

Towards a Circular Built Environment using Bio-Based and Reclaimed materials

The workshop consists of addressing the challenges of moving towards more circular practices within the built environment from a policy maker and construction professional perspective. It focuses on new building design (modular and reversible design) as well as the production and use of reclaimed and bio-based materials.

Barbara Trachte (Secretary of State of the Brussels-Capital Region, responsible for Economic Transition and Scientific Research) has presented the innovative policies of the BCR in terms of circularity with a focus on the built environment (Renolution and Shifting Economy). She recalled the importance of the roles played by the front runners to move towards more sustainable practices.

The workshop was then divided into two panel sessions:

The first panel focused on how building design innovation considers the entire lifecycle of a building by taking into consideration its adaptability and its circularity potential. Then the main regional public policies supporting the circularity practices in the Belgian built environment were presented as well as the interlinkages between private innovation and public policies. Finally it has been presented how this practice shift is to be addressed from an educational and training perspective.

The panellists for the first session were:

- Joost Declercq (Director of Research & Innovation and partner at archipelago architects) on the Building Reversible principles applied to the Joseph Bracops hospital projects.
Quotes:
 - "Building clients are changing: designing for changing functions is not so crazy anymore"
 - "Market is asking for measuring circularity"
- Anne Paduart (Civil Engineer Architect and Project Manager at Brussels Environment) on regional policies for engaging stakeholders in circular practices
 - "From the 3 regional policies we discern 2 phases: first awareness raising and afterwards implementation"
- Jiri Banka (Cedefop expert in the Department for VET and Skills.) for giving a perspective on the necessary skills to accelerate the shift to new practices
 - "New trainings must be foreseen for the job loss in the construction sector"
- Jordi Thijs: student in the hogeschool PXL was the voice of the youth as he had the opportunity to work on circular projects
 - "It was great to work on these innovative solutions within an international project"

The second panel focused on the decision to build and the new material selection as part of the building circular practice. Choosing low-carbon materials (bio-based or reclaimed) avoids the need for extracting and using non renewable virgin raw materials. Stakeholders from across the whole value chain explained the challenges and opportunities for shifting to new sustainable practices.

The panellists for the second session were:

- Tim Veckemans (Co founder of RE-ST architects, specialised in 'non-building' based on the philosophy that the most sustainable building is not built)
Quote: "The most sustainable building is the one that you don't build", "We are addicted to Building but we need to stop that and start with what we already have".
- Gaspard Geerts (Architect and project manager at Rotor specialist of reclaimed materials)
Quote: "There is no solution that fits for all (situations requiring performance guarantees)"
- Joeri Beneens (Contractor at Beneens family business which applies digital tool to track the circularity of materials used). Joeri presented the future proof approach he developed at Beneens in order to follow up the circularity and apply the new taxonomy principles in terms of material usage in its operation. He mentioned his involvement in KAMP CIRCULAIR - 'T CENTRUM project as an encouragement to move further into more circular practices.

Quote: "Sharing our knowledge gives me a lot of energy".

The final part of the discussion mainly focused on the biobased materials with the two last panellists:

- Rein Dressers (founder of Earth Plant & Fiber vzw, a Belgian association that promotes local value chains to develop nature based applications, like building materials). Rein advocated for a mainstreaming of bio-based materials by connecting all the stakeholders across the value chain and developing innovative projects with designers and users.
Quote: " Bio-based products can be coupled with social economy"
- Christian Roggeman (Founder and CEO of Gramitherm, a company that manufactures insulating boards made with natural grass).
Quote: "We are using abundant grass waste not competing with farmers 'production. All local resources come within 300km radius"

Finally, Anders Ladefoged closed the workshop, reminding the importance of sharing good practices within the EU notably through the European Circular Economy stakeholders platform that wants to be the "One stop shop" for circular best practices. He called for scaling-up circular initiatives using all the EU potentials such as the Single Market.