# BACKGROUNDER

## 2025/26 Wood First Funding

Forestry Innovation Investment (FII) delivers programs that support market development activities designed to generate demand for B.C. forest products and help diversify and strengthen the provincial economy.

The Wood First program works with manufacturing, education, training, design, and construction industries, as well as government and the forest industry, to advance wood construction technologies and expertise in B.C. FII leverages this leadership to position B.C. and its forest industry internationally as a leading source of products, technology, and expertise for the use of wood in construction, interior design, and daily living.

FII targets opportunities to grow and expand B.C.'s value-added wood industry in British Columbia and the use of next-generation products using lumber such as mass timber, as well as traditional engineered wood products. At the same time, FII recognizes the importance of the primary forest sector and supports the use of these products in a wide range of building and finishing applications.

For 2025/26, FII is investing a total of $2.67 million to advance wood use in the province.

FII is pleased to be collaborating with and funding the following organizations:

## Research and innovation – $906,203

FII-supported research helps to address regulatory and performance barriers to using wood-based products and building systems, particularly as it relates to national and provincial building code provisions. This research also advances performance-based design and supports housing and community infrastructure solutions, low-carbon innovation, and other considerations related to the building sector.

Research areas include fire performance, moisture and durability, acoustics and sound, seismic performance, connections and connectors, computer-assisted design and building information modelling. Databases, guides and calculators are developed for architects, engineers and developers—and the broader building and design community—to guide mass timber and hybrid construction projects.

**Funded activities:**

Seismic

- Develop design guidelines and preliminarily quantify the seismic performance for balloon mass timber shear walls for implementation in 2029 CSA O86, the Canadian Standard for Engineering Design in Wood. (FPInnovations)
- Test design values of high-capacity shear walls to address increased seismic provisions in the British Columbia Building Code 2024 that make mid-rise light wood frame construction more complex. (FPInnovations)
- Evaluate the rocking-and-pivoting balloon-type CLT shear wall system's seismic performance through full-scale testing of two-storey structures with two lines of coupled shear walls. (UNBC)
- Design models that account for the impact of floor-to-wall interactions on the seismic performance of multi-storey platform-type CLT shear walls. (UNBC)
- Develop design guidelines for moment-resisting timber frame buildings to enhance the seismic resilience of timber structures. (University of Waterloo)

Fire/Moisture

- Develop appropriate structural design principles for point-supported steel-timber systems exposed to fire. (FPInnovations)
- Investigate the effect of moisture content on the performance of self-tapping screw connections in mass timber construction to provide a database for developing design guidelines and tools. (UVic)

Vibration/Acoustic

- Conduct ambient vibration testing of tall wood buildings and floor vibration performance testing to develop vibration serviceability design guidance for mass timber buildings, addressing gaps in building codes. (UNBC)
- Research mass timber buildings for vibration and acoustic performance and develop best practice, research-informed guides for practitioners. (UNBC)

New Fibre/Product Applications

- Develop and diversify the use of B.C. hem-fir by creating high grade glulam; evaluate the performance of hem-fir glulam connections and develop shear design values. (UBC)
- Repurpose cross-laminated timber offcuts into value-added lumber products. (UBC)
- Improve the buckling resistance equation of high-capacity light wood frame shear walls in Canadian timber design code to better reflect real boundary conditions. (UVic)

Carbon

- Unlock new financing opportunities for mass timber through integration of the building material into a collaborative financial sector initiative to develop a Low-Carbon Resilient Construction Financing Program across Canada. (Affine Climate Solutions Society)

## Strengthening manufacturing and business capability – $1,160,850

Design and construction professionals choose wood products and wood building systems when they have the skills, ability and confidence to design and specify wood. With building codes allowing wood use in taller building applications, there is increasing interest by architects, engineers and developers to build their knowledge and expertise with these new approaches.

FII funds education, training and technical support to accelerate the adoption of mass timber and other value-added products and systems across the supply chain—from primary and secondary manufacturers, architects, engineers and developers, through to builders, assemblers and installers.

**Funded activities:**

- Work directly with owners/developers, architects, city planners, and other stakeholders, to advise on feasibility of wood use, design, detailing, and project execution, ensuring the successful implementation of wood-based projects. (WoodWorks BC)
- Enable current lumber production capacity to deliver a sawn lumber product that is more appealing to the prefabrication component sector interested in automation. (FPInnovations)
- Work directly with individual manufacturers to improve production processes. (CAWP)
- Build marketing and business capacity within B.C.'s value-added wood products sector through workshops and company-specific support. (BC Wood)
- Encourage growth of the value-added sector through monthly industry-focused networking events and educational seminars on manufacturing topics such as the Mass Timber Demonstration Program, and provide support for small manufacturers through knowledge-building sessions. (CAWP/TWIG)

## Education and skills development – $522,627

FII supports education and skills development activities needed to increase knowledge and experience in designing and constructing with wood products, including mass timber and next-generation wood and hybrid building systems. This includes educational programs, materials and tools for architects, engineers, builders and building professionals, building officials, insurers, financiers and developers.

**Funded activities:**

- Develop and distribute resources and studies for designers, engineers and builders to provide guidance for requirements in 6-storey wood buildings, help improve construction outcomes, financial performance, and address common technical questions for mass timber buildings. (WoodWorks BC)
- Build upon previous work to create an easily accessible, accurate, and reliable database to accelerate the structural design, evaluation, and implementation of mass timber construction. (FPInnovations)
- Develop a Local Materials Inclusion Guide to increase the standard of housing being built on reserves by and for First Nations people, incorporating various principles such as affordability and cultural appropriateness for occupants. (Construction Foundation of BC)
- Introduce off-site construction to B.C.'s small-scale multi-unit housing sector. (BCIT)
- Provide demonstrations and education on high-performance and low-carbon building envelopes that feature renewable, bio-based materials. (BCIT)
- Produce a feasibility study for schematic design and cost analysis of a flexible, modular hybrid structure to be used for interdisciplinary learning. (BCIT)
- Educate target audiences on B.C.'s sustainable forestry practices and processes, while connecting qualified specifiers and buyers with B.C. producers. (BC Wood)
- Provide educational workshops for industry on Design for Manufacture and Assembly using robot technologies and host international technical tours on offsite construction of the low- to mid-rise building sector. (CAWP)

## Marketing, promotion and outreach – $84,060

FII's funding supports efforts to communicate the benefits, best practices and lessons learned involving wood products and wood and hybrid building solutions, such as mass timber. This includes sharing solutions for issues important to local regions and communities in B.C. like resilience, durability, climate change mitigation, and the costs related to mid-rise and taller wood buildings.

**Funded activities:**

- Connect qualified buyers with B.C. producers and increase buyer and specifier awareness of B.C.'s value-added wood products through participation in key trade events. (BC Wood)
- Participate in key trade events to engage with target audiences on the benefits of building with wood, while promoting project support services. (WoodWorks BC)