, support for the proposal was not unanimous. A few respondents did not agree with the principle of imposing additional charges on consumers, and two local authorities urged the Scottish Government to consider the impact of additional charges on low-income households to ensure they are not unfairly disadvantaged by the proposal, particularly during a cost of living crisis. Two individuals suggested an approach whereby discounts or subsidies are applied to environmentally friendly choices instead.

Several individuals and organisations from a mix of sectors, including the Royal Society of Chemistry, City of Edinburgh Council, Whale and Dolphin Conservation and Fidra, raised concerns that disincentivising the use of products which contain environmentally damaging materials such as plastic may increase the use of substitutes made of other materials

² A sectoral breakdown of the number of respondents who provided open text comments to each question is included in Appendix D.

(such as wood, starch or paper) which potentially have a more detrimental environmental impact across their life cycle. In addition, a few respondents warned that replacing environmentally damaging items with more 'eco-friendly' substitutes reinforces a disposable, throw-away culture.

“The carbon content of plastic is at least locked-in for a long time, so it does little harm when disposed of in landfill. In my experience, plastic cutlery is often cleaned and reused many times even if designed for single use. The wooden replacements on the other hand are near impossible to clean and will therefore always be single use. Unlike plastic, paper and wood will decompose and release not only carbon but also methane which is a much more harmful greenhouse gas in the short term.” – Individual

Some respondents, including Circular Communities Scotland, suggested that an outright ban on single-use items where readily available alternatives exist may be a more effective approach than introducing charges, and a few advocated for mandatory deposit return or producer take-back schemes in place of a charging system.

Questions were raised over how compatible this proposal is with the Scottish Government's ambition to make sustainable choices more affordable. North Lanarkshire Council commented that increasing the cost of environmentally damaging items doesn't necessarily make sustainable options any cheaper; it just makes them the least expensive.

The Association for Renewable Energy and Clean Technology suggested that if charges for environmentally damaging items are introduced, any income raised should be ring-fenced and used for further environmental education, communication and behaviour change activities.

Feedback on Proposal 2. We will introduce a charge for single-use disposable cups by 2025

Proposal 2 received a similar response to Proposal 1, with many respondents agreeing that the introduction of a charge for single-use disposable cups is likely to encourage consumers to adopt reusable or recyclable receptacles, which will decrease demand for and usage of single-use disposable cups. A few advocated for the proposed charges to be extended to all single-use disposable food containers, rather than being limited to cups.

Receptacles made of materials such as ceramic, glass, aluminium and steel were suggested as reusable alternatives by some respondents. However, as with Proposal 1, a few respondents raised concerns over the sustainability of such replacements, pointing out that reusable cups are often not made from particularly environmentally friendly materials, and are difficult to recycle once they reach the end of their product life cycle.

There were some doubts expressed over the efficacy of charging as a disincentive, with some respondents suggesting that this will not be sufficient to change consumer behaviour around single-use disposable cups. There were calls from a few individuals and organisations, including Scottish Environmental Services Association, for the proposal to be strengthened to an outright ban on single-use cups instead of a charge.

Some organisations, including Ecosurety and a number of those in the Retail and Packaging sector, expressed support for all of the proposals in Package 1 with the exception of Proposal 2; they advocated for the introduction of a mandatory take-back obligation on the sellers of cups instead of a charge on consumers.

Feedback on Proposal 3. We will develop a prioritised approach to charges and bans on other environmentally damaging products from 2025

Similar points to those set out under Proposals 1 and 2 were raised in feedback to Proposal 3, with several respondents recognising the effectiveness of charges and bans in reducing the use of environmentally damaging products.

Some respondents supported an outright ban on all single-use plastics. Others suggested this should not be limited to just plastics, but that the Scottish Government should focus on restricting the use of single-use items altogether. A few called for restrictions on the use of non-recyclable materials in manufacturing processes, recommending the implementation of bans or financial penalties for their usage. However, there were some requests for more research into suitable alternatives before such bans or charges are imposed.

While supportive of the intentions of the proposal, a few respondents asked for more consideration of the impact this proposal may have on businesses. Two called for specific exemptions to bans and charges for essential items to be set out; specifically in healthcare settings where single-use items are necessary for infection prevention and control reasons.

As with Proposals 1 and 2, a small number of respondents disagreed with imposing charges on consumers, reiterating their support for mandatory producer take-back or deposit return schemes instead.

Feedback on Proposal 4. We will publish a prioritised approach to product stewardship by 2024

Proposals to publish a prioritised approach to product stewardship were welcomed by individuals and organisations from a variety of sectors, who largely agreed that Extended Producer Responsibility is critical for improving the sustainability of products and achieving a circular economy. Some respondents set out the principles that they would like to see reflected in the product stewardship and producer responsibility approach, including obligations for producers to:

- ensure that products are designed to last for longer and to support reuse activity;
- fund waste management infrastructure;
- fund consumer education campaigns; and
- support innovation to find new solutions.

Some respondents gave examples of retailers which currently offer take-back schemes (such as IKEA, H&M and Clarks) and advised that other furniture and clothes retailers should be required to adopt similar practices. In addition, one individual suggested that manufacturers should be obliged to provide a warranty for all vital products.

A few respondents, including Aberdeenshire Council, noted that producers will require significant support to embed these responsibilities, suggesting that advice and financial

assistance should be available to businesses to facilitate the creation, penetration or enhancement of a market for more sustainable goods or materials.

Some priority products and industries for which stewardship schemes should be introduced were suggested, including e-cigarettes and vaping, lithium batteries and fast fashion. Both Scottish Environment LINK and Whale and Dolphin Conservation expressed concern at the Scottish Government's aim to identify three priority products for further action, fearing that this could result in insufficient action in this area. Instead, they advocated for a move towards producer responsibility being the standard approach.

Feedback on Proposal 5. We will take powers to set statutory consumption reduction targets

There was a mixed response to Proposal 5; while most respondents generally appreciated the rationale behind setting consumption targets, some respondents, including CIWM Scotland and SUEZ Recycling & Recovery UK cautioned that it is a complex undertaking which will be difficult to measure and regulate. There were requests for greater detail to be set out on the nature and level of proposed targets, the evidence base underpinning them, and the potential consequences of non-compliance with the proposed targets. A few respondents, including Supply Chain Sustainability School, raised concerns about the potential impact that statutory consumption targets could have on economic growth.

Three respondents (all local authorities) flagged potential resource implications that this proposal may have for local councils.

The Aluminium Packaging Recycling Organisation highlighted the importance of considering the implications for ongoing policy measures such as a Deposit Return Scheme and Extended Producer Responsibility when setting such targets.

SUEZ Recycling & Recovery UK suggested that a 'resource productivity target' measured through waste in the system would be a more effective and reliable starting point, while Viridor advised that if consumption reduction targets are to be set, they should focus on a defined set of priority materials, for example: the food and beverage sector; packaging waste; and WEEE.

Feedback on Proposal 6. We will investigate the feasibility of setting reuse targets by 2025

Several respondents expressed support for the proposal to set reuse targets by 2025, noting that this will help to prioritise reuse and repair over recycling. However, a few individuals and organisations (including Scottish Environmental Services Association) noted that if reuse targets are to be set and achieved, there is a need to challenge the negative public perception associated with reused goods.

A small number of respondents expressed caution about the challenging and complex process of quantifying reuse; there were calls for the Scottish Government to provide more detail on how this will be done.

“CIWM Scotland would support reuse targets if the Government were clear on how it creates an accurate measure. It is hard to understand when we will measure reuse when taking into consideration the number of times an item is reused, the period between each reuse, the point at which you measure, the item being reused and the process to ensure the items can be reused or the frequency of reuse.” – CIWM Scotland

The Charity Retail Association highlighted that reuse targets for specific product categories have been successfully implemented in both France and Spain, explaining that their targets mandate that a set percentage of goods must be redirected from recycling or landfill and sent for repair and/or resale.

Two respondents (Hamilton Waste & Recycling Limited and EALA Impacts CIC) described the reuse target as a ‘lag’ measure, and suggested that ‘lead’ measures, which show progress toward wider societal changes, should be set instead. ‘Lead’ measures suggested included: the number of community interest companies, not-for-profits, B Corps³ in the construction and property sector, or vacant buildings brought back into use.

Feedback on Proposal 7. We will identify ways to expand business models that prolong product lifespan by 2025.

Very few respondents commented directly on Proposal 7, but those who did welcomed the plans, highlighting the importance of supporting innovation which reduces waste and challenges ‘throwaway culture’ by extending product lifespan. The ambition to develop more community sharing libraries and subscriptions models was viewed positively, with a small number of respondents commenting on the success of existing initiatives.

More comments on reuse and repair initiatives are included under the analysis of responses to Proposal 9, which focusses on improving the reuse experience for consumers.

Feedback on Proposal 8. We will keep pace with the EU Sustainable Product Initiative

As with Proposal 7, very few respondents commented directly on Proposal 8. Those who did (including RMAS, Friends of the Earth Scotland and BEAMA) were supportive of aims to keep pace with the EU Sustainable Product Initiative.

"Scotland should aim to keep pace with the breadth of products considered in the EU SPI and key policies, such as the development of digital passports for products. The SPI also aims to address the presence of harmful chemicals in products such as electronics, textiles, furniture, steel cement and industrial chemicals. These should also be addressed by the Circular Economy programme in Scotland.” – Friends of the Earth Scotland

³ B Corporation is a private certification of for-profit companies which verifies that the company meets a certain standard of social and environmental performance

Scottish Enterprise perceived some inconsistencies between the approach set out in the Route Map and the EU SPI, suggesting that the Scottish Government's plans place emphasis on keeping materials in circulation, but not necessarily at their highest utility, whereas the EU SPI explicitly mentions the concept of remanufacture and upgradability.

Feedback on Proposal 9. We will develop support measures to further improve the reuse experience for consumers

Feedback on Proposal 9 was almost entirely positive. Respondents from a cross section of categories including individuals, public bodies, third sector organisations and retail welcomed the Scottish Government's ambition to improve the reuse experience for consumers, citing the mainstreaming of reuse and repair as a vital component in the move towards a circular economy. Other benefits of reuse were described, including the development of social enterprises, boosting local, green jobs, and helping to combat the current cost of living crisis by offering affordable goods to those who need them.

A few organisations, including Glasgow City Council and Circular Communities Scotland, suggested that the Scottish Government should do more to support and promote the Right to Repair scheme, which is a movement aimed at making it easier for consumers to repair their own products. A few others, including Scottish Water and Moray Firth Coastal Partnership called for the introduction of a Repairability Index in Scotland, as has been implemented in France.

A few individuals called for greater investment in repair cafés to ensure they are the most convenient and efficient options for consumers, and some advocated for greater promotion and advertising of such facilities. Suggestions included offering information about them on council websites and at local recycling centres.

Some challenges and barriers were noted in improving the reuse experience for consumers. For example, a few organisations (including CIWM Scotland and Aberdeenshire Council) highlighted the need to address the skills shortage in repair-adjacent professions such as electrical engineering, plumbing, mechanics, metal working and tailoring. It was noted that the shortage of available tradespeople inflates prices and means it is quicker and cheaper to replace a product than repair it in some cases. Scottish Borders Council highlighted that the development of centralised reuse hubs in rural areas is likely to be more challenging than in urban areas.

Electrical Safety First called for the Scottish Government to place a higher importance on electrical safety when promoting greater reuse and repair of products.

Feedback on Proposal 10. We will run a national communications campaign focused on sustainable consumption

Proposal 10 was particularly well-received across all categories by respondents who agreed that public education is a key priority in moving towards a circular economy. A few respondents advised that a multi-platform communications campaign should be delivered through a range of different mediums and spaces including social media, TV, radio, schools and workplaces. Some highlighted the importance of sustained messaging in promoting changed behaviours.

Some suggestions for the content and focus of the proposed media campaign were offered, with respondents advising it should: define what is meant by a circular economy; set out the consequences of continuing current patterns of consumption; and highlight the impact of personal choices in purchasing and disposal of materials. A few requested that the urgency of the situation is emphasised, and that the overarching message of the communications campaign is on consuming less, rather than consuming more sustainably.

“Buying better products does not address the unsustainable level of consumption. Messaging has to move towards reduction rather than replace as well as a ‘collaborative economy’ where companies have opportunity to look at value rather than volume.” – North Lanarkshire Council

2.1.2 Overview of responses to Q2

Q2 asked respondents to suggest any further measures that should be included in the Route Map to promote responsible consumption, production and reuse; 122 open text comments were received. The most common suggestions related to product packaging, education and training, and fiscal measures, such as fines and incentives.

Suggestions about packaging

The most common suggestion under Q2 related to introducing measures to reduce current usage of packaging in the supply chain. There were calls for measures to be introduced which require producers to eradicate or reduce packaging, or adopt sustainable alternatives, such as packaging made of compostable materials.

“Look towards banning use of plastic wrapping for fruits and vegetables where appropriate and ensure that over packaging of items has a cost consequence.” – Renfrewshire Council

A small number suggested that the Scottish Government should do more to support and develop zero waste/refill shops⁴ and encourage their use among consumers. Additionally, a few others suggested that major supermarkets should be encouraged to adopt principles similar to those of zero waste stores; for example by ceasing the use of plastic packaging of fruit and vegetables and selling loose produce instead. It was noted that this would also contribute to a reduction in food waste as well as environmentally damaging packaging, as consumers would be more likely to purchase necessary quantities rather than larger pre-packaged amounts.

“Enabling consumers to purchase more goods by weight using reusable containers (rather than set volumes or weights wrapped in plastic “for freshness”) will better allow consumers to avoid creating waste in their food consumption.” – Common Weal

⁴ Zero waste stores sell loose produce to consumers in their own containers; the produce is then charged by weight.

One individual called for all retailers to be required to use a set, prescribed set of packaging material that can be separated easily and recycled. Another suggested that increased availability of publicly accessible water-refill stations would reduce the use of single-use plastic water bottles.

Suggestions related to education and training

Additional measures related to education and training around circular economy were suggested by a number of respondents, including local authorities, third sector organisations and a few individuals. There were requests for investment in publicly accessible practical and skills-based training initiatives, such as workshops teaching repair techniques for textiles and household items. Others emphasised the importance of introducing the principles of circular economy and skills related to reuse and repair into school curriculums; one individual suggested such topics might sit well within subjects like art, design and science. A few organisations, including Supply Chain Sustainability School, suggested that training should be made available for businesses who wish to adapt to more sustainable models.

Suggestions related to fiscal measures

A few respondents suggested that tax incentives to encourage repair should be introduced to help promote reuse of e-products, such as waiving VAT on labour for repair cost. Other financial measures suggested included: imposing penalties and fines on producers and manufacturers engaged in unsustainable practices; applying a carbon tax to certain environmentally damaging items; and introducing subsidies for sustainable products.

