# Delivering Scotland's Circular Economy: A Route Map to 2025 and beyond



## **Respondent Information Form**

Pleas	se Note this form must be completed	d and retu	urned with your response.				
	nd out how we handle your personal //www.gov.scot/privacy/	data, ple	ease see our privacy policy:				
Are y	Are you responding as an individual or an organisation?						
	Individual						
$\boxtimes$	Organisation						
Full r	name or organisation's name						
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The S	Scottish Government would like you	r	Information for organisations:				
permission to publish your consultation response. Please indicate your publishing preference:			The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.				
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			in, for example, the analysis report.				
addre requi	essing the issues you discuss. They n	nay wish	Scottish Government policy teams who may be to contact you again in the future, but we for Scottish Government to contact you again				
$\boxtimes$	Yes						
	No						

# Questionnaire

# Question 1

	nsumption, production and re-use? Please provide evidence to support your answer if possible.
	Strongly agree Agree Neither agree or disagree Disagree Strongly disagree
ci	We support the transition from our current reliance on the linear economy to better embracing the ircular economy's principles. In particular, we strongly support a shift in culture and approach that necourages reuse and repair.
tr	The construction and built environment sector must play a significant role in facilitating Scotland's cansition to the circular economy. As the Government has outlined in this consultation paper, cansitioning to the circular economy will require ramping up reuse and recycling initiatives.
ta m w po te re th T	We support, in principle, the Government's proposal to investigate the feasibility of a national reuse arget. However, industry professionals have noted several challenges with reusing and recycling naterials. These challenges include limitations in both consumer knowledge and industry experience with reused materials. Additionally, recycled and reused products often have a shorter lifespan, which oses financial burdens to end-users and is not necessarily better for the environment in the long term. Further, demolition professionals have highlighted challenges with finding a suitable market for eused products. One stakeholder explained that "we will not recover them if there is no place for nem to go," citing the relatively insignificant cost savings associated with using these materials. Targets should only be explored alongside extensive discussions with stakeholders to identify and initigate current barriers to the widespread adoption of reuse and recycling practices.
co	Ghaffar, S.H., Burman, M. and Braimah, N., 2020. Pathways to circular construction: An integrated management of construction and demolition waste for resource recovery, Journal of cleaner production, 244, 2020., p. 6 ibid.

### **Ouestion 2**

We believe that a greater focus on the circular economy and waste management plans that seek to reduce and repurpose materials throughout all phases of construction support not only sustainability and net-zero objectives but also the economic well-being of communities.

Some substantive progress has been made in diverting construction and demolition waste (CDW) from landfills with reuse and recycling initiatives. For example, the EU Waste Framework Directive – implemented in the UK through its own waste regulations – set a 2020 target for 70% recycling of non-hazardous CDW. This directive has facilitated a shift within the construction industry that is better focused on "strategies for more sustainable processing and re-use of materials".<sup>1</sup>

However, we believe that reuse and recycling initiatives must be used in parallel with a shift in culture and approach that aims to reduce the amount of waste created in the first place. As we argue in our recently published discussion paper<sup>2</sup>, supporting the reprioritisation of our tax systems and grant programming toward retrofit and renovation would support such a cultural shift as well as lowering carbon emissions, reducing CDW, and increasing the energy efficiency of buildings. Policy S17 in the 2021 published London plan sets requirements for the reuse and recycling of construction demolition waste. As part of its place-based approach to sustainability, we urge the Government – as part of this consultation process – to follow suit. The CIOB stands ready to facilitate a dialogue between industry and the Government on how this requirement could work in practice.

We recommend the reduction of future demand for new construction through design that supports adaptability, repair, and maintenance, in line with the indicators of the EU Framework for sustainable Buildings, Levels.<sup>3</sup> The most significant environmental impacts of constructing a building relate to its structure and facade. If the useful life of the building, and therefore also its structure, can be extended, there can be significant environmental benefits. Based on EU indicators, we would like to develop a proposal to score a building's adaptability to change of use and recommend that this be germane to the decision to grant planning permission. While an adaptability requirement may be overly onerous on smaller developments in peripheral locations, implementing an adaptability score is critical in central urban locations, where changes in demands for building types are frequent.

