

FORESTRY INNOVATION INVESTMENT

WOOD FIRST PROGRAM

2023-2024 INVESTMENT PLAN

NOVEMBER 2022



Forestry Innovation
Investment®

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HOW TO USE THIS INVESTMENT PLAN

The information included in this document provides an overview of FII's Wood First program priorities for 2023/24. The Investment Plan is a key element of FII's Wood First program Call for Proposals process, providing guidance to anyone interested in proposing activities to FII for cost-shared funding.

Funding applicants are expected to align programs and funding proposals with the priorities identified in this Investment Plan if they wish to secure funding from FII.

Applicants should clearly articulate in their funding proposals how proposed activities fit with the strategic objectives, priority activities, audiences and behaviours laid out in this plan. Funding applicants are **strongly encouraged** to review the [Wood First Program Application Guide 2023/24](#), [Wood First Program 2023-2026 Strategy](#), [British Columbia Market Development Summary](#), and other information provided as a part of the Call for Proposals process. All relevant information can be found at www.bcfii.ca or by contacting FII.

Successful funding recipients are accountable for funding received and are expected to assess and report on deliverables and outcomes of their funding programs and activities. FII continuously assesses these outcomes to refine the Wood First program strategy and priority investments.



Forestry in B.C. | Credit: Nik West

1. INTRODUCTION

Much of British Columbia's history is connected to forestry—an industry that has long sustained B.C. communities and local economies. With a relatively small population, the province's forest sector relies on the diversity of export markets to grow and prosper. Forestry Innovation Investment (FII) was established in 2003 as the provincial agency responsible for maintaining and expanding markets for B.C. forest products. FII works in collaboration with the forest industry, research institutions, the provincial and federal governments and other stakeholders to deliver programs that support the growth and development of the provincial forest sector.

This Investment Plan details FII's Wood First Program investment priorities for 2023/24 and provides guidance for organizations seeking FII funding through its annual Wood First program Call for Proposals process. FII's investment focus is informed by an ongoing program of market research and input from a range of B.C. building, industry and government stakeholders who are involved at all steps of the strategy development and planning process. FII provides funding to non-profit forest and construction sector organizations such as industry trade associations, academic and research organizations, and to government agencies/ministries for work that they propose and ultimately deliver in relation to the Wood First Investment Plan.

This annual Investment Plan is developed in the context of the [Wood First Program 2023-2026 Strategy](#) and [British Columbia Market Development Summary](#), as well as [FII's five-year Strategic Plan](#) and more detailed [three-year Service Plan](#)¹.

¹ FII's Strategic Plan, Service Plan and other corporate reports are available on the FII website at bcfii.ca

THE IMPORTANCE OF THE FOREST SECTOR

The B.C. forest industry is recognized globally for its production of high quality wood products, leadership in sustainable forest management, innovation in harvesting and processing and for the development of advanced wood construction technologies and building systems. The sector continues to be a major contributor to the provincial economy, supporting jobs and communities across the province.

\$16.3

Billion of B.C.'s total exports came from forest products in 2021

140

Communities are supported by the forest sector

\$1.8

Billion in provincial resources revenue was generated by B.C.'s forest sector in 2021/22

Harvesting operations near Morton Lake | Credit: Brudder Productions



2. ABOUT FII

FII is British Columbia's market development agency for forest products. As a Crown corporation, FII helps maintain, create and diversify markets for B.C. forest products to ensure the forest sector continues to be a key contributor to the provincial economy.

FII works in collaboration with the forest industry, research institutions, the federal government, B.C. government, Indigenous organizations and other stakeholders to deliver innovative, forward-looking programming that responds to today's market dynamics as well as tomorrow's challenges and opportunities. This is done through delivering and co-funding a mix of research and capacity building, as well as market development and promotional activities.

FII'S MANDATE IS FULFILLED BY:

1. Promoting wood's environmental merits as a preferred, sustainable, renewable building material.
2. Expanding global markets by creating more opportunities in existing and new markets—especially in high-potential Asian countries like China, Japan, South Korea, India and Vietnam.
3. Showcasing B.C.'s leadership in innovative wood use and manufacturing to advance the use of wood at home and abroad.
4. Collaborating with government and industry partners to maximize our effectiveness in supporting the growth of the mass timber and engineered wood products sector in B.C.

FII acknowledges that it is situated on the traditional territories of the x^wməθk^wəyəm (Musqueam), Skwxwú7mesh (Squamish) and səliililw̓ ətaʔt (Tsleil-Waututh) Nations.

FII PROGRAMS

WOOD FIRST

Building Innovation and Capacity in B.C.

The Wood First program collaborates with B.C.'s design and construction industries and government to advance wood construction technologies and expertise in B.C. FII then leverages this leadership to promote B.C. internationally as a leading source of technology, products and expertise for the use of wood in construction, interior design and daily living.

