Waste and Resource Use Category Group Meeting
Wednesday 14th June, online

Date: Wednesday 14th June 2023

Attendees: Mark Turner (Supply Chain Sustainability School), Naomi Pratt (School), Lucy Picken (School), Matt Nichols (Reconomy), Craig Thom (SSE), Stephen Gough (Severn Trent), Sirio D'Aleo (Berkeley Group), Ceri Williams (Redrow), Vanessa Rae (Knauf Insulation), Martin Bell (United Living), Zach Pears (Octavius Infrastructure), Will Maginn (NG Bailey), Wendy Storey (Suez), Amanda Porritt (Colas Rail), Martina Silickis (Balfour Beatty), Charles Eddington (Strabag), Gavin Allan (Robertson), Jane King (Morgan Sindall), Jonathan Ayton (Willmot Dixon), Steve Lane (Tilbury Douglas), Leila du Toit (Canary Wharf Group), Joana Mestre (SP Energy Networks), Will Keer (Biffa), Molly Dowling (Laing O'Rourke), Hannah-Mae Prodger (Cadent Gas), Vanessa Smith (Multiplex Global), Nick Ribbons (Zero Waste Scotland), Dave Farebrother (Bouygues), Gareth Rondel (Barratt), Jon Tucker (Telford Homes), Tobias Jones (Crest Nicholson), Ricardo Guimaraes (Biffa), Amanda Wright (BAM), Briony Bendle (Veolia), Jessica Cooper (SSE), Shaun McKenna (Peel Ports), Anastasios Skitzis (Lendlease)

Apologies: Eleanor Horton-Smith (National Grid), Anthony Lavers (Taylor Wimpey), Elizabeth Edgington (NG Bailey), Sophia Borgese (TfL), Lynne Good (School), Cathal Ward (Bouygues), Faye Hyslop (SGN), Andrew Boyd (Keepmoat)

Summary of Actions and Notes from the Waste and Resource Use Category Group Meeting

No	Notes	Actions	Owners
1	**Welcome and introductions** • Apologies noted and new group attendees welcomed from Suez, Morgan Sindall, SSE, Knauf Insulation, Cadent Gas, Strabag, United Living, Multiplex Construction Europe and Bouygues		
2	**Details of the work of our group** • Work of our group and intervention points was outlined – importance of sub-contractors and suppliers • There remains quite a heavy leaning to contractors, FM service providers, sub-contractors and suppliers and less of a lean to clients and designers. It would be helpful to get more clients and designers involved in this group / in these meetings • Focus of work towards circular economy, designing out waste and legislation and policy (UK wide) **Work programme and resource updates** Waste and Resource group page can be viewed here Subtopic webpage can be viewed here New resources on the school website – these can all be viewed here – filtering by Waste and resource efficiency in subtopic. One new resource recently added is the **Zero Waste Scotland Site Waste Reduction Protocol** • A systematic approach developed to help measure waste in a standardised way, sampling waste and extrapolating it to create meaningful targets by setting a benchmark • It has received good feedback since being published and launched in Feb 2023 – not too technical and therefore accessible for site teams etc	Encourage clients and designers you work with to join Please think about resources and case studies to submit, send to LP and MT If interested in the Tool please contact Nick Ribbons	All All All

• Includes noting what goes into a skip and is accompanied by an Excel calculator • Materials are broken down by material and source (e.g. offcuts, over procured, cost of materials etc). This enables the user to have conversations with teams / organisation who are responsible and understand what strategies and approaches can be put in place to reduce waste. **HE Simm: New Victoria Prevention Before Reduction** • This case study by HE Simm included weighing the various wastes generated from the MEP fit out of the first floor in the project they were delivering on behalf of Vinci at New Victoria, Manchester • They set the project up by sending their key suppliers a letter requesting how they could reduce waste, in particular packaging • From floor 1 to 5 of the development, they reduced nearly 50 percent of the waste baseline via by the layout and weighing exercise. Initiatives included having materials arriving in reusable crocodile boxes rather than individually wrapped **Discussion on case studies:** • Zap project – Morgan Sindall collaboration. This collaborative project focuses on reducing plastic packaging in construction. Examples include live case studies. • Suez offered to send a number of case studies for consideration	Any further case studies to be sent to MT and LP	WS / JK
MEP map • Viewing nearby and online UK wide platforms where the user can donate, buy or collect materials • Recently updated to include improved colour scheme for accessibility and updated MEPs (removed those no longer operating and added new MEPs such as scrap stores, Sustainability Yard, Remake Scotland) **Discussion on MEP** • **Question: Is there an element addressing the timescale within which the materials need to be collected by e.g. from an active construction site?** Arrangements would need to be made with the MEP on the site. • Collecteco In Bristol – really good experience with collecting a high volume of carpet tiles reported by BAM. Potential for case study once more information is available	Please let us know thoughts on the MEP map and submit new MEPs you encounter through this form Keep in touch as project develops and provide case study content if possible	All AW (BAM)
Learning Pathways We have two waste Learning Pathways. Members and partners of the school can create bespoke learning pathways using these as base content and, if they wish, adding content of their own to complement that provided via the School. There is a gap between assignments and completions – can we PLEASE improve uptake and completion?	Partners to review existing Waste and Resource Efficiency Learning Pathways and offer recommendations	All