As per the European Commission's 'Level(s) indicator 2.3: Design for adaptability and renovation guide' a building's adaptability score can provide a semi-quantitative assessment of the extent to which the design of a building could facilitate future adaptation to changing occupier needs and market conditions. It can therefore provide a proxy for the capacity of a building to continue fulfilling its function and to extend the useful service life into the future. A spatial criterion could be used to implement adaptability scoring in the assessment of a planning application. New buildings in central urban locations, where demand for space changes – between office and residential, for example – could be required to achieve a certain adaptability score and this could be a factor in the decision as to whether to grant a development planning permission. This would be in keeping with national planning policies in Scotland, which prioritise dense, mixed-use development. In addition, an adaptability requirement would offset the need to repeatedly reproduce the most significant environment impacts of the construction process. By providing a score for adaptability, developers, local planning authorities and communities will be presented with clear options to take a longer view on the design aspects and decisions that may influence the building's service life.

<sup>1</sup>Ghaffar, S.H., Burman, M. and Braimah, N., 2020. <u>Pathways to circular construction: An integrated management of construction and demolition waste for resource recovery</u>, *Journal of cleaner production*, 244, 2020., pp. 1-2. <sup>2</sup> CIOB, 2022. <u>Levelling the playing field</u>, not Scotland's built environment. 11 August.

<sup>&</sup>lt;sup>3</sup> European Commission. Level(S): A Guide to Europe's New Reporting Framework For Sustainable Buildings.

Are there any further measures that you would like to see included in the Route Map to promote responsible consumption, production and re-use?
Question 3  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 or disagree					
Disagree					
☐ Strongly disagree					
CIOB is not best positioned to provide feedback on household food waste mitigation plans	•				
However, in principle, we support government actions that look to reduce food waste across Scotland.	SS				
Question 4  Are there any further measures that you would like to see included in the Route Map to redu food waste?	ce				
Question 5  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	ıg				
☐ Strongly agree					
□ Agree					
☐ Neither agree or disagree					
☐ Disagree					
☐ Strongly disagree					

CIOB is not best positioned to provide feedback on plans to improve household recycling rates.
However, we support, in principle, Government actions outlined in Package Three.
Question 6 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?
Question 7  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 or disagree
☐ Disagree
☐ Strongly disagree
CIOB is not best positioned to provide feedback on plans to improve commercial recycling rates.
However, in principle, we support Government actions outlined in Package Four. In particular, we support the co-design and co-production of initiatives and targets to ensure that industry stakeholders are able to feed into plans, highlight challenges to their widespread adoption and opportunities for industry and government to work together to achieve the targets as agreed.

Question 8
Are there any further measures that you would like to see included in the Route Map to improve waste recycling from commercial businesses?
waste recycling from commercial businesses:
Question 9
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.
☐ Agree
We support the Government's commitment to conserving and recycling assets. We believe that a
greater focus on the circular economy and waste management plans that seek to reduce and repurpose
materials throughout all phases of construction support not only sustainability and net-zero objectives but also the economic well-being of communities. We supported many of the principles and initiatives
outlined in the National Planning Framework 4, highlighted in our <u>consultation response</u> .
We strongly support the investigation of options to incentivise the refurbishment of buildings. Our
recent discussion paper, Levelling the Playing Field, not Scotland's Built Environment, considers
whether a demolition levy might effectively prioritise retrofit and refurbishment (further outlined in
our answer to Question 10).
Further, we strongly support the government's ambition to work with industry to accelerate the
adoption of best practice standards. CIOB has long championed sustainability within the built
environment sector; we have developed many resources to provide guidance to the built environment sector on how to cut carbon emissions by applying innovation and best practice to project design,
construction, maintenance, operation, retrofit, and waste management. We stand ready to work with
Government to support sustainability practices across the built environment sector.

### **Ouestion 10**

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

Yes. In order to support a culture change in the built environment toward the reuse of existing buildings, as outlined in our <u>recent discussion paper</u><sup>1</sup>, we urge the government to consider the implementation of a demolition levy.

The UK's current VAT structure is antithetical to achieving the transition to the circular economy outlined in this consultation paper. Under the current UK tax structure, 20% VAT is applied on most repair and maintenance. In contrast, most demolition and new build projects are not charged VAT at all, creating a perverse environment where the demolition and replacement, rather than the repair and restoration, of Scotland's built environment is financially incentivised. Further, this undergirds the industry's reliance on the linear model – take, make and throw away – and contributes significantly to construction and demolition waste.

