

From planning to demolition - reorganizing the construction cycle

This is a translation only – for the original challenge description, contacts and submission got to: <https://www.ioeb-innovationsplattform.at/challenges/detail/von-der-planung-bis-zum-abriss-den-baukreislauf-neu-organisieren/>



An initiative of

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 Federal Ministry
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Climate Action, Environment,
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In cooperation with

 **BBG**
BUNDESBESCHAFFUNG

Challenge Sponsors/ Jury Members



Point of Departure

The Danish architect and upcycler Anders Lendager describes cities as an intermediate store for valuable material resources. However, the longevity and potential for reuse of materials and building materials is currently not being exploited. Materials that are released during a reconstruction or demolition of buildings still end up in landfills far too often. They are thus disposed before the end of their lifecycle. With urban mining and a functioning recycling economy, resources could remain in circulation much longer.

The City of Vienna sees the advantages of this sustainable economic model and has set the way in the Smart City Vienna Framework Strategy 2020 - 2050. The City of Vienna would like to make use of the circular economy model in the city's own construction projects. Therefore, it is currently supporting projects of the Vienna University of Technology that focus on urban metabolism for a resource cadastre. This should indicate when, which resources will be freed up and made available for reuse. However, in the view of the City of Vienna, the resources available from exclusively urban demolition projects are not sufficient to get the resource cycle going. For a sustainable concept, the City wants to take the entire construction industry on a journey to re-use in construction and materials management. By 2050, 80% of building components, materials from demolition buildings, major reconstructions and renovations should be re-used.

Interconnected structures and standardized processes are prerequisites for being able to implement recycling management in the city's construction projects:

Procurement managers, for example, need an overview of **planning and architectural firms** that can design integrated construction processes. Those in turn need **information on available secondary products**. An important piece of the puzzle here is a **bundled and coordinated market for secondary products**. Construction and dismantling must be synchronized for the **realization of regional reuse**. This is what makes re-use in construction projects possible in the first place.

Main Question

How does an economically self-sustaining marketplace look like that creates the conditions for a recyclable construction industry?

Desired situation

The City of Vienna wants to initiate a new development in the construction industry. The City of Vienna is seeking exchange with companies that want to launch and operate a Europe-wide self-sustaining marketplace or platform for re-use in construction and materials management. Through the Challenge, the City of Vienna

would like to get to know sustainable concepts (business cases) and subsequently enter into a partnership to support the realization.

The City of Vienna sees itself as a strategic customer, helping to shape the service it will later use. It would like to bring its experience and its network of public institutions (and thus further potential customers) into the venture. The long-term goal is to create a model that is accepted by the market and is self-sustaining.

Central functions and aspects of the marketplace "Recyclable construction industry" in the perspective of the City of Vienna are the following:

- Players from the construction sector can advertise and sell their relevant services and products
- Secondary materials that are freed up and requirements can be matched according to spatial and temporal aspects

Call for proposals

Do you understand how the construction industry works? Do you understand how to operate a virtual B2B marketplace? You are enthusiastic about recyclable construction? You can identify a self-sustaining business model in a virtual marketplace for re-use in construction and materials management? You would like get in contact with the City of Vienna and representatives of funding agencies to take a step towards realization?

Click on the "Submit Solution" button and design your contribution to this market survey. Please prepare:

A brief description of your business case. Point out why your approach will work. Go into the evaluation criteria and focus on the main aspects of the challenge. Describe relevant reference projects, e.g. experience in setting up companies or service offerings, operating B2B marketplaces, industry-relevant know-how.

Tell us how you are planning the implementation in general and the involvement of the City of Vienna. What kind of support do you think is needed?

Based on the descriptions, the City of Vienna will invite the most promising submissions to an innovation dialogue.

Added value: Summarize briefly and concisely why you should be invited to a market talk (innovation dialog) and show your unique selling proposition.

Confidential information (only visible to the jury and the moderation team). Give the jury a first impression of the implementation time and effort involved. Explain what kind of support you expect from the City of Vienna.

Optional: You can upload a file. This file should supplement the text fields but not replace them. Avoid redundancies! If necessary: You can make this optional file available to the jury confidentially and not publicly. To do so, send the file to the moderators of the Challenge via e-mail.

A cover picture as a visual flagship on the Challenge page.

Benefits of the Challenge and further course of the project

With this Challenge, the City of Vienna is providing an impulse for a service that it would like to use later as a customer. The City of Vienna gets an overview of potential lead partners and possibilities for implementation. The jury of internal and external experts will discuss all submissions along the evaluation criteria. For the most interesting concepts, the jury issues invitations to an innovation dialogue.

