

## **COWI AS PARTNER IN RESEARCH PROJECT "FIRE, ACOUSTIC AND STRUCTURAL PROPERTIES OF TIMBER CONNECTIONS"**

Green transition is a basic condition in society and hence for COWI's customers and employees. With the urban population steadily growing and climate change becoming a pressing topic, one key challenge is to design buildings with low carbon emissions and durability. Timber is an attractive material because it has a low carbon footprint, uses little energy and water and is 100% renewable from sustainably managed forests. To increase the attractiveness of timber as a structural material, gaps in the knowledge of the performance of timber structures needs to be addressed.

One important topic is the design of timber connections where the current standards are both difficult to navigate and insufficient for many practical problems. Connections are crucial in terms of buildability, stiffness and thereby flexibility in terms of longer span widths, structural safety and overall acoustic performance.

The overall research project "**Fire, Acoustic and Structural properties of Timber connections**" (FAST), aims to improve the methodology of the fire, acoustic and structural performance of timber connections and to provide user-friendly tools and procedures that reduces risk and improves the assessment of resource efficient and cost-effective solutions. The COWI Foundation supports COWI's contribution to the research project as an industrial partner.

The project team will consist of specialist from COWI and other participants from the industry and researchers from SINTEF (Norway), RISE (Sweden), Tampere University and Turku University of Applied Sciences (Finland) and Warsaw University of Technology and Andrewex (Poland).

The project FAST is a project proposal which will be delivered to Joint Call 2021 of the ForestValue Research Programme. The call closed 13 April 2021. The overarching aim of this joint transnational call is to support projects that will produce knowledge to promote the best possible use of forests and forest resources for the benefit of society on its way to a climate-neutral and sustainable society.

The project will have a project duration of 36 months. The project will start in late 2021 and finish in late 2024. COWI's participation is expected throughout the whole project period as our involvement is mainly related to regular meetings and consultations prior to dissemination at the very end of the project. The project will be disseminated by research articles and relevant conferences.