Other suggested measures

Some additional suggestions included:

- Greater efforts to change societal attitudes and behaviours around consumption, for example reducing the stigma around reuse and second-hand items.
- A ban on sending unrequested items to consumers (e.g. junk mail, promotional flyers).
- Marketing and advertising restrictions on environmentally damaging items; Glasgow City Council questioned whether there is scope to adopt a similar approach to the way in which tobacco marketing has been restricted.
- Greater support for and investment in reuse charities, along with more recognition of the role that the third sector can play in the move towards a circular economy.
- Local recycling centres should be encouraged to all have a "working but not wanted" area, which can be tied in to repair centres or reuse community groups.
- A requirement for any electrical goods brought to recycling centres to be assessed for repair before disposal.
- A specific section of the Route Map which addresses e-waste and IT disposal.
- Greater investment in local communities, and support to build local supply chains.
- Whale and Dolphin Conservation suggested ways in which existing Scottish Government initiatives could be amended to promote reuse, for example by including reusables as part of the Baby Box scheme and the Period Products (Free Provision) (Scotland) Act 2021).

2.2 Package 2: Reduce food waste

Measures in Package 2 are aimed at reducing food waste from all sources, building on the Scottish Government's [Food Waste Reduction Action Plan](#) (FWRAP).

Q3. To what extent do you agree with the measures proposed in this package to reduce food waste? Please provide evidence to support any identified opportunities and challenges associated with the measures in your answer if possible.

Q4. Are there any further measures that you would like to see included in the Route Map to reduce food waste?

2.2.1 Overview of responses to Q3

The breakdown of responses to the quantitative element of Q3 was as follows:

Q3. To what extent do you agree with the measures proposed in this package to reduce food waste?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	60	46	13	4	1	36
% breakdown among:							
All respondents (%)	160	38	29	8	3	1	23
All answering (%)	124	48	37	10	3	1	-
- Individuals	45	69	24	0	4	2	-
- Organisations	79	37	44	16	3	0	-
- Retail & packaging	16	50	25	25	0	0	-
- Third sector	15	27	53	13	7	0	-
- Local Authority	16	56	44	0	0	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	7	0	71	29	0	0	-
- Public body	4	50	50	0	0	0	-
- Other	16	25	44	25	6	0	-

Among those answering Q3, 85% agreed with food waste proposals. Almost half (48%) strongly agreed, with higher levels of strong agreement among individuals than organisations (69% compared to 37% respectively). While very few disagreed with the proposals, strength of agreement varied considerably by sector. Over half (56%) of local authorities agreed strongly, as did half of the retail and packaging organisations (50%) and public bodies (50%). Conversely, no waste management organisations strongly agreed; however, all either agreed or were neutral.

Q3 received 77 open text responses, within which Package 2 was generally well-received. Respondents agreed that reducing food waste should be seen as a priority, and there was broad consensus that, if delivered successfully, the proposals described in Package 2 will contribute to a reduction of food waste in Scotland. However, as with other packages, a

few respondents were critical of the perceived lack of urgency within the measures, and called for stronger action. More specific feedback on each of the five proposals in Package 2 is set out below.

Feedback on Proposal 1. We will take powers to introduce mandatory public reporting of food surplus and waste

Most respondents who commented on Proposal 1 supported the introduction of mandatory public reporting of food surplus and waste, with a few organisations from different sectors (including Glasgow City Council) highlighting a lack of existing data in this area. Some respondents highlighted specific groups that they felt should be required to report on food surplus and waste, such as food retailers and catering outlets, while others suggested that mandatory reporting should be imposed on the whole supply chain, including primary producers.

A few advocated for a system whereby food waste reporting requirements are targeted at the businesses that produce the most waste. Similarly, a few organisations (including Scottish Wholesale Association) suggested that the Scottish Government should consider leniency for small businesses and SMEs, given the disproportionate burden that food waste reporting will impose on their resources. A few respondents proposed that small businesses should be exempt from reporting altogether; and one anonymous organisation suggested that SMEs should not be required to provide the same level of detail as larger corporations.

A few respondents, including East Dunbartonshire Council, suggested that investment will be required to support businesses to develop systems to collect and publish accurate data on food surplus and waste. A few others advised that clear definitions of food waste should be given to ensure consistency in reporting. For example, Nestlé UK and Ireland specified that they would like more clarity on the status of by-products; such as bones that are a result of food production but are not suitable for human consumption. Food and Drink Federation cautioned that public reporting of food surplus and waste could lead to a negative public perception for certain sectors who generate unavoidable by-products.

“For example, a meat processor will generate a large tonnage of “food waste” from bones and hides, yet this will be neither be avoidable nor suitable for human consumption and is often used by other sectors to make non-food products.” – Food and Drink Federation

One individual strongly disagreed with the introduction of mandatory reporting in this area; they felt it would be unlikely to lead to positive behaviour change and will instead simply result in additional administrative burden for various agencies. A small number advocated for introducing enhanced voluntary food surplus and waste reporting rather than a mandatory scheme,

Feedback on Proposal 2. We will investigate the feasibility of food waste action plans by 2024

Few respondents commented directly on Proposal 2; those who did supported the Scottish Government’s intentions to explore the feasibility of food waste reduction plans, but there was little overlap in the other feedback received on this proposal. Points raised included:

- Support for making food waste reduction plans mandatory;
- Emphasis on the importance of Food Waste Action Plans tying into the UN Sustainable Development Goals;
- Recognition of the success of France's Food Waste Prevention Legislation (which forbids retailers from destroying food fit for consumption, and puts obligations on operators within the food industry to establish a partnership with a charity organisation to donate unsold food products); and
- Emphasis on the importance of a sectoral approach to food waste action plans.

Feedback on Proposal 3. We will intensify action to tackle household food waste, developing a behaviour change strategy by the end of 2022 and enhancing support for Scottish households to reduce food waste

Proposal 3 attracted the most comments out of the five measures set out in Package 2. The introduction of a behaviour change strategy was welcomed particularly strongly by respondents, with many individuals and organisations from different sectors recognising the critical importance of public education and changing household food waste behaviours. Some respondents (including a few local authorities) expressed awareness of high levels of food waste present in residual waste streams, as revealed by waste composition analysis; they noted that this reinforces the need for action to tackle household food waste.

A few respondents highlighted that, in addition to environmental and waste management benefits, reducing household food waste may lead to cost savings for consumers, which was flagged as particularly beneficial given the current economic climate.

“We support fully all five measures outlined within Package 2. In particular we support further action to tackle household food waste not only for environmental and waste management reasons but also because we feel this will save Scottish households money in a period of rapid food inflation.” – Foodservice Packaging Association

Some organisations, including local authorities and third sector organisations, emphasised the importance of working at a local and community level when promoting behaviour change, and suggested that the Scottish Government should collaborate with other organisations to promote the strategy, such as local councils, schools, faith and community groups and charities. The need for long-term interventions when embedding behaviour change was highlighted by City of Edinburgh Council, who noted that short-term projects may yield immediate results, but these often appear not to be sustained, particularly in areas where there is a more transient population.

Common Weal cautioned against placing undue blame for food waste on consumers and households, arguing that food wasted by consumers should still fall under the remit of Producer Responsibility. They reasoned that many underlying causes for food waste can be attributed to lengthy supply or logistics chains and retailer practices such as encouraging excessive purchases (often as part of multi-buy promotions) or packaging food in volumes too large to easily use. Scotland Food and Drink echoed this in their response, arguing that upstream solutions should be prioritised over requirements at an individual business or household level.

Feedback on Proposal 4. We will enhance support for Scottish businesses and organisations to reduce food waste and engage with the circular bioeconomy

Respondents were broadly supportive of Proposal 4, welcoming the offer of enhanced training, education and resources to help businesses across Scotland reduce food waste and move towards a more circular model. A few called for increased promotion and visibility of the Food Waste Hierarchy among businesses.

Some respondents noted awareness of businesses which have already successfully implemented schemes (such as donations to local food banks and use of the Too Good To Go app) which help to reduce food waste in their business operations. The Association for Renewable Energy and Clean Technology suggested that case studies of such examples should be published to encourage businesses who have not yet engaged with food waste reduction practices.

There was some discussion of poor practice in the food industry that should be driven out, for example over-ordering of produce, rules which prohibit staff from taking surplus food home, and adding dye to food waste so that it cannot be repurposed.

A few respondents, including Nourish Scotland and North Lanarkshire Council were critical of the 'Love Food Hate Waste' scheme referenced under this proposal, describing its messaging as 'tired' and 'conflicting', and questioning its efficacy in terms of changing behaviours and diverting food waste from residual waste. RMAS joined them in calling for the resources to be updated and refreshed based on new behavioural research.

Fife Council suggested that the support should not just be limited to businesses and commercial organisations, calling for Local Authorities and other public sector organisations to be included in the proposed enhanced support.

Feedback on Proposal 5. We will continue to support food redistribution in Scotland in 2022 and focus on actions to best move food up the waste hierarchy

Respondents welcomed the proposal to continue supporting food redistribution activity in Scotland, with some highlighting the importance of this proposal given the current cost of living crisis and subsequent increase in the number of householders at risk of, or experiencing, food insecurity.

A few examples of successful food redistribution schemes were raised by respondents to underpin their support for the proposal, including a programme run by wholesalers whereby surplus stock was diverted to school meals for children across the UK during the school holidays, and FareShare Scotland's 'Surplus with a Purpose' programme (which is referenced in the consultation paper) and the Pantry Network.

Some respondents called for greater investment in local food redistribution hubs such as community fridge projects; they were viewed as effective mechanisms for both diverting food surplus from landfill and facilitating low or no cost access to food at a local level. A few, including CIWM Scotland commented that the Scottish Government should take more action to reduce stigma attached to redistributed food.

A few respondents expressed caution that the proposal may result in a focus on investment in food redistribution, advising that the priority must remain addressing food waste overproduction issues at source.

“SUEZ is concerned that the actions proposed support parts of the system that should be eradicated through the true and complete adoption of a circular economy. For instance, although very welcome and supportable today and as part of a transition plan, food redistribution should not be seen as a final outcome. A balanced circular economy should ensure that food poverty is eradicated as well as ensuring edible food waste is not discarded. Under the measures proposed and supported, food poverty could appear to be treated as an underlying foundation of the thinking, whereas pointing to each measure as a transition away from food waste and food poverty would not only send the correct messages but also ensure that both are equally part of the food waste and circular economy agenda and design.” – SUEZ Recycling & Recovery UK limited

2.2.2 Overview of responses to Q4

Q4 asked respondents to suggest additional measures to reduce food waste; 94 open text comments were received. The most common suggestions were: measures targeted at retailers, better education around food waste, and improved food waste recycling facilities.

Suggestions related to retailers

Several respondents (including individuals, public bodies and third sector organisations) highlighted the significant role that retailers play in societal food distribution, and suggested that the Route Map should include various measures which target supermarkets. Suggestions included:

- Limit supermarkets’ ability to run promotions which encourage unnecessary bulk buying such as ‘Buy One Get One Free’.
- Regulate price/volume equivalence (e.g. prohibit discounts on larger packets/multibuys so people don’t buy more than they need because it’s a bargain).
- Take steps to remove the requirement to display ‘use by’ dates on food items.
- Encourage supermarkets to remove ‘best before’ dates on fresh produce.
- Encourage supermarkets to provide guidance on product labels about responsible food consumption, storage and waste avoidance, e.g. freeze don’t waste.
- Restrict the sale of pre-packaged fruit and vegetables; encourage the sale of loose produce instead (which encourages consumers to purchase the quantity they require as opposed to a larger pre-packaged amount).
- Require supermarkets to reduce the cost of perishables which are close to their sell-by date, and give them away for free once this date has passed.
- Encourage supermarkets to shorten supply chains by using local suppliers and incentivising the purchase of seasonal produce.
- Penalise retailers with high levels of food waste.

Suggestions related to education

Several respondents, including a number of individuals, third sector organisations and local authorities, advocated for better education and awareness around food waste reduction, for example lessons at school and public awareness campaigns which focus on preventing food waste and safe reuse of food.

“Specific measures to incorporate food surplus and waste awareness in school curriculums for all age groups.” – Lochaber Environmental Group

Aberdeenshire Council requested more public information and guidance to help consumers understand the benefits of home composting.

Suggestions about primary production and agriculture

Some respondents called for the package to have a greater focus on how primary producers and the agricultural sector can contribute to food waste prevention and reduction.

“Looking beyond food waste, the Route Map should look at primary production and how we produce food and this should be covered in a Sector Plan for food and farming (including aquaculture and fisheries). A co-developed protein strategy, to make use of waste and by-products and ensure protein is produced sustainably, should be part of the Sector Plan. Aspects of our protein production, especially intensively raised chicken, pigs and farmed fish are inherently uncircular, relying on grains, soya and wild fish based feeds; with significant land use implications and environmental impact⁵. A protein strategy should set out how we produce protein, using low opportunity cost⁵ livestock feed (feeding animals with by-products from the food, fisheries, aquaculture and agriculture sectors and using marginal grassland); as well as producing novel proteins such as insects and algae from waste and byproducts.” – Scottish Environment Link

Suggestions about food waste recycling

A few respondents (mostly individuals) called for improved and more consistent access to domestic food waste collection services across local authority areas, with a small number describing poor past experiences with such services. A few suggested that more research should be carried out to explore reasons behind non-compliance with food waste segregating and recycling processes. One individual called for greater transparency about what happens to food waste once it is collected, and Renfrewshire Council suggested introducing some form of statutory obligation to recycle food waste.

Request for a reference to economic inequality

The absence of a reference to economic inequality in this Package was noted by a few respondents, including West Lothian Council. There were calls for the inclusion of

⁵ <https://www.wwf.org.uk/learn/low-opportunity-cost-feed>

measures which specifically address the challenges that socio-economically deprived groups face in accessing environmentally and economically sustainable food.

Other measures suggested

Some respondents suggested that there were opportunities for better linkage with other strategies and policies throughout the Route Map, including the Good Food Nation policy, the Right to Food agenda and agriculture policy.

Measures aimed at the hospitality sector were suggested by some respondents, including requirements for cafés and restaurants to offer different portion sizes and charge customers for wasting food.

“Another suggested area to tackle would be the companies who provide excessive portions of food in restaurants and take no account of the individual needs of their customers or indeed give them the opportunity to choose the portion size of their meal. This leads to excessive waste which can be avoided at source.” – Renfrewshire Council

A small number of respondents called for more support for community composting facilities, and more investment in local food growing initiatives, like community gardens. MPA Scotland advocated for the inclusion of measures to facilitate the reuse of food waste as fuel, including a ban on biodegradable waste being sent to landfill.

A few respondents, including Scottish Environment LINK, called for measures to be included in the Route Map which focus on soil health.

“We need a National Soil Plan which reports on a 5-year cycle on the state of Scotland’s soils and monitors soil loss/health, with ambitious targets to increase soil carbon. There needs to be a commitment to nutrient budgets including a phosphorus balance sheet, and there needs to be a Chief Soils Officer in Government. There needs to be a duty on land managers to maintain and enhance soil carbon levels and prevent soil erosion. Lastly, there needs to be a specific and sizeable levy paid on any activity which seals soil, therefore destroying its regenerative capacity, which can be used for remediation of soil and peatland; and any soil sealing activity, such as paving or artificial grass, needs to require planning permission.” – Scottish Environment LINK

2.3 Package 3: Improve recycling from households

Measures in Package 3 aim to improve and optimise the performance of household recycling collection services to make the right choices the easier choices for households; ensure high standards across Scotland; and maximise diversion of waste from disposal.