MARKET INITIATIVES

Diversifying Markets in Asia and North America

The Market Initiatives program encourages the development of export markets and new market segments, particularly in fast growing Asian economies. This helps to diversify the sector, reduce market risk and open new opportunities in higher-value segments of the forest economy. Market Initiatives also focuses on growing market segments in North America, such as the multifamily, mass timber/tall wood and value-added sectors.

MARKET OUTREACH

Promoting B.C. Forests and Products Around the World

The Market Outreach program expands opportunities for B.C. forest products by positioning wood as an environmentally friendly, preferred building material and by highlighting B.C. as a reliable supplier of quality products from sustainably managed forests. Through providing credible, fact-based information, FII ensures that audiences in B.C. and globally understand that using wood from B.C.'s sustainably managed forests can help to address climate change and advance low-carbon innovation.

More information on FII's strategic priorities, programs and activities, can be found at bcfii.ca.

FUNDING AND GOVERNANCE

As a B.C. Government Crown corporation, FII receives its funding from the B.C. Ministry of Jobs, Economic Recovery and Innovation (JERI). Part of FII's funding is used to share the cost of industry-led market initiatives and part is used to pursue specific objectives the B.C. Government has set for the sector and for FII. FII's activities and approach are aligned with the international and domestic market development objectives of both JERI, and the Ministry of Forests (FOR). FII is governed by a Board of Directors, ensuring consistency with government's strategic priorities. Industry has an active role in advising FII and its Board to ensure that programming reflects industry priorities and growth opportunities.

While FII works closely with forest sector associations on these activities, it also plays a lead role in initiating and managing related projects on behalf of the Province. Where forest sector organizations or research institutes are positioned to support project activities, FII may contract directly with these organizations to assist with or play a lead role in project implementation.

Belmont Secondary High School | Credit: Barry Calhoun



FII'S COMMITMENT TO DIVERSITY, EQUITY AND INCLUSION

Forestry Innovation Investment (FII) recognizes that our work impacts our stakeholders, Indigenous communities, partners and employees in different ways. This includes marginalized identities and communities that experience disproportionate social, economic and/or environmental impacts. We aim to identify and mitigate the barriers that diverse groups experience in accessing our information, programs, and services. We foster a shared responsibility amongst all levels of the organization to ensure that our work considers the diverse needs of the populations we aim to serve— promoting and advancing accessibility, inclusion and equality.

Diversity. Equity. Inclusion. They are more than just words for us. They are the hard-and-fast principles guiding how we build our teams, cultivate leaders and create an organization that's the right fit for every person inside of it. We have a global, multicultural presence and we want to reflect that inside our walls.

Together, we continue to build an inclusive culture that encourages, supports, and celebrates the diverse voices of our employees. It fuels our innovation and connects us closer to our partners and the communities we serve. More importantly, creating an environment where everyone, from any background, can be their authentic selves and do their best work are the right thing to do.

Wii Gyemsga Siwilaawksat student building | Credit: Bright Photography



GUIDING PRINCIPLES FOR INVESTMENTS

With the intent of maximizing economic benefit to the forest sector and the province, the following key principles guide FII's decisions about its own activities and about providing funding to other organizations. These guiding principles provide a framework to balance investments across markets and areas of competing interest within the forest sector.

Developing fact-based market strategies— Priorities and strategies must be firmly rooted in current, relevant and comprehensive market information that provides a compelling business case for each market initiative.

Generating measured results— FII must evaluate and demonstrate the results of its investments on an annual basis. Projects must have well-developed performance measures, detail how the project's results and outcomes are measured, and explain how they relate to overall performance objectives.

Balancing short- and long-term investments— As a priority, FII looks for projects that generate the desired impact and return on investment in the short term (i.e., within one year). FII recognizes, however, the need to take a long-term perspective in funding some activities in emerging markets where there is a compelling business case to do so, and that the return may take a number of years to be achieved.

Fostering collaboration— FII encourages collaboration among industry stakeholders, the research sector and government to ensure a coordinated international approach and strong Canadian brand. Higher priority will be given to activities that clearly demonstrate a high degree of stakeholder support and collaboration.

Encouraging innovation— FII anticipates changing market, economic and geopolitical forces that impact the forest economy. To respond to market dynamics and ensure the best activities are identified for each market, FII encourages industry to bring fresh ideas and approaches to help achieve industry priorities.

Supporting growth across the B.C. industry— Ensuring the overall health of B.C.'s forest economy means that funded activities should benefit as much of the industry as possible. FII seeks to support proposals that encourage growth and market development in terms of:

- > Primary and secondary manufacturing including value-added products
- > Different producing regions within B.C. that supply a variety of commercial species (e.g., SPF, hem-fir, cedar)
- > A variety of product groupings including solid wood, mass timber, panels, value-added, bio-energy and bio-chemical products, and pulp and paper products.



