EU-CDW-EoW-Survey

We will ask for sources and (voluntary) submission of further documents. In the text fields "Please share any sources or further information", please add a link or references. You can upload documents at the end of the survey. Questions marked with "*" are mandatory. You can also send them to end-of-waste@tauw.com, please indicate which information the documents contain and to which question and waste stream it refers. You can find further information on data processing here. We prefer that the survey is completed in English, but if this is not possible, it can be also completed in German, French, Spanish, or Polish. Thank you."

The European Commission is considering to establish European end-of-waste criteria for construction and demolition waste. To develop a priority list of construction and demolition waste streams for which end-of-waste criteria can be established, we would like to get your feedback in your field of expertise. In general, more information about a waste stream will allow us to create more precise and practical priority lists.

End-of-waste criteria are all the requirements that have to be fulfilled by a material derived from waste, and which ensure that the quality of the material is such that that material will not be discarded and its use is not detrimental for human health and the environment. The concept of end-of-waste criteria implies that the waste material has reached a stage of processing whereby it has an intrinsic value, so it is unlikely to be discarded and has been processed to a point at which its use does not represent a risk to the environment.

Do you agree that your answers will be stored, analysed and further processed for the purpose of this study? The results will be summarised during a closing stakeholder meeting (end of this year). The anonymized results might be publicly published and the answers are stored for the purpose of this project.*

- ○ Yes

What is the name of your organisation?*

What type of organisation do you belong to?*

- ○ Non-Governmental Organisation (NGO)
- ○ Industry association
- ○ Enterprise
- ○ Government body
- ○ Research / academia
- ○ Other

To which European country do your survey answers apply? If your answer refer to a specific region (province, city) or to a non-EU country that operates in the European Single Market, please indicate this under "Other". If you want to fill in the survey for several countries/regions, you can submit multiple surveys.*

-Please select-

Do you work with, are an expert in or are familiar with the waste stream aggregates?

Aggregates are granular materials used in construction. They are sand, gravel (including marine aggregates) and crushed rock, as well as recycled and manufactured aggregates. Primary aggregates are produced from natural sources: extracted from quarries or from sand and gravel extraction sites, and, in some countries, sea-dredged. Secondary aggregates include recycled or reused aggregates, which are reprocessed materials previously used in construction, and manufactured aggregates, sourced from industrial processes such as blast or electric furnace slags or porcelain clay residues. The demolition industry generates a large amount of rubble and mixed stony waste. The disposal of these waste products can be expensive, therefore recycling them can save costs. When construction waste of this nature is disposed of, it is usually transported to landfills. If it is not disposed of properly, harmful substances can leach into the environment. This can be prevented by converting the waste into aggregates for reuse in other construction purposes such as road fill.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream concrete?

Concrete is a composite material composed of cement, fine and coarse aggregates, water, chemical admixtures and mineral admixtures. Cement is manufactured using a closely controlled chemical combination of minerals. Common materials used to manufacture cement include limestone, shells, and chalk or marl combined with shale, clay, slate, blast furnace slag, silica sand, and iron ore. Concrete is a very reliable and durable material. The demolition of concrete leads to the generation of rubble and other waste consisting of different types of material. Since this creates a complex mixture, the disposal of concrete waste can be expensive. Recycling it into aggregates, on the other hand, can save costs for building companies. This waste stream is of high importance for the project, since concrete is the one of the most-used substances in the world. The production of concrete is highly energy-intensive, and large amounts of waste are already generated during its production.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream asphalt?

Asphalt is a construction material consisting of bitumen mixed with aggregate, and is one of the most widely used pavement surface materials. Bitumen is crude petroleum which can be found in natural deposits. It can also be used as a refined product. Asphalt is a crucial material for infrastructure; it can be found in many locations such as roads, roofs and driveways. However, asphalt can be a significant source of air pollution when in situ, and its production includes the excavation, withdrawal and depletion of bitumen, a fossil oil resource. Asphalt can be recycled without altering the quality of the material. Using recycled asphalt in building processes has environmental benefits and is also cost-efficient.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream fired clay bricks?

