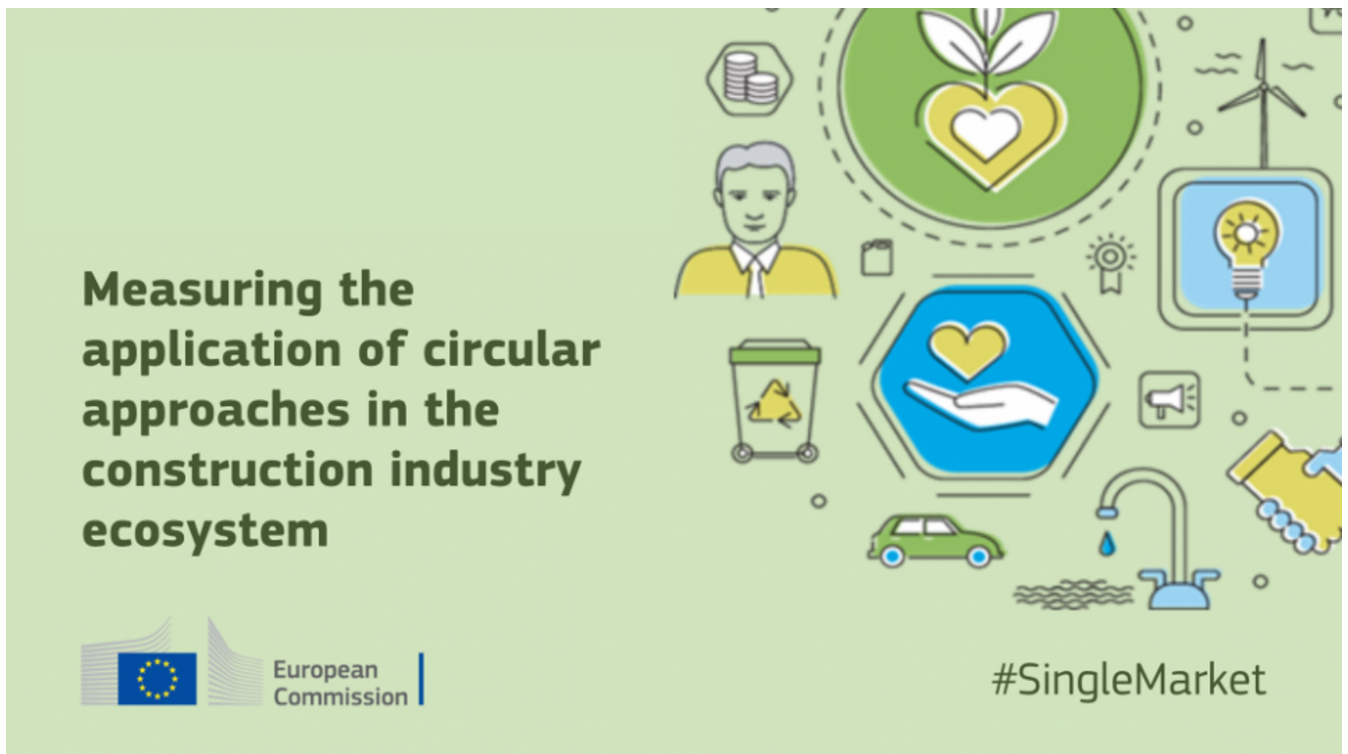


Contribution ID: 26c0ec9b-bb76-4d75-aeba-3c74ae4ac815

Date: 31/03/2023 15:21:41

Targeted survey | Study on measuring the application of circular approaches in the construction industry ecosystem

Fields marked with * are mandatory.



Targeted survey | Study on measuring the application of circular approaches in the construction industry ecosystem

Did you know that 36% of the total waste generation in the EU comes from construction waste? And that waste generation is predicted to increase by 70% by 2050 compared to current levels? Yet, it's difficult to measure what the construction ecosystem is doing to address this problem. In order to fully reap the benefits of circular economy, we need a good view of the application of different circular economy approaches and indicators by different stakeholders across the value chain.

To address this challenge, we are working on a Study on measuring the

application of circular approaches in the construction industry ecosystem (https://eisma.ec.europa.eu/news/study-measuring-application-circular-approaches-construction-industry-ecosystem-2022-07-19_en) for the European Commission.

As part of the study, we are carrying out the **second survey, targeted at each stakeholder type** of the ecosystem.

The survey will be open until 31 March.

Thank you very much for your support!

All the information obtained from the respondents in this survey will be kept strictly confidential.