Fabrication process of four NLT panels | Credit: Wade Comer Photography

3. WOOD FIRST PROGRAM

The B.C. Government initiated Wood First in 2009 to ensure that the province's forest industry is vibrant and globally competitive, providing benefits for current and future generations and acting as one of the foundations for strengthening B.C. communities. FII's Wood First program focuses on advancing wood use in the province by promoting and supporting innovation in manufacturing, building design and construction. These goals are achieved by positioning wood as a preferred building material and B.C. as a global leader in wood innovation.

The Wood First program focuses on advancing wood use and innovative wood construction technologies in the Province and establishing B.C. as a showcase for forest products in construction, interior design and daily living. The scope includes both residential and non-residential buildings.

Planning and delivery of the Wood First program is a collaborative effort involving the building construction industry, the forest sector and government. FII provides overall management and administration of the program, including aligning priorities and ensuring the best use of funds. An advisory group (the Wood First Advisory Committee) representing a cross-section of primary and secondary manufacturing industries, design and construction professionals, and wood product end-use sectors provides recommendations on program priorities. Based on these recommendations, FII develops an investment plan that allocates and prioritizes available funding on an annual basis across several categories of activity including research, education, marketing and value-added capacity building. Specifically, Wood First focuses on:

- Support a robust valued-added manufacturing sector capable of driving and responding to market demand
- Accelerate the adoption of existing and emerging wood-based products and building systems
- Advance innovative wood use and building systems
- Position B.C. as a world leader in sustainable and innovative wood-based products and building systems in design, production, and application

The activities of the Wood First program are delivered primarily by third-party organizations under a cost-sharing framework that relies partially on contributions from industry. Organizations receive funding from FII through an annual competitive Call for Proposals. Learn more about applying for funding through the Wood First program by visiting bcfii.ca.

FII has separate strategies and investment plans for its Market Outreach, Market Initiatives and Wood First Programs. **This *Wood First Investment Plan* for 2023/24 summarizes the activities and areas where FII places the highest priority for Wood First investments in 2023/24 in alignment with the [Wood First Program 2023-2026 Strategy](#).**

3.1 WOOD FIRST PROGRAM—2023-2026 STRATEGY

FII and the Wood First Advisory Committee established the following goal and strategic objectives for the Wood First program which are further described in the three-year strategy for the Wood First program.

GOAL

B.C. is a leader in using innovative forest products and building systems.

STRATEGIC OBJECTIVES

The following objectives provide direction and context for the Wood First program to contribute to employment opportunities for British Columbians.

OBJECTIVE 1: SUPPORT INNOVATION

B.C. has the capability to manufacture, design and construct with innovative next-generation wood-based products and building systems that create and respond to market demand.

OBJECTIVE 2: ACCELERATE ADOPTION

Architects, engineers, designers, developers and builders specify more wood because they understand the benefits and have the skills, ability, and confidence to choose wood products and building systems over alternatives.

OBJECTIVE 3: DRIVE LEADERSHIP

Leverage B.C.'s advancements in wood use by mobilizing provincial research, experts and technologies that embrace and showcase wood, including community and Indigenous projects in B.C.

1 Lonsdale Avenue Commercial Building | Credit: KK Law



3.2 FUNDING, PROGRESS AND RESULTS

Funding for FII's Wood First program comes from the Province of B.C.'s Ministry of Jobs, Economic Recovery and Innovation. This Investment Plan seeks to align priorities and ensure the best use of available funds to support the advancement of wood use and a wood culture in B.C. The activities in the Wood First program are delivered primarily by non-profit organizations under a cost-sharing framework that functions partly on contributions from the forest industry.

FII invites funding proposals from non-profit organizations that can provide services in line with the allocations, activities and audiences outlined in this Investment Plan. This Investment Plan serves as a key reference tool for interested organizations to develop their funding proposals. Proposals must conform to the format and requirements of the FII online funding management system. Proposals will be evaluated by a panel made up of FII staff, the Chair of the Wood First Advisory Committee, and independent industry experts. Final funding decisions are made by FII's CEO. Successful applicants will then enter into recipient agreements with FII.

FII's investments in each category will be limited to the levels of the respective allocations. If proposed activities do not respond to the priorities outlined in this Investment Plan, FII reserves the right to allocate investments to activities delivered by FII (or others) for that same category to support the advancement of wood use in B.C. and to fill gaps in the program that are not covered by eligible funding applicants.

Funding recipients are accountable for funding received and are expected to assess and report on deliverables and outcomes of their funding programs and activities. Funded projects will be monitored by the FII Wood First program to ensure the funds are used appropriately and activities are proceeding in the intended direction. Tracking projects and activities is important for measuring the progress towards the Wood First program objectives and target behaviours.