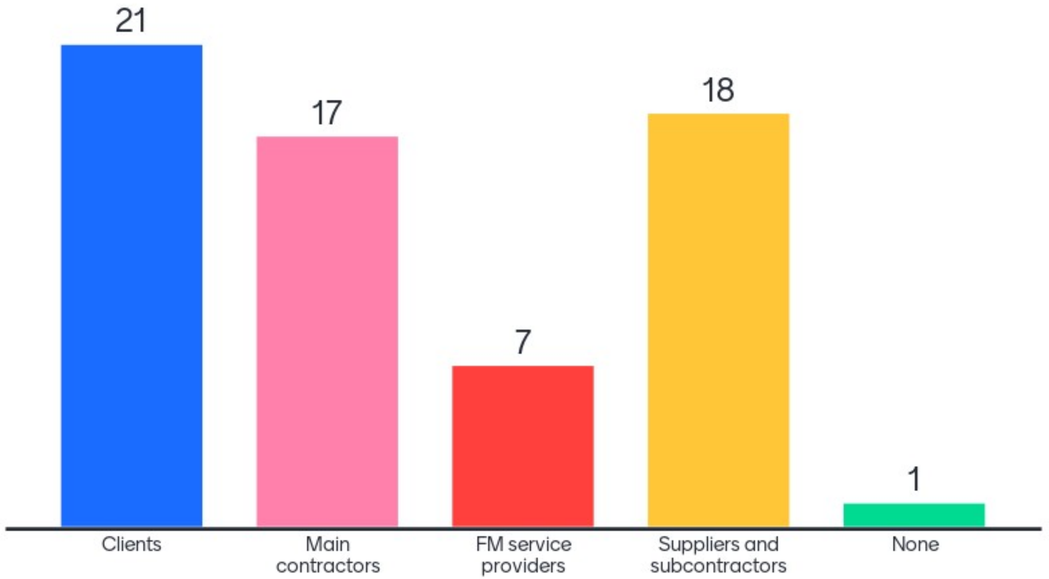
	Construction lifecycle waste • The web feature can be found here - please use and suggest additional resources for consideration.	for streamlining or improvement to increase uptake Partners to suggest any new content that could be useful	
3	**Training programme** • We will be running a designing out waste workshop with Zero Waste Scotland on 28th June and measuring and managing environmental impacts webinar on the 29th June. • We are also developing a Packaging Optimisation Showcase to be held on 8 August – watch this space.	Please register if interesting in attending training Participating project partners (see 5. below) and suppliers interviewed will be contacted by MT	All
5	**Homes packaging project overview** • Phase 1 was completed two years ago and focused on identifying and quantifying the types of packaging waste commonly generated by housebuilding supply as a basis for future action. We are now well into Phase 2 which looks at initiatives to optimise and reduce packaging • We have had an excellent response from suppliers and have completed 21 interviews. All have to various extents come forward with examples of how they have been reducing volume of packing and/or making it more recyclable and reusable. Common challenges and barriers have also been reported • Having written up outcomes of the 21 interviews we are now putting together a report to identify common themes, opportunities and further collaboration that will deliver better outcomes • Our Packaging Innovation Showcase will form the launch of the report and involve suppliers who have demonstrated impactful initiatives • The focus for this has been on the housebuilding sector, but there is much replicability and opportunity for action in other sectors of the built environment.		
6	**Waste monitoring and reporting project** • The ability to accurately baseline, monitor and measure the amount of waste being generated has improved but requires improvement across the whole built environment • Partners are being asked if they would like to see the School develop project activity focused on this area. • The group had a discussion on preferred outcomes for this project, aided by a number of mentimeter polls, results below.	Please email back any additional thoughts Email MT and LP if you would like to be involved in the subgroup to communicate and	All

