



Reducing the carbon footprint of buildings: Circular concepts for construction material and life-cycle carbon accounting FOLLOW-UP NOTE

POLICY LEARNING PLATFORM MATCHMAKING SESSION

DATE: 26 April 2022, 14:00-15:30 CEST / 15:00-16:30 EEST

BENEFICIARY: Partnership of Latvian Constructors

TOPICS: CONSTRUCTION, BUILDINGS, LIFE-CYCLE, CO₂, C&D WASTE, DEMOLITION, RE-USE, RECYCLING, LAW, METHODOLOGY, DATA, CIRCULAR ECONOMY

PARTICIPANTS

Main beneficiary & local stakeholders:

Partnership of Latvian Constructors, Latvia (an independent public organisation comprised of twenty-five largest building contractors in Latvia)

- Brigita Vīksne, Partnership of Latvia Constructors
- Gints Miķelsons, Partnership of Latvia Constructors
- Gints Brunovskis, Latvian Waste Management Enterprise Association
- Anete Raslava, Passive House Latvija
- Alise Vecezola, Ministry of Environmental Protection and Regional Development (MEPRD)

Peers & colleagues:

- Dr. Ingrid Winter, Head of the Department of Waste and Resource Management, Province of Styria, Austria, Partner in CONDEREFF project
- Pierre Ståhl, Project Managers, Energy Agency for Southeast Sweden, Partner in POTEnT project
- Inês Gomes, Smart Waste Portugal, Portugal, representing the (De)construct for circular economy project, project promoted by CIMBAL (Partner of the Interreg Europe project LCA4Regions)
- Klaus Przesdzing, Department of Waste and Resource Management, Province of Styria, Austria
- Sofia Martins, Project Manager, IrRADIARE, Portugal, LCA4Regions project

Interreg Europe Policy Learning Platform

- Katharina Krell, Thematic Expert Low Carbon Economy
- Lotte van Meijel, Web Expert

Interreg Europe Joint Secretariat

Verena Priem, Policy Officer Low Carbon Economy



OBJECTIVES OF THE MEETING

To meet with public policy makers or non-public drivers for circularity in the construction sector to learn about their experiences with

- construction material circularity facilitation policies, projects, or initiatives
- construction waste management and carbon accounting throughout the cycle
- data-driven accounting methods and tools.

SOME KEY TAKEAWAYS

- The civil construction sector and the various activities it develops result in the intensive consumption of raw materials and the production of high amounts of Construction and Demolition Waste (CDW). Reuse of building material is one of the most efficient ways to increase circularity in our economy. It has both a high potential for circularity and a significant economic potential.
- The disposal of CDW is expensive as landfill fees are rising. This encourages sorting onsite in view of recycling and reuse.
- However, many barriers remain for the reuse of used building material, such as lack of knowledge, low interest and motivations to use the old material for a new building, a lack of standard components, the problem of quality insurance and guarantees, the absence of a legal framework regarding the conditions for reaching end-of-waste for CDW, the high fragmentation of the building sector and how to measure and communicate circularity throughout the value chain.
- Many small-scale initiatives emerge across Europe on the instigation of regions and municipalities where sorted CDW streams are offered to the local market, as in the Re-Use Centre in Växjö, Sweden that collects, renovates and sells reusable building material. The buyers of used material are typically private persons looking for cheaper building components for their own buildings.
- Whereas some used CDW streams like windows, alarms, doors, basins etc. are met with market acceptance, the critical and potential risky structural elements need guarantee schemes to ensure their uptake
- Especially large building contractors and investors in large buildings still shy away from reuse of old building materials due to concerns with quality and guarantees of performance, especially when it comes to structural elements.
- A clear legal framework helps create larger markets for CDW reuse as can be seen in Austria, where a 2016 Building Ordinance creates legal certainty and standard methodologies and procedures for the handling of CDW in view of reaching end-of-waste status. It introduced a pre-demolition audit obligation to investigate if there are pollutants and contaminants in the material. It introduced the obligation to sort and separate onsite, and it set the conditions to achieve end-of-waste status. It also includes recording and reporting obligations to communicate the circularity through the value chain. From the ordinance derived the insertion of a new skillset in the training leading to the certification of building professionals.
- Awareness rising, training and acquiring new skills for circularity in the construction sector is also the focus of a training course developed by Smart Waste Portugal to build capacity for reuse amongst sector professionals.
- Portugal also serves as good example how the stakeholders have been gathered towards circularity, including academia, associations, municipalities, and the private sector.



- A big question remains also regarding the traceability of reused materials through the construction value chain. How to measure and communicate circularity, which data format to use that can be accessed by all players? Currently, each group uses different data types that are not interoperable. This is a main question for the Latvian construction sector where Building Information Systems are already very advanced.

FOLLOW UP ACTIONS

- Styria is starting a project to trace reused building materials in their own public building stock; the Partnership of Latvian Constructors is interested to learn about this experience, and Ingrid promised to keep in touch with Brigita.
- Brigita would like to access the Portuguese training material, especially module 3 on legal and quality aspects. Ines also promised to share English content from her website with further information with Brigita.
- All participants exchange contact details for possible follow-up actions on bilateral basis.

KEY PRACTICES IDENTIFIED

- CONDEREFF project: [The Austrian Recycling Building Materials Ordinance](#)
- POTEnT project: [Reuse centres for building materials](#)
- LCA4Regions project: [E-learning course performed under \(De\)construct for circular economy project](#)

Note circulation: All attendees