Q5. To what extent do you agree with the measures proposed in this package to improve recycling from households? Please provide evidence to support your answer if possible.

Q6. Are there any further measures that you would like to see included in the Route Map to improve recycling from households and incentivise positive behaviours?

Several responses submitted under Q5 and Q6 covered themes of responsible consumption and promoting recycling through product design and stewardship. As these were more relevant to Package 1, such responses have been included in the analysis under Q1 and Q2.

2.3.1 Overview of responses to Q5

The breakdown of responses to the quantitative element of Q5 was as follows:

Q5. To what extent do you agree with the measures proposed in this package to improve recycling from households?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	47	54	14	3	5	37
% breakdown among:							
All respondents (%)	160	29	34	9	2	3	23
All answering (%)	123	38	44	11	2	4	-
- Individuals	45	64	29	0	2	4	-
- Organisations	78	23	53	18	3	4	-
- Retail & packaging	16	19	69	13	0	0	-
- Third sector	14	50	36	7	0	7	-
- Local Authority	16	13	56	19	13	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	8	0	75	13	0	13	-
- Public body	3	33	33	33	0	0	-
- Other	16	19	44	31	0	6	-

Over four fifths (82%) of those answering Q5 agreed with the household recycling proposals; 38% strongly agreed and 44% agreed. Strong agreement was again higher among individuals than organisations (64% compared to 23%). While over two thirds of almost all groups agreed to some extent with the proposals, only the third sector saw at least half of respondents agreeing strongly. Strong agreement was lowest among local

authorities (13%) and waste management (0%); a small number of organisations in each of these sectors disagreed with the proposals.

Q5 received 85 open text responses. Respondents were broadly supportive of the current commitments and proposed new measures set out in Package 3. The plans were described by some as “logical”, “appropriate” and “well-considered.”

However, there were some calls for greater urgency in improving household recycling rates across the country, and recurring questions from public sector organisations (including most local authorities) about how the Scottish Government intends to fund the measures, given the increased responsibilities that they will impose on local councils.

"Whilst the package does outline some beneficial actions and commitments, Fife Council suggest that additional and long-term funding for local government is required to make the substantive changes needed to meet the ambitions. This should include both capital and revenue funding support." – Fife Council

Feedback on Proposal 1. We will facilitate a process to co-design high quality, high performing household recycling and reuse services by the end of 2023, working with service operators and users.

Comments on Proposal 1 were mostly supportive. A few respondents suggested that additional stakeholders should be involved in the co-design process alongside local authorities and service operators, including members of the public, brands and retailers and charity retail/reuse organisations.

Most respondents welcomed the idea of more consistent service provision across the country, however a few organisations, including Scottish Environmental Services Association and four local authorities, noted that a ‘one size fits all’ approach is unlikely to work given the Scotland’s diverse geography, population profiles, local housing stock and recycling infrastructure. In these comments, scope for local authority areas to choose collection service models that meet their specific needs and circumstances was called for.

Some respondents emphasised the importance of considering the future impact of the Deposit Return Scheme and reformed packaging Extended Producer Responsibility scheme when designing household recycling and reuse services.

Feedback on Proposal 2. We will strengthen the monitoring and reporting framework for local authority waste services by 2025, and explore introducing a requirement on local authorities to report publicly on the end destination of household recycling collected.

There was widespread support for Proposal 2 among respondents, particularly the proposed requirement for local authorities to report on household recycling end destinations. A few organisations within the retail and packaging sector cited findings from a recent study by INCPEN⁶ which indicate that a lack of information about what happens to household recycling can be a negative influence on a citizen’s decision to partake in the

⁶ <https://incpen.org/lack-of-information-on-what-happens-to-recyclates-after-collection-risks-undermining-public-confidence-in-recycling/>

process. A small number of respondents stated that they were confident that greater transparency about the end destination of recycling will increase public confidence and encourage wider participation in household recycling.

A few local authorities shared concerns about the administrative burden that the proposed requirement will result in; it was suggested that it may be more effective to place the duty on the entire waste management chain rather than solely on local authorities.

“As the proposals stand, each local authority would need to work with their reprocessors on an individual basis to establish end destinations. However many reprocessors work with multiple councils, therefore they would suffer an administrative burden of answering the same request received many times in many different formats. It would be beneficial to place the duty on all reprocessors based in Scotland, creating a homogenised system, which would also incorporate commercial and industrial waste. The overall burden on the reprocessors will be lower as they will only have to conduct the data reporting exercise once and can provide the data to their multiple customers, for example through a national public database.” – West Lothian Council

A few respondents, including Aberdeenshire Council and Scottish Borders Council, highlighted the importance of linking this proposal with existing waste data tracking systems to avoid duplication of data collection and reporting.

One organisation (who chose to remain anonymous) voiced a concern that the publication of household recycling end destinations could breach the commercial confidentiality of businesses providing services to local authorities.

Feedback on Proposal 3. We will take powers to place additional requirements on local authorities regarding household collection services and develop statutory guidance for household waste services.

The response to Proposal 3 was mixed. A few respondents expressed support for placing additional requirements on local authority household collection services, noting that this is likely to increase household recycling compliance and participation. While some of the local authorities who commented on this proposal were supportive of the intentions behind it, their comments largely focussed on concerns over the additional burden that this will place on local authorities, noting that implementing this proposal will require significant additional local government funding. These sentiments were also echoed by other organisations including Plastic Free Helensburgh.

A small number of respondents requested more clarity on what the proposed ‘additional requirements’ on local authorities will be.

“While it is not entirely clear what additional requirements would be placed on local authorities we nonetheless support efforts to bolster the Recycling Charter and accompanying guidance with the aim of achieving greater consistency in household collections. The current Charter and guidance were developed between Scottish Government and COSLA, and we strongly recommend that any proposals to review and build on both these are done in closer collaboration with SESA.” – Scottish Environmental Services Association

The introduction of statutory targets was welcomed by several respondents, including The Alliance for Beverage Cartons and the Environment (ACE UK) and Viridor. However, a few local authority respondents called for flexibility within any statutory guidance and code of practice to account for local differences in geography, recycling infrastructure and housing stock.

Feedback on Proposal 4. We will take powers to introduce statutory recycling local performance targets for household waste services, with targets to be met from 2030.

Proposal 4 also received a mixed response. Some respondents, including Ecosurety and a few organisations in the retail and packaging sector agreed that introducing statutory recycling local performance targets is likely to improve Scotland’s household recycling collections and rates, pointing to examples of other countries where setting such targets has been successful.

However, several organisations (mostly from the public sector) questioned the implications for local authorities, noting that they have limited control over the actions the public in terms of purchasing behaviours and compliance. They reiterated that any statutory performance targets should take into account the circumstances and constraints imposed by their geography and housing stock, and must fairly reflect what authorities can be reasonably expected to achieve.

The Charity Retail Association felt that there is a risk that a focus on meeting recycling targets will create an incentive to increase rates of recycling at the expense of existing reuse activities.

Responses from local authorities suggested that the example in the consultation paper (which describes the successful introduction of local authority recycling targets in Wales) is not directly comparable to Scotland, given their different geographies and housing stock. Three respondents (City of Edinburgh Council, Renfrewshire Council and Aberdeenshire Council) also noted that recycling performance in Wales is inflated by the inclusion of incinerator bottom ash, which is not included in Scotland. In addition, West Lothian Council questioned the impact of the recycling targets as an individual measure, noting that the improvement in Wales was driven by a whole package of measures including £1 billion of investment.

There were also calls for more information on the statutory obligations imposed, the level of financial support for local authorities to take forward these obligations and the consequences of non-compliance. A few objected to the use of financial penalties in cases where targets are not met. West Lothian Council noted that the councils which are under-performing are likely to be those most in need of support and investment, so applying penalties is likely to be “detrimental at the point of greatest need”.

Feedback on Proposal 5. We will undertake a review of waste and recycling service charging by 2024, and are seeking views on what further powers, if any, should be considered to support households to reduce waste and recycle more, by 2028.

Views on the review of waste and recycling service charging were mixed. Some respondents raised concerns that waste disposal and recycling charges are unaffordable for some households, and therefore accentuate inequalities, reduce participation in recycling and increase instances of illegal fly-tipping.

“Enforcement powers and charges should be proportionate and designed in such a way that does not accentuate inequalities in society by penalising those who are experiencing hardships and have limited choices. We find that household waste that is fly tipped on our land sometimes originates from people who have no other choice due to their situations. Options should be available in such circumstances to apply for increases in waste capacities in a way that does not discriminate.” – Historic Environment Scotland

However, claims about an increase in fly-tipping were contested in City of Edinburgh Council’s response; they observed no increase in fly-tipping when charges for bulky collections were introduced.

Some respondents from the public sector raised concerns about the potential removal of charges for garden waste collections and bulky uplifts, fearing this would have a significant detrimental impact on local authority finances. A few noted that councils have introduced charges for garden waste recycling and bulky uplifts in response to the challenging financial climate and associated budgeting constraints, and stressed that the removal of such charges would need to be offset by a new funding stream or more radical saving measures elsewhere. For example, North Lanarkshire Council noted that they would support a return to a free model, provided any loss in income to local authorities was fully funded by the Scottish Government.

One anonymous organisation felt that removing charges for bulky kerbside collections could promote a more “throw away culture” rather than discourage waste generation.

A few argued that applying charges only to those that use garden waste collection services is the fairest approach, as many residents on lower incomes have smaller gardens or no garden at all and therefore produce no garden waste.

“Users of the garden waste service are being asked to pay a contribution towards the cost of having it collected from their home. Ceasing the charge would spread the cost (almost £2 million per year, just in Edinburgh) across all householders many of whom have no garden and are lower income. Our current service makes it available to all, but the cost is borne by those who need it and benefit from it.” – City of Edinburgh Council

Some organisations, including CIWM Scotland, Ecosurety, Aberdeenshire Council and The Association for Renewable Energy and Clean Technology supported looking into introducing a direct and variable waste charging system, noting that a ‘polluter pays’ or

'pay as you throw' model has seen success in other countries and is likely to reduce waste and incentivise participation in recycling.

“Regarding the proposals to investigate waste and recycling charges, we welcome the opportunity to look at this. We are aware in other countries such as Italy, the polluter pays principle is applied. The cost of waste (collection and treatment) is charged directly to the householder and this enables greater visibility of the whole system costs and also can influence householder behaviour, i.e. it costs less if they recycle more. It also enables Local Authorities to understand their full costs of providing the service and drives efficiencies. The future investigation needs to consider examples from elsewhere and engaging feedback across the waste and resources sector.” – The Association for Renewable Energy and Clean Technology

“‘Pay as you throw’ schemes have been largely successful in European countries in limiting the amount of residual waste by households, and largely increase national recycling rates.” – Ecosurety

However, City of Edinburgh Council noted there would be challenges in introducing such a scheme in Edinburgh due to the composition of local housing stock; they noted that given around 25% of households in their local authority have an on street communal collection system, there is no direct link between the producer of the waste, and the cost of disposing of it.

A small number of third sector organisations noted any service charging model investigated by the Scottish Government should consider socio-economic impacts on households. The Salvation Army - Scotland Office highlighted that any waste charging model should be joined up with recycling collections to avoid unintended consequences, such as the charging leading to waste being disposed of in clothing recycling bins which are free.

2.3.2 Overview of responses to Q6

Q6 asked respondents to suggest additional measures to improve recycling from households and incentivise positive behaviours; 100 open text responses were received. The most common suggestions were: providing clearer guidance on effective recycling practices; investing in public awareness and education about the importance of recycling; and improving local recycling infrastructure.

Requests for clearer guidance

Several respondents, including individuals, public bodies and organisations in the waste management sector voiced concern that there is generally poor public knowledge and understanding about effective household recycling. They called for clear, detailed and publicly available instructions and guidance about: what can and cannot be recycled; how to sort/separate recyclable materials; and the process for recycling (for example whether items need to be cleaned).

Some proposed media campaigns to educate the public on which items can and cannot be recycled, and a few suggested that the Scottish Government should design a centralised website with clear guidance about recycling. One individual noted that Zero Waste

Scotland provides some of this information online, but they did not find it to be comprehensive enough.

A common suggestion among responses submitted by individuals was to introduce a mandatory labelling system whereby packaging must clearly state whether the product and its packaging can be recycled (and which recycling category it falls into). A few added that this information may encourage consumers to make more informed and therefore more sustainable choices; for example, choosing to buy items which can be recycled as opposed to those which cannot.

Improved signage on recycling bins was also suggested; for example using pictures instead of written instructions so that the guidance can be easily and quickly understood by those with low levels of literacy or for whom English is not a first language.

Calls for improvements to local recycling infrastructure

Several individuals and organisations from different sectors, including the Royal Society of Chemistry, Whale and Dolphin Conservation and the Royal Yachting Association Scotland, called for the Scottish Government to prioritise improvements to local recycling infrastructure, advising that there should be more regular collections and greater access to local recycling centres.

“The Scottish Islands Federation would welcome a recycling system which ensures every household has access to easily identifiable recycling facilities and a consistent level of service across all geographical areas, in particular the more remote islands and coastal communities.” – The Scottish Islands Federation

The difficulties or inconvenience associated with recycling Waste Electrical and Electronic Equipment (WEEE), old clothing and Tetrapaks were noted by a few respondents, who urged the Scottish Government to tackle these challenges to improve household recycling rates.

A few called for improved facilities to improve the collectability of recyclable items in mixed waste.

Calls for increased public awareness

There were calls for regular government messaging and public awareness campaigns about the importance and benefits of household recycling. Several respondents agreed that sustained communication can embed positive behaviours in the public and help to promote and embed a societal recycling culture. A few added that educating young people is crucial to embed understanding from an early stage and support a generational shift in attitudes towards recycling.

“In the first instance national education and awareness campaigns need to be revived and modernised to capture all age groups and demographics and the concerns that will resonate with the public.” – Renfrewshire Council

Other suggested measures

A few respondents advocated for the introduction of fines to households who repeatedly place recyclable items into general waste bins, with education and warnings preceding any financial penalty. Two individual respondents suggested that reducing the size of general wastebins could encourage householders to recycle more. Aberdeen City Council suggested exploring recent developments in sorting technology in a bid to make recycling easier and more convenient for households.

**“It is perhaps time to change the way we view kerbside recycling and move the focus away from reliance on the householder to be vigilant and trusted/expected to mainly comply with requirements to sort their materials into different streams, and instead focus on providing something which is simple and convenient for the householder and then designing and providing the right technology and infrastructure to support that. There have been significant developments in sorting technology over the past few years and this should not be underplayed.” –
Aberdeen City Council**

A few respondents suggested that research should be carried out to determine why some households choose not to engage with reuse and recycling services, and which interventions would be most effective in encouraging them to comply.

2.4 Package 4: Improve recycling from commercial businesses

Measures in Package 4 focus on supporting businesses to reduce commercial and industrial waste and increase recycling.

Q7. To what extent do you agree with the measures proposed in this package to improve recycling from commercial businesses? Please provide evidence to support your answer if possible.

Q8. Are there any further measures that you would like to see included in the Route Map to improve waste recycling from commercial businesses?

