ForestValue

InFutUReWood Innovative Design For the Future - Use and Reuse of Wood

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Project InFutUReWood is supported under the umbrella of ERA-NET Cofund ForestValue by Vinnova – Sweden's Innovation Agency, Formas – Swedish Research Council for Sustainable Development, Swedish Energy Agency, the Forestry Commissioners for the UK, the Department of Agriculture, Food and the Marine for Ireland, the Ministry of the Environment for Finland, the Federal Ministry of Food and Agriculture through the Agency for Renewable Resources for Germany, the Ministry of Sience, Innovation and Universities for Spain, the Ministry of Education, Science and Sport for Slovenia. ForestValue has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773324.



Consortium







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Objectives

The project has five major areas:

- Design of timber structures for the future
- Product design using recovered timber
- Inventory, deconstruction and quality of recovered wood
- Properties and grading of recovered wood;
- Environmental and economic assessment of design for recycling in wood building construction

Aim answer the question





Exploitation and tech transfer

20 October 2020 free webinar

Timber Buildings: Reuse and Recycling for Sustainability

- Presentation
- Videos
- OnDemand
- Website The materials can be accessed at www.infuturewood.info/ondemand/

About 200 pre-registrations. Attendees from all over the world

14 videos Video presentation Part1 and 2 InFut INVENTORY OF WOOD MATERIALS USED IN CO URRENTLY (DELIVERY, M24 1. Identifying the building types with the hi materials within the Finnish building stock in 20 2. Quantification of wood materials in the building 3. Documentation and quantification of wood ma representative buildings InFutURe

Grading old timber Reusing old timber







Exploitation and tech transfer



Five Questions for Slovenia



Sara Bergås 👉 Ida Lundgren

FÖRÜNN Å FÖRÜNN

Exploring possibilities with timber buildings designed for disassemble

Examiner: Krystyna Pietrzyk Supervisor: John Helmfridsson Department of Architecture & Civil Engineering Chalmers University of Technology

Activities to collect and transfer information

- Five questions from each country
- Exchange information with other projects and standardisations groups
- Interviews with industry & stakeholders
- Site visits
- Internal seminars sharing information
- Workshop with stakeholders
- Case studies
- Thesis works
- More than 14 videos
- Stakeholder oriented articles
- Horizon Results Booster (HRB)



Activities State of the art report

- Focusing on Design for Deconstruction and Reuse (DfDR)
- Contemporary building techniques of timber buildings in all project countries, Sweden, Finland, Ireland, UK, Spain, Germany, Slovenia.
- Compilation of terminology.





Design for deconstruction and reuse of timber structures – state of the art review

CARMEN CRISTESCU, DANIEL HONFI, KARIN SANDBERG, YLVA SANDIN, ELIZABETH SHOTTON, ST JOHN WALSH, MARLENE CRAMER, DANIEL RIDLEY-ELLIS, ANNETE HARTE, MICHAEL RISSE, RAPHAELA IVANICA, MARINA DE ARANA-FERNÁNDEZ, M. GARCÍA BARBERO, DANIEL F. LLANA, GUILLERMO ÍÑIGUEZ-GONZÁLEZ, BAHARÉH NASIRI, MARK HUGHES, ŽIGA KROFL

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ISE report 2020:05		
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Activities Definition of product property requirements

- Data was collated from site visits and responses from industry to a questionnaire
- Information provided on demolition practices was supplemented by a presentation given by Paul Hogan of Hegarty Demolition Ltd.







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Activities testing

• CLT panels were constructed with wood-salvage and tested structurally

Recycled



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Dissemination and Communication

- Arana-Fernández, M. de, Llana, D.F., Nasiri, B., Íñiguez-González, G. (2020) Cascading potential for recovered wood from heavy timber frame typologies in pre-modern dwelling buildings in Madrid. In Proceedings of the 63rd International Convention of Society of Wood Science and Technology (SWST). July 13-15. Online due to Covid-19. Pp. 16-27.
- Cramer, M. (2020), D. Ridley-Ellis, A case study on timber demolition and recycling UK. Presentation at 16th Annual meeting of the Northern European Network for Wood Science and Engineering (WSE) 2020 Conference. December 01-02. Online due to Covid-19.
- Cramer, M. (2020), D. Ridley-Ellis, A shed Resource A look at wood recycling in the UK. Timber 2020 Conference Proceedings. September 09-10. Online due to Covid-19. Pp. 201-214
- Llana, D.F., Íñiguez-González, G., Arana-Fernández, M. de, Uí Chúláin, C., Harte, A.M. (2020) Recovered wood as raw material for structural timber products. Characteristics, situation and study cases: Ireland and Spain. In Proceedings of the 63rd International Convention of Society of Wood Science and Technology (SWST). July 13-15. Online due to Covid-19. Pp. 117-123.
- Ridley-Ellis, D. (2020), M. Cramer, Some awkward questions about density. Timber 2020 Conference Proceedings. September 09-10. Online due to Covid-19. Pp. 99-110
- Walsh, S.J. (2020) Adding value to timber components through consideration of demolition and disassembly. In Proceedings of the 63rd International Convention of Society of Wood Science and Technology (SWST). July 13-15. Online due to Covid-19. P. 436.

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