Evidence suggests that a demolition levy could be an effective means of catalysing a shift in culture to embrace circular economy principles better: in the UK, the main drivers for construction waste reduction are realised through legislation and regulation. Market-based instruments, including taxes and levies, are "better than laws promoting environmental innovation." Regulatory measures have been proven effective in undergirding similar sectoral culture shifts in the UK. Landfill taxes and the application of an aggregate levy facilitated a 70% decline in the amount of CDW disposed to landfills in the UK. International studies have further demonstrated the efficacy of financial levers in driving change. Calvo et al. examined various policy models engaging levies and economic incentives in mitigating CDW waste in Spain. They concluded that levies were more effective at CDW mitigation than financial incentives, achieving the targeted 30% reduction in CDW two years sooner.

Professional bodies like CIOB and the construction industry more broadly stand ready to work alongside Government to decarbonise the sector and embrace ways of working that better adhere to the principles of the circular economy. However, the industry faces several challenges in so doing. To realise the sector-wide shift to embrace the circular economy, a long-term, collaborative strategy will be needed to address skills shortages, consumer preference and awareness, and the existing barriers to embracing circular economy principles. From an industry perspective, perpetual volatility in demand for construction has led firms, particularly SMEs, to curb capital and education investment because spending on research and development (R&D) brings high fixed costs that are difficult to cut in an economic downturn. Accordingly, the lack of available finance is a major stumbling block for SMEs investing in tools and skills that could help to improve waste management and mitigation and decarbonise work practices. Creating a Green Skills Fund to channel low-cost, long-term loans to SMEs specifically for investment in formal, sustainability focussed R&D would address this and lead to sector-wide improvements in sustainable practices. A similar fund exists in Holland, where the MKB+ (Innovation Fund for SMEs) gives construction firms access to finance to embed innovative new products, services, and processes in their business.

<sup>&</sup>lt;sup>1</sup> CIOB, 2022. Levelling the playing field, not Scotland's built environment. 11 August.

<sup>&</sup>lt;sup>2</sup> Ghaffar, S.H., Burman, M. and Braimah, N., 2020. <u>Pathways to circular construction</u>: <u>An integrated management of construction and demolition waste for resource recovery</u>, *Journal of cleaner production*, 244, 2020., p. 6

<sup>&</sup>lt;sup>3</sup> Calvo, N., Varela-Candamio, L. and Novo-Corti, I., 2014. <u>A dynamic model for construction and demolition (C&D) waste management in Spain: Driving policies based on economic incentives and tax penalties, Sustainability, 6(1). 2017., p. 417</u>

 <sup>&</sup>lt;sup>4</sup> Lesniewska, F., <u>Adding value to construction and demolition waste to achieve sustainable development</u>, 3 February 2022.
 <sup>5</sup> Calvo, N., Varela-Candamio, L. and Novo-Corti, I., 2014. <u>A dynamic model for construction and demolition (C&D) waste</u>

Calvo, N., Varela-Candamio, L. and Novo-Corti, I., 2014. A dynamic model for construction and demolition (C&D) waste management in Spain: Driving policies based on economic incentives and tax penalties, Sustainability, 6(1). 2017., p. 431

### **Ouestion 11**

of the disposal of residual waste? Please provide evidence to support your answer if possible.
☐ Strongly agree
⊠ Agree
☐ Neither agree or disagree
☐ Disagree
Strongly disagree
We strongly support the Government's ambition to minimise the impact of disposal. Aligned to the consultation paper, we have recently highlighted challenges with the creation and disposal of construction and demolition waste.
For instance, demolition itself can cause silica dust exposure, a "public and occupational health issue." Similarly, the incineration of CDW is "widespread" and poses acute risks to public health and the environment. <sup>2</sup>
<sup>1</sup> National Engineering Policy Centre. <u>Decarbonising construction: building a new net zero industry</u> , p. 18. <sup>2</sup> Pretlove, S. and Kade, S., <u>Post occupancy evaluation of social housing designed and built to Code for Sustainable Homes</u>

To what extent do you agree with the measures proposed in this package to minimise the impact

### **Question 12**

levels 3, 4 and 5, Energy and Buildings (110). 2016., p. 18.