2.4.1 Overview of responses to Q7

The breakdown of responses to the quantitative element of Q7 was as follows:

Q7. To what extent do you agree with the measures proposed in this package to improve recycling from commercial businesses?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
All respondents (n=)	160	37	51	27	4	8	33
% breakdown among:							
All respondents (%)	160	23	32	17	3	5	21
All answering (%)	127	29	40	21	3	6	-
- Individuals	41	56	34	2	0	7	-
- Organisations	86	16	43	30	5	6	-
- Retail & packaging	19	11	37	53	0	0	-
- Third sector	14	29	43	29	0	0	-
- Local Authority	16	19	56	19	6	0	-
- Construction / Dev	7	29	57	0	14	0	-
- Waste management	8	0	13	38	0	50	-
- Public body	4	50	25	0	25	0	-
- Other	18	6	50	33	6	6	-

Agreement with the proposals for recycling from commercial businesses was lower than for other packages, with 69% of those answering Q7 agreeing to some extent; 29% strongly agreed and 40% agreed. While 90% of individuals agreed, a much lower proportion of organisations did so – 59%. One in six organisations agreed strongly (16%), with the highest strong agreement recorded among public bodies (50%). No waste management organisations agreed strongly with the proposals with 38% neutral and half (50%) strongly disagreeing.

Q7 received 84 open text responses. In summary, the first three proposals set out within Package 4 were largely well-received by respondents; however, the proposal to pilot a commercial zoning approach was met with some strong opposition.

As with respondents from other sectors, local authorities expressed a mix of views on different proposals, in many cases offering a balanced view of the potential benefits and challenges of each. More detail is provided below.

Proposal 1. We will conduct a national compositional study of waste from commercial premises by 2024

There was broad support for a national compositional study of waste from commercial premises, with respondents describing it as an ‘essential’, ‘valuable’ and ‘important’ exercise in terms of addressing data gaps within commercial recycling and improving service provision. Some respondents noted that many operators within the waste and resource sector already collect data on commercial waste and should be consulted as part of the study.

A few respondents emphasised the importance of selecting a fair and representative sample of premises to participate in the study, stressing that sampling should consider business size, type and location. Others called for regular and ongoing compositional waste studies to identify and monitor trends, raising concerns that a single study would simply be a ‘snapshot in time’ and not reflect seasonal or longitudinal change.

Some concerns were voiced about the additional administrative burden that this may place on businesses, particularly SMEs.

Proposal 2. We will review compliance with recycling requirements by 2024

Few respondents commented directly on Proposal 2. Those who did welcomed the review of compliance with the source segregation requirements of the waste regulations, noting that it will gather insight and contribute to an evidence base which will help inform future policy and actions. A few advised that the proposed reviews should be more comprehensive than previous compliance reviews carried out by SEPA, and should include a greater number of business in the sample.

Proposal 3. We will co-design measures to improve commercial waste service provisions that drive waste prevention and reuse by 2025

Respondents from a mix of sectors expressed support for Proposal 3, valuing the emphasis on a collaborative approach which involves engagement with businesses and industry stakeholders. The possible interventions suggested in the consultation paper were also welcomed, particularly the focus on reducing food waste and the introduction of fiscal measures that incentivise commercial recycling and waste prevention.

“Incentives do need to be provided for commercial businesses (especially SME) to increase reuse and recycling who have limited time and resources as well as market competition and profit margins.” – Lochaber Environmental Group

Proposal 4. We will research and pilot commercial waste zoning approaches by 2024

The proposal to research and pilot commercial waste zoning⁷ approaches attracted the greatest response across the proposed measures in Package 4. Views were mixed; spanning support through to opposition, and a number of calls for extensive research and consultation before a trial is undertaken.

There was some recognition of the potential benefits of the scheme from respondents from a variety of sectors, such as reduced environmental impact and increased commercial recycling compliance (as it may be harder for businesses to avoid putting in place a service and avoid their commercial waste charges). A few respondents noted that the scheme may be particularly advantageous for small businesses who do not produce enough waste to warrant an individual contract with a waste service provider.

“We are supportive of commercial zoning for recycling as this can create commercially viable collections for recycling small amounts of material that could be recycled.” – Nestle UK and Ireland

However, several respondents expressed concern about the potential introduction of waste zoning. All five waste management organisations who commented on waste zoning expressed opposition to the proposal, including RMAS and SESA. The following concerns about commercial zoning were raised repeatedly throughout responses, by organisations from different sectors, including a number of local authorities across Scotland:

- loss of competition and potential monopoly price escalation;
- less choice, flexibility and convenience for businesses;
- less innovation and investment;
- potential loss of jobs (particularly for SME waste service providers); and
- costly and time-consuming public procurement procedures.

“We strongly disagree with the proposals for commercial waste zoning. This idea is fraught with difficulty and our members are concerned about the impact of this and that it will undermine existing service providers. Once a contract has been awarded for a particular geographic area, this will eliminate competition, reduce flexibility, innovation and drive down the level of service that the winning tenderer will deliver.” – The Association for Renewable Energy and Clean Technology

A number of respondents from the retail and packaging sector and local authorities called for more research into the zoning of waste collection and further consideration of the cost savings and environmental benefits versus longer-term concerns. They also noted that any piloting of the zoning proposals will require ongoing consultation and collaboration between the waste management industry and local authorities.

⁷ Commercial waste zoning involves one waste collection service provider being awarded a contract to undertake all commercial collection in a defined geographical area or ‘zone’.

A few called for more detail about the proposals, specifically: who would run procurement processes and set tendering criteria; who would manage the scheme; and whether the scheme would be applied nationally or in city centres only.

2.4.2 Overview of responses to Q8

Q8 asked respondents to suggest additional measures to improve recycling from commercial businesses; 82 open text responses were received. The most common suggestions related to stricter enforcement, applying financial penalties and more support for businesses.

Calls for stricter enforcement with regulations

Several respondents called for stricter and more effective enforcement of businesses compliance with the requirements of the Waste (Scotland) Regulations 2012, suggesting that currently, there is a perceived lack of consequences for those who do not comply.

Suggestions to improve enforcement included: more frequent site visits from officials, easier paths to report non-complying businesses, and giving local authorities powers to issue fixed penalty notices for low level non-compliance offences (e.g. repeated failure to properly sort waste for recycling).

“Better enforcement of existing legislation... Additional steps and compliance checks would result in a reduction of “white van man” and others from profiting from illegal waste activity and give the householder/customer more assurance that a registered waste carrier is bona fide.” – Aberdeen City Council

However, a few respondents recognised that resourcing constraints can make it difficult to enforce the regulations and requested investment to improve this.

Calls for financial penalties

Some respondents (mostly individuals) suggested that introducing taxes or fines for businesses that do not meet certain sustainability standards or recycling targets might encourage better practice and incentivise compliance with commercial recycling.

A few respondents highlighted that existing financial penalties for commercial waste crime do not act as a sufficient deterrent. For example, with reference to fly-tipping, Moray Council pointed out that legitimate disposal procedures can be significantly more expensive than the fine associated with the offence, and therefore some businesses may choose the illegitimate path and risk the fine to save costs.

Calls for more support for businesses

A few respondents suggested that the Scottish Government should invest in support and education for businesses on how to improve their recycling efficiency, for example through designing toolkits and publishing case studies.

Calls for greater focus on commercial reuse

Some respondents advocated for a greater focus on schemes which promote reuse as opposed to recycling. For example, a few respondents (including Scottish Water) called for the introduction of a national database of Scottish business waste for use by other businesses to create products and facilitate the reuse of waste streams.

Other suggested measures

Other suggested measures to improve commercial recycling rates included:

- the introduction of legislation which requires businesses to be transparent about their waste and recycling processes (including endpoints);
- the introduction of legislation which requires private companies to incorporate sustainable procurement into their business model;
- setting statutory targets for commercial waste recycling; and
- promotion of sustainable practices through public spending and planning regulations (for example only awarding planning permission/a contract if there is a commitment to using a certain percentage of recyclable materials).

Industry-specific suggestions were provided by a few respondents; for example, Marine Conservation Society, Moray Firth Coastal Partnership and Whale and Dolphin Conservation called for measures from the Marine Litter Strategy for Scotland which improve the circularity and recycling of fishing and aquaculture gear to be incorporated into the Circular Economy Route Map.

2.5 Package 5: Embed circular construction practices

The measures set out in Package 5 focus on embedding circular construction practices to reduce resource needs, reduce waste and carbon, and encourage refurbishment and reuse.

Q9. To what extent do you agree with the measures proposed in this package to embed circular construction practices? Please provide evidence to support your answer if possible.

Q10. Are there any further measures that you would like to see included in the Route Map to embed circular construction practices?

2.5.1 Overview of responses to Q9

The breakdown of responses to the quantitative element of Q9 was as follows:

Q9. To what extent do you agree with the measures proposed in this package to embed circular construction practices?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
All respondents (n=)	160	44	51	22	1	2	40
% breakdown among:							
All respondents (%)	160	28	32	14	1	1	25
All answering (%)	120	37	43	18	1	2	-
- Individuals	44	68	23	7	0	2	-
- Organisations	76	18	54	25	1	1	-
- Retail & packaging	9	11	44	44	0	0	-
- Third sector	13	23	62	15	0	0	-
- Local Authority	15	20	60	20	0	0	-
- Construction / Dev	11	18	64	18	0	0	-
- Waste management	8	0	63	25	0	13	-
- Public body	6	33	50	17	0	0	-
- Other	14	21	36	36	7	0	-

Four fifths (79%) of those answering Q9 agreed with the package of proposals to embed circular construction practices; 37% strongly agreed and 43% agreed. By sector, strong agreement was highest among public bodies (33%) and third sector organisations (23%), and lowest among waste management organisations (0%). Among organisations in the construction sector, 82% agreed to some extent, with the remaining 18% neutral about the proposals.

Q9 received 64 open text responses from a mixture of individuals and organisations, including local authorities and those in the construction and development and waste management sectors.

Proposal 1. Work with industry to accelerate the adoption of best practice standards and explore options for mandatory compliance

This proposed action generated the greatest number of comments from those who responded to Question 9. The discussion centred on three themes; mandatory vs voluntary standards; what engagement with the sector can bring and who should be involved; and the challenges of working with stakeholders in the sector.

On mandatory vs voluntary standards, there were mixed views. Many of those who commented on this aspect felt that mandatory standards will be required, with some suggesting that financial incentives could be more effective. Some respondents highlighted that they would need more detail about any proposed requirements to be placed on their sector. A few highlighted the challenges of introducing mandatory requirements in their specific sector and suggested that voluntary standards could be a more effective way to achieve change.

There was some discussion of how to support the introduction of any new mandatory requirements; for example:

- sufficient transition periods;
- provision of training and upskilling for the workforce; and
- introduction of tools, technology and communication systems which allow procurement specialists, designers and builders to connect and access the appropriate materials and equipment.

Comments on which industry representatives should work with the Scottish Government to develop best practice standards and models frequently stressed the value of sector-specific knowledge. The breadth in scale and size of the sector was frequently highlighted, with many respondents stressing the need for SMEs to be involved in any discussions. One highlighted the value of engaging with the UK Government, noting that ‘some of the levers that could have a potentially significant impact here are at a UK level’.

A small number of respondents described ways to facilitate effective engagement, for example one explained that “the Scottish Construction Leadership Forum, the Circular Economy Investment Fund, the Supply Chain Sustainability School, and BE-ST are welcomed initiatives to foster collaboration and innovation”.

On the challenges of working with industry, a few expressed cynicism that partners would meaningfully engage with any discussions about changes that could affect profit levels.

In their responses to Q10 (Are there any further measures that you would like to see included in the Route Map to embed circular construction practices?) many respondents made further comments on working with industry to accelerate the adoption of best practice standards and explore options for mandatory compliance. These included:

- Multiple endorsements of moving to a mandatory approach and many calls for the Scottish Government to take stronger, urgent action.
- Several calls for the Scottish Government to develop more specific about the policies and standards that would be required; with various ideas including:
 - embedding circular construction principles into all building standards, all local and development control plans and all Scottish Planning policies;

- no planning approval for projects without a carbon reduction plan and a waste management plan;
- for all buildings to have an end-of-life plan;
- new buildings designs to factor in the changing climates, for example constructed following passivhaus standards, or with non-fossil fuel energy sources;
- the provision of more circular recovery options and onsite segregation of waste; and
- considering the potential contribution of Regional Spatial Strategies (RSSs) and Local Development Plans toward the circular economy goals.

There were mixed views on mechanisms for change; many described the role of incentives, a very small number suggested penalties could play a role. Some reiterated comments about welcoming this engagement and specified key stakeholders to involve, for example those in the construction industry.

A small number of respondents urged the Scottish Government to look more widely at best practice in community build projects and on a global scale. One advocated for building standards to lead rather than follow construction practice.

Proposal 2. Investigate options to incentivise refurbishment of buildings

Overall, respondents welcomed the proposal to incentivise the refurbishment of buildings, although some questioned the cost implications of this approach.

In endorsing this suggestion, respondents suggested that building refurbishment was ‘core to a truly circular economy’; but some recognised that the current rate of new buildings reflect the fact that it is far cheaper to demolish and rebuild, than refurbish. Some stressed the need for refurbishment to also adopt environmentally sustainable approaches; for example, proposing that incentives should be extended to ensure that natural, locally sourced, and recyclable local products are used. One respondent called for consideration of how to reduce the cost of assessing risks relating to refurbishment, noting that buildings may be in poor condition.

A few mentioned the role of tax incentives, describing VAT as a barrier to refurbishment; within these comments some expressed a view that the Scottish Government should look at alternative fiscal levers within its powers, such as a demolition levy.

A small number of respondents made suggestions that the Scottish Government could do more to promote the reuse of buildings. Comments on this varied, from generally encouraging this practice, to providing stronger incentives, setting embodied carbon targets, or mandating that old buildings should never be demolished.

Proposal 3. Coordinate a Scottish Programme for Reuse of Construction Materials and Assets

Mixed views were evident on the development proposal to Coordinate a Scottish Programme for Reuse of Construction Materials and Assets. The majority agreed with the principle and highlighted benefits of this approach, for example, the importance of minimising waste; or the high quality of materials available for reuse. A small number suggested the proposal was unachievable, stressing the cost of transporting materials and

the difficulties of managing a certification process for any reused goods to ensure they are structurally sound. One respondent reiterated their calls for clarity on aspects of reuse such as health and safety, integrity checks and energy efficiency constraints.

Respondents often discussed practical aspects of reusing construction materials and assets. They noted that Scotland will need more recycling plants to service construction projects, and a need for greater awareness of how recycled products can be used, and for the value of recycled materials to be recognised. One highlighted the complexity of providing assurances on what would be safe to recycle and managing aspects such as insurance, warranties and building regulations; another said clear guidance was required, and noted the risk of adverse consequences such as builders using recycled materials which are less energy efficient.

A small number said a directory would be required, to provide details of where to source recyclable materials; some shared examples or said that case studies could help to demonstrate how materials can be used. One suggested reuse could be driven by banning recyclable materials from landfill; another urged the Scottish Government to align with relevant UK initiatives.