Through participating in the Challenge, you as a company can position yourself as a pioneer of recyclable construction. Your concept will get on the radar of a potential customer who is willing to support you. If you are one of the winners, you are invited to the final innovation dialogue. There, you have the opportunity to meet personally with the project managers of the City of Vienna.

The special advantage of this Challenge: Experts from important funding agencies have confirmed their participation at the market talks: the Austria Wirtschaftsservice Gesellschaft (aws), the Austrian Research Promotion Agency (FFG) and the Vienna Business Agency. You can therefore benefit directly from feedback and advice on suitable funding programs for the implementation of the planned venture.

The **innovation dialogue** is planned for calendar week 3 (2021) - please save the date.

Depending on the results, the further project plan provides for the following:

The City of Vienna's Directorate for Buildings and Technology intends to make its knowledge and network available. Specifically, it offers, for example, to involve the most promising project team/company in the competence center for construction research, regulatory construction, engineering services, standards-based program "DoTank Circular City 2020-2030 (DTCC30)". This means being involved from the very beginning in the development of a city-wide Circular City Strategy, where e.g. procurement is considered one of the biggest levers.

In addition, the Directorate for Buildings and Technology is happy to provide support in any grant applications and financing issues. The network of the DTCC30 offers, for example, the opportunity for stakeholder dialogues with potential donors along the value chain in the construction industry

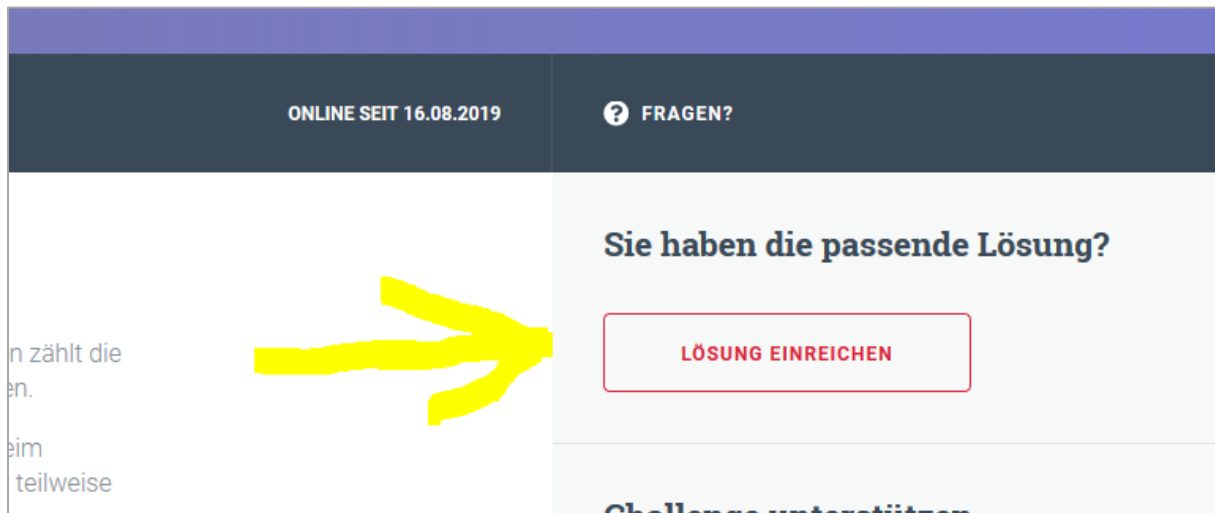
Your Questions

Contact the moderator or post your question about the Challenge. Our moderators will check, research and publish your question together with the answer. This way, all potential participants are certain to receive the same information.

How to submit a solution/idea

Go to the challenge page: <https://www.ioeb-innovationsplattform.at/challenges/detail/von-der-planung-bis-zum-abriss-den-baukreislauf-neu-organisieren/>

Click on the button "Lösung einreichen" on the top right side of the page.



- Beschreibung
Post a meaningful description (make references to the description of the challenge and evaluation criteria on the right side of the challenge page)
- Mehrwert
Highlight the benefits of your solution.
- Titelbild
Upload a picture to be displayed on the landing page of the challenge.
- Kooperationspartner
If you are handing in a joint contribution with other companies, this is where you make sure they are represented with logos and names.
- Dateien & Infos
If necessary in addition to the descriptions above: add pdf-files (e.g. existing product brochures). But: Keep your contribution manageable for the jury.
- Vertrauliche Infos
If necessary, place a confidential information for the jury, the sponsor and moderator (e.g. indication of approximate price range). All other parts of the contribution will be public.

Please be aware of the fact, that a challenge is market research / market engagement prior to a possible procurement. The challenge will not decide upon a contract award nor will it lead to any unfair advantage in a tender. Please balance your time and effort.

Contact Information

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