Achieving the EU's climate & biodiversity goals through circular construction

OVERVIEW

An interactive session to bridge the EU public and private side of the built environment sector by sharing innovations, perspectives and opinions on current trends and future needs to scale up circularity in buildings and infrastructure and thereby achieving EU's climate and biodiversity goals.

The moderators (Freek Van Eijk and Emma Gervasi, Holland Circular Hotspot, Arthur ten Wolde, Ecopreneur.eu), the Commission (Josefina Lindblom, DG ENVI), EU industry representatives (Caterina Rocca, Rockwool, Joan Prummel, Rijkswaterstaat) and policy experts (Laetitia Aumont, European Enviornmental Bureau, Samy Porteron, ECOS) discussed topics such as just how the construction sector is important for the EU's climate goals, the EU taxonomy, sufficiency, good practices and the need to consider energy as well as materials.

Many circular business practices in the built environment already exist. However, in order to scale these up and enable a market transition, targeted mandatory economic measures are needed. For example, via a combination of pricing, standard-setting and stimulus instruments. This will ensure that circularity becomes profitable for businesses by effectively making unsustainable practices inconvenient, e.g. by making virgin materials more expensive than secondary raw materials.
Circularity requires internationalisation within (and beyond) the EU to truly contribute to meeting our common climate and biodiversity goals. For this, clear standards, KPIs and definitions of key terms (recyclability, reuse, recycled material etc) at EU level are paramount to enable a closed loop global economy.
Nature restoration, sufficiency and circularity go hand in hand and are complementary.
Lifecycle assessment and mandatory reporting will make the environmental impact of the built environment measurable and thus actionable - if combined with clear and ambitious reduction goals. This way we can successfully achieve our 2030 and 2050 climate and biodiversity goals.

CHALLENGES

- Move from a sector that has a major impact on the environment towards a more circular and efficient sector that is an active contributor to climate mitigation. Considering the sector's major environmental footprint, the EU's 2050 carbon neutrality goals won't be achievable without a sustainable and circular built environment.
- The extraction of materials is very energy intensive, so even highly energy efficient buildings take a long time to amortise the initial debt.
- The approach to construction must cover buildings, materials and energy.
- The roadmap for wholelife carbon is still being developed: it will need to focus on sufficiency (reducing demand for new builds and making buildings more adaptable), renovation rather than construction from scratch (saving on materials and carbon emissions), and circularity.
- Circularity is widely recognised as valuable, but access to materials is still problematic.
- Clearer criteria for "recyclable" are needed in the context of banning landfilling of recyclable items.
- The materials passport must be fit for use and rolled out quickly across the EU at least, using harmonised indicators.
- The EU taxonomy is still not ready: there is a lack of relevant data and clear criteria.
- Need to scale up innovations in the sector through economic incentives and collaboration between the public and private sectors.
- Need for increased collaboration between the Member States and internationalisation to share materials and knowledge.

KEY MESSAGES

- The EU's construction sector is responsible for about half of all extracted materials and energy demand and a third of all water consumption, waste and CO_2 emissions. About 90% of existing EU buildings will still be in use in 2050, but 75% of them are currently inefficient. There is thus massive room for improvement in the construction sector.
- The construction sector is key for climate change and biodiversity, both because it has such a huge impact (on energy, materials, water use and waste) and because it has such great potential (reuse of components through design for disassembly, using buildings as carbon sinks, more efficient buildings being more resilient against disasters and reducing pressure on the environment).
- Circularity can help the construction sector to tackle climate change, but will not be enough in itself: sufficiency is pivotal.
- Biobased materials are not an easy solution: the amount available is limited and so priorities must be established for biomass use.
- The construction sector is ready and willing to evolve, but this needs to be paired with initiatives to encourage it to switch from linear to circular through sustainable finance initiatives and the taxonomy.
- The construction sector is ready to become more circular and the EU is developing policy frameworks. There is a clear momentum that needs to be capitalised on to ensure that the construction sector contributes to climate mitigation and adaptation efforts.
- The EU should play a bigger role in coordinating innovations across Member States. The Member States are coming up with innovations and there is an opportunity to share both these and knowledge across the EU and beyond through collaboration and internationalisation.