



Climate-KIC



Nordic Council
of Ministers

Wood in Construction

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Wood in Construction

Climate-KIC is supported by the
EIT, a body of the European Union



Why wood is the future of construction

- The need for action to **tackle climate change** is ever more apparent – the construction industry is responsible for around one third of all carbon emissions globally
- Using wood as a building material has the potential reduce the carbon footprint of our buildings by using **the only renewable construction material**
- Wood in construction also delivers **financial, social and health co-benefits** that are currently under appreciated, drives innovation and boosts rural communities.



25 cases of Nordic good practice

- Showcases 25 examples of Nordic projects from throughout the construction value chain **working with wood in exciting and innovative ways.**
- The aim is to **demonstrate the benefits and drivers** for building with wood, providing inspiration for the next generation of wood construction projects.
- Published by the **Nordic Wood in Construction Secretariat** and the Nordic Council of Ministers in partnership with EIT Climate-KIC and Nordic Sustainability



Innovation



Social & local
benefits



Environmental
benefits



Partnerships



Economic
benefits

Digital forestry revolution helps to see the wood from the trees

FINLAND: Metsä Group is using new technology to gather and utilise an unprecedented amount of forest data to drive intelligent felling and planting practices, that leads to improved efficiency up the 100% traceable supply chain.



As digital tools vastly improve efficiency of forestry work, it is estimated that 10% of operating costs can be reduced – savings that can bring down the cost of wooden construction materials in the future.



One in seven Finns own some forest, and new digital and virtual tools are enabling them to manage their resource more efficiently, and even to visit their forests virtually from their own home.



Timber trade revolutionised with new digital platform

FINLAND: Kuutio is the world's first publicly open digital marketplace for timber trade, linking forest owners and wood buyers, which traded over €500 million of wood in its first year and a half of operation.



The platform uses national data on forest resources to improve the effectiveness of the sector, helping both buyers and sellers to reap the benefits of the digital revolution.



Kuutio uses digital technology to link buyers and sellers of wood more closely to optimise their operations, and ownership of the platform is split 50:50 between buyers and sellers.



New 3D design techniques creating flexible and traceable wooden façades

SWEDEN: Wooden façades play a vital role in the aesthetics and safety of a building, and by pairing the latest software and hardware, Schlyter Gezelius is producing sustainable building façades that allow greater creativity and require less maintenance.



This project is utilising 3D design software, paired with the latest milling hardware to create entirely new ways of working with wooden façades that offer architects new flexibility to let their creativity run free.



This has been a research-led project with Research Institute of Sweden (RISE) and Luleå University of Technology (LTU), bringing in collaborators from forestry, production, construction and housing developers and end-users.



The role of policies

- Implement incentives mechanism for bioeconomy as a measure for climate change mitigation
- Support of financial instruments
- Capacity development on the use of sustainable wood for construction and its benefit
- Research to enhance the efficiency and/or reduce the cost of the different operations in the sustainable wood for construction supply cycle





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