*Please provide your name and surname

Alessio Rimoldi/Edwin Vermeulen

*What is the name of your organisation?

Concrete Europe

*Which country is your organisation based in?

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal

- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Outside of EU

*What is the size of your organisation?

- Less than 10 employees (micro-enterprise)
- Between 10-49 employees (small enterprise)
- Between 50-249 employees (medium-sized enterprise)
- More than 250 employees (large enterprise)

*Which stakeholder group applies to you/your organisation?

- Investor
- Public & Private sector client
- Manufacturer/ supplier of construction products and materials
- Main contractor
- Sub-contractor
- Resource manager
- Demolition contractor
- City, regional, central government representative
- Architect/designer/ structural engineer
- Consultant and surveyor
- Other type of engineer
- Construction permit and control authority
- Facilities/building manager
- Representative of European and national trade associations
- Distributor/ logistics
- Insurer
- Other

Which **circularity approaches** are you implementing/addressing? Please tick all that apply

	Apply
Product as service, new business models	<input checked="" type="checkbox"/>
Designing for future disassembly and reuse	<input checked="" type="checkbox"/>
Designing for flexibility and adaptability	<input checked="" type="checkbox"/>
Improving material efficiency/intensity/mass of materials used	<input checked="" type="checkbox"/>
Improving durability, lifespan, repairability of construction works	<input checked="" type="checkbox"/>
Increasing recycled and secondary content of construction products and materials	<input checked="" type="checkbox"/>
Increasing direct reuse of products and materials	<input checked="" type="checkbox"/>
Increasing reuse/recycling of waste from construction works	<input checked="" type="checkbox"/>

Increasing reuse/recycling of waste from demolition works	<input checked="" type="checkbox"/>
Reducing waste/wastage rates/waste generation from construction activities	<input checked="" type="checkbox"/>
Life time extension e.g. through retaining and refurbishing	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

We are interested in the **circularity indicators** you are currently measuring/addressing or considering. Please tick all that apply:

	Measuring/ addressing	Consid ering
PRODUCT or MATERIAL level	<input type="checkbox"/>	<input type="checkbox"/>
Reused product i.e. used again for same or different purpose without altering the form of it. Measured as Yes/No	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Remanufactured/reused content i.e. mass (kg/tonnes) and % of product which has been remanufactured or from a reused source.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recycled/secondary content i.e. mass (kg/tonnes) and % of product that is from a recycled or secondary (other industrial processes) content	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Design for disassembly and circularity i.e Product is design to be disassembled to aid future use; measured as Yes/No	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wastage rate i.e. the amount of product/material delivered but not used (measured as quantity and %)	<input type="checkbox"/>	<input type="checkbox"/>
Predicted service life Estimated period of service in use, measured in years	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hazardous waste Mass (kg/tonnes) of hazardous waste the product may generate	<input type="checkbox"/>	<input type="checkbox"/>
Realistic end of life scenarios developed i.e. the reuse, recycling, recovery and disposal routes at end of life identified (measured as Yes/No)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Residual value per unit product/material at end-of-life i.e. the financial value of the product at the end of life (in Euros)	<input type="checkbox"/>	<input type="checkbox"/>
Part of an Extended Producer Responsibility system i.e. take-back system	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BUILDING or ASSET level	<input type="checkbox"/>	<input type="checkbox"/>
At Concept stage comparison of asset life cycle costs Costs of asset over life cycle. E.g. m2/Euro/year	<input checked="" type="checkbox"/>	<input type="checkbox"/>
At Concept stage comparison of asset life cycle assessment Assessment of the whole life carbon of the asset e.g. kgCO2e/m2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
At Design stage - Material intensity/ dematerialisation The relative amount of material used e.g. kg/m2	<input type="checkbox"/>	<input type="checkbox"/>

