All hands on deck for the rise of wood construction in Europe

Oliver Jancke - Business Manager, InnovaWood

Interactive webinar on wood in Ukraine's green recovery and development
«European initiatives for green building with wood:
experience and lessons for Ukraine»

Online – 14 November 2024

DOI: 10.5281/zenodo.14178129

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New European Bauhaus Academy

Circular Bio-based Europe Joint Undertaking

Bio-based Industries Consortium

Co-funded by the European Union

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The European Network
for **Wood** Research,
Innovation and Education

Membership map 2024

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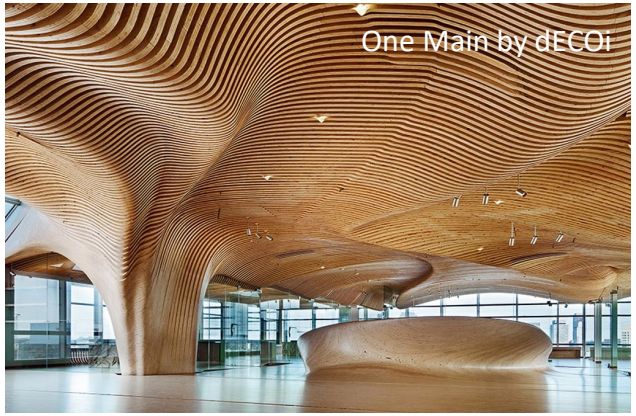

WHAT?

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WHAT?

Bern University of Applied Sciences

Omega Swatch HQ, Blumer Lehmann

Swiss Tennis, Renggli AG

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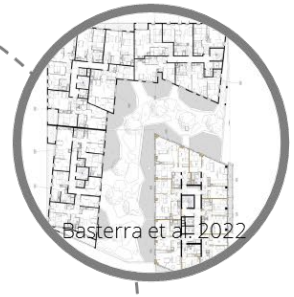
WHAT?

BIM modelling

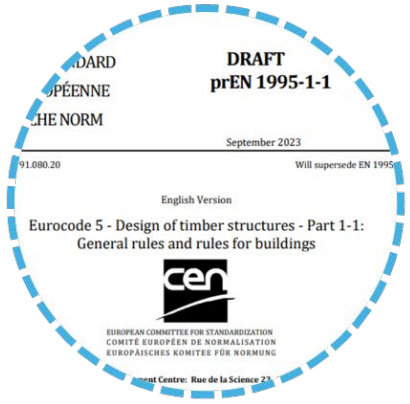
Engineered Wood Products (EWP) + wood-based panels

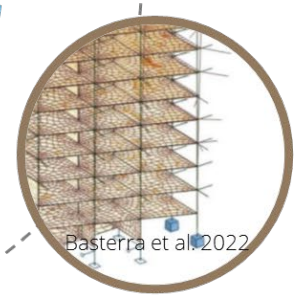


Architectural design

Wood grading

CNC machining





Structural design

Construction: off-site prefabrication & on-site assembly

MATERIALS → PRODUCTS → SYSTEMS → BUILDINGS

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Trending now

- Circular design for deconstruction and reuse
- Resawmills (from old/used to new construction elements)
- Large scale industrial production
- Parametric design
- New innovative materials (biobased, carbon negative)
- Lighthouse demonstrators
- Wood construction across all continents
- New European Bauhaus
- ...

Key factors for the rise of wood construction during the last 30 years

All hands on deck for the rise of wood construction in Europe

Picture: Allan Villiers

HOW?

