

BioReno

Bio-based materials and hybrid structural solutions for renovation

To create opportunities to Finnish companies through developing high-performance bio-based materials and hybrid structural solutions for renovation with low environmental impact.

1.5.2025–31.12.2027 | ~ 2 050 k€

Co-Research

**BUSINESS
FINLAND**

 **Tampereen yliopisto**

VTT

XAMK

TAVOITTEET | BioReno

- BioReno-hankkeen päätavoitteena on **kehittää** uusia **biopohjaisia** ja **vähähiilisiä** rakennusratkaisuja **korjausrakentamiseen**.
- Hankkeen tavoitteena on yhdistää kolmen tutkimuslaitoksen (TAU, XAMK ja VTT) uusin tieteellinen osaaminen **kestävien, kosteusturvallisten, paloturvallisten** ja kustannustehokkaiden **lisälämmöneristysratkaisujen kehittämiseksi** ja **demonstroimiseksi** korjausrakentamiseen biopohjaisia ja luonnonmateriaaleja hyödyntäen.
- Tämän kehitystyön tarkoituksena on parantaa mukana olevien yritysten mahdollisuuksia päästä nopeasti kasvaville kestävän korjausrakentamisen markkinoille uuden innovatiivisen konseptin avulla.

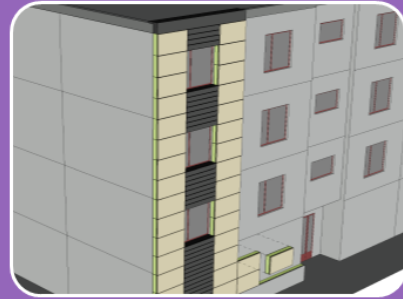




WP1: TAU

Thermal insulation solutions for ventilated roof structures

Development of exterior thermal insulation solutions for roof structures based on bio-based blown insulation materials



WP2: XAMK

Insulated facade element concept for external walls

Development and demonstration of pre-insulated facade element-concept, along with engineering data management for microelement design



WP3: TAU

Interior insulation solutions for external walls

Development and demonstration of nature-based materials and structures for interior thermal insulation of external walls



WP4: VTT

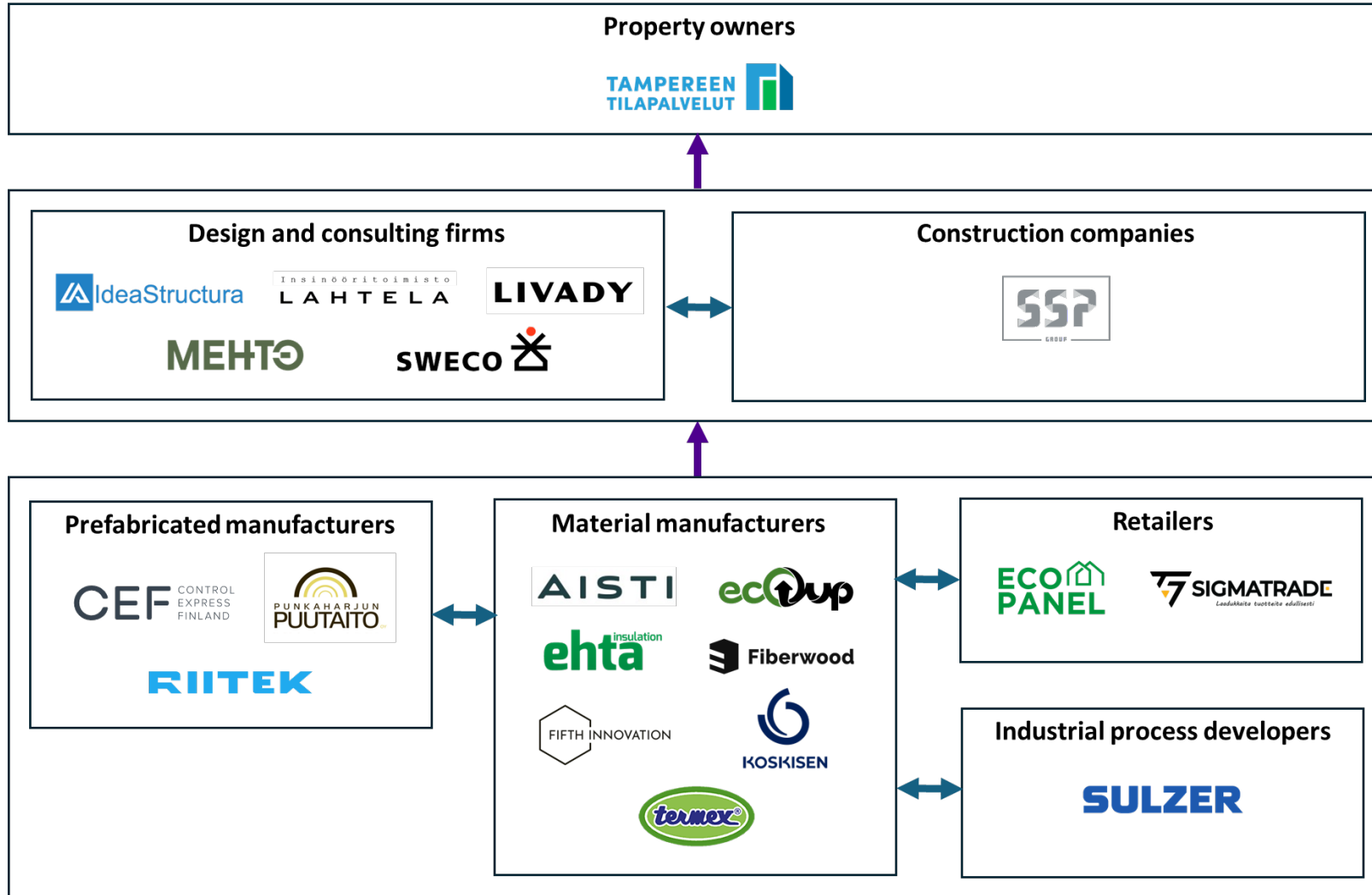
Wood-based thermal insulation solutions

Development and demonstration of forest-based thermal insulation and vapor retarder materials for renovation and construction

WP5: Life-cycle assessment (LCA) and techno-economic analysis (TEA) XAMK

WP6: Management, dissemination and communication TAU

BioReno – Value Chain



- **20** companies representing all stages of the construction process.
- Altogether **205 000 €** financing + **10 000 €** other investments.
- The project involves **many SMEs companies** that have not yet systematically utilized the expertise of research organizations.
- The project involves companies from different stages of the construction process, enabling **many opportunities for collaboration** between them.



Thank you!