FII expects that projects include tasks and methods to obtain feedback (such as satisfaction, economic benefits gained, etc.) and/or key information and data (such as attendance at events, amount of wood use etc.). The information will be linked to explicit metrics that are used to track performance of the Wood First program-funded recipients and projects, as well as to refine Wood First investment priorities. FII continuously assesses these outcomes to refine the Wood First program strategy and priority investments.

4. 2023/24 INVESTMENT PRIORITIES

FII's Wood First program continues to adjust priorities to meet strategic objectives, while considering various external trends and industry factors. The 2023/24 priority audiences and activities in this Investment Plan are aligned with the opportunities and challenges as outlined in the *Wood First Program 2023-2026 Strategy*.

4.1 2023/24 PRIORITY AUDIENCES

The following are priority audiences to be addressed through 2023/24 funded projects and activities. Appendix A lists the definitions for these priority audiences, as well as secondary target audiences.

(In alphabetical order)

- Architects
- Assemblers
- Builders
- Building inspectors
- Building and fire officials—municipal and provincial
- Developers
- Educational institutions— Post-Secondary, Secondary
- Engineers
- Insurers and Financiers
- Manufacturers—primary, secondary
- Public institutions
- Quantity surveyors
- Research institutions



Sir Mathew Begbie Elementary School seismic replacement | Credit: Bright Photography

4.2 2023/24 PRIORITY ACTIVITIES

FII's Wood First program investments and priorities are organized into four investment categories to provide a framework for planning, funding and assessment from year to year. They also facilitate the preparation, submission and evaluation of funding applications.

- Research and innovation
- Strengthening manufacturing and business capability
- Education and skills development
- Marketing, promotion and outreach

The following elements are important to consider across ALL investment categories, audiences and activities.

Priorities and single vs. multi-year activities: Funding applicants should ensure their proposals directly respond to the objectives, priority audiences and activities outlined in this plan.

While funding can only be committed to for the 2023/24 fiscal year, if activities, such as research, are anticipated to span more than one fiscal year, a clear overview of the key steps and elements of work for each additional year should be clearly outlined. **Results of earlier phases of research associated with the proposal should also be included.**

Collaboration: FII encourages closer links between similar activities carried out by Recipient Organizations. Where multiple funding recipients are targeting the same audiences or activities, **it is strongly recommended that recipient organizations collaborate in planning and implementing a coordinated strategy that demonstrates a common vision, plan and alignment in relation to target audiences and priority activities.** For example, events and educational activities that profile wood products, building systems and technologies to architects, engineers, developers and manufacturers such as workshops and lunch and learns; collaborative research projects between universities and non-profit research organizations.

Knowledge mobilization: Knowledge mobilization includes a wide range of activities relating to the production and use of research results, including knowledge dissemination, synthesis, transfer, exchange, and co-creation by researchers and knowledge users. FII requires a **knowledge mobilization plan** for projects funded under the Research and Innovation investment category (4.2.1). It is also expected that projects in the other categories are publicly extending and sharing information and results and lessons learned. The knowledge mobilization plan requirements are described in the [Wood First Application Guide](#).

Activity impact tracking: FII requires funding recipients to assess and report on deliverables and outcomes for their funding programs and activities. One core measurement tactic for some activities is **exit surveys**, which is a category of project deliverables to evaluate activity effectiveness and impact. To improve and streamline data collection and analysis, FII will administer online exit surveys with funded project participants using technologies that facilitate an efficient and economical workflow. Further details on the process are described in the [Wood First Application Guide](#).

The following sets out, for each investment category, the priority audiences and desired outcomes that these investments support and priority activities to achieve these outcomes.

Prince George Fire Hall No. 1 | Credit: Ed White Photographics



4.2.1 RESEARCH AND INNOVATION

This investment category develops solutions, through applied research, to overcome barriers in advancing the applications of wood-based products and building systems. Research projects should improve target audience understanding and enhance the performance of wood in applications that offer significant market potential within B.C. Projects may include technical research in engineering and material sciences, development of guides, case studies, reviews, market research and other non-technical research.

FII recognizes that numerous research programs and projects related to wood design and construction are underway throughout Canada and the United States. Wood First program investments focus on priority research topics that can leverage funding from other sources and/or address pressing knowledge gaps in B.C. FII encourages universities and non-profit organizations to collaborate on research projects and to seek partnerships with industry in B.C.

Wood First program investments are intended for short-term research projects that can be completed within the annual funding period, or for clearly defined research tasks within larger projects funded from other sources. However, recognizing the complexity of many research projects as well as the constraints of funding or academic calendars, if research is anticipated to span more than one fiscal year, a clear overview of the key steps and elements of work for each additional year should be clearly outlined. Results of earlier phases of research associated with the proposal should also be included.