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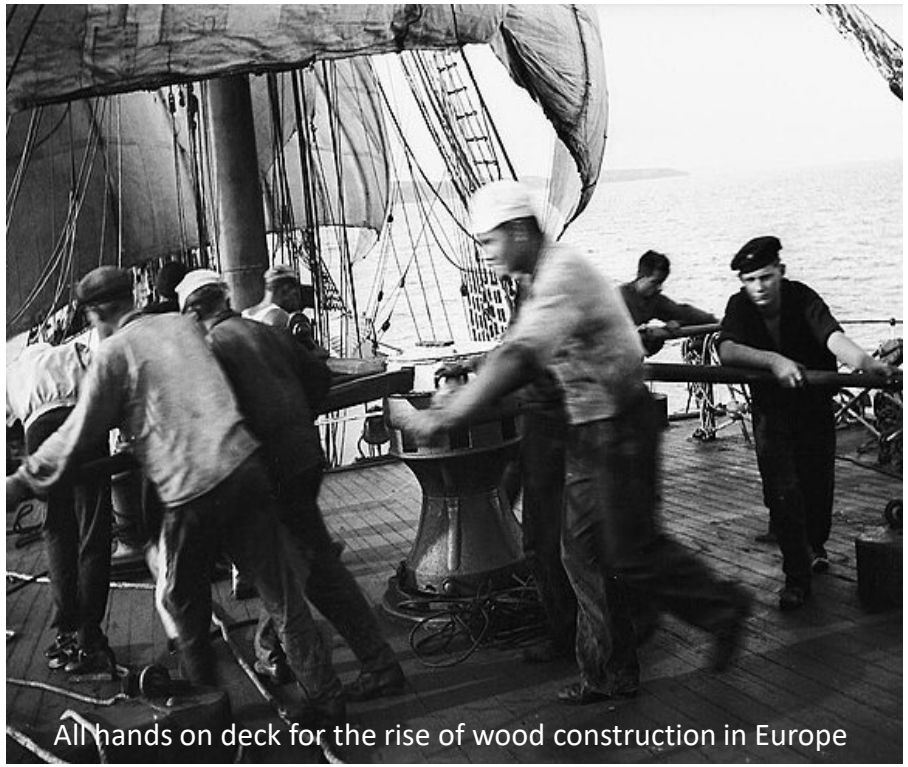
Key factors for the rise of wood construction during the last 30 years

- Major competitiveness shifts across Europe following the cold war aera and the rise of new global players e.g. China
- Pioneering work and joint efforts of business, research and education
- International dialogue and exchange
- Focus on quality and solving technical issues
- Major innovations in Engineered Wood Products EWP, e.g. Cross Laminated Timber CLT
- Industrialised off-site production
- Digitalisation, e.g. CAD, CNC, BIM, DT
- New European Bauhaus
- Sustainable Forest Management SFM
- Money ;)



