

Housing Europe view on the implementation of circular economy approach to the social, cooperative and public housing sector

POSITION PAPER

What is the circular economy approach for the social, cooperative and public housing sector ?

The Building sector is responsible for 39% of the end use energy related CO₂, with 28% related to emissions from operation of the building, and 11% from embodied emissions. In order to drastically reduce emissions and achieve carbon neutrality by 2050 in cities, there is a need to apply a method which will help change the way we produce material, operate buildings, manage resources, treat waste throughout the life cycle of the buildings. This is what the circular economy approach is about. The Circular economy approach is therefore a method which will help achieve the goal of carbon neutrality in cities by 2050. Applied to the building sector, it encompasses a series of aspects that housing providers will have to take into account¹ including for instance:

1. Quantification of building circularity.
2. Co-creation based on stakeholder engagement.
3. Material Passports (MP) based on BIM to share data across building's value chain.
4. Sourcing of circular building materials.
5. Greywater and blackwater separation for water reuse (>95%).
6. Separation of liquid/solid fraction of white water for water reuse (>95%)
7. Joint treatment of blackwater, solid fraction and grinded blackwater for reuse in toilet, irrigation and biogas.
8. Stabilised blackwater for use as compost in local community gardening.
9. Waste management for recovery and valorisation through disassembly of existing buildings materials.
10. Design of energy efficient facades and roofs using modular and more sustainable materials.
11. Co-creation based on performance rather than ownership of energy systems (Pay per performance model).²

What are the levers for social, cooperative and public housing providers to promote this approach ?

¹ See <https://houseful.eu/>

² See also : Circular Economy Principles for Buildings Design, European Commission (2019)

1. Knowledge of local resources (energy, products, labour force)
2. Procurement for design, material, life cycle
3. Financial incentives (conditionalities for EU funding)
4. Evaluation of the environmental impact of a building
5. Skills for circular economy strategic planning
6. Support from residents

What are the EU policies/instruments that can support housing providers towards this approach ?

- Supporting the sector transition through Research and Innovation Programme (Horizon Europe) : looking at the different phases of the life cycle of a building. For instance more research on the use of alternatives to concrete is needed
- Promoting the use of appropriate procurement tools (environment clauses, framework agreements)
- Strengthen the financial incentives to implement circular economy solutions in the building sector (at the level of EIB lending policy and cohesion policy funding)
- Further promote the use of the Level(s) and the smart readiness indicator (EPBD) to better ensure systemic approach to efficiency and carbon neutrality