

Description

To meet the global and European challenges of reducing the GHG emissions from the construction sector, Build-in-Wood will develop a sustainable and innovative wood value chain for the construction of multi-storey wood buildings. The ambition of the project is to make optimised and cost effective wood construction methods common practice in the European construction sector.

Build-in-Wood will address this challenge through innovative development of materials and components as well as structural systems and façade elements for multi-storey wood buildings fit for both new construction and retrofitting. Developments will be tested, piloted and fully documented for immediate market uptake. Active engagement of selected cities will strengthen the urban-rural connections.

The project aims to lay the foundation for the solutions developed to be usable upon its completion for full scale construction projects.

Objectives

- To make wood a natural choice of building material for the construction of multi-storey buildings
- To decrease GHG-emissions of the European building sector
- To establish an innovative and sustainable European value chain for multi-storey wood buildings
- To improve the connection between rural and urban areas and to contribute to sustainable urbanisation
- To increase productivity of the European building sector

Impact

- Reduction of GHG emissions through increased use of wood;
 a sustainable, resource- and energy-efficient material
- A rising demand for forest-based construction products providing incentives for expanding and maintaining forests
- Creation of economic opportunities and new methods of using wood and natural materials in the construction sector
- Increased innovation in the building industry (including materials, building systems and processes)
- Higher quality buildings (including health and indoor climate)
- Green and decent jobs in rural and urban areas through a sustainable wood value chain

WHAT IS A MULTI-STOREY WOOD BUILDING?

Build-in-Wood defines 'multi-storey wood buildings' as buildings where the supporting structure is made from wood or wood/hybrid materials, and which are at least 3 stories in height. Buildings may be clad with any material including non-wood materials.



Duration: 09/2019 - 08/2023

Total costs: € 10 million **EU-Funding**: € 8.6 million



Outcomes

- Optimised materials (resource-efficient, enhanced qualities)
- Development of a structural, customisable building system platform as well as guidelines for incorporation of ICT tools in the design process
- Performance and environmental documentation of developed materials, systems and solutions (e.g. LCA, LCC, S-LCA)
- Demonstration projects
- Stakeholder co-creation and scenario building workshops in selected European cities
- Training for entrepreneurs, SMEs and researchers
- An open source design guide (for private clients and local/ national authorities)
- Overview and evaluation of relevant legislation, public regulations and standards
- Model for enhancement of rural-urban connection

Project Coordination

Danish Technological Institute
Niels Morsing, Project Coordinator: nmo@teknologisk.dk
Anders Kjellow, Project Management: awk@teknologisk.dk
www.build-in-wood.eu



Project Consortium:



















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