A knowledge mobilization plan is expected with any project in this investment category. The knowledge mobilization plan requirements are described in the [Wood First Application Guide](#).

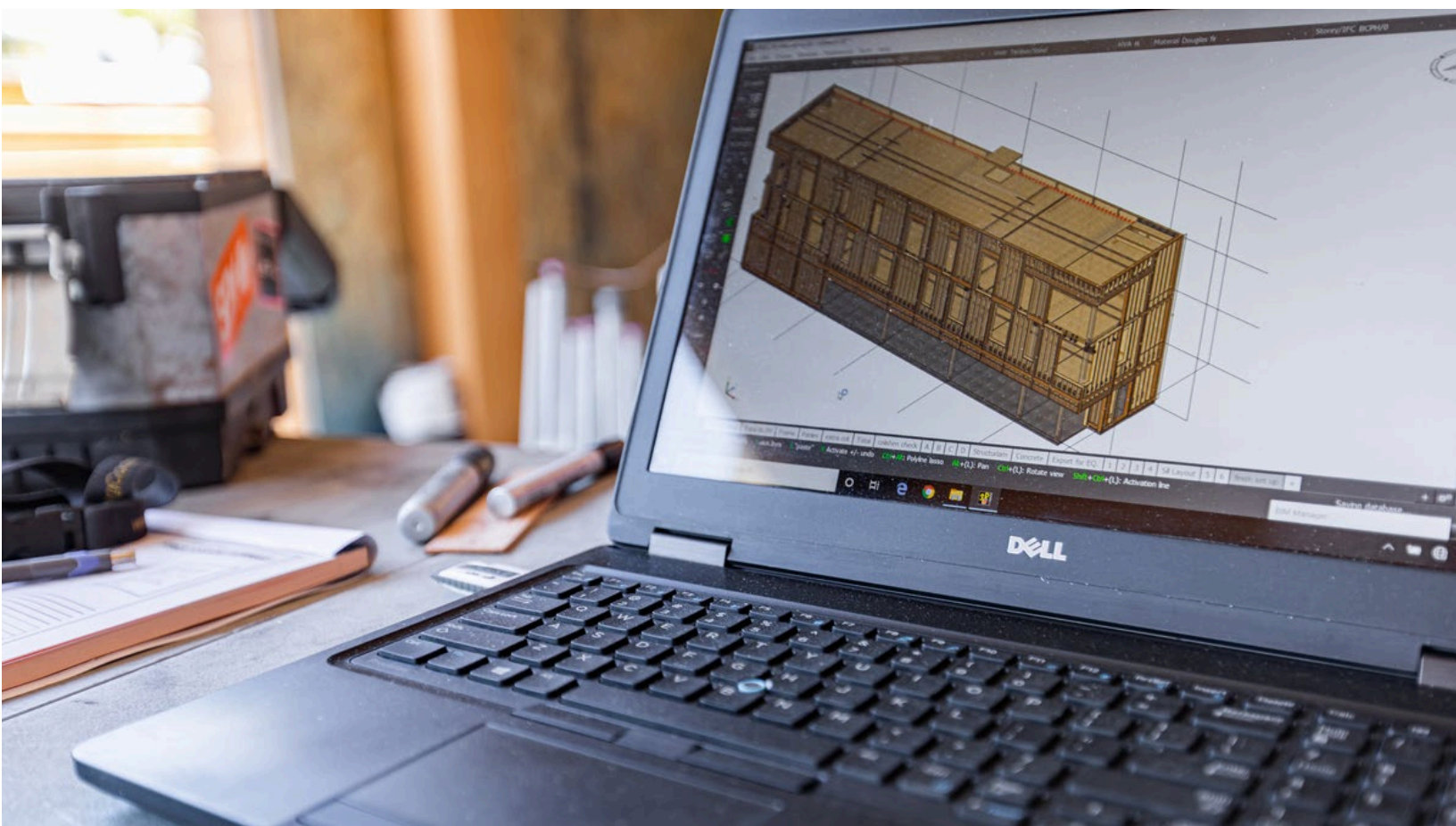
Table 1: Research and Innovation category

Audiences	Priority activities	Desired outcome
Developers Insurers and Financiers Quantity surveyors Public institutions Architects Engineers	<ul style="list-style-type: none">• Develop best practice, research-informed guides for practitioners:<ul style="list-style-type: none">○ Evaluation and rehabilitation of mass timber buildings following fire/water damage○ Mitigation of potential water and fire damage during construction○ Monitoring of mass timber buildings for structural health and post-occupancy performance○ Prefabricated construction○ Retrofit with wood-based systems of existing buildings	Understand the benefits and challenges when using wood, use best practices in wood design and construction, and where wood-frame, mass-timber, and wood hybrid building

