Innovative solutions for CLT structures

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Project InnoCrossLam is supported under the umbrella of ERA-NET Cofund ForestValue. ForestValue has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 773324.

ForestValue Kick-Off Seminar. Helsinki, 24.5.2019
Title and acronym

InnoCrossLam

= Innovative solutions for Cross Laminated timber structures
Aims

“...increasing even further the competitiveness of CLT as a versatile engineered product...”

“...increasing its predictability...demanding design situations...not covered by the guidelines of today, or codes and standards foreseeable in a near future...”

“...further develop a ... multi-functional use of CLT in terms of its thermal activation ... an integrated part of a heating/ventilation system.
Full project partners:

• The Slovenian National Building and Civil Engineering Institute (ZAG) – leading partner

• Lund University, Sweden (LU)

• Vienna University of Technology, Austria (TUW)

• Technical University of Munich, Germany (TUM)

• University of Navarra, Spain (UNAV)
Associate partners:

- The Association of German CLT producers
- The Association of Austrian Wood Industries
- Hermann Kaufmann & Partner ZT
- merz kley partner (mkp)
- Limträteknik AB
- Arrea
- Infomadera
- Swedish Wood
- White
Content of the project

- Design of CLT connections and joints (WP 2, All) simulation & experiments
- Design of CLT walls with large openings (WP 6, 5) simulation & assessment
- Performance of point-loaded CLT plates (WP 2, 3, 6) simulation & design rules
- Structural design of large-span CLT elements (WP 6, 2) theoretical work & guidelines
- Thermal activation of CLT (WP 5, 4, 3) experiments & production process analysis
- Material behavior and stress singularities (WP 3, 2) modelling & simulation
- Seismic behavior of CLT-based structural systems (WP 4, 6, 2, 3) experiments & probabilistic modelling
- Design of deep GLT/CLT beams with point loads (WP 3, 2, 6) simulation & design rules
- Management and transnational dissemination (WP 1, All) documentation & organization
Forest based value chain, importance for industry / society

- increase use of wood based materials
- mitigation of climate change by substitution of non-renewable building materials with wood
- increased sustainably of buildings and the construction section in general
- new job opportunities in production of CLT and also in construction
- transnational cooperation → strengthen the competitiveness of the forestry EU based sector
Looking forward to a successful project!