Bricks are a type of block which are used in the construction of walls, pavements and other elements of our built environment. Bricks are made of clay and can contain small amounts of other materials, such as chamotte and sand. Bricks can be joined together either using mortar adhesives or by interlocking them. Using bricks in construction has multiple benefits, such as an easy recycling process compared to other construction materials, their environmentally friendly ingredients, and the fact that bricks can themselves be made from waste. Because they are typically composed of natural resources such as clay, they are considered to be one of the most eco-friendly construction materials. The EU has already published a study on the recycling of bricks: Green public procurement: a successful example of increasing brick recovery in demolition services | European Circular Economy Stakeholder Platform (europa.eu).

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream wood?

Wood is versatile, and the only completely renewable construction material. Wood is very durable and robust, and can be harvested either from plantations or native forests. The market for wood is large, since this material is not only used in construction but also for timber, energy production, and paper production. The waste stream for wood plays a large role within this project, not only because wood is a renewable resource, but also because recycled wood can be used for the production of materials which would otherwise use virgin wood. Additionally, most wood waste is biodegradable, and can therefore easily be disposed of.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream gypsum?

Gypsum is a common sulphate mineral which can be found in naturally occurring deposits. It is used in construction as a heat-resistant, moisture-preserving, sound-absorbing and fireproofing material. It is often used in the production of plaster and drywall (plasterboard). The waste stream for gypsum from demolition works is important for the project, since there are ways that gypsum can be recycled, but the process is in need of optimisation. Gypsum is more likely to present a certain degree of contamination than other construction materials. These contaminants can be in the form of nails, screws, wood, insulation, wall coverings, etc. Because of its natural origin, gypsum is also used in non-construction-related applications such as fertiliser. Therefore, gypsum is seen as one of the most environmentally friendly binding materials.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream plastic foam insulation?

Plastic foam insulation consists of hardened plastic resin which has been frothed with air bubbles. The foam can, for instance, be used to fill wall cavities to create airtight seals between the two 'skins' of the wall. The material often consists of polyurethane or polyisocyanurate, which act as good insulators. Plastic is a material with a vast variety of purposes. The problem of plastic pollution and the potential creation of microplastics has gained more and more public awareness within the last few years, since the material does not biodegrade. However, using plastic in construction is also a way to reduce emissions, since proper insulation can reduce a building's heating requirements significantly. Hence, it is important to address the topic of recycling plastic compounds such as polyurethane and polyisocyanurate. There is also the possibility of recycling plastic waste such as disposable cutlery into plastic foam insulation for construction purposes, thus reducing the need for new plastic material to be produced.

- ○ Yes

- ○ No

Do you work with, are an expert in or are familiar with the waste stream inert insulations?

Inert insulation materials such as stone wool or glass wool are used during construction for the thermoregulation of a building. Stone wool, also known as mineral wool or rock wool, is created by spinning molten rock and minerals with steel slags to create a wool-like product. Glass wool is made from glass fibres, which are arranged into their final form using a binder. Both materials possess sound-absorbing and fire-resistant properties. Stone wool and glass wool are considered eco-friendly insulation products, since they are recyclable. The proper insulation of a construction is important, since it can significantly decrease the emissions of said construction. However, the manufacturing processes for both materials are energy-intensive, which is why this material is considered to represent an important waste stream for this project.

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream building products for reuse?

The term 'building products for reuse' refers to materials and components that are designed to be disassembled, refurbished, and reused in future construction projects, rather than being discarded as waste. These products are typically manufactured to high quality and durability standards, ensuring that they can withstand repeated use over time. Building products for reuse have the two main benefits of cost and resource-efficiency. Using reusable products can reduce the environmental impact of building work and contribute to a more sustainable built environment. Since the transformation of the construction sector is of great importance, the EU has already established a marketplace for reusable construction materials: restado – Marketplace for the reuse of construction material | European Circular Economy Stakeholder Platform (europa.eu)

- ○ Yes
- ○ No

Do you work with, are an expert in or are familiar with the waste stream plastics (PVC for rigid plastic pipes / window frames)?