Further comments on coordinating a Scottish Programme for Reuse of Construction Materials and Assets included:

- Suggestions that the Programme should operate at a regional rather than national level;
- Encouraging the use of digital material passports;
- Introducing embodied carbon limits to drive demand for used materials;
- A requirement during planning to submit a Construction Phase Circularity Plan, based on the Circularity Statement, to show how site logistics will be adapted to allow materials to be stored.

Proposal 4. Investigate the potential use of recycling bonds to divert material from landfill

Mixed views were evident on using recycling bonds to divert material from landfill. Some endorsed this approach in broad terms, stressing the importance of soil as a non-renewable resource and carbon sink, and the forthcoming reduction in landfill capacity upon the implementation of the landfill ban in 2025; but noted they looked forward to investigating how a bond scheme would work in practice. A small number directly opposed the proposal, on the basis that bonds will add costs and inefficiencies to the industry.

Most comments centred on practical considerations, features of the bond scheme they would like to see, or the process of implementation. For example, a few said any proposals would need to be carefully drafted and consulted upon; and there were some comments that actual levels of soil and stone in landfill is relatively low; others argued that the targets should focus on higher value uses, and that a bond scheme should feature incentives.

Two respondents noted the requirement to landfill contaminated soils, another said that soil management should be considered earlier in a project design stage. One took issue with the phrase 'diversion from landfill'; explaining that "the majority of construction waste is diverted to a waste transfer station...this performance bond would essentially be dependent on the performance of the waste transfer stations".

A small number of respondents urged the Scottish Government to consider the timing carefully, so that bonds are introduced when routes for material reuse exist, and note the complex financial and legal implications and provide appropriate support to and input from local authorities.

Proposal 5. Consider how devolved taxes can incentivise the use of secondary aggregates and support circular economy practices

Most of those who responded to this proposal endorsed the use of secondary aggregates, and felt that devolved taxes could support this approach. For example, one local authority argued that “the biggest change to construction waste arising seem to have come from the increased costs of landfill itself, and this would suggest that financial mechanisms are the best way of achieving collective circular economy actions”.

Many of those who endorsed devolved taxes argued that incentives were an effective way to drive change but said this would require careful planning; for example, the Scottish Environmental Services Association suggested that “to ensure that secondary aggregates are properly incentivised over virgin aggregates, the Levy should be increased. The current rate of £2/tonne is very low, and an increase would act as an added incentive to adopt recycled aggregates. However, in order to avoid market distortion and reduce complexity for those operating under different tax authorities, the rates and structure of any devolved tax would need to be maintained in close alignment to the UK Aggregates Levy”.

One respondent disagreed with this approach, explaining that “the focus should be on not turning usable masonry into aggregate in the first place by incentivising reuse over recycling”. Another suggested that tax incentives for reuse of whole units would be welcome; arguing that tax incentives for recycling would send the wrong message and incentivise crushing of masonry for aggregate and losing embodied carbon.

Proposal 6. Work with industry to identify ways to reduce soil and stones going to landfill

Many respondents recognised the importance of reducing the amount of soil and stones going to landfill and welcomed the Scottish Government’s ambition to identify ways to address this issue. Several referenced the role of soil and stones in landfill daily cover, noting it is used to ‘bury refuse and weigh it down, preventing it from being blown around by the wind’. One observed that the industry will need to “work closely with the regulator (SEPA) to ensure end of waste status or alternative end destinations can be achieved.”

One questioned the estimate provided in the consultation paper that soils and stones account for 38% of all waste landfilled, arguing that this figure probably included the use of soils for capping and daily cover; so the volume of soil that could be diverted was likely to be lower.

Two respondents argued that many existing recycling activities use subsoil in low-value bulk-fill applications; another explained that good practice of reuse soil is niche and expensive. Two suggested that to achieve the desired change, reuse should be incentivised and argued that planning processes could be utilised to drive less wasteful use of soil as a building material. Other comments explained details aspects of the process to consider.

“We suggest that with closer oversight of (and co-operation with) some of the larger construction projects it should be possible to track and map the flows of waste soil off-site and use this exercise to identify and improve current soil waste management practices.” – Scottish Environmental Services Association

Two respondents proposed assessment processes to judge the quality and potential uses of waste soil with the exception of excavated waste which was more than 50% silt, clay, sand or gravel.

One respondent noted their disagreement with this approach, suggesting that the focus should be on building materials. They argued that excavation waste is already well controlled and standards and options for maintaining soil onsite exist.

Proposal 7. Facilitate the development of a soil symbiosis programme

There were a small number of specific comments on soil symbiosis and within these, mixed views were evident. Those who endorsed the programme agreed a soil-specific approach would contribute to waste and emissions targets; one noted that splitting soil into its constituent parts could produce more economic value. Another described it as ‘a practical and workable approach’ and felt it could be achieved before 2025.

Opposing the development of a programme, one respondent noted the approach had already been attempted in the UK, with little impact and low engagement from the sector. Another identified ‘a tension between soil symbiosis and current treatment of building materials designed to give longevity’. One called for clarification on the overlap between proposals on the reuse of construction materials and the soil symbiosis programme and said that careful use of the term ‘soil’ was needed. Finally, one respondent said that delivering this proposal will require a review of the SEPA best practice guidelines.

2.5.2 Overview of responses to Q10

Q10 asked respondents to suggest further measures to embed circular construction practices; 85 responses were received. These responses were often lengthy, and we encourage readers to review the published responses⁸, to see the detail.

Comments on further measures which link to existing or proposed commitments for construction practices have been incorporated into the analysis above; this section focuses on new measures or considerations raised by respondents.

Suggestions related to design, planning and standards

The prevalent theme in responses on further measures centred on how Scotland’s planning system and standards could embed circular construction practices. These comments came from a mixture of individuals and organisations; including local authorities, public bodies, waste management companies and those in the construction sector. Across these responses there was no clear consensus and many different points were raised.

⁸ Where permission is granted, the Scottish Government publish full responses to the consultation on their website.

On how to embed circular construction with the planning phases, comments included scope within the construction sector to develop designs which: place a greater emphasis on waste management; take a longer-term view to building design which factors in sustainability through climate change; and specify material use based on a whole life assessment. On a whole life assessment, one called for increased benchmarking, testing and future-proofing of existing materials to ensure material recovery is designed into the construction sector and explained that targets similar to those previously established by The Waste and Resources Action Programme for recycled materials may offer the incentive and demand-led solution.

There were also comments on the critical role of the planning system and building regulations and standards in delivering a sustainable built environment. These spanned requests such as: no infrastructure project is approved unless it uses 30% recycled products; for buildings that cannot be reused to be deconstructed not demolished; to consider wider factors in planning approval, such as active travel and attractive places to live and work; to raise building standards to include higher energy efficiency and use of solar electricity; one suggested the encouragement of, or mandating, Passivhaus standards.

Broader suggestions included:

- To introduce Circular Planning Statements for local authorities making them act as gatekeepers to ensure a sustainable, future, built environment for cities.
- For reviews of standards and the planning system to embed circular construction practices.
- Calls for better inspection and compliance within the building sector.
- For the Scottish Government to offer specific examples of how using British and international standards can help embed circular construction practices.
- An assertion that a mandatory baseline of current circular performance in construction is needed to drive targets and sector specific interventions. With this suggestion, it was observed that projects above a certain value should be required to report their forecasts and actual performance.
- One respondent made several suggestions, including:
 - analysis of current Net Zero Public Standards Building pipeline projects to understand challenges in applying circular construction principles, given the readiness of industry and the supply chain to deliver against these principles;
 - targets/banding against project values for circular construction and how these can be implemented in practice; and
 - for salvage and reuse programmes, to recognise the practicalities of storing large volumes of construction materials, conditions required to maintain these and the quality certification of materials which have been in storage for periods of time.
 - consider the additional capital cost implications of circular economy measures, including prolongation of construction phase programmes, impact of increased prelim costs and pressures on local authority capital resources.

Suggestions about materials

Several respondents, including both individuals and organisations from a mix of sectors, made suggestions about materials used in construction. Some themes emerged across

these comments; most common were calls for greater use of natural materials in construction, followed by suggestions that greater consideration should be given to end-of-life and/or efficiency in the planning and design stages. A small number suggested that there should be incentives to encourage local sourcing of materials, and two advocated for the creation of a construction materials library, for reference in the design stage, to encourage reuse.

Suggestions related to measurement and reporting

Several organisations across a range of sectors commented on measurement and reporting. There were no clear views expressed by sector; the comments from this group were largely individual points which spanned recommended tools and approaches, what should be measured, how to embed monitoring, suggested targets, or calls for more detail.

On tools and approaches, comments included: for companies to be provided with tools to help them identify effective practices; a recognition that standardisation and comparability, is crucial and a suggestion that a national pre-demolition audit framework is needed to inform decisions on the carbon costs or demolishing vs retrofitting and develop a catalogue of salvaged materials; and consideration of the role of digitisation in effective data capture, sharing and reporting.

“Standardisation, and the ability to compare carbon and cost alongside each other, is essential in developing actionable insights in order to decarbonise the built environment. Further, it is essential that a more holistic accounting method is used to assess new construction projects, that incorporates lifecycle, carbon and social costs in order to gain a comprehensive understanding of the true opportunities of a more sustainable approach.” – Built Environment Forum Scotland (BEFS)

Discussion of targets and what to measure spanned: holistic accounting methods to assess new construction projects, incorporating lifecycle, carbon and social costs; granular data capture on waste material with as much detail as segregation as possible; discussion of specific data capture, for example, the use of quarry basalt dusts and biochar in any soil symbiosis sustainability programme; to move from a net zero direct emissions target to a net zero resource demand target; to use progressive targets to drive change, or to use existing measurements and frameworks, with various examples put forward.

There were a small number of comments on how to embed monitoring and engage the sector in these efforts. Suggestions spanned ongoing engagement through industry bodies, using procurement systems to embed change, developing opportunities to share information across the sector. One respondent asked for more detail on how activity will be monitored, managed, and enforced.

Suggestions about sharing resources

Eight consultation participants, spanning individuals and organisations in different sectors, described ways to encourage sharing and reuse by communities as part of circular construction practices. A small number described tools or approaches elsewhere that they felt Scotland should consider, such as the resource exchange mechanism or green passport system for new products and materials. Two suggested that the construction sector could be expanded to consider the scope for creative industries or social

enterprises to instil a culture of reuse, one felt that productive topsoil removed during development should be made available and recycled for community food growing, and one made a general point that they endorse approaches which encourage sharing and community access to resources.

Suggestions about incentives, guidance and other support

Some respondents, mainly from organisations in the construction and development sector, suggested the use of incentives, guidance or other support to embed circular economy practices.

In these comments there were calls for: guidance for improved refurbishment, retrofit and demolition of buildings; financial incentives that encourage sustainable practices; to remove tax benefits which encourage the demolition of empty buildings; to develop a database to catalogue materials available for reuse; or more broadly for the Scottish Government to set a clear strategy and promote best practice, for example through procurement processes.

“Incentives to invest in strategically placed innovation parks/hubs where businesses work symbiotically with producers to ensure minimum waste and maximum use of materials.” – Renfrewshire Council

One respondent urged the Scottish Government to provide specific support such as in-situ mobile aggregate processing equipment on large scale infrastructure projects; and investment in local and regional supply chains.

Calls to upskill the labour market

Discussion of upskilling the labour market appeared in a small number of comments. These focused on Scotland’s skills development infrastructure, the types of skills needed, and issues with the labour market and economy at present.

Other measures suggested

Less frequently mentioned measures included comments on the types of equipment and tools, and procurement processes, that could help embed circular economy practices.

2.6 Package 6: Minimise the impact of disposal

Package 6 focuses on achieving the best environmental outcomes for materials that cannot be captured for reuse or recycling, and ensuring environmental and economic value of wasted resources and energy is maximised and harnessed efficiently.

Q11. To what extent do you agree with the measures proposed in this package to minimise the impact of the disposal of residual waste? Please provide evidence to support your answer if possible.

Q12. Are there any further measures that you would like to see included in the Route Map to minimise the impact of disposal?

2.6.1 Overview of responses to Q11

The breakdown of responses to the quantitative element of Q11 was as follows:

Q11. To what extent do you agree with the measures proposed in this package to minimise the impact of the disposal of residual waste?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	37	57	11	2	1	52
% breakdown among:							
All respondents (%)	160	23	36	7	1	1	33
All answering (%)	108	34	53	10	2	1	-
- Individuals	38	55	34	5	3	3	-
- Organisations	70	23	63	13	1	0	-
- Retail & packaging	14	43	50	7	0	0	-
- Third sector	12	8	75	17	0	0	-
- Local Authority	14	14	79	7	0	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	8	25	50	25	0	0	-
- Public body	2	50	50	0	0	0	-
- Other	15	13	67	13	7	0	-

Almost nine in ten (87%) of those who answered Q11 agreed with the proposals, with similar levels of total agreement recorded among all sectors and disagreement noted by only one organisation. The highest levels of strong agreement were recorded among public bodies (50%) and retail and packaging organisations (43%), and the lowest among third sector organisations (8%).

Only 50 open text comments were received in response to Q11, which is fewer than most of the other questions in the consultation.

Proposal 1. Develop a Residual Waste Plan to ensure the best environmental outcome for materials and set strategic direction for management of residual waste to 2045

This proposal generated the highest number of comments across responses to Q11. Respondents from a diverse range of sectors shared different views on what should be considered in the Plan's development; several expressed their support for the proposal, while others raised some questions and concerns. Some responses were lengthy, and we encourage readers to review the published responses to see the detail.

Some respondents described different aspects of the Residual Waste Plan that they would like to see, suggesting that it should consider questions such as strategic implementation, data collection, leadership, costs, socio-economic impacts, different treatment scenarios and the need to build new plants. A few respondents, including Aberdeen City Council, said the parameters for the plan should be more clearly defined in the Route Map, and that there should be recognition that source separation is unlikely to achieve complete removal of fossil carbon. Common Weal suggested that the Residual Waste Plan should be integrated into the Circular Economy Route Map rather than produced as a standalone document, arguing that Scotland needs a more holistic approach to managing waste across all parts of the waste hierarchy.

There were a small number of comments on the scope of the Residual Waste Plan; one suggested that residual waste covers many compositional components and variations, noting their concern that the broad focus will prevent more focused interventions; another said the Plan should cover all aspects of waste management and not just focus on residual waste.

“The scope for the Plan should include greater emphasis on how to derive the greatest carbon benefit from residual waste management and highlight the opportunity that energy from waste (EfW) facilities provide to achieve carbon negative status through installation of carbon capture systems.” – Aberdeenshire Council

On materials, one suggested that the impact of persistent organic pollutants should be considered in the disposal of hard plastics and require incineration.

In discussion of waste sorting plants, one argued that encouragement is needed to develop processing plants which operate at the highest level of efficiency; another urged the Scottish Government to create and improve access to local recycling opportunities, noting that some waste facilities already pre-sort residual waste prior to disposal to remove valuable material and this best practice should become mandatory.