All hands on deck for the rise of wood construction in Europe

Picture: Allan Villiers

Key factors during the last 30 years

- Pioneering work and joint efforts of business, research and education
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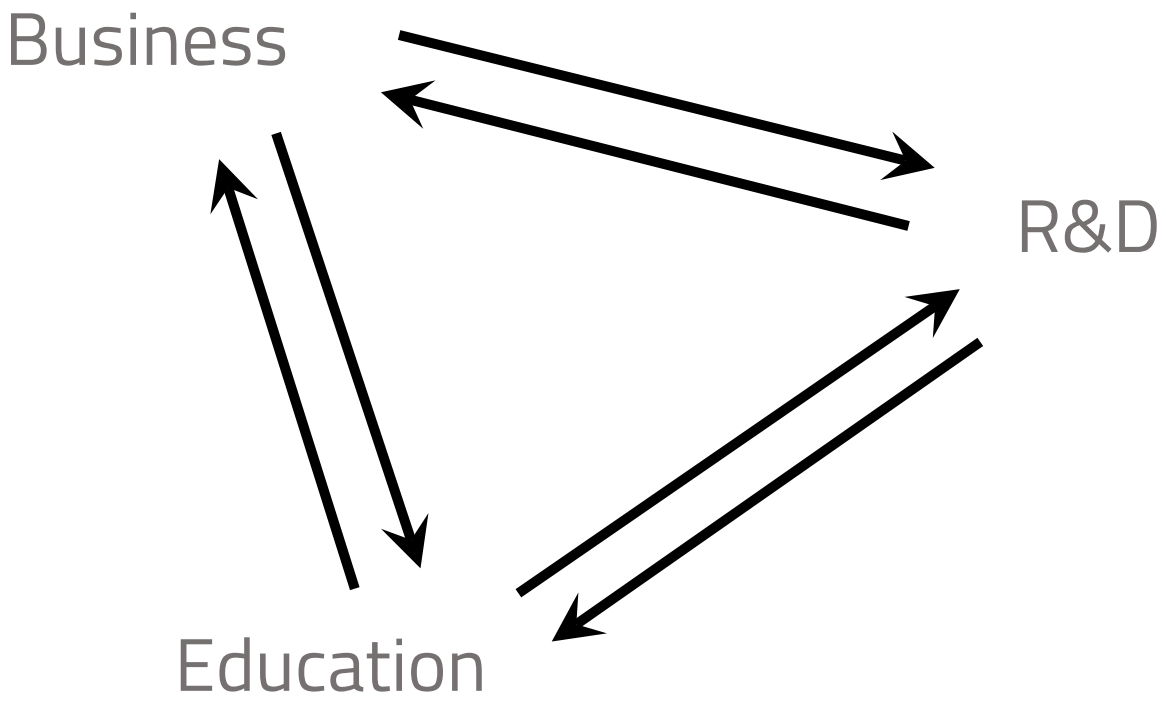



Bern University of Applied Sciences

FORUM HOLZBAU INTERNATIONAL

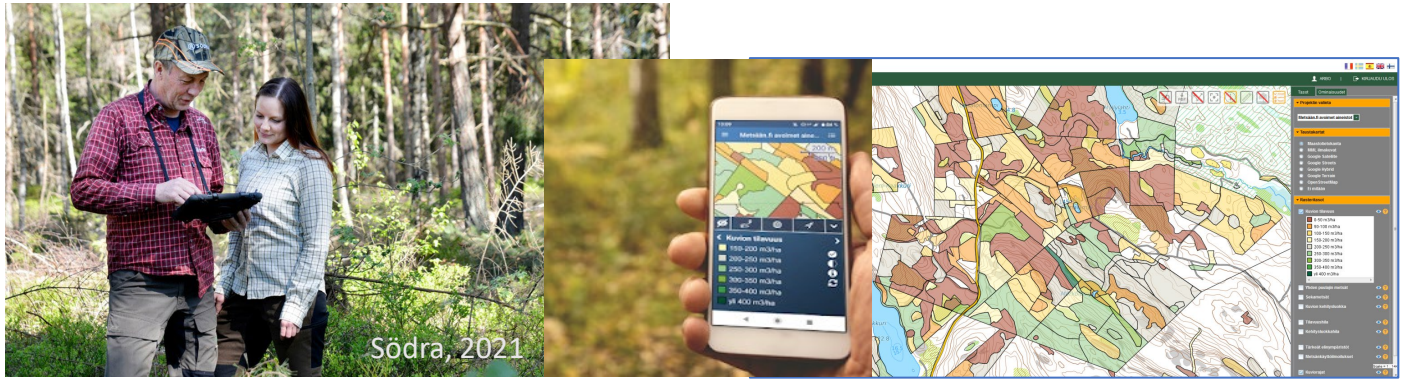
English Version
Eurocode 5 - Design of timber structures - Part 1-1: General rules and rules for buildings
cen
EUROPEAN COMMITTEE FOR STANDARDIZATION

WOODRISE

Key factors during the last 30 years

Focus on quality and solving technical issues

- Water and humidity (condensation, roof, moist rooms)
- Fire
- Thermal insulation
- Sound insulation
- …
- Sustainable Forest Management SFM



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New European Bauhaus
A call for bio-materials and nature-based solutions

*"We know that the construction sector can even be turned from a carbon source into a sink, if **organic building materials** like wood and smart technologies like AI are applied.'*

