Forestry Innovation Investment

BACKGROUNDER

2026/27 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 2026/27, FII is investing a total of $2.61 million to advance wood use in the province. This amount is leveraged by another $1.47 million in funding from partners, for a total funding program of $4.08 million.

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

Affine Climate Solutions
BC WOOD
COFI
Canadian Wood Council / Conseil canadien du bois
Wood Works
CFBC
FPInnovations
MODULAR BC
small housing
Okanagan College
UBC
UVIC
UNBC University of Northern British Columbia

Research and innovation – $680,760

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 and standards development. This research advances performance-based design approaches and supports practical solutions for housing and community infrastructure solutions, resilience, and low-carbon innovation across the building sector.

This year's work spans six research categories: Resilience & Safety; Structural Systems; DfMA (Design for Manufacturing and Assembly) & Prefab; Market & Economics; Materials & Products; and Building Physics & Performance. Outputs such as validated design methods, test data, design guidance, and practitioner-ready tools help architects, engineers, and developers apply mass timber and advanced wood systems with greater confidence.

Funded activities (by research category):

Resilience & Safety

- Apply advanced fire modelling (FDS) to strengthen the evidence base for performance-based fire design in mass timber buildings, supporting safe pathways beyond prescriptive code limits for taller and more complex structures. (FPInnovations)
- Establish fire design principles for wood-to-wood notched bearing connections through fire testing and moisture monitoring, supporting realistic detailing guidance and future standards implementation. (FPInnovations)
- Determine overstrength factors for self-tapping screw connections to support capacity-based design provisions and improve seismic safety and performance of mass timber buildings in Canada. (FPInnovations)

Structural Systems

- Develop user-friendly, capacity-based design procedures for balloon-type CLT shear walls to support upcoming CSA O86 revisions and expand code-ready solutions beyond platform-type systems. (University of Northern British Columbia)
- Validate mechanics-based punching shear design rules for point-supported CLT floors through full-scale testing, enabling less conservative designs and supporting future standards provisions. (University of Northern British Columbia)
- Extend brittle failure design methods for self-tapping screw CLT connections to the minor strength direction—a critical condition for floor and diaphragm applications—supported by full-scale testing. (University of Northern British Columbia)

- Improve buckling resistance equations for high-capacity wood-frame shear walls using experimental testing and numerical modelling, supporting more accurate code prediction and broader adoption. *(*University of Victoria*)*

DfMA (Design for Manufacturing and Assembly) & Prefab

- Develop high-performance volumetric modular mass-timber building systems designed for seismic resilience and rapid assembly, including deconstructable connections and replaceable shear fuses to accelerate delivery of mid-rise affordable housing in British Columbia. *(*University of British Columbia)
- Develop conceptual structural systems, numerical models, and simplified design guidance for modular timber buildings under lateral loads such as wind and earthquakes. (University of British Columbia)
- Produce a decision-ready guide to help small-scale developers adopt prefabricated B.C. wood systems for Part 9 gentle density housing, translating off-site construction principles into practical feasibility, risk management, and coordination frameworks. (Small Housing BC)

Market & Economics

- Create a standardized lender's guide and financing framework to help de-risk mass timber investment and improve how the "green premium" and value of wood buildings are assessed in lending decisions. (Affine Climate Solutions Society)

Materials & Products

- Advance CLT manufacturing using thermally modified western hemlock by addressing adhesive bonding challenges, supporting improved dimensional stability and biological durability for moisture-prone applications such as balconies and facades—without chemical preservatives. (University of British Columbia)
- Evaluate Hem-fir glulam connection performance to establish realistic shear design values for standards inclusion and strengthen competitiveness of an abundant but underutilized B.C. species in mass timber markets. (University of British Columbia)

Building Physics & Performance

- Conduct field testing, long-term monitoring, and numerical analysis of tall mass timber buildings to address vibration serviceability design gaps and support future standards and code updates. (University of Northern British Columbia)

Strengthening manufacturing and business capability – $1,188,807

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, prefabricated wall panels and floor cassettes 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:

- Build wood specification and approvals with owners/developers, architects, city planners and building officials, through technical support on feasibility of design and construction related to wood, mass timber and prefabricated wood solutions. (WoodWorks BC)
- Work directly with individual manufacturers to improve manufacturing processes of SMEs. (CAWP and UNBC)
- 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, and provide support for small manufacturers through knowledge-building sessions. (CAWP/TWIG)

Education and skills development – $596,309

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:

- Support designers, engineers and builders through research and technical materials and seminars to accelerate private and public sector uptake, scale repeatable wood and mass timber solutions in priority segments and directly support BC's housing objectives. (WoodWorks BC)
- Enable designers to accelerate mass timber projects through computer modelling using a centralized database to inform structural design, evaluation, and implementation of mass timber construction. (FPInnovations)

- Help inform First Nations decision-making across forestry, construction and community infrastructure, through timber and wood use guides, toolkits and workshops. (Construction Foundation of BC)
- Educate and train design and construction professionals on B.C. value-added wood products and their applications through a variety of trade and educational events. (BC Wood)
- Provide educational workshops for industry on Design for Manufacture and Assembly using robot technologies on offsite construction. (CAWP)
- Strengthen youth awareness of career opportunities through career fairs and Indigenous-focused education events, focussing on the modern, high-tech nature of British Columbia's product manufacturing and construction sectors. (COFI)
- Establish a comprehensive education programme for building officials, trades and manufacturers to build wood-based modular supported by standardized designs maximizing wood utilization and optimized for factory manufacturing. (Modular BC)
- Expand industry and workforce knowledge through a targeted micro-credential focussed on wood-first modular housing systems, including factory-centric curriculum. (Okanagan College)

Marketing, promotion and outreach – $141,749

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)