A small number of respondents stressed that a holistic approach to managing the waste hierarchy is needed, which recognises that upstream measures influence the composition of the remaining, residual waste. Within these comments, it was suggested that the Plan addresses the issues of Combined Heat Power, maximising the recovery of Energy from Waste (EfW) by-products, carbon capture, utilisation and storage and incentives which create distortions.

Others described practical issues for the Residual Waste Plan to address. For example, a few respondents, including Scottish Borders Council, highlighted that the majority of alternative treatment and sorting technologies are located in the central belt, which means that rural authorities incur significant transport costs to access such facilities. One suggested that sorting facilities are necessary in every council area to reduce costs of transport, and highlighted the issue of removing residual waste from islands where landfill disposal is not possible. Another encouraged the Government to consider implementing auditing systems in the construction sector by qualified, external professionals. One respondent offered to share their expertise on using open standards to ensure that accurate data on product and packaging information is used to ensure that waste materials are sorted and disposed of correctly as part of a Residual Waste Plan.

Some highlighted specific materials to consider, such as the recycling needs of items including wind turbine blades, glass reinforced plastic hulls, medical waste, hazardous household chemicals, gas cylinders for fridge freezers, artificial pitches and old car tyres.

A small number described the holistic role of waste and its links with other policy areas; for example, one called for integration with the Blue Economy Vision and Action Plan, arguing that the vision and Action Plan should also deliver a Circular Blue Economy; another said it should support the provision of a much wider array of waste disposal options for the construction industry. Finally, one respondent described their support for the establishment of an expert technical working group to address the optimal strategies for the reduction of carbon from residual waste treatment systems.

Some respondents called for greater urgency; asking for accelerated timescales or urging the Scottish Government to do more.

Proposal 2. Restrict the incineration of fossil materials, through the development of a sector-led plan by 2024

Few respondents commented directly on this proposal. Of those who did, two asked for more detail about implementation and suggested that a more effective process could be to capture and use energy more effectively, remove plastics and capture and use the carbon post incineration. Two expressed support for this approach, citing concern about the carbon released through the incineration of fossil materials. One asked if the plan would include all wood and plastic waste that is currently burnt for energy, saying if not, it should. Scottish Borders Council referred to Dr Colin Church's Independent Review of the Role of Incineration in the Waste Hierarchy in Scotland⁹ in their response, expressing particular support for Provisional Recommendations 13 and 14, which refer to strengthening existing requirements for pre-treatment and working with industry to deploy combined heat and power for as many existing incineration facilities as possible.

The United Kingdom Without Incineration Network (UKWIN) made a number of recommendations related to restrictions around incineration, advising that the Scottish Government should:

⁹ <https://www.gov.scot/publications/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland/documents/>

- Reinforce the moratorium on new waste incineration capacity through a ban on environmental permits being issued for incinerators that do not currently have a permit.
- Move quickly to consulting on an ‘Incineration exit strategy for Scotland’, including setting a clear target date for ending incineration in Scotland.
- Commit to the principle that no public funding (including public service pension funds) should be made available for incineration.
- Require SEPA to make information available online, including information about existing incineration facilities that are required to be part of their public register.¹⁰

Proposal 3. Investigate fiscal measures to incentivise low carbon disposal, including the potential to include energy from waste in the UK Emissions Trading Scheme (ETS)

Few respondents commented directly on this proposal. Within this small group, mixed views were evident. One stated they were not in favour of incentivising energy from waste; two suggested that plants which could not accommodate CCUs would pass on higher costs to consumers. One raised concerns about the impact the proposal may have on local authorities; suggesting that grant support for investment should be considered. Another urged the Scottish Government to consider the potential contractual and financial implications for existing long-term residual waste treatment contracts.

Two respondents noted that while they understood the intentions behind the proposal, they felt a lack of viable alternatives to current practices could be a barrier.

2.6.2 Overview of responses to Q12

Q12 asked respondents to suggest further measures to minimise the impact of disposal; 58 responses were received. The majority of suggestions received were extensions, changes or additions to the three proposals set out under Package 6, and as such, analysis of these comments have been included under the relevant proposals in the previous section.

A few respondents, including Food and Drink Federation and Foodservice Packaging Association asked the Scottish Government to encourage the use of chemical recycling. Two others said it should be mandated that waste facilities are required to pre-sort residual waste to remove recyclable material.

Other suggestions included:

- Consideration of potential funding measures to support the delivery of future carbon capture and storage measures for existing Energy from Waste (EfW) plants
- Additional measures to limit or ban the export and import of waste
- Calls to educate the general public and wider sector about why effective processing of residual waste is important, and the economic benefits over time.

¹⁰ UKWIN made a number of other recommendations related to incineration, which can be viewed in their full published response on the Scottish Government website

2.7 Package 7: Cross-cutting measures

The measures in Package 7 focus on ensuring that the right structures and support are in place to enable action across the circular economy.

Q13. To what extent do you agree with the measures proposed in this package to support action across the circular economy? Please provide evidence to support your answer if possible.

Q14. Are there any further measures that you would like to see included in the Route Map to support action across the circular economy?

2.7.1 Overview of responses to Q13

The breakdown of responses to the quantitative element of Q13 was as follows:

Q13. To what extent do you agree with the measures proposed in this package to support action across the circular economy?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
All respondents (n=)	160	50	70	7	2	0	31
% breakdown among:							
All respondents (%)	160	31	44	4	1	0	19
All answering (%)	129	39	54	5	2	0	-
- Individuals	43	56	40	5	0	0	-
- Organisations	86	30	62	6	2	0	-
- Retail & packaging	16	38	56	6	0	0	-
- Third sector	13	31	62	8	0	0	-
- Local Authority	16	25	75	0	0	0	-
- Construction / Dev	8	38	63	0	0	0	-
- Waste management	8	50	38	0	13	0	-
- Public body	7	43	43	14	0	0	-
- Other	18	11	72	11	6	0	-

Among those who answered Q13, 93% agreed to some extent with the proposed measures; 39% agreed strongly and 54% agreed. Very high levels of total agreement were recorded across all sectors, though levels of strong agreement ranged from 50% among waste management organisations to 31% among third sector organisations and 25% among local authorities. While other organisations were less likely to strongly agree (11%), most (83%) of these organisations agreed to some extent with the proposals. Only two organisations disagreed with the proposals.

There were 85 open text comments provided in response to Q13.

Proposal 1. Introduce duty to develop a Circular Economy Strategy

Many respondents endorsed the proposal to introduce a duty to develop a Circular Economy Strategy. On strategic focus, some respondents highlighted specific issues to include or consider in the development of the Circular Economy Strategy. Examples span planning, the built environment, investment, the just transition, procurement, waste, materials, skills, education the marine litter, data collection and end-of-life waste. A small number suggested that plans for the circular economy should be incorporated to a wider economic strategy and not presented as a separate consideration.

“How planning relates to a proposed Circular Economy Strategy, how data and research should be utilised to drive evidence-based decision making, and how we can develop the planning skills and workforce necessary to achieve ambitions of a circular economy all need careful consideration and should be made explicit in this section.” – RTPI Scotland

Proposed timescales were mentioned by a small number of respondents, including two local authorities. These responses highlighted the scale and pace at which the sector operates and suggested that long lead-in times are required to plan and implement strategic change. Two suggested that the overall direction should have a longer-term vision, with one suggesting that this be set in the first strategy, with five-year review cycles to allow for adjustment rather than significant changes in direction. Another advocated for a ten-year timeframe.

Some respondents highlighted the need for cross-sectoral working to develop and implement any new Circular Economy strategy, with some stakeholders expressing willingness to work with the Scottish Government on this, and others describing experiences of engaging with specific groups of stakeholders on this area.

Proposal 2. Develop a monitoring and indicator framework

This proposal featured in a high number of responses to Question 13. Many comments conveyed general agreement with the proposal to develop a monitoring and indicator framework. Roughly half of the responses expressed views on what should be measured or how to gather the data; this spanned general comments on smart metrics or specific examples, such as data on benefits to the community. Some respondents, including SESA and a few local authorities, expressed outright support for a transition away from blunt weight-based targets to a suite of smart indicators across production; consumption; material end of use; and end-of-life. Others advocated for the use of a carbon metric and one suggested that the focus of monitoring waste should be swapped to measurement of the ‘lead’ metric of reduced consumption.

A few respondents noted that care should be taken that indicators do not create adverse unforeseen behaviours, another said that any targets should be achievable and clearly measurable.

Within comments, some respondents highlighted the benefits of data collection, including driving change and information sharing.

“There are various metrics that would assist individuals and businesses to improve practice on the ground, including a repository of businesses and NGOs that are engaged in circular initiatives at a local level. This would enable greater collaboration and knowledge sharing. Better understanding of sectoral issues would also allow for targeted interventions where they are needed most.” – Royal Institution of Chartered Surveyors (RICS)

Some respondents shared additional suggestions on what to monitor, with a range of measures suggested such as end-of-life waste destinations, consumption, productivity, carbon intensity, emissions reporting, the number of refurbished buildings, companies working in the sector, or avoidance of waste created. A few respondents raised the issue of additional costs for monitoring; and one stressed the potential costs of achieving performance standards. Another said the approach would introduce consistent use of metrics across public sector organisations, and a few proposed measurement tools or systems to use.

Proposal 3. Undertake a programme of research on waste prevention, behaviour change, fiscal incentives and material-specific priorities.

Many respondents expressed their support for this proposal, with some suggesting specific areas for further research and investigation. These ideas were wide-ranging, and included research into: whether or not the frequency of waste collection affects recycling behaviours, effective economic levers to drive supply or demand, the drivers of consumption, waste prevention and reuse, residual waste charges, long-term initiatives, material-specific priorities, how to design waste out of refurbishment and retrofit properties.

Some respondents discussed further ideas for research or approaches to consider – for example, one urged the Scottish Government to establish a university-based research institute to explore the potential for new products and services to support a decentralised network of circular economies; another advocated for the inclusion of further research into Resource Exchange Mechanisms implementation.

“We are supportive of the Government’s proposal to undertake a programme of research with a behavioural dimension...the RSC believes that behavioural studies on recycling may lead to a better understanding of citizen choices around plastics and may support the reuse and reduction of plastics, and may help optimise collection for recycling.” – The Royal Society of Chemistry

Proposal 4. Develop public procurement opportunities to reduce the environmental impact of public spending.

This proposal generated the fewest comments from those who responded to Q13 – all expressed agreement with the approach. Respondents identified a range of positive potential impacts, including greater innovation, increased opportunities for local and regional suppliers, greater use of low carbon products, noting the scope to drive institutional and individual behavioural change, the role for the public sector to drive investment in reused or recycled materials.

In describing how procurement could be amplified as a tool for change, respondents noted scope to introduce a 'reuse first' principle, increase the evaluation criteria for sustainability and community benefits or the wider application of Environmental, Social and Governance Criteria. Some described stakeholders, resources and tools to engage with and promote; such as the Sustainable Procurement Toolkit, publishing the Construction Client Guide on Sustainability or using the Big Buyers for Climate and Environment model.

A few called on the Scottish Government to consider an ongoing review of public procurement practices to prioritise the principles of circularity, noting they would also encourage support for circular organisations to be better represented in bidding for and winning public tenders, for example through a circular accreditation scheme which was prioritised in procurement.

“We would welcome more collaborative working and knowledge sharing across public sector organisations that focus specifically on sustainable procurement. We welcome some of the tools which have come from the Sustainable Procurement Forum for instance the Now Till 2030 category templates. It may be useful to run training sessions for contract managers from across public organisations to take workshops together to develop these for their own organisations.” – Historic Environment Scotland

“Business should be given the opportunity to contribute to developments on procurement to ensure procurement requirements are attainable including commercial attainability without adding to public sector costs.” – Foodservice Packaging Association

Proposal 5. Support greater uptake of green skills, training, and development opportunities

This proposal generated the highest number of comments across responses to Question 13. Those who commented were generally supportive, agreeing that investing and supporting green skills, training and development will be crucial in achieving the delivery of a circular economy in Scotland. Some discussed skills and training underway or existing evidence about skills needs; descriptions of a specific type of skills gap this proposal could address (for example electrical repairs). A few emphasised the scale of investment this proposal will require.

Some suggested that an awareness raising campaign would be needed to alert the general public of new training and employment opportunities and promote circular economy career paths. There was wider discussion about the changing nature of the economy, comments on specific training and discussion of how to upskill different parts of the existing workforce.

2.7.2 Overview of responses to Q14

Q14 received 82 open text comments, where respondents shared additional suggestions on ways to support action across the circular economy. Most of these suggestions have been raised in previous sections of this report; for example, many focused on how the Scottish Government could drive change behaviours through education, public awareness campaigns, taxes, and investment and resources.

“The general public does not necessarily understand what a circular economy is, why we need one and how everyone can get involved. We suggest that a sustained general awareness raising campaign on these points should be included in the Route Map.” – Whale and Dolphin Conservation

A small number urged the Scottish Government to look more widely, and consider its part in the global circular economy; some shared examples of approaches already having a positive impact in Scotland. There were also multiple comments on existing work underway by the Scottish Government to enhance the circular nature of economic activity.

A few advocated for stronger leadership and a greater sense of urgency in the development and implementation of the strategy. A few reiterated calls from earlier responses to urge the Scottish Government to consider the costs of any changes introduced and to offer appropriate financial support for sectoral adjustment.

2.8 Beyond 2025

The final section of the consultation document outlined four key principles for future targets to lay the foundations of the transformational change required in the years ahead. These are:

1. Achieve net zero by 2045
2. Reduce the material footprint of our resources and waste
3. Maximise the value of our circular economy
4. Align with the EU

Q15. To what extent do you agree with the principles proposed to underpin future circular economy targets? Please provide evidence to support your answer if possible.

2.8.1 Overview of responses to Q15

Q15. To what extent do you agree with the principles proposed to underpin future circular economy targets?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	47	61	9	3	2	38
% breakdown among:							
All respondents (%)	160	29	38	6	2	1	24
All answering (%)	122	39	50	7	2	2	-
- Individuals	42	57	29	10	2	2	-
- Organisations	80	29	61	6	3	1	-
- Retail & packaging	15	33	53	13	0	0	-
- Third sector	15	27	73	0	0	0	-
- Local Authority	14	29	71	0	0	0	-

- Construction / Dev	7	57	43	0	0	0	-
- Waste management	9	11	67	0	11	11	-
- Public body	4	25	50	25	0	0	-
- Other	16	25	56	13	6	0	-

High levels of total agreement (89%) were recorded by those answering Q15; 39% agreed strongly and 50% agreed. Between one quarter and one third of most sectors strongly agreed with the proposed principles, with the highest strong agreement among construction and development organisations (57%) and the lowest among waste management organisations (11%). The only disagreement with the proposals came from two of the nine waste management organisations and Common Weal.

Q15 received 85 open text comments. Most respondents endorsed the principles, and there was detailed consideration of each element, which largely centred on the goal to achieve net zero by 2045. Second most common was discussion on reducing the material footprint of resources and waste, maximising the value of our circular economy, or aligning in with the EU. Finally, a small number of respondents proposed a fifth principle for the Scottish Government to consider.