Ursula von der Leyen
President of the European Commission
State of the Union Address, Brussels, 16 September 2020

New European Bauhaus

*"**Reforesting the planet, retimbering the cities**: timber construction is a true silver bullet for climate change."*

Prof. John Schellnhuber
Director Emeritus of the Potsdam Institute for Climate Impact Research
Director General of International Institute for Applied Systems Analysis (IIASA)
Wood4Bauhaus Conference, 8 April 2021

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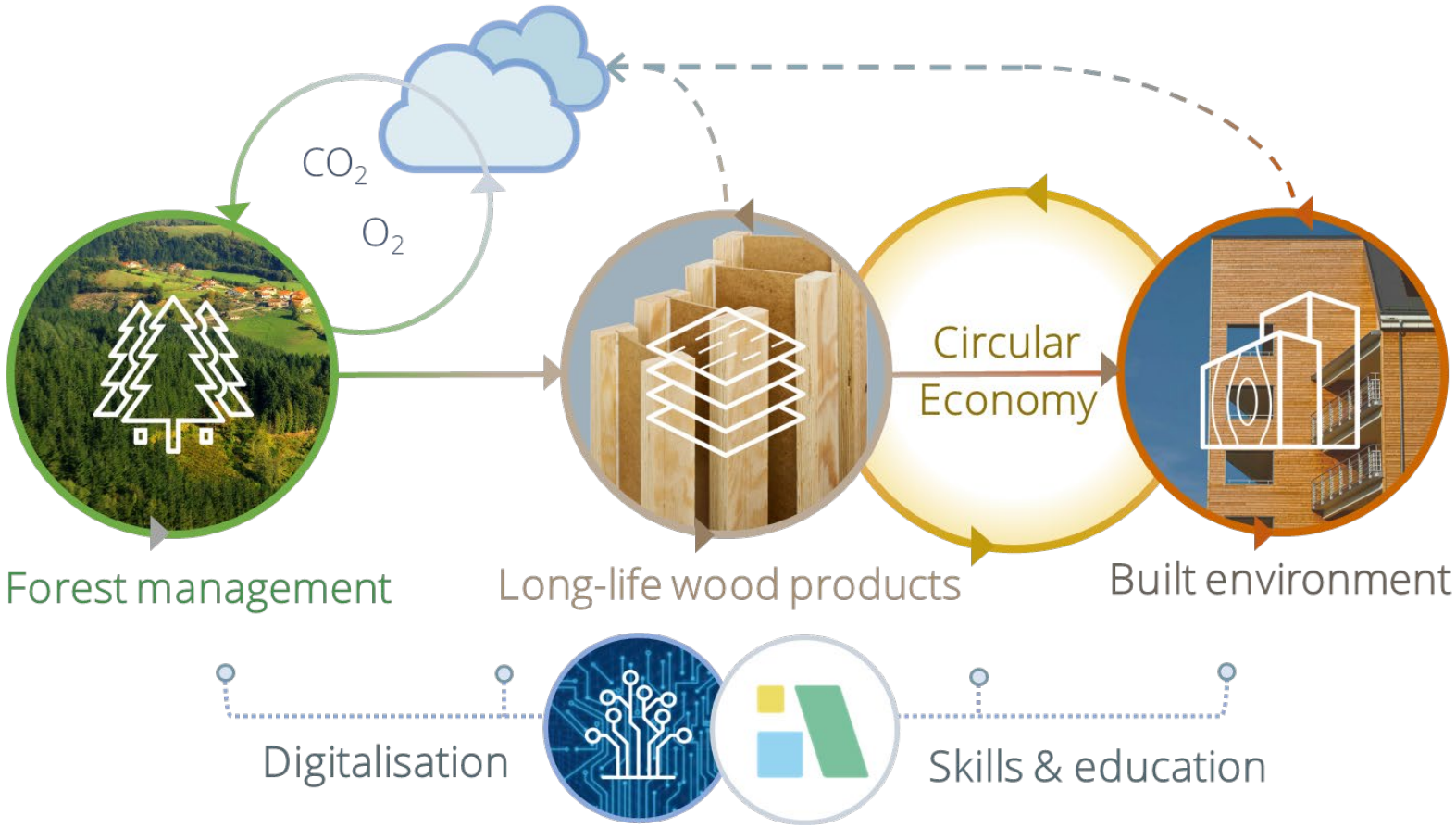
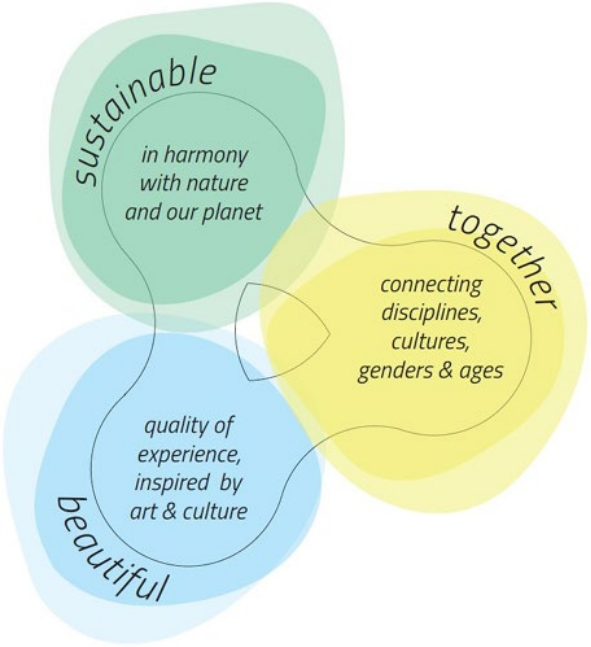
The narrative part 1:

