

KlimaBau

The construction industry accounted for over 50% of the waste generated in Germany in 2016. According to official statistics, the construction industry achieves a recycling rate of 88%. However, since just under half of this value is used for backfilling former extraction sites and storage in landfills, this process cannot be considered classic, "proper" recycling.

Furthermore, the construction industry is responsible for 38% of carbon dioxide emissions and 40% of the energy consumed across Europe.

Optimising the construction sector in terms of resource and energy consumption is therefore a potential lever to address the problem of the lack of sustainability in our current lifestyles and thus to limit the consumption of energy and resources. The public sector has an exemplary role to play for other building owners. In the year under review, the public sector was the building owner of 3,076 approved buildings, of which 2,282 were non-residential buildings. The presence of these buildings in the public eye through their location and purpose launches the possibility of sustainable building. In order to make the environmental impacts of different building materials and techniques quantitatively comparable with each other, various methods of life cycle assessment exist. These are intended to enable consumers to purchase the most environmentally friendly product, while companies can be shown optimisation potential in their products, processes and services through the presentation of key figures.

This project examines the possibilities for making the building fabric in Germany more climate-friendly. In doing so, it must be taken into account that in addition to purely ecological sustainability, social issues in the area of housing and house construction must also be considered. For this purpose, the methods of life cycle assessment are applied, and a wide variety of economic and social indicators are integrated. In the end, it should be possible to make a statement on how the building stock can be made more ecologically sustainable in the future and how rising property prices can be addressed at the same time.

Duration: 01.2019-12.2021

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