“Aligning Circular Economy targets with the net zero targets for 2045, making use of monitoring data, and working with EU partners all appear to be positive and realistic approaches.” – East Dunbartonshire Council

Principle 1. Achieve net zero by 2045

Of all principles, the goal to achieve net zero by 2045 received the largest number of comments; almost all endorsed the ambition, evidenced by general positive responses or longer discussion of how this could be achieved, which began with statements such as ‘we welcome this’ and ‘agree’.

Some respondents highlighted the actions needed to achieve net zero. Within these comments, the dominant theme was on defining how net zero is measured; a group of respondents across the third sector submitted a similar response which called for future targets to align with net zero consumption emissions, rather than territorial emissions, arguing that ‘territorial emissions don’t take account of emissions from the goods we import from other countries’. One respondent urged the Scottish Government to shift the net zero target from direct emissions to resource demand; another said residues from waste to energy facilities should be considered, to align with approaches in other countries.

The second most common theme among comments about Principle 1 was an endorsement of the suggestion that Scotland could go beyond the weight reduction criteria to a more comprehensive measure of the carbon impact of waste. There was no clear pattern in these views which were expressed by some individuals and a range of organisations. One respondent argued that the current system incentivises collection of heavy materials for recycling and has little wider impact across the supply chain. Suggestions from respondents included using multiple or ‘smarter’ metrics such as the carbon performance of recycling programmes, of recycling as a component in manufacturing processes, or within high value waste streams.

A few respondents urged the Scottish Government to undertake scenario planning and consider the steps required to achieve net zero. These comments often stressed that short term goals must be met and asked the Scottish Government to model the potential impact on progress if the milestones which will support the journey to net zero are missed.

“We believe that the Climate Crisis is urgent and therefore this type of work and target is essential in making good decisions which are future proofed, support investment in the right activity and reduce activity in damaging areas. It should be supported with scenario planning to consider what impacts short term alternative measures may cost if we miss other targets.” – The Association for Renewable Energy and Clean Technology

Two respondents suggested that the Scottish Government should consider the role of science in tackling the climate emergency; one said that targets should be based on a comprehensive scientific assessment. The other argued that Scotland cannot assume future scientific or technological breakthroughs will be sufficient to address carbon emissions and that changes to how waste is managed are needed now. They added that the science sector needs support and investment to make discoveries, and that investment in education is required to develop future generations of scientists and innovators.

Other comments included: calls for more action or greater urgency, such as having higher targets, or details of how to create the changes in social attitudes and behaviours required to meet net zero goals; and for joined up policy, including the use of incentives and investment to drive change.

Principle 2. Reduce the material footprint of our resources and waste

The principle of reducing the material footprint of our resources and waste is described in the consultation paper as essential to tackling both the climate and nature crises. Most comments on this principle expressed agreement.

Second most common were examples of how this could be done; respondents explained processes within their own organisation or approaches they were aware of. For example, the Salvation Army described their work to trial a new fibre-sorting technology to sort and treat post-consumer textile waste; GS1 explained how their standards and data capture processes could help set and measure targets.

“Agree that future targets should help ensure that resources are reused. A great example of this is in procurement and ensuring that items contain a minimum amount of recycled material therefore reducing virgin material use, such like waste and recycling bins containing a percentage of granulated plastic from end of life bins” – Aberdeenshire Council

A small number of respondents highlighted issues to consider including where policy objectives contradict or overlap. One gave the example of economic targets based on Gross Value Added which might encourage biogas production from food waste, to the detriment of redistribution. Another suggested the principle of reducing the material footprint was too vague; while a third respondent called for a clearly articulated vision; one

urged the Scottish Government to produce a strategy for the construction and built environment sector.

Principle 3. Maximise the value of our circular economy

On the circular economy, the consultation paper highlights ‘that future targets should seek to maximise the value of our waste, energy and resources, building a thriving, sustainable economy with opportunities across Scotland’.

A prevalent theme in comments on the circular economy was for the definition of ‘value’ to encompass wider social benefits, not just economic impacts. For example, one respondent argued that value should be measured in well-being terms, another stressed a circular economy model must consider social impact before profit; one explained that value would encompass a range measurement of including social inclusion, justice, community wealth building, participation, democratisation, education, and life opportunities.

“Principle 3: Maximise the value of our circular economy – if value is taken in the wider sense, to include the true social value (rather than market value) then we agree with this principle.” – Scotland's International Development Alliance

Second most common was discussion of how the Scottish Government could support this transition, with reference to the need for networks, incentives, investment and funding to drive change. Other less commonly mentioned issues included the need for monitoring, targets and indicators to measure progress through transition. Two welcomed the model as a means to generate employment, one stressed that the national objective should be underpinned by regional and local approaches; another said this would require cross-sectoral activity and that the goal should be to achieve a sustainable model.

Principle 4. Align with the EU

The consultation paper notes that Scotland will ‘continue to meet the high European standards on the environment. We have welcomed the ambition demonstrated in the EU’s circular economy action plan and the revision of the Ecodesign Directive with the Sustainable Products Initiative’. Most comments on alignment with the EU endorsed this approach.

“Unlike the UK government which wants a complete divorce from Europe, Scotland should align with and both learn and contribute by example with our nearest neighbours, especially the EU and aim for net-zero principles in all things.” – Individual

However views on alignment with the EU varied; a small number of respondents (one individual, one waste management company and one energy company) stressed that Scotland should aim to lead, and not ‘follow’ or ‘align’; one local authority suggested that these targets might not be realistic for Scotland; an individual argued that Scotland should monitor progress and only continue to align with the EU if it meets its stated targets.

One individual proposed that Scotland should also align with the EU on other relevant issues such as environmental protection; another organisation asked for more detail

including whether the Scottish Government intends to adopt the EU's definition of plastic under Single Use Plastics Directive (SUPD) guidance.

In reference to the broader context, alignment with the UK was often mentioned; two organisations (one local authority, one organisation in the retail and packaging sector) stressed the need for businesses to be able to operate freely across the UK, without the administrative burden of differences between devolved nations. The Royal Society of Chemistry urged the Scottish Government to aim to harmonise legislation globally and achieve a global circular economy, and another local authority encouraged the Scottish Government to consider the UN Sustainability Development Goals, describing these as 'essential outcomes of the circular economy especially SDGs 7, 8, 9, 10, 11, 12, and 15.' One waste management organisation said the Scottish Government should prepare for clashes between the UK government and devolved administrations, and strive to provide clarity.

Other Comments

A fifth principle, to 'achieve nature positive by 2030' was put forward by several respondents, who noted their agreement with the submission by Scottish Environment LINK.

“We suggest a 5th Principle: Achieve nature positive by 2030. Some damaging aspects of our linear economy, especially the leakage of harmful materials, impact biodiversity and would not necessarily be covered by the other principles’.” – Scottish Environment LINK

A small number highlighted the complex challenge of meeting the Scottish Government's ambitions and the sectoral transformation required to achieve this. They urged the Scottish Government to provide more strategic direction and detail; within this small number of responses opinions varied; some felt the vision was too ambitious, others felt that more urgency was required. For example, one respondent suggested that the Scottish Government undertake a review of all current legislation, policy, quality measures and targets. Timescales were also raised; a small number suggested that the Scottish Government had delayed action.

3. Impact Assessments

This chapter provides an analysis of the five impact assessment questions. While the publication of the Route Map will not result in any direct impacts, the Scottish Government wishes to assess how a specific intervention may have an impact if introduced. The impact assessment questions cover equality, socio-economic considerations, island communities, business and regulation, and the environment.

For further information, review the initial impact assessments that were published by the Scottish Government alongside [this consultation](#).

3.1 Impact Assessments

Q16. Please provide any further information or evidence that should be considered in the accompanying Equalities Impact Assessment

Of the 19 respondents who provided an answer to Q16, the most common theme was that no other information of evidence should be considered in the accompanying Equalities Impact Assessment.

The second most common theme considered regulations and secondary legislation on recycling and waste management and the effects they may have on certain groups of disabled people or the elderly who suffer from dementia. These respondents noted that not all people may be able to separate waste or recycle without assistance and consideration of this should be acknowledge in any regulations. CIWM Scotland noted concerns about increased costs associated with the proposals, specifically the reuse proposal, and Dundee City Council suggested that specific proposals related to charging individuals should be assessed independently to determine their impact on equalities.

A few respondents highlighted the impact of some of the proposals on rural communities in general, although do not speak more specifically to the effects on those with protected characteristics in those communities.

Q17. Please provide any further information or evidence that should be considered in the accompanying Fairer Scotland Assessment

There were 22 responses to Q17. Of those, the most common theme was a concern about the socio-economic impacts on low-income households.

“All measures must be 'affordable' to those on the lowest incomes. Some solutions may only be affordable to the wealthier such as reuse. It is important to avoid a two-stream programme which means only the wealthier can participate in achieving objectives.” – Foodservice Packaging Association

Two respondents mentioned the economic impact some proposals would have in rural communities, while two others suggested the same about densely populated urban centres. For example, the City of Edinburgh Council suggested adapting or shifting costs so those who do not benefit from certain proposals are not faced with the burden of paying

for them, such as garden waste collection paid for by residents without access to a garden. Two respondents noted that increasing infrastructure investment, such as transport and community resources, could help to mitigate any financial burden caused by the proposals.

A few respondents noted that no further information or evidence should be considered, and two others recommended further assessments be done at the implementation of some of the proposals or for any secondary legislation put forward.

One respondent each highlighted the following areas for further consideration:

- Recommendations for regulations on fair rent based on earned wages relating to the housing and construction proposals.
- Regarding food surplus redistribution, particularly effective ways to direct it in-person food preparation and consumption activities or care settings, such as after school clubs, shared meals, rather than just to individual households.
- Finally, one individual noted support for the proposals as they will provide a need for high-skilled labour and reduce demand on imported commodities that hurt natural resources.

Q18. Please provide any further information or evidence that should be considered in the accompanying Island Communities Impact Assessment.

There were 14 responses provided to Q18. Support for no further information or evidence was the theme with the most responses and two respondents noted that the proposals would affect island communities but did not provide further information on how.

Two respondents, FareShare Scotland and Shetland Islands Council, noted that transport links and infrastructure necessary to implement aspects of the proposal - especially around food waste management and deposit return schemes - needed to be considered carefully as the proposals did not seem to currently account for hard-to-reach areas. Two individuals highlighted the need for further assistance with consumption goals, with one also suggesting a 'responsible emissions solution to island communities for recycling and reuse' although they did not give details as to what that would look like.

Q19. Please provide any further information or evidence that should be considered in the accompanying Business and Regulatory Impact Assessment.

The most common theme to emerge from the 21 responses to Q19 was for further considerations about the financial impact of the proposals on businesses. Respondents mentioned increased administrative costs for local authorities, particularly regarding waste management and in relation to forthcoming DRS (Deposit Return Scheme) and EPR (extended producer responsibility) regulations. CIWM Scotland asked for further assessments into these reforms as well as a capacity assessment 'within Scotland to allow for circularity of materials'. NSS mentioned that the proposals may increase the financial burden on NHS boards, and the Scottish Wholesale Association recommended engagement with the food and drink wholesalers on the proposals as costs and burdens were likely to increase with the proposals set out in the route map.

‘We are supportive of these extra measures as long as they are applied consistently across the industry to ensure that those driving forward circular solutions are not disadvantaged with additional cost or process burdens.’ – Balfour Beatty

A few respondents highlighted concerns about legislation. Rio ESG Ltd. recommended aligning Scottish legislation with EU and UK regulations wherever possible, although they did not specifically say why. Supply Chain Sustainability School noted that legislation should not inhibit economic growth, and similarly an individual respondent recommended more assistance for business that may suffer and struggle under the new regulations. Another individual thought that legislation should be stronger with businesses recognising ‘the need for business to take responsibility for its actions, including those that do not enhance profits or externalise costs’. As with the other impact assessments, a small number noted that no further information or evidence should be considered.

3.2 Strategic Environmental Assessment (SEA)

Q20. Please provide any further information or evidence that should be considered with regards to the environmental impact of proposals outlined in the Route Map.

Across the 25 responses which provided an answer to Q20, the most common theme was suggestions for further information or evidence regarding waste management. Many of these respondents provided positive assessments of the consultation, and provided specific caveats related to waste. Two respondents supported the steps to improve the volumes and quality of material for recycling, and one of these suggested further regulations on the greatest waste producers.

“Throughout the documents there are laudable references to ensuring the more deprived sectors of our society are considered and provided with extra help. In addition to this, it is important, given the urgency of the issues being addressed, to give extra consideration to targeting those sectors of society which generate the most waste and use the most resources and energy per capita as these areas offer the greatest potential to make rapid progress.” – Lochaber Environmental Group

Aberdeenshire Council raised a concern that the Waste Framework Directive did not dictate that these collections should be kerbside, and Dundee City Council noted that there should be special consideration for dense urban centres.

“It is anticipated that all of the proposals and packages would have a positive effect on the environment through improving recycling by householders & businesses, minimising the impacts of disposal, embedding circular practises and promoting responsible consumption. Consideration should be given to high density urban areas where deprivation, poor quality housing stock, multi occupancy households and a lack of infrastructure impact the ability to provide quality recycling facilities and where participation is historically low.” – Dundee City Council

A small number of respondents suggested further consideration be given to supply chain issues. Again, these respondents were largely supportive of the packages presented, and expressed interest in further examination of certain practices. These included recommendations to consider the emissions associated with bulk transportation.

“The Route Map should consider additional environmental factors, such as transport emissions. For example, our sector deals with heavy and bulky materials, with significant implications for transport and processing. Any measures to encourage reuse and recycling should avoid inadvertently increasing energy use or increased transport emissions.” – MPA Scotland

Concerns about supply chain resilience in the face of economic and climate shocks were expressed by two respondents.

A small number of respondents reaffirmed the need for strategic environmental assessments (SEA) as early as possible. Historic Environment Scotland suggested that they should be carried out considering the impact proposals in the Route Map may have on historic buildings, specifically around construction and demolition. NatureScot recommends that partners assist with the SEA process, arguing that the SEA will help discover any unintended consequences that may lead to adverse impacts.

Other less mentioned themes include:

- Concerns about the investment and resources set aside to fund the proposals in the consultation
- A request that the proposals rank and present interventions in order of priority
- An acknowledgement that impacts of Brexit, Covid and the cost-of-living crisis have already created instability and make the outcomes of the proposal harder to predict.

4. Conclusions

Many individuals and stakeholders with detailed knowledge took part in the consultation, sharing their views on measures proposed by the Scottish Government to reduce emissions, contribute to meeting waste and recycling targets, and deliver a circular economy. This report provides a summary of the consultation responses; for more detail, readers are encouraged to review individual responses where permission was given for publication¹¹.

Analysis of the closed quantitative questions indicates a high level of overall support for the proposals in the Route Map. The table below shows that 6 out of the 7 Packages were supported by at least 79% of respondents; support for Package 7: Cross-cutting measures was as high as 93%.