	Group discussion – key points (See Menti results for voting and comments)
	Item 1: Agreeing a common waste reporting framework with a range of more consistent KPIs
	N.B. Strong general support and interest in this item.
	• Overall the group agreed that it would be useful to attempt to develop some kind of framework
	• This could encourage consistency of monitoring and reporting along with helping to address weaknesses in use of appropriate metrics and KPIs, whilst allowing for the many variables this in project and build type
	• Who should be involved? Group keen to make sure there are requirements for clients and designers in addition to contractors, as a lot of waste is built-in during design phase. It would also be useful for there to be a better/more formal process for contractors to feed back issues in design which cause waste to clients / designers
	  ○ Proposal that this process could be done up front, whereby client sets a waste target, and contractor sends back considerations that need to be taken into account if target is to be achieved or beaten
	  ○ (could there be a target for waste avoided – i.e designed out potential waste? Is this practical?).
	• The lack of benchmarking was raised and there was interest in one focus of this framework being to collate / create benchmarks of different building types and designs for average and best practice waste generation
	  ○ Following on from this, a reliable way of estimating waste based on design would be useful
	• The need to involve waste brokers was raised as there were concerns around gaps and inaccuracies in reporting. There is also inconsistency with some brokers for instance not being able to report in tonnes vs m3.
	  ○ Issues with misreporting from waste brokers could be addressed by encouraging PAS 402 adoption / audit trails
	• Any framework would need to be tested with different types and sizes of companies in the sector and have basic to best practice KPIs
	  ○ smaller companies might not have resource to monitor or have capabilities for extensive tools and should not be put at a disadvantage because of this
	Item 2: Producing and signing up to a commitment or charter on waste reduction
	N.B. Some fairly strong "in principle" interest in this idea. Will be discussed further
	• Would Partners be interested in helping to generate something similar to the Plant or People Matter charters the School has produced?
		share views on this work
		
		Please also forward to MT and LP any comments or views on any of the points made within these meeting notes concerning the group discussion. These are all substantial issues and may require applications for additional budget over time via the School board. Any decision to take work forward must be as well informed as possible.	

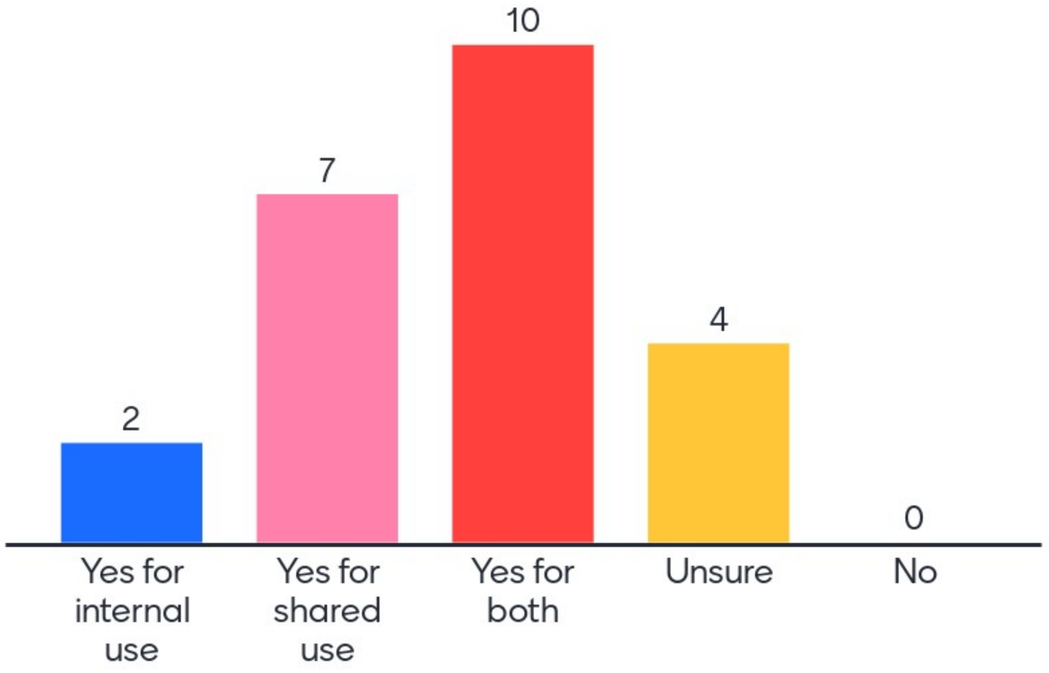
	• Question around what the overall waste ambition of the group – is it zero avoidable waste to landfill or something else? • Most companies will already have their own commitments but a charter with timescales for improvements could help frame the workstream and enable incorporation of elements such as Circularity. **Item 3: Development of a digital platform or tool to enable improved reporting** **N.B. Initial response to this item was cooler than for the other two – will need further debate** • A general concern with the tool proposal was that there are a number of tools already in existence including SmartWaste which contractors are reporting in to. Contractors also already report on waste through waste transfer notes. ○ A research exercise would need to take place first to assess what was out there. • Supply chain might struggle to get data at large enough quantities • It was felt that a calculator could be useful if applied to collecting sample data to inform benchmarks in the framework, but not as a universal tool • **Question: Would users upload a final figure, or upload monthly or quarterly?** This is about frequency and can be done by automated interfaces rather than manually entering **Appendix – Menti Poll results**		
7	**AOB** • Naomi leaving the School, Lucy taking over as point of contact • Next meeting date 2nd October 2023 10-12am	Circulate invites	LP