Polyvinyl chloride (PVC) is a synthetic plastic polymer widely used in construction due to its durability, versatility, and cost-effectiveness. Two types of PVC are being used. Rigid PVC is commonly used in pipes, fittings, and window frames. Flexible PVC is used in roofing membranes, and flooring materials. This project focusses on Rigid PVC only. The material has good chemical resistance and can withstand a wide range of temperatures, making it suitable for use in a variety of applications. The material is not biodegradable, which is why it is of high importance to include this waste stream into this project. PVC waste can be recycled and processed into new products, providing a source of raw material for new products and therefore reducing the need for further virgin PVC production. Additionally, recycling PVC waste can generate economic value and create jobs in the recycling and manufacturing sectors. Legacy additives such as lead and cadmium based stabilisers could hamper recycling and the reuse of the secondary material.

- ○ Yes
- ○ No

What kind of waste or by-product stream related to construction and demolition waste are you likely to be interested in or confronted with in the future?

- ☐ Aggregates
- ☐ Concrete

- [ ] Asphalt
- [ ] Fired clay bricks
- [ ] Wood
- [ ] Gypsum
- [ ] Plastic foam insulation
- [ ] Inert insulation
- [ ] Building products for reuse
- [ ] Plastics (PVC for rigid plastic pipes / window frames)

Do you have further documents that are of interest for this research?

1 Drop file here or select file (pdf, doc, docx, xls, xlsx, pptx, ppt, txt. Maximum number of files allowed: 50)

Do you have additional remarks on end of waste criteria for construction and demolition waste?

If you agree to be contacted for further questions, please provide your email address (optional)?

Your email address will only be stored for the duration of this project and used only in connection with it.

We want to give participants the opportunity to network and share experiences within the EU. It is not possible to get in touch with all stakeholders in person, so we offer this stakeholder mapping and profiling. This way you can make contacts yourself.

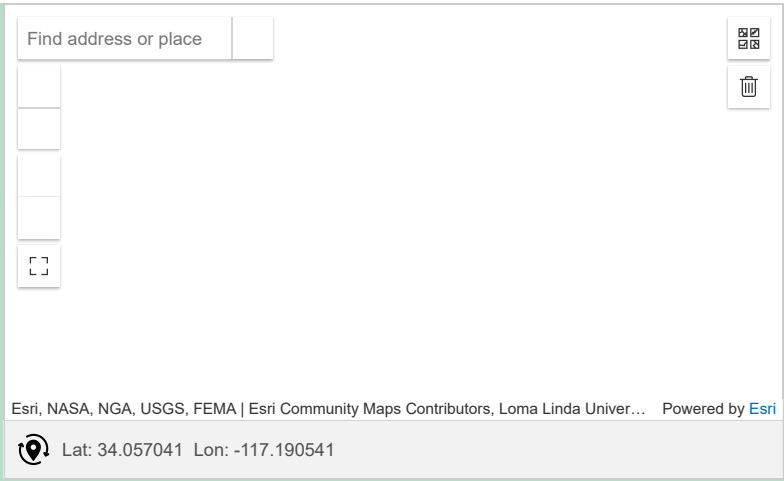
Do you want your organisation's location to be shown on the Stakeholder Map on the project website?

- ○ Yes
- ○ No

You may upload the logo of your organisation for the stakeholder map (optional)

1 Drop image here or select image (maximum number of files allowed: 1)

Please select the location of the headquarter of your organisation within the European Union on the map



You can provide a short description of your organisation here, if you want to. It should be not more than 200 characters. It will appear on the stakeholder profiles: https://eu-cdw-eow-prioritylist-tauw-group.hub.arcgis.com/pages/stakeholder-profiles

400

Submit