

BASAJAUN – Building A SustainAble Joint between rurAl and UrbaN Areas Through Circular And Innovative Wood Construction Value Chains.

The global purpose of BASAJAUN is to foster the adoption of wood as raw material in products and building solutions and demonstrate that they contribute to increase the quality, habitability, and performance of the European building stock with many benefits for healthier, sustainable cities. Better integration of wood products in the construction sector stimulates more sustainable development of rural regions. For more information, please check www.basajaun-horizon.eu.

Project Setup

- Horizon 2020 Innovation Action grant agreement no. 862942
 - Duration: October 2019 - September 2023 (4 years)
 - Total budget: 12.2M€ ◦ Total EC grant: 10M€

Coordinator: Tecnalia Research and Innovation Foundation

Consortium

- 30 partners from 12 countries
- 8 RTOs, 3 universities, 15 companies, 5 other public and sectoral
- Competence in wood construction systems and buildings, innovative materials, architecture, forestry, digitalisation, environmental assessment, development
- Regions: Northern, Central and Southern Europe

• Research



• Industry



• Public authorities



• Dissemination Exploitation



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Project summary

BASAJAUN is a major European innovation project about sustainability of building with wood. The main objective is to demonstrate how wood construction chains can be optimized to foster both rural development and urban transformation whilst being connected with sustainable forest management in Europe. The core idea is to enable the construction of a mid-sized building with the lowest possible hectares of forest.

Two full-scale medium-sized demo buildings will be constructed in Finland and France using innovative architecture and a complete digitalization of the 'forest to building' chain to show how wood construction can create benefits for rural areas.

Coordinated by TecNALIA, the project comprises 30 partners from 12 countries including 8 leading research and technology organizations, 3 universities, 15 companies and 5 other public and sectoral organizations. The team unites strong expertise in wood construction systems and buildings, innovative materials, architecture, forestry, digitalisation, environmental assessment and rural development. It covers regions both in Northern, Central and Southern Europe.

The title BASAJAUN is adopted from an imaginary creature of the Basque mythology and can be translated as 'Protector of the forest'. The name BASAJAUN has been chosen for the project as an analogy to the idea that forests can be better protected through a sustainable use of forest products in wood construction, to generate positive benefits for the rural communities.

The BASAJAUN project will deliver the following innovative outcomes:

1. Several guidance reports about building with wood addressing a holistic value chain approach including LCA assessment, recyclability and eco-design of novel building products and systems
2. Studies on wood as driver for sustainable development impacts in Europe's rural regions
3. A 'Forest to Building Digital Framework' (F2BDF) as complete digital twin of the whole value chain
4. A series of innovative bio-based materials, products and constructive systems, including e.g. thermoplastic composites, WPC foams, structural insulation panels, waterborne coatings with fire-proof properties, structural components, façade, interior partitions and roof prototypes, innovative fixing systems, etc.
5. Two full-scale demo buildings - in Bordeaux/France and in Joensuu/Finland
6. A novel exploitation and co-creation platform for upscaling of results together with more regional companies and stakeholders
7. Broad dissemination of results and policy recommendations in the forest-based sector and towards the interested public