Appendix – mentimeter results

Should the School be seeking adoption of a common waste reporting framework for any / all of the following?



As part of the framework (or as a separate exercise) should the school produce a menu of metrics and KPIs?



What metrics or KPIs do you think it should contain?

25 Answers

% of waste fatesTargeted % waste fates

Main ones Divertion from landfill, reused (on and off site) , reclyced and recovered, waste intensity

Tonnes of waste generated per £100K of construction value

top waste streams. m3/m2tonnes/m2breakdown of waste streams (timber etc)

Landfill/recovered/recycled/RDF/

Waste avoided

Looking at BREEAM and other benchmarking frameworks. Discussion within the different sectors is needed to understand what people ask for

All final waste destinations i.e. reuse/recycling/recovery/landfill

Area based to produce an intensity metric

What metrics or KPIs do you think it should contain?

25 Answers

Tonness of waste send to landfill per £100K of construction value	Before any KPI's are established a succinct forecasting method should be established	Waste recycling rate - closed loop and open loop separately
Main: Divertion from landfill, waste intensity, reuse (on and off site), recycled, recovey	Volume , carbon footprint, waste hierarchy kpis (reuse , recycle, recover and dispose)	Percentage reduction of disposal to landfill and EfW
<1% disposal	Mass of waste normalised by a monetary metric	Separate out phases (demolition groundworks construction finishing, and by waste type

What metrics or KPIs do you think it should contain?

25 Answers

Construction waste /100sqm legally completed area. Targets for trades or waste streams, depending on the type of project. Accuracy & quality of data.

% of 'Waste' reused

Divertion from landfill

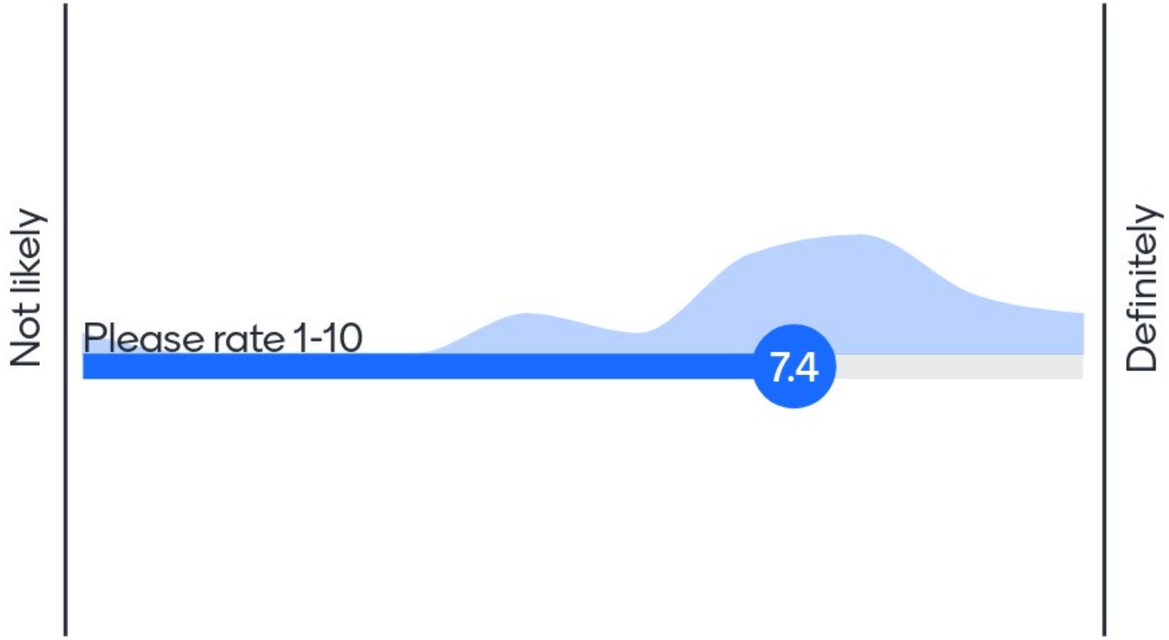
ratio between materials procured and waste generated for key materials, e.g. concrete, timber, bricks, metal or plasterboard