Builders	<ul style="list-style-type: none"> ○ Mid-rise wood-frame construction based on latest NBCC ○ Wood-based building systems in a circular economy ○ Integrated design and construction approaches (Integrated Project Delivery, Building Information Modelling) and their application to wood construction ○ Other research-based guides and case studies that advance knowledge in B.C. of high-performance and next-generation wood and hybrid building systems 	systems are economically viable
<p>Building and fire officials—municipal and provincial</p> <p>Building inspectors</p> <p>Developers</p> <p>Insurers and Financiers</p> <p>Architects</p> <p>Builders</p>	<p>Carry out technical research on wood and wood hybrid building systems for large, mid-rise and tall buildings:</p> <ul style="list-style-type: none"> • Performance-based design • Standardized systems and connections for prefabrication (wood frame and mass timber) • Digital technology, eg. BIM, DfMA in prefab construction • Net-zero energy ready solutions • Wood-based insulation from B.C. species • Data, methodology and tools that support Whole Building Life Cycle Analysis (WBLCA) and/or the role of B.C. wood products in WBLCA • Circular built environment (design for disassembly and adaptation, cascading use of wood, waste prevention, reduced lifecycle impacts of wood) <p>Carry out technical research on building systems with mass timber:</p> <ul style="list-style-type: none"> • Structural repair methods following fire/water damage • Encapsulation of timber elements in Encapsulated Mass Timber Construction, National Building Code of Canada 	<p>Develop knowledge and proficiency in delivery of wood and hybrid building systems.</p> <p>Provide guidance in reviewing applications of existing building code provisions and in evaluating new building systems, and supporting future building code changes</p>

	<ul style="list-style-type: none"> • Acoustics and vibration • Construction processes • Risk management and investment decisions 	
Manufacturers – primary and secondary Developers Insurers and Financiers Architects Builders Research institutions	<ul style="list-style-type: none"> • Mass timber products that recognize B.C. species and wood supply such as hem-fir • Wood-based insulation from B.C. species • Wood-based building products for a circular built environment (design for disassembly and adaptation, cascading use of wood, waste prevention, reduced lifecycle impacts of wood) 	Guide research institutions and manufacturers in development of new equipment, processes and products

1 Lonsdale Avenue Commercial Building / Credit: KK Law



4.2.2 STRENGTHENING MANUFACTURING AND BUSINESS CAPABILITY

Growing demand for new and innovative wood-based products and building systems are driving a need to improve the capacity and effectiveness of all components of the supply chain—primary and secondary manufacturers, architects, engineers, developers, builders, assemblers, installers—and strengthen relationships to reduce gaps between producers and users. A key part of being successful is the economic competitiveness of each link in the supply chain.

This category focuses on strengthening the supply chain and improving the competitiveness of the manufacturing sectors by developing sustainable approaches to manufacturing wood-based products and building systems. Activities should improve manufacturing and marketing capabilities and fill gaps in the supply of wood products. Activities that would facilitate dialogue along the supply chain, including architects, engineers, quantity surveyors, manufacturers and assemblers, are also considered.

FII supports highly effective activities that help manufacturers improve their production, marketing and business processes—and thus, competitiveness. General-industry outreach and communication activities will be supported only to the extent that they would drive interests and adoption of other program elements under this category (e.g. company-specific projects).

For all proposals, specific efforts to evaluate the impacts and results of each project must be included in plans. Where more than one service delivery agency is involved in delivering company-specific projects, FII will require a common project evaluation format to be used by all organizations.

Activities and audiences are listed in order of priority.

Table 2: Strengthening Manufacturing and Business Capability category

Audiences	Priority activities	Desired outcome
Manufacturers —primary and secondary Installers Assemblers Builders Architects Engineers Developers	<ul style="list-style-type: none">Explore targeted business clusters in wood products and construction, including the current/potential effect of clusters on industry competitiveness<ul style="list-style-type: none">Examples of clusters can include, but not limited to, “ideas exchanges” platforms, network hubs with numerous partners to develop as a community of practice.	Create competitive advantage for their company through interaction and collaboration with other cluster members

Educational institutions—post-secondary		
Assemblers Builders Developers Installers Manufacturers—secondary	<ul style="list-style-type: none"> Conduct company-specific projects (e.g. prefabrication, automation (including robotics), BIM/DfMA, product testing, design and product development support, plant layout support, protocol development for manufacturing, standardized training program development, branding exercises and strategies, preparing for and attending conferences and trade shows, search engine optimization and training, social media training), including outcome assessment from previous company-specific projects Conduct company-specific wood prefabrication projects (e.g. prefabrication, BIM/DfMA, plant layout support, automation/digitization, standardized training program development), including outcome assessment from previous company-specific projects 	Develop products and building systems to effectively meet market demand
Manufacturers—primary and secondary	<ul style="list-style-type: none"> Identify ways to address existing and anticipated skill shortages at the production worker, supervisory, skilled trades and technologist levels Develop employee recruitment and development opportunities by leveraging co-op and/or internship student work placements for company-specific projects. 	Understand how to attract and retain employees
Manufacturers—primary and secondary	<ul style="list-style-type: none"> Assess B.C. wood products and systems, particularly exterior doors and windows, to comply with net-zero energy ready building requirements and potential for standardization of components 	Enhance collaboration in the design of products and building systems to satisfy markets
		Manufacturers understand market needs, as well as