Cities as carbon sinks – upscaling long-life wood construction



The Narrative part 2:

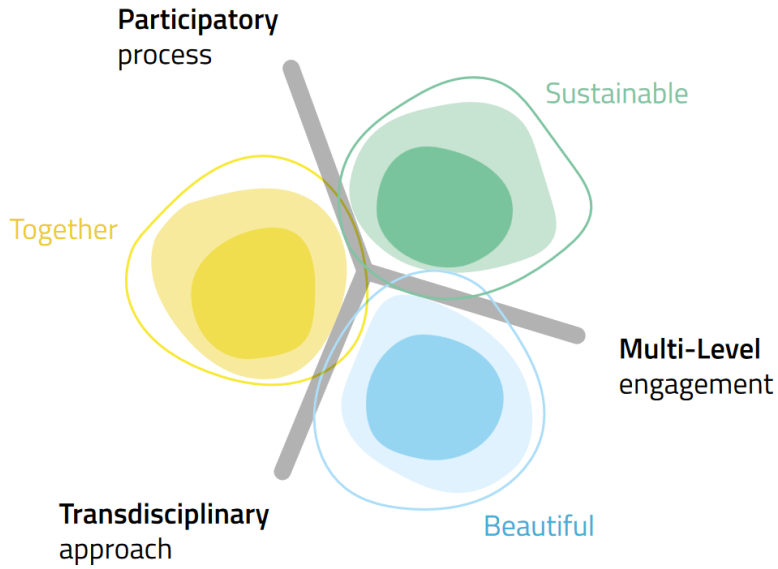
Compelling values, methodologies and tools to connect stakeholders and policy makers



Co-creation

- Onboarding relevant stakeholders
- Identify holistic solutions accounting for all stakeholder needs
- Convince and reduce risk for funding agencies

- NEB Values
- NEB Compass
- NEB Toolbox
- NEB Self-Assessment Tool
- NEB Investment Guidelines
- NEB Lab (NEB Partners)
- …