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

We strongly support the development of a Residual Waste Plan to ensure the best environmental outcome for materials. To support the construction sector's ability to minimise and manage waste according to these best practices, we encourage the Government to consider implementing auditing systems conducted by qualified, external property professionals.

Pre- demolition assessments could establish an unbiased, qualified appraisal of a building's viability, presenting the environmental and economic case for its repair or replacement. These assessments would support a transition to prioritising retrofit and reducing instances of demolition while remaining practically minded and responsive to each construction project's individual needs and unique characteristics. The flexibility of the built environment should be prioritised so that buildings can reach their full life expectancy by being repurposed. As such, these pre-demolition assessments could further evaluate the adaptability of the new build structures being proposed. Considering and prioritising the future adaptability of today's new build structures will support common-sense-based decision-making whilst also helping to realise current and future reuse and recycling targets.

Waste audits conducted by external auditors ahead of demolition could further support the mitigation of CDW. Research has demonstrated that pre-demolition audits are an "effective tool for enhancing CDW management practices." In some cases, an internal version of these audits is already in use. However, the practice has not been widely adopted. Further, concerns have been raised regarding self-regulation. In light of these limitations, there is a need for mandatory auditing systems that do not rely on the industry self-policing but rather engage with specialised staff with the necessary training to provide objective assessments and oversee waste management practices.

Ruiz, L.A.L., Ramón, X.R. and Domingo, S.G., 2020. The circular economy in the construction and demolition waste sector—A review and an integrative model approach, *Journal of Cleaner Production*, 248. 2020., p.12.
 Ghaffar, S.H., Burman, M. and Braimah, N., 2020. Pathways to circular construction: An integrated management of construction and demolition waste for resource recovery, *Journal of cleaner production*, 244, 2020., pp. 4-5

# Question 13 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 Disagree Disagree Strongly disagree Strongly disagree We strongly support the Government's holistic approach to transition to the circular economy and its ambition to create a policy landscape where waste reduction and recycling are normal, easy, attractive, and routine. Further, we strongly support an evidence-based approach to policymaking that embraces ongoing performance monitoring in real-time. We agree that achieving our waste and recycling targets is a shared endeavour, requiring input and participation from government, households and businesses. The built environment sector

### **Question 14**

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

has a central role to play in achieving targets and creating the strategies to do so. We stand

ready to work with government as initiatives develop.

As the consultation paper has recognised, half of the waste produced in Scotland is generated from construction and demolition. In light of this significant contribution to Scotland's waste systems, we urge the Government to engage with the built environment sector in developing strategies and programmes designed to mitigate waste and encourage reuse and recycling.

As we have highlighted in other sections of this consultation response, we believe strongly that there are a variety of measures that Government could implement — from pre-demolition and waste audits to a demolition levy — that could catalyse an industry-wide shift toward embracing the circular economy as well as creating good, local jobs and decarbonising our built environment.

### **Question 15**

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.

$\boxtimes$	Strongly agree
	Agree
	Neither agree or disagree
	Disagree
	Strongly disagree

We support the principles outlined to underpin future circular economy targets. In particular, we support the development of a monitoring and indicator framework, as outlined in the Circular Economy Bill consultation.

The construction sector and wider built environment have a significant role to play in achieving these ambitions and tackling the climate crisis. Urgent sectoral transformation will require input and engagement from industry practitioners, policymakers, researchers, and professional bodies like CIOB. Addressing the sustainability of the built environment will require coordinated, long-term action. Various mechanisms will be needed to bring about the culture shift to drive a greener built environment. CIOB stands ready to help with implementing recommendations within this response.

A	-1	
Question		h
Oucsuon	_	v

Please provide	any further in	formation or	evidence	that s	should	be con	sidered	in	the
accompanying	Equalities Im-	pact Assessm	nent						

n/a
Question 17 Please provide any further information or evidence that should be considered in the accompanying Fairer Scotland Assessment Question 18
n/a

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

### **Question 19**

n/a	a
Plea	estion 20 ase provide any further information or evidence that should be considered with regards to the ironmental impact of proposals outlined in the Route Map.
n/a	a

Please provide any further information or evidence that should be considered in the

accompanying Business and Regulatory Impact Assessment.