		potential opportunities in the supply chain relative to mass timber
		Innovation clusters and sector groups emerge to increase technical knowledge and skill sets
Educational institutions	<ul style="list-style-type: none"> Optimize current state of wood-based curriculum, materials and occupational credentials to address gaps in labour availability for value-added, engineered wood product and mass timber product and system manufacturing 	Support the development of training programs and/or training materials to facilitate wood use in B.C. by professionals, trades, and code officials
Builders Assemblers Engineers Architects Manufacturers —primary and secondary Developers	<ul style="list-style-type: none"> Promotion of excellence and innovation in B.C. businesses, their workforce development and utilization <ul style="list-style-type: none"> Wood product manufacturing Design and construction of low-rise non-residential, mid-rise and taller residential and non-residential wood buildings 	Recognize industry leadership in the wood supply chain and learn about business best practices/solutions, i.e. BIM

4.2.3 EDUCATION AND SKILLS DEVELOPMENT

This investment category focuses on increasing knowledge and experience related to designing and building with wood, including products and building systems. It covers a range of species, products, design applications, and construction techniques.

Outreach to building and fire officials regarding innovations and performance of wood-based products and building systems (particularly mass timber and hybrid) is a priority. Emphasis is also placed on activities specific to the needs of developers, insurers and financiers, and builders to develop understanding of the benefits and appropriate uses of wood. There is a need to break down misperceptions and barriers as it relates to wood acceptance in the current building regulations, as well as alternative solutions.

Momentum continues to grow around interest and building with wood across jurisdiction, the design and development community. There are an increasing number of stakeholders and early innovators who are leading the way, building expert networks and showcasing BC’s wood products, design and construction expertise. FII and the Wood First program is looking for innovative, effective and efficient delivery methods and topics, with efforts balanced between the continuing education of practicing professionals and educating future practitioners. FII encourages leveraging strategic collaborations and networking with third parties and/or material agnostic venues to deliver programming.

Activities and audiences are listed in order of priority.

Table 3: Education and Skills Development category

Audiences	Priority activities	Desired outcome
Educational institutions— post-secondary Ministry of Advanced Education Professional associations representing specifiers (architects, engineers, technologists)	<ul style="list-style-type: none">• Incorporate the use of wood in mass-timber and wood-hybrid building systems into curricula of architects, engineers and technologists, including interactive design/build workshops• Include BIM/DfMA into post-secondary and continuing education curricula for architects, engineers and technologists• Support broader education, adoption and use to increase familiarity across the construction value chain of circular building practices, BIM/DfMA and other digital technologies	Professors and trainers are equipped to teach undergraduate, graduate and continuing education courses on wood engineering and design and the role of digital technology Increase acceptance of

		wood and wood-hybrid systems in mid-rise and taller buildings
<p>Building inspectors</p> <p>Building and fire officials—municipal and provincial</p> <p>Insurers and financiers</p> <p>Quantity surveyors</p>	<ul style="list-style-type: none"> • Provide high-level expert technical assistance, advisory services and guidance in reviewing applications of existing building code provisions and in evaluating new building systems <ul style="list-style-type: none"> ○ Focus on communities based on proven data that have the greatest opportunity to influence projects for increased acceptance of wood, including but not limited to the early adopter jurisdictions of the 2020 Building Code, design and systems that may work with/support increasing efficiency standards as part of the CleanBC Better Buildings “net-zero energy ready” by 2032 	<p>Increase acceptance of wood and wood-hybrid systems in mid-rise and taller buildings</p>
<p>Developers</p> <p>Architects</p> <p>Assemblers</p> <p>Builders</p> <p>Installers</p> <p>Building inspectors</p> <p>Building and fire officials—municipal and provincial</p> <p>Engineers</p> <p>Architects</p>	<ul style="list-style-type: none"> • Deliver content (including but not limited to drawings, lessons learned, guides etc.) for multiplatform dissemination (i.e. web-based, seminars, events etc.): <ul style="list-style-type: none"> ○ Mixed-use, mid-rise building code provisions, tall wood and wood-hybrid building systems ○ Mass timber installation including moisture management, transitioning from concrete to wood, connections ○ BIM/DfMA, design for durability in wood construction ○ Energy efficient, high-performance mid-rise or taller wood buildings ○ Convene full integrated design and construction teams to develop common solutions • Support broader education, adoption and use to increase familiarity across the construction value chain of circular building practices, BIM/DfMA and other digital technologies 	<p>Facilitate immediate efficient application of new building code provisions</p> <p>Encourage construction of wood-frame, mass timber and hybrid wood residential, mixed use and non-residential buildings</p>