% of waste landfilled/recycled/ reused/ sent for EFW per £100K of construction value.

Intensity metrics

diversion from landfill

How likely would you be to buy into some form of common commitment or charter on circularity and waste reduction?



If so, what should it contain? How ambitious should it be?

18 Answers

Have a degree of stretch but not too vigours at first. Then main objective should be to benchmark the different types of projects.

Commitment to Sharing of data on waste

Pas 402 promotion

Unsure

As a householder, would want charter to reflect across all forms of construction and refurbishment in an appropriate way

commitment to design out waste

commitment to waste reduction, including a specific target in a given timeframe; commitment to engage supply chain / clients share number of initiatives / partnerships to DoW

The challenge we have is the uk waste data is poor so we have no really bench marks.

Commitment to divert from landfill

If so, what should it contain? How ambitious should it be?

18 Answers

Commitment to report waste data on an agreed basis

Unsure

Design out waste

Commitment on sharing auditable waste data

Commitment to upskilling workforce on waste reduction/designing out waste etc

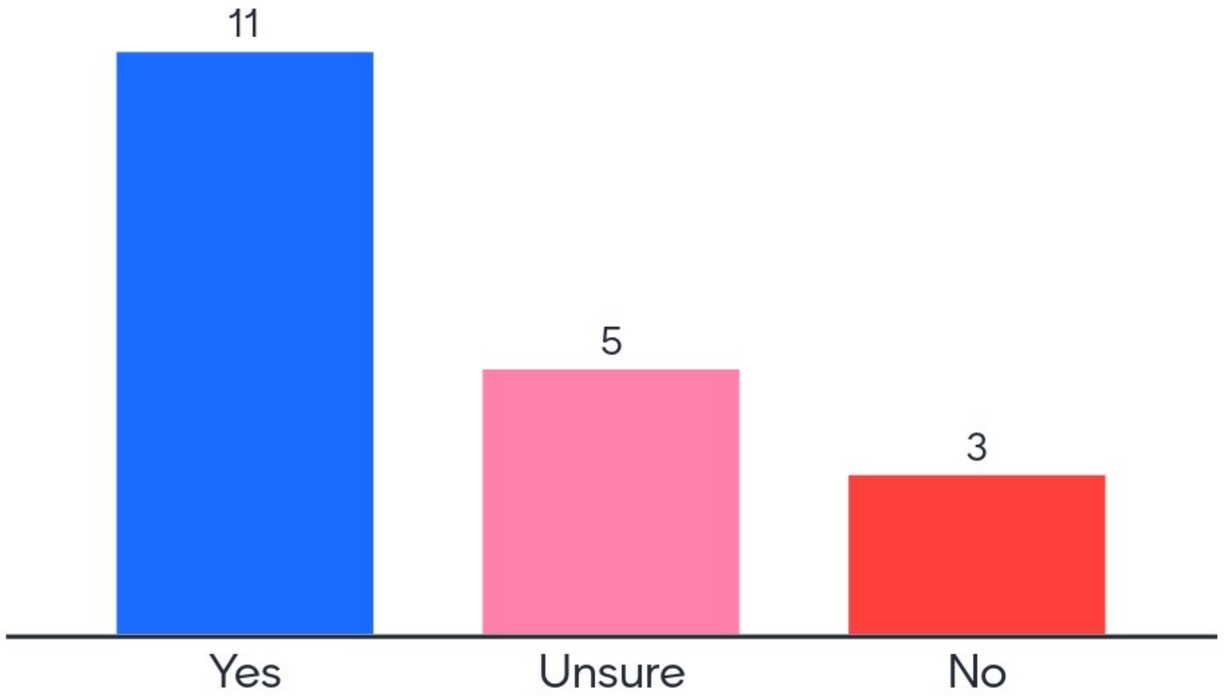
commitment to reuse of waste

Need to ensure it doesn't put off supply chain by asking too much but still enough to signal a commitment