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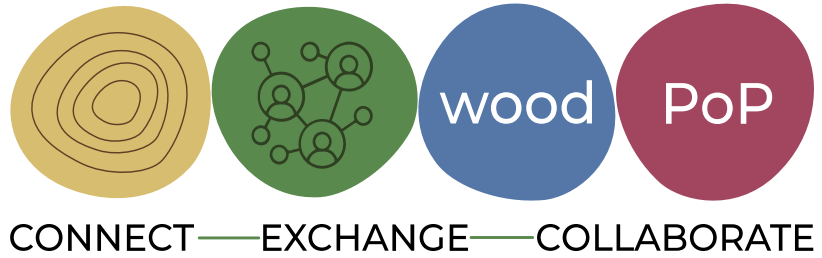
Building sector alliances to connect stakeholders and policy makers

wood4bauhaus

Wood Sector Alliance for the New European Bauhaus



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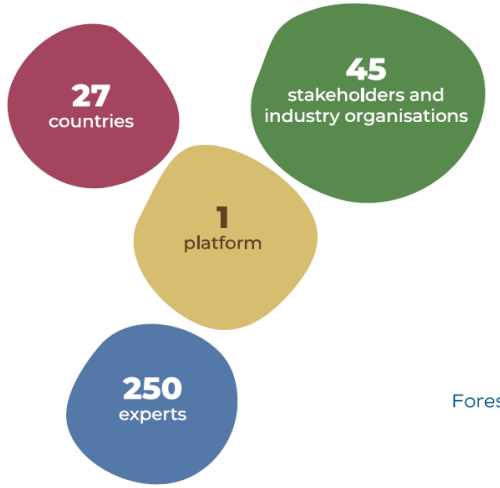
EUROPEAN PANEL FEDERATION
WOOD-BASED PANELS

EOS
EUROPEAN ORGANISATION OF THE SAWMILL INDUSTRY

CEI-Bois

EUROPEAN FEDERATION OF BUILDING AND WOODWORKERS

INNORENEW COE



Forest Fund Republic of Austria

An initiative by the Federal Ministry of Agriculture, Forestry, Regions and Water Management

IUFRO

Interconnecting Forests, Science and People

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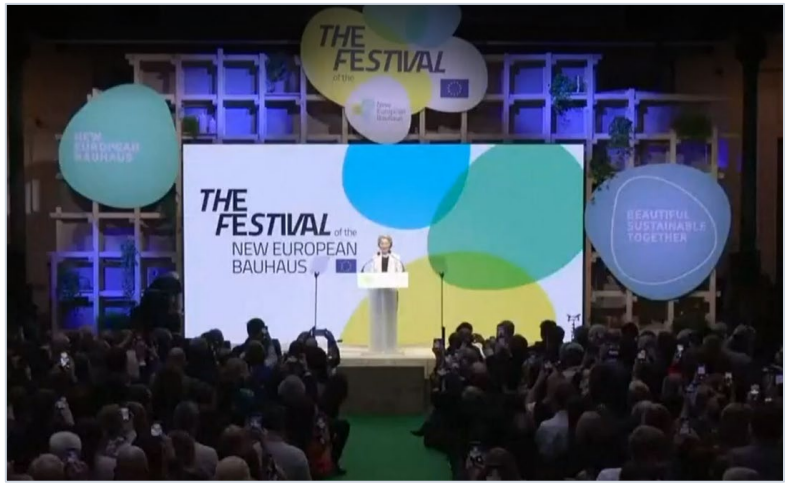
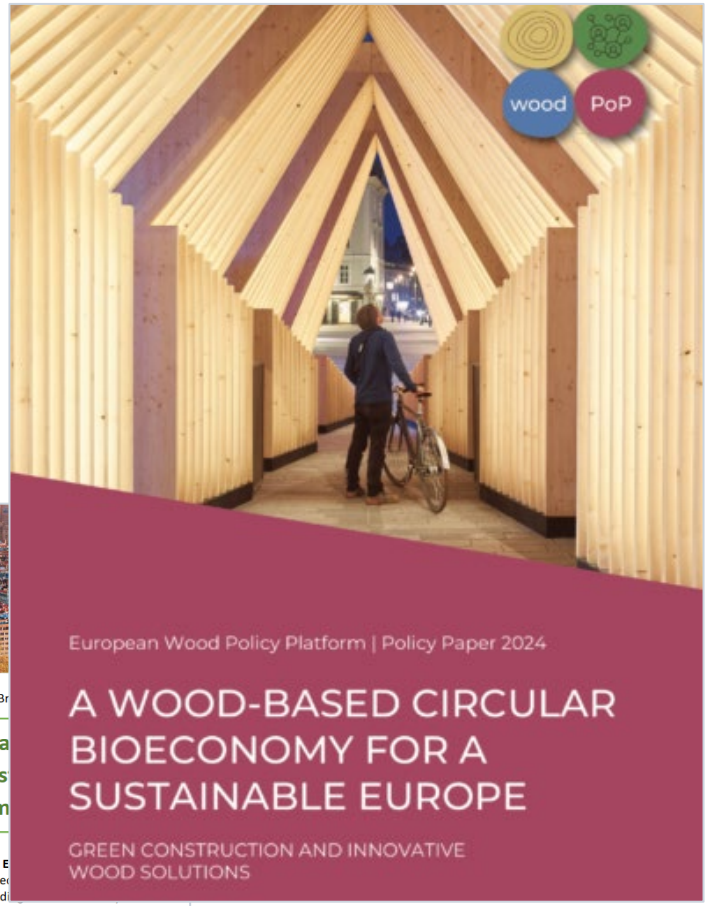
Building sector alliances to connect stakeholders and policy makers





