



A sustainable built environment

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The construction sector has a large environmental and climate impact: the construction and use of buildings account for 40 percent of the material consumption, 33 percent of water consumption and 40 percent of energy consumption in the EU. This leads to enormous amounts of waste, which in Denmark annually amounts to over 40 percent of total waste generated. It is the Danish Government's target to reduce the environmental impact of construction and demolition.

There are significant potential benefits of a transition to a circular economy for the Danish construction sector. The circular transition of the sector aims to avoid harmful substances that have a negative impact on human health, the environment and nature, as well as optimising the use of natural resources. This requires a focus on quality, flexibility and durability, as well as making use of recycled and bio-based materials in construction, taking into account the requirements for health and safety.

To create a sustainable built environment, it is necessary to focus on all phases of a building life cycle - from material selection, design and production, to construction and use of the building, maintenance, renovation and ultimately demolition.

In order to reduce the environmental impact from construction and demolition, the government will, among other things:

- Update the Building Regulations with elements from the voluntary sustainability class
- Introduce increasing limit values for climate footprint from buildings
- Develop the existing Danish LCA- and LCC-tools for buildings into design-tools
- Introduce requirements for standardised demolition plans
- Establish national limit values for problematic substances in recycled concrete and brick
- Create unambiguous rules and better traceability for construction and demolition waste

Facts about the circular economy in building and construction

- Construction and use of buildings accounts for 40 percent of total material consumption, 33 percent of total water consumption and 40 percent of total energy consumption in the EU. Thus, the building stock accounts for 36 percent of total EU greenhouse gas emissions.
- Based on the total construction cost of active, planned and completed construction projects in 2020, it is expected that the certifications DGNB and the Nordic Ecolabel together will amount to 23 per cent.
- The lifespan of a building is typically between 40 and 100 years.
- Construction and demolition waste is the largest waste stream in Denmark and annually amounts to approximately 5 million tonnes and more than 40 percent of all waste generated in Denmark.
- Approx. 36 percent of construction and demolition waste in Denmark is recycled, while 52 percent of waste is used in other forms of material recovery, for example, crushed and placed under roads where the material is used for the last time as backfilling