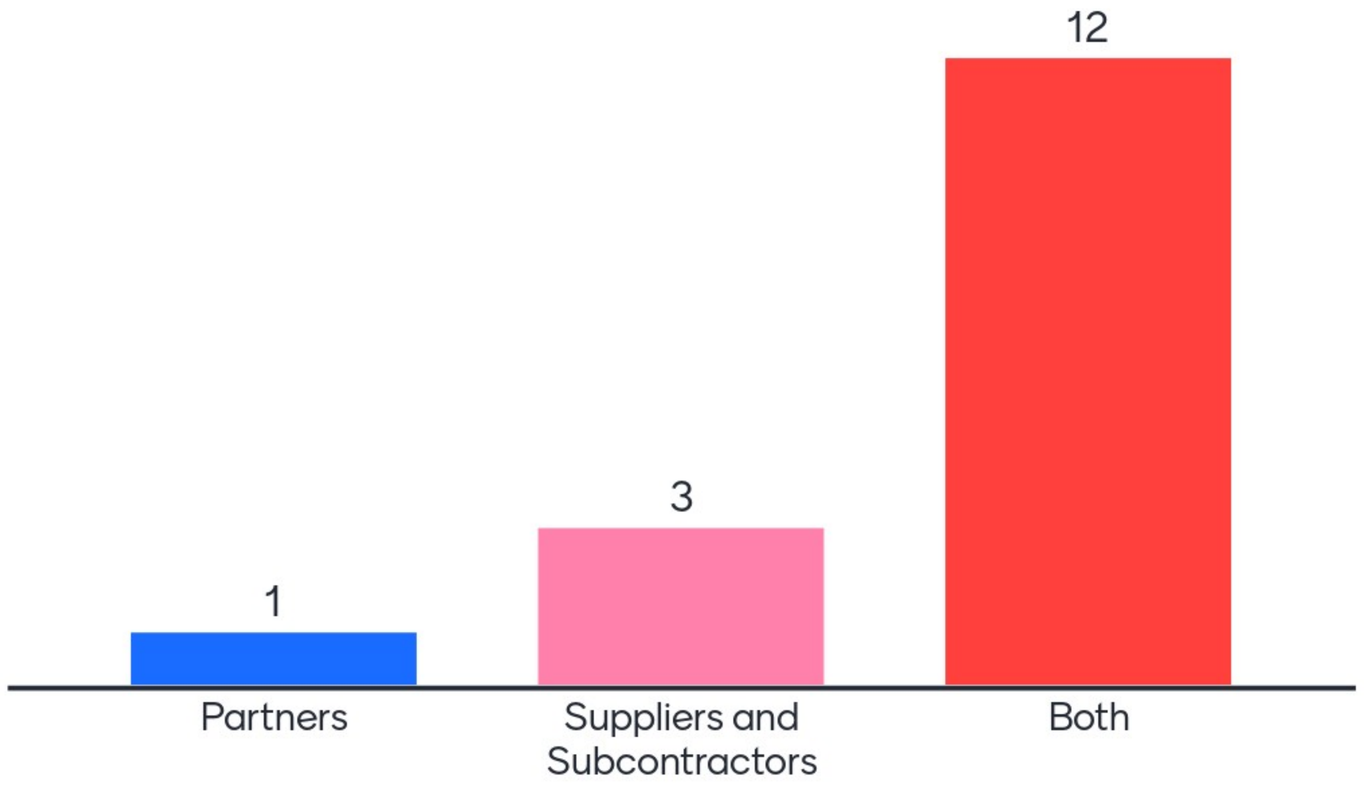
commitment to designing out waste at different design stages

Commitment to using SWMP's that start at the design stage to ensure waste is considered from stage 1 design of the project. (perhaps for projects over a particular value?)

Should we look to develop something similar to the School's free Carbon Calculator for waste reporting?



If so, who would it target?



If so, what should it contain?

6 Answers

Waste Reduction Framework

Mass of waste

not sure

We haven't seen much uptake from our supply chain in using the CC and have found it clunky to use - it would need input from different levels of the supply chain to make sure it's fit for purpose

Potentially the detailed benchmarking data but shouldn't try to capture all projects

The mechanism should digistised so that waste data will not need to be inputted manually