At Design stage - reused content The proportion of the asset that is designed with reused products /materials (% , tonnes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
At Design stage - recycled content The proportion of the asset that is designed with recycled content (%/tonnes)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Designed for adaptability and flexibility Measurement of the adaptability/flexibility of the asset in use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Designed for disassembly/ deconstruction e.g. proportion of the asset that can be disassembled at end of life	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction Waste generated on and off site Resulting from the installation of products and materials; Measured in kg/tonnes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous Waste generated during construction Resulting from the installation of products and materials; Measured in kg/tonnes	<input type="checkbox"/>	<input type="checkbox"/>
Construction Waste reused, recycled, recovered, landfilled Resulting from the installation of products and materials; Measured in kg/tonnes and % reused, recycled, recovered, landfilled	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction related waste generated through in-use/ refurbishment cycles Amount of waste (kg/tonnes) generated from the installation and removal of products/materials during maintenance, repair, refurbishment etc	<input type="checkbox"/>	<input type="checkbox"/>
Effective utilisation of building (e.g. levels of occupancy) or asset; Intensiveness of use For example how much the asset is in productive use/how much of the asset is being used (e.g. floor area)	<input type="checkbox"/>	<input type="checkbox"/>
At end of use of building/asset - Proportion of building/asset retained (mass) for further use e.g. the mass of the asset retained for future reuse (adaptive reuse)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Demolition waste generated Resulting from the deconstruction/demolition of the asset Measured in kg/tonnes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous waste generated at Demolition Resulting from the deconstruction/demolition of the asset Measured in kg/tonnes	<input type="checkbox"/>	<input type="checkbox"/>
Demolition Waste reused, recycled, recovered, landfilled Resulting from the deconstruction/demolition of the asset. Measured in kg/tonnes and % reused, recycled, recovered, landfilled	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ORGANISATION or PROCESS level	<input type="checkbox"/>	<input type="checkbox"/>
Refurbishment/Transformation rate of buildings/assets portfolio For example, % of assets upgraded/refurnished over a given timeframe	<input type="checkbox"/>	<input type="checkbox"/>
Predicted service life of buildings/assets More relevant to those who have multiple assets; for example, years of life remaining per asset/ average service life remaining	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>Average reused and recycled content in new buildings/assets (circular inputs)</p> <p>The average proportion of a reused and recycled content in new assets/measured as % and in kg/tonnes</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Non hazardous waste arisings</p> <p>Resulting from the installation of products/materials, refurbishment and deconstruction/demolition of buildings/assets; Measured in kg/tonnes</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Hazardous Waste</p> <p>Resulting from the installation of products/materials, refurbishment and deconstruction/demolition of buildings/assets; Measured in kg/tonnes</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Waste management routes</p> <p>Resulting from the installation of products/materials, refurbishment and deconstruction/demolition of buildings/assets; Measured in kg/tonnes for reuse, recycling, recovery and disposal</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Requirements set for specification of circular economy approaches including recycled + reused products and materials</p> <p>i.e., the number of projects/assets that have these type of requirements/initiatives</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Requirements set for pre-demolition audits and subsequent implementation</p> <p>The number of projects/assets where pre-demolition audits are required/implemented</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>URBAN level (city/region/national)</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Demolition waste generated</p> <p>Resulting from the installation of products/materials, refurbishment and deconstruction/demolition of buildings/assets; Measured in kg/tonnes</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Recycling/recovery rate of Construction and Demolition Waste</p> <p>Resulting from the installation of products/materials, refurbishment and deconstruction/demolition of buildings/assets; Measured in kg/tonnes for recycling/recovery of materials</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Refurbishment and transformation rate relative to new construction</p> <p>The number of buildings/assets refurbished versus the number built new over a given timeframe</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Demolition rate</p> <p>The number of buildings demolished over a given timeframe</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Average age at demolition</p> <p>The average age of assets/buildings when demolished (in years)</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Other</p>	<input type="checkbox"/>	<input type="checkbox"/>

Please detail the **circularity data** you are collecting/using

As association we are not collecting data, but we are supporting initiatives aimed at increasing the uptake of circular economy in construction based on the following:

- Reference service life, including reuse of structures
- Life cycle cost/life cycle assessment
- Use of reclaimed materials
- Use of recycled materials

What are the **main drivers** for you to collect data and measure indicators related to circularity? Please provide specific examples where possible.

What are the **main barriers** that you face in collecting data and measuring indicators related to circularity? Please provide specific examples where possible

As association we are not collecting data, but we are facing the following barriers:

- focus on recycled content only within the supply chain of concrete (with minimum recycled content), without considering relevant alternatives for the use of secondary aggregates

*Data protection

- I have read the Data Protection Notice and agree that my personal data is processed for the purposes described herein. I agree to be contacted via email, by the European Commission staff and the contractor in charge of this survey to provide me with information and updates about this survey.

Data Protection Notice (DPN)

Data_Protection_Notice.pdf

I give my consent to be contacted for (you can select both interview and workshop, only one or none):

at least 1 choice(s)

- a follow-up interview
- a follow-up virtual workshop
- none of the above purposes

Please provide your email address to be contacted

info@concrete-europe.eu

Contact

Contact Form (/eusurvey/runner/contactform/ab9fa725-6ce2-cbed-09a1-9861f39e95fb)
