

JRC Construction & Demolition Waste Workshop Survey

Fields marked with * are mandatory.

Introduction

The aim of this questionnaire is to validate and complement the techno-scientific data provided in the workshop background document entitled "Techno-economic and environmental assessment of construction and demolition waste management".

Therefore, **we kindly request you to fill in the survey by 28 July at 18.00 (CEST)**. Your participation in this questionnaire is crucial to ensure a successful project, and would thus be greatly appreciated.

The individual responses and results of the participating organisations to this survey will not be publicly available and will exclusively be accessible to the Joint Research Centre and other European Commission services for the development of policies on construction and demolition waste.

Information on your organisation

* We kindly request the submission of one consolidated reply per organisation.

Organisation Name

European Panel Federation

* Name and surname of the organisation representative

Alexis Kuhl

* Email of the organisation or organisation representative

alexis.kuhl@europanel.org

* Geographical scope of your organisation

At most 1 choice

- | | | | |
|-------------------------------------|------------------------------------|---------------------------------------|-------------------------------------|
| <input type="radio"/> AT - Austria | <input type="radio"/> FI - Finland | <input type="radio"/> LT - Lithuania | <input type="radio"/> SI - Slovenia |
| <input type="radio"/> BE - Belgium | <input type="radio"/> FR - France | <input type="radio"/> LU - Luxembourg | <input type="radio"/> ES - Spain |
| <input type="radio"/> BG - Bulgaria | <input type="radio"/> DE - Germany | <input type="radio"/> MT - Malta | <input type="radio"/> SE - Sweden |

- HR - Croatia EL - Greece NL - Netherlands ALL - ALL (Pan-European)
 CY - Cyprus HU - Hungary PL - Poland OTHER - - please specify below
 CZ - Czechia IE - Ireland PT - Portugal
 DK - Denmark IT - Italy RO - Romania
 EE - Estonia LV - Latvia SK - Slovak Republic

* Type of organisation

at most 1 choice(s)

- Member State or Member State representative
 Industry organisation (please further specify below)
 Non-governmental organisation
 Non-profit organisation
 Research organisation
 International organisation
 Other, please specify below:

For industry organisations, what is the main focus of your activities:

Multiple answers possible

- Demolition and collection of CDW
 Sorting and recycling of CDW
 Producing finished construction products (from primary sources)
 Producing finished construction products (from primary and secondary sources)
 Designing and planning buildings and infrastructure
 General waste management services
 Other, please specify below:

* I consent that any responses and information provided in this questionnaire may be used for the development of the JRC reports on CDW targets.

- Yes
 No
 Yes, but only on condition that any information provided is anonymised, and that the data provided cannot be associated or linked to my organisation

* I agree to be contacted by the JRC to further expand on the answers provided, if necessary.

If deemed suitable for the further development of the project, the JRC may want to follow up with a limited number of stakeholders. In such case, the JRC will contact your organisation via email to schedule a telephone or videocall.

- Yes
 No

Section on possible targets for "preparing for re-use and recycling targets" for CDW

1. Waste characterization (section 2 of the background document)

- Target group for answer: all actors

- Objective of the question: update and/or validate the state-of-the-art for waste data
 - Click (?) for more background
- Are you aware of any (additional) data on the generation and composition of excavated soils, dredging spoils and infrastructure waste?**

Poor information is available on soil and dredging spoils generation and composition as well as on infrastructure waste, across EU.

- YES
- NO

Specify:

1500 character(s) maximum

2. Recycling technologies (section 4 of the background document).

- Target group for answer: Actors involved in the recycling of CDW, research organisations.
- Objective of question: increase insights on recycling technologies available.
- Click (?) for more background

Is the description in section 4 of the background document covering the main recycling technologies for CDW or are there any additional innovative or emerging technologies that could play a role in the near future (2023-2035)?

Focus is on emerging technologies, e.g. for recovery of cement or other materials from the mineral fractions of CDW, like bricks or concrete.

- YES
- NO

Please specify (links to documents or information):

1500 character(s) maximum

3. Soil waste and dredging spoils recycling technologies (section 3-4 of the background document).

- Target group for answer: Actors involved in the recycling of soil waste, research organisations.
- Objective of question: increase insights on recycling technologies available.
- Click (?) for more background

a) Based on your knowledge, is recovery via stabilization (with lime or cement) a commonly applied pathway for excavated soils and dredging spoils?

Little knowledge is available on soil waste treatment across EU27.

- YES
- NO

Please specify:

1500 character(s) maximum

b) Based on your knowledge, is use in agriculture a commonly applied pathway for excavated soils and dredging spoil?

Little knowledge is available on soil waste treatment across EU27.

- YES
 NO

Please specify:

1500 character(s) maximum

4. Life cycle assessment and life cycle costing (section 5 of the background document)

- Target group for answers: Private companies active in the collection & recycling of CDW.
- Objective of question: validate and update the data used for LCA/LCC from operational plants.
- More background (click (?) below)

Would you be able to provide additional data to update the environmental impacts from the recycling stage in the life cycle assessment models used, and if so, would you be available to be contacted by JRC to form part of a technical working subgroup on LCA/LCC?

The JRC has performed a life cycle assessment based on data available in techno-scientific literature as well as in-house data available from other projects. The JRC would like to update this extremely technical assessment, potentially based on (confidential) data from technology providers, particularly recyclers. Therefore, we aim to set up a small technical working group with companies active in recycling to review and update the outcomes presented in the background document. On this occasion, we would like to receive preliminary feedback on the private cost figures presented to ensure that these are in the ballpark for actual summed capital and expenditure costs for the sorting, collection, recycling, incineration and landfilling of CDW.

