Avoiding climate disaster is the goal


Anything that is not included now to enhance the decarbonisation of buildings will be a 10-year delay in implementation.
Building materials generate **250mt** of CO2 annually in the EU + other associated impacts

11% of global emissions are from embodied carbon of building materials.

WLC approach – Circularity and Sufficiency

Decomposition of CO2 emissions of residential buildings in the EU27+UK over the period 1990-2018

Source: Y. Saheb, Sufficiency and Circularity. The two overlooked decarbonisation strategies in the ‘Fit For 55’ Package. Editor: EEB 2021
ZERO EMISSIONS BUILDINGS

Highly energy-efficient buildings

100% renewable energy source

Sharing back to the grid

Excess self-produced renewable energy

Construction/Renovation emission

Embodied carbon emission < EU WLC thresholds
• Establishing ambitious Whole Life Carbon (Lifecycle Global Warming Potential) roadmap, requirements for setting targets, benchmarks, and limits for the reduction of the embodied and operational emissions by 2027

• Aligning WLC timeline to ensure a low carbon implementation of the Renovation Wave across the lifecycle of buildings via ‘headline’ targets and the National Building Renovation plans
EEB - main demands for the EPBD

• Including *instruments and strategies that contribute to the reduction of the Whole Life Carbon emissions*, such as *circularity, sufficiency* (setting targets and establishing requirements for their implementation by 2025) and the use of low carbon and natural-based materials.

• Defining a clear date to *phase out fossil fuels* from heating and cooling across the EU by 2025.
"Circularity and Sufficiency" requirements for the Member States to set specific national targets for 2030 of at least 15% for use of secondary materials in buildings by 2025.
Circular targets? Evidence

Policy signals

• Circular Economy Action Plan: double circular material use-rate by 2030
• Industrial ecosystem transition pathways for 2030: (Ell and construction)

Criteria recommendations

• Eurostat source: Europe has sufficient available secondary raw materials to meet an average 15% recycled content level today
• WRAP: feasibility across projects, building typologies, and product types (2009, 2013)
Circular targets? Circular market?

Metal ores (gross ores):
25.3

Non-metallic minerals:
15.8

Biomass:
9.6

15% of secondary materials available

“Circularity and Sufficiency”:
requirements for the Member States to set specific national targets for 2030 of at least 15% for use of secondary materials in buildings by 2025
EU and local experiences

**REVERSIBLE BUILDING DESIGN**

**REUSE AND TRANSFORMATION OF BUILDINGS**

Source: Dr. Elisa Darriwalla

https://www.bamb2020.eu/

BAMB Project

https://cityloops.eu/

CityLoops


European Circular Economy Stakeholder Platform
EEB position paper - EPBD

Thanks for listening!

Keep in touch

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