Package	% who agree or strongly agree
Package 1: Promote responsible consumption, production and re-use	85%
Package 2: Reduce food waste	85%
Package 3: Improve recycling from households	82%
Package 4: Improve recycling from commercial businesses	69%
Package 5: Embed circular construction practices	79%
Package 6: Minimise the impact of disposal	87%
Package 7: Cross-cutting measures	93%

Open text comments gave respondents the opportunity to provide more nuanced feedback on the Route Map. There were many supportive comments; the proposals were often described as comprehensive, ambitious, sensible and well-intentioned. Many agreed that, if delivered successfully, the measures set out in the Route Map will contribute to the delivery of a circular economy. However, some concerns were raised about the additional burden that some new measures may place on public bodies (particularly local authorities), as well as possible unintended consequences of some measures. Some proposals were described as complex and difficult to implement, particularly the introduction of new statutory targets, and respondents called for more detail on how targets would be set and measured, and the consequences of failing to meet them.

The Scottish Government will use the consultation feedback and analysis presented in this report to refine proposals, with a view to publishing the final Route Map later this year.

¹¹ Responses are published on the Scottish Government's consultation website: <https://consult.gov.scot/>

Appendix A: Consultation Questions

Q1. To what extent do you agree with the measures proposed in this package to promote responsible consumption production and re-use? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q2. Are there any further measures that you would like to see included in the Route Map to promote responsible consumption, production and re-use?

Q3. To what extent do you agree with the measures proposed in this package to reduce food waste? Please provide evidence to support any identified opportunities and challenges associated with the measures in your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q4. Are there any further measures that you would like to see included in the Route Map to reduce food waste?

Q5. To what extent do you agree with the measures proposed in this package to improve recycling from households? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q6. Are there any further measures that you would like to see included in the Route Map to improve recycling from households and incentivise positive behaviours?

Q7. To what extent do you agree with the measures proposed in this package to improve recycling from commercial businesses? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q8. Are there any further measures that you would like to see included in the Route Map to improve waste recycling from commercial businesses?

Q9. To what extent do you agree with the measures proposed in this package to embed circular construction practices? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q10. Are there any further measures that you would like to see included in the Route Map to embed circular construction practices?

Q11. To what extent do you agree with the measures proposed in this package to minimise the impact of the disposal of residual waste? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q12. Are there any further measures that you would like to see included in the Route Map to minimise the impact of disposal?

Q13. To what extent do you agree with the measures proposed in this package to support action across the circular economy? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q14. Are there any further measures that you would like to see included in the Route Map to support action across the circular economy?

Q15. To what extent do you agree with the principles proposed to underpin future circular economy targets? Please provide evidence to support your answer if possible.

[Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Not answered]

Q16. Please provide any further information or evidence that should be considered in the accompanying Equalities Impact Assessment

Q17. Please provide any further information or evidence that should be considered in the accompanying Fairer Scotland Assessment

Q18. Please provide any further information or evidence that should be considered in the accompanying Island Communities Impact Assessment.

Q19. Please provide any further information or evidence that should be considered in the accompanying Business and Regulatory Impact Assessment.

Q20. Please provide any further information or evidence that should be considered with regards to the environmental impact of proposals outlined in the Route Map.

Appendix B: Sectoral Classification

Given the range of sectors represented by respondents, analysts created a broad level of classification for analysis purposes. Respondents were assigned to one of the categories below based on the nature of their organisation.

Respondent profile

In total, 160 consultation responses were received. Most were submitted via the online consultation platform, Citizen Space. Those received in an alternative format, for example an email or PDF document, were reviewed separately by the research team.

Individuals provided 48 responses to the consultation; the remaining 112 were from organisations. To aid analysis, each organisation was assigned a sector or type. The largest share of organisational responses came from retail and packaging organisations, the third sector, and the construction and development sector.

Table 1: Sectoral classification

Sector	n=	%
Retail & packaging	23	14%
Third sector	19	12%
Local Authority	17	11%
Construction & development	12	8%
Waste management	10	6%
Other - Membership / representative body not aligned with the sectors above	9	6%
Public body	7	4%
Other – Manufacturing	5	3%
Other – Energy	3	2%
Other – Consulting	2	1%
Other - Technology	2	1%
Other	3	2%
Individuals	48	30%

A note on the sectoral classification

Public bodies and local authorities were classified first. Organisations were then classified by their primary focus: retail and packaging, construction and development, and waste management. If an organisation did not fall into one of the three industries, they were classified by organisation type, i.e. third sector, membership body and other. If an organisation fell into two categories, such as waste management and a membership body, they were classified with their industry rather than their organisation type.

Not all organisations who responded to the consultation consented to their name being published. Those who consented in each category included:

Retail & packaging

Advisory Committee on Packaging
ApparelXchange CIC
Association of Convenience Stores
AVA: The Vending & Automated Retail Association
BBIA
British Glass
British Plastics Federation
Charity Retail Association
Food and Drink Federation
Foodservice Packaging Association
GS1UK
Industry Council for Packaging and the Environment
Scotland Food and Drink
Scottish Wholesale Association
The Alliance for Beverage Cartons and the Environment (ACE UK)
The Aluminium Packaging Recycling Organisation
The Cosmetic, Toiletry and Perfumery Association (CTPA)
The Packaging Federation

Third sector

CFINE and Granite City Good Food
Circular Communities Scotland
Electrical Safety First
FareShare Scotland
Fidra
Friends of the Earth Europe
Friends of the Earth Scotland
Keep Scotland Beautiful
Lochaber Environmental Group
Marine Conservation Society
Moray Firth Coastal Partnership
Newcastleton & District Community Community Trust
Nourish Scotland
Plastic Free Helensburgh
Scottish Environment LINK
The Salvation Army - Scotland Office
UK Without Incineration Network (UKWIN)
Wellbeing Economy Alliance Scotland
Whale and Dolphin Conservation

Construction & development

Balfour Beatty
Built Environment - Smarter Transformation
But Environment Forum Scotland (BEFS)
Construction Industry Training Board (CITB) Scotland
EALA Impacts CIC
Homes for Scotland
NFRC (National Federation of Roofing Contractors)
Royal Institution of Chartered Surveyors (RICS)
Royal Town Planning Institute (RTPI) Scotland

Supply Chain Sustainability School
The Chartered Institute of Building
The Royal Incorporation of Architects in Scotland (RIAS)

Local Authority

Aberdeen City Council
Aberdeenshire Council
Angus Council
COSLA, Convention of Scottish Local Authorities
Dundee City Council
East Dunbartonshire Council
Fife Council
Glasgow City Council
Moray Council
North Lanarkshire Council
Renfrewshire Council
Scottish Borders Council
Shetland Islands Council
The City of Edinburgh Council
West Lothian Council

Waste management

Albion Environmental Ltd
Brewster Brothers Ltd
CIWM Scotland
Hamilton Waste & Recycling Limited
Scottish Environmental Services Association
SRMA (Scotland) Ltd trading as Resource Management Association Scotland
(RMAS) SUEZ Recycling & Recovery UK limited
Viridor

Public body

British Standards Institution
Historic Environment Scotland
National Service Scotland
NatureScot
Scottish Enterprise
Scottish Water

Other - Membership / representative body not aligned with the sectors above

MPA Scotland
NFU Scotland
Railway Industry Association (RIA) Scotland
Royal Society of Chemistry
Royal Yachting Association Scotland
Scotland's International Development Alliance
Scottish Islands Federation
UK Urban AgriTech

Other

The Just Transition Partnership

Comply Direct Ltd

Connect 3 Consultants

The Association for Renewable Energy and Clean Technology

SP Energy Networks

SSE

BEAMA

Ecosurety

Nestlé UK and Ireland

DXC Technology

Rio ESG Ltd

Common Weal

Budweiser Brewing Group UK & Ireland

Appendix C: Quantitative Summary

The following tables outline the results for each of the eight closed questions in the consultation.

For each question the following tables show:

- The number of respondents from the total sample of 160 who selected each response, and the corresponding percentage.
- The number and percentage response among those who answered each question, broken down by:
 - Individual and organisation responses.
 - By sector¹².
- Please note that the row percentages may not add to 100% due to rounding.

Q1. To what extent do you agree with the measures proposed in this package to promote responsible consumption production and re-use?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	61	59	15	7	0	18
% breakdown among:							
All respondents (%)	160	38	37	9	4	0	11
All answering (%)	142	43	42	11	5	0	-
- Individuals	47	70	21	2	6	0	-
- Organisations	95	29	52	15	4	0	-
- Retail & packaging	20	10	55	30	5	0	-
- Third sector	16	63	25	13	0	0	-
- Local Authority	16	44	56	0	0	0	-
- Construction / Dev	8	13	88	0	0	0	-
- Waste management	8	25	50	13	13	0	-
- Public body	6	17	50	33	0	0	-
- Other	21	24	52	14	10	0	

¹² The 'Other' category comprises 15 organisations involved in consulting, energy, manufacturing, technology and miscellaneous sectors, and 9 membership / representative bodies not aligned with a relevant sector.

Q3. To what extent do you agree with the measures proposed in this package to reduce food waste?

Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	60	46	13	4	1	36
% breakdown among:							
All respondents (%)	160	38	29	8	3	1	23
All answering (%)	124	48	37	10	3	1	-
- Individuals	45	69	24	0	4	2	-
- Organisations	79	37	44	16	3	0	-
- Retail & packaging	16	50	25	25	0	0	-
- Third sector	15	27	53	13	7	0	-
- Local Authority	16	56	44	0	0	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	7	0	71	29	0	0	-
- Public body	4	50	50	0	0	0	-
- Other	16	25	44	25	6	0	-

Q5. To what extent do you agree with the measures proposed in this package to improve recycling from households?

Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	47	54	14	3	5	37
% breakdown among:							
All respondents (%)	160	29	34	9	2	3	23
All answering (%)	123	38	44	11	2	4	-
- Individuals	45	64	29	0	2	4	-
- Organisations	78	23	53	18	3	4	-
- Retail & packaging	16	19	69	13	0	0	-
- Third sector	14	50	36	7	0	7	-
- Local Authority	16	13	56	19	13	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	8	0	75	13	0	13	-
- Public body	3	33	33	33	0	0	-
- Other	16	19	44	31	0	6	-

Q7. To what extent do you agree with the measures proposed in this package to improve recycling from commercial businesses?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	37	51	27	4	8	33
% breakdown among:							
All respondents (%)	160	23	32	17	3	5	21
All answering (%)	127	29	40	21	3	6	-
- Individuals	41	56	34	2	0	7	-
- Organisations	86	16	43	30	5	6	-
- Retail & packaging	19	11	37	53	0	0	-
- Third sector	14	29	43	29	0	0	-
- Local Authority	16	19	56	19	6	0	-
- Construction / Dev	7	29	57	0	14	0	-
- Waste management	8	0	13	38	0	50	-
- Public body	4	50	25	0	25	0	-
- Other	18	6	50	33	6	6	-

Q9. To what extent do you agree with the measures proposed in this package to embed circular construction practices?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	44	51	22	1	2	40
% breakdown among:							
All respondents (%)	160	28	32	14	1	1	25
All answering (%)	120	37	43	18	1	2	-
- Individuals	44	68	23	7	0	2	-
- Organisations	76	18	54	25	1	1	-
- Retail & packaging	9	11	44	44	0	0	-
- Third sector	13	23	62	15	0	0	-
- Local Authority	15	20	60	20	0	0	-
- Construction / Dev	11	18	64	18	0	0	-
- Waste management	8	0	63	25	0	13	-
- Public body	6	33	50	17	0	0	-
- Other	14	21	36	36	7	0	-

Q11. To what extent do you agree with the measures proposed in this package to minimise the impact of the disposal of residual waste?

Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	37	57	11	2	1	52
% breakdown among:							
All respondents (%)	160	23	36	7	1	1	33
All answering (%)	108	34	53	10	2	1	-
- Individuals	38	55	34	5	3	3	-
- Organisations	70	23	63	13	1	0	-
- Retail & packaging	14	43	50	7	0	0	-
- Third sector	12	8	75	17	0	0	-
- Local Authority	14	14	79	7	0	0	-
- Construction / Dev	5	40	40	20	0	0	-
- Waste management	8	25	50	25	0	0	-
- Public body	2	50	50	0	0	0	-
- Other	15	13	67	13	7	0	-

Q13. To what extent do you agree with the measures proposed in this package to support action across the circular economy?

Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	50	70	7	2	0	31
% breakdown among:							
All respondents (%)	160	31	44	4	1	0	19
All answering (%)	129	39	54	5	2	0	-
- Individuals	43	56	40	5	0	0	-
- Organisations	86	30	62	6	2	0	-
- Retail & packaging	16	38	56	6	0	0	-
- Third sector	13	31	62	8	0	0	-
- Local Authority	16	25	75	0	0	0	-
- Construction / Dev	8	38	63	0	0	0	-
- Waste management	8	50	38	0	13	0	-
- Public body	7	43	43	14	0	0	-
- Other	18	11	72	11	6	0	-

Q15. To what extent do you agree with the principles proposed to underpin future circular economy targets?							
Base	n=	Strongly Agree	Agree	Neither	Disagree	Strongly disagree	No answer
<i>All respondents (n=)</i>	160	47	61	9	3	2	38
% breakdown among:							
All respondents (%)	160	29	38	6	2	1	24
All answering (%)	122	39	50	7	2	2	-
- Individuals	42	57	29	10	2	2	-
- Organisations	80	29	61	6	3	1	-
- Retail & packaging	15	33	53	13	0	0	-
- Third sector	15	27	73	0	0	0	-
- Local Authority	14	29	71	0	0	0	-
- Construction / Dev	7	57	43	0	0	0	-
- Waste management	9	11	67	0	11	11	-
- Public body	4	25	50	25	0	0	-
- Other	16	25	56	13	6	0	-

Appendix D: Breakdown of open text responses by sector

Number of open text responses received by question							
Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7
All respondents	110	122	77	94	85	100	84
- Individuals	26	42	19	36	20	39	11
- Organisations	84	80	58	58	65	61	73
- Retail & packaging	21	13	15	7	14	9	17
- Third sector	12	15	9	13	11	11	9
- Local Authority	13	12	13	13	15	14	14
- Construction / Dev	8	8	3	1	4	3	5
- Waste management	8	8	8	7	9	8	9
- Public body	5	5	2	4	2	4	4
- Other	17	19	8	13	10	12	15

Number of open text responses received by question							
Question	Q8	Q9	Q10	Q11	Q12	Q13	Q14
All respondents	82	64	85	50	58	85	82
- Individuals	25	13	33	8	17	12	24
- Organisations	57	51	52	42	41	73	58
- Retail & packaging	8	3	0	6	4	14	7
- Third sector	9	6	8	4	7	9	10
- Local Authority	12	10	10	14	11	14	9
- Construction / Dev	5	11	12	1	2	8	6
- Waste management	8	8	8	8	6	8	7
- Public body	4	5	6	1	1	5	7
- Other	11	8	8	8	10	15	12

Number of open text responses received by question						
Question	Q15	Q16	Q17	Q18	Q19	Q20
All respondents	85	19	22	14	21	25
- Individuals	19	6	6	5	4	6
- Organisations	66	13	16	9	17	19
- Retail & packaging	13	0	2	0	3	2
- Third sector	11	3	4	3	1	3
- Local Authority	11	6	7	3	4	6
- Construction / Dev	5	0	0	0	2	0
- Waste management	8	2	2	3	3	4
- Public body	4	1	1	0	1	3
- Other	14	1	0	0	3	1



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