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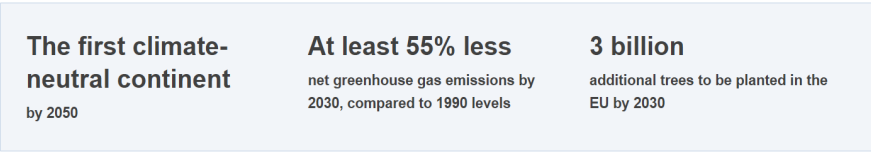
EU policies affecting sustainable building

European Commission



- **European Green Deal (2020)**
- New European Bauhaus (NEB, 2020)
- Renovation wave (2020)
- Circular Economy Action Plan (CEAP, 2020)
- Carbon Removals Certification Regulation (CRC, 2022)
- EU Taxonomy Environmental Delegated Act (Taxonomy, 2023)
- Energy Performance of Buildings Directive (EPBD, 2018/2023)
- Construction Products Regulation (CPR revision, 2024)
- EU Carbon Removals and Carbon Farming Certification Regulation (CRCF, 2024)
- …

New European Bauhaus
beautiful | sustainable | together

National and regional initiatives promoting wood construction

- **Slovenia:** Green Public Procurement GPP requires 30% wood-based construction materials in public buildings
- **Austria:** CO_2 bonus of 1€ per kg of wood used in buildings
- **Styria AT:** committed to using 20% timber construction in social housing
- **Galicia ES:** 20% of regional government buildings to use wood in their structure
- **Estonia:** renovation using prefabricated wooden elements are eligible for a 50% subsidy
- **Amsterdam NL:** goal of 20% of new residential builds made from wood be 2025
- …

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The New European Bauhaus Academy *#NEBA* is a flagship initiative of the European Commission on skills for sustainable construction.

NEBA aims **unlocking the potential of the construction ecosystem in decarbonising & transforming the built environment**.

Creation of a NEB Academy Hub in Ukraine

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All hands on deck

Focus on quality and
build alliances of different actors on
regional, national and international level

Advocate a compelling narrative

Use powerful methods and tools
such as co-creation

Access funding for research, education and building projects
→ Funding providers want long term low risk and high impact, so they go for anything that is high QUALITY and SUSTAINABLE