- Yes
 No

Please add any further relevant information and comments, if appropriate:

Brunet-Navarro, P., Jochheim, H. & Muys, B. The effect of increasing lifespan and recycling rate on carbon storage in wood products from theoretical model to application for the European wood sector. Mitig Adapt Strateg Glob Change 22, 1193–1205 (2017). <https://doi.org/10.1007/s11027-016-9722-z>

5. Drivers and barriers to a sustainable and circular management of CDW.

- Target group for answers (non-exhaustive): all actors involved in CDW management, member states authorities, others.

- Objective of question: to identify and understand well the barriers to recycling so as to enable to develop policy measures that effectively address the barriers to recycling.

a) Please rate the following statements in relation to potential barriers to recycling:

Statement:	strongly disagree	disagree	neutral	agree	strongly agree
Lack of customers for CDW headed to reuse or recycling is a barrier to increasing recycling	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Products from recycled CDW cost too much in comparison to primary materials	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Products from recycled CDW are perceived as low quality or unknown quality	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are not enough recycling facilities near to the construction sites in my region	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of investment is the only barrier to scaling CDW recycling processes	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently, Member States collect enough data on CDW to monitor (possible) new recycling targets for individual material fractions	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) In your opinion, how much more are consumers willing to pay for CDW from secondary materials?

- Consumers are not willing to pay a price premium
- 1% to 3%
- 4% to 6%
- 7% to 10%
- 10% to 20%
- No Answer

6. Market for secondary materials from CDW.

Target group for answers (non-exhaustive): all actors involved in CDW management, member states authorities, others.

Objective of question: to understand better the market for recycled materials.

a) Do you know your regional CDW market well? If so, for which fraction would you be able to rank the biggest barriers?

- Concrete
- Bricks
- Ceramics and tiles
- Wood
- Glass

- Metals
- Gypsum
- Mineral wool
- Soil
- Dredging Spoil
- PVC
- No Answer / None

b) How would you rank the biggest barriers to recycling the fraction you selected above?

Use drag&drop or the up/down buttons to change the order or [accept the initial order](#).

<input type="checkbox"/>	Recycling is not available in my region
<input type="checkbox"/>	Lack of skills for recycling available in my region
<input type="checkbox"/>	Lack of information on recycling available in my region
<input type="checkbox"/>	Not enough customers for recycled construction material in my region
<input type="checkbox"/>	Recycling costs too much

7. Feasibility of preparing for re-use and recycling targets of individual fractions of CDW.

- Target group for answers (non-exhaustive): all actors involved in CDW management, member states authorities, others
- Objective of question: Insights on feasibility of possible targets.

Please, suggest the ambition of possible 'preparing for re-use and recycling' targets (% of collected material that is prepared for re-use or recycling):

Article 11 requires the Commission to consider, by 31 December 2024, preparing for re-use and recycling targets for construction and demolition waste and its material-specific fractions. Furthermore, Article 5(9) of Directive 1999/31/EC on the landfill of waste requires the Commission to consider, by 31 December 2024, introducing restrictions to the landfilling of non-hazardous waste other than municipal waste (including through targets).

	No target	25%-to-50%	50%-to-75%	>75%	No answer
Concrete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Bricks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Ceramics and tiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Wood	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Glass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Metals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Gypsum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Mineral wool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
PVC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Insulation plastic (EPS, PUR, XPS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Soil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Dredging spoils	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

8. You may upload a file to transmit information, e.g. if have you identified flaws, errors or incorrect conclusions in the draft JRC report or to provide additional inputs or data.

For wood, the biogenic carbon neutrality assumption completely biases the analysis especially in relation to climate change. In line with the cascading principle and the waste hierarchy, material use (hence recycling wood CDW for the production of particle boards) should be the preferred option over early energy recovery. Wood is a valuable resource that stores carbon and can substitute other carbon intensive materials and therefore play an important role in climate change mitigation. In its 2023 Report on Biomass Production, Supply, Uses and Flows in the European Union and in the 2023 Bioeconomy Progress Report, JRC clearly underlines the vital role of cascade use of wood to unlock the full potential of EU's circular bio-economy given the increasing demand for bio-based materials such as wood. The cascading principle is even now enshrined into the revised Renewable Energy Directive but as highlighted by JRC the cascading principle is not being currently properly applied in the EU. Such conclusions on wood CDW could be extremely detrimental to achieving the objectives of resource efficiency within the framework of a well-functioning circular economy in the EU. Recovering valuable materials such as wood would create jobs, enhance the carbon stored lifespan and make a more efficient use of natural resources according to circular bio-economy principles. The production of particle boards brings both environmental and economic benefits through the use of recovered wood (including from CDW) as the composition of raw wood consumption mix in the EU particle board industry can come very close to 100% of recovered wood in some Member States.

Please upload your file with comments.

DISCLAIMER: Please note that the answers provided in this consultation will be used to improve the study and the report. JRC may contact you to further discuss on specific aspects if deemed relevant and necessary. In the next version of the report, JRC will document how and where feedbacks have been incorporated.

JRC contact details

For any further questions in relation to this questionnaire, please contact the JRC at JRC-ENV-RESEARCH@ec.europa.eu (using the subject **CDW TARGETS**).

Privacy statement

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Contact

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