	<ul style="list-style-type: none"> • Provide tools or expertise regarding alternative solutions in non-combustible projects, e.g. symposium on alternative solutions. • Leverage learnings from early adopters (i.e. 2020 Building Code change to allow for 12-storey mass timber construction) to address barriers and share tested solutions to facilitate rapid adoption • Provide details of the business case for working with mass timber as compared with other materials with examples in residential, commercial, and industrial application, circular economy. 	
Engineers Architects	<ul style="list-style-type: none"> • Deliver content (including but not limited to drawings, lessons learned, guides etc.) for multiplatform dissemination (i.e. web-based, seminars, events etc.) on B.C. secondary wood products (including, but not limited to, doors, windows, mouldings, joinery, engineered wood products and prefabricated solutions) 	Understand supply and properties of B.C. secondary wood products
<p>Educational institutions— post secondary</p> <p>Ministry of Advanced Education</p> <p>Education institutions— secondary</p> <p>Ministry of Education</p>	<ul style="list-style-type: none"> • Develop and promote career pathways; deliver training programs geared to: <ul style="list-style-type: none"> ○ Secondary wood product manufacturing (non-structural) ○ Manufacturing of engineered structural wood product, with emphasis on specialty skilled trades, CNC operation and BIM ○ All aspects of wood design and construction, including basic digital literacy ○ Transferability of complimentary trades (i.e. steel installers) to the continuum of skilled trades required for mass timber/hybrid mass timber design and construction ○ Develop employee recruitment and development opportunities by leveraging co-op and/or internship student work placements for company-specific projects. 	Institutions develop and offer materials on careers in wood product manufacturing and construction to raise awareness, improve attraction and improve retention

4.2.4 MARKETING, PROMOTION AND OUTREACH

This investment category focuses on promoting the benefits of and extending the latest developments in wood building design and construction, including excellence and innovation in B.C. businesses and workforce.

Efforts should be on communicating to key parts of the supply chain (such as developers, builders, manufacturers), while maintaining a modest outreach to architects, engineers, building officials, and elected municipal officials. Proposed activities should take a cost-effective approach to reaching key audiences with consistent wood messaging.

Messaging about the benefits of wood as a building material (strength, adaptability, cost-effectiveness, beauty, sustainability, carbon sequestration, and other environmental and health benefits) are already captured and promoted domestically and internationally through FIL's information resource on B.C.'s forests and forest products, [naturally:wood](#). **Funding recipients are expected to leverage this messaging and material and further collaborate with other recipient organizations and other programs on consistent information and facts shared with target audiences.**

Activities and audiences are listed in order of priority.

Table 4: Marketing, Promotion and Outreach category

Audiences	Priority activities	Desired outcome
Developers Insurers and financiers Public institutions Builders Engineers Architects	<ul style="list-style-type: none">• Showcase projects and disseminate materials addressing costs, performance, health, climate and other environmental impacts, as well as how using wood helps address specific issues important to local regions and communities in B.C., such as resilience (including post-disaster), durability, economy and climate change adaptation/mitigation, renovation and design for disassembly (DFD) and durability, and a spectrum of economic considerations including, but limited to, leased spaces, occupant experience in consideration of marketing efforts.○ Priority should be placed on low-rise commercial and public buildings, mid-rise and taller residential and non-residential wood buildings.	Champion and support wood as sustainable and a feasible environmental impact mitigation option Specify wood where appropriate and available

Educational institutions—elementary, secondary, post-secondary	<ul style="list-style-type: none">Promote careers in wood-related trades, addressing opportunities and misperceptions associated with wood construction trades.	Aware of and have a positive perception of careers in wood-related trades and construction
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KF Aerospace CLT installation / Credit: Agency Media



5. 2023/24 ALLOCATIONS AND COST SHARING

The 2023/24 Wood First program Call for Proposals supports market and industry capacity development activities focused on B.C. International market development activities delivered outside of B.C. are funded through a separate Market Initiatives program Call for Proposals ².

FII receives the majority of its annual funding from the Ministry of Jobs, Economic Recovery and Innovation. For 2023/24, FII anticipates receiving a level of funding similar to the current year.

5.1 FUNDING ALLOCATIONS

For 2023/24, FII's total budget for Wood First activities to be funded through the Wood First Call for Proposals is anticipated to be \$2.0 million

Table 1 shows the investment category allocations of the 2023/24 *Wood First Investment Plan*. These allocations are based on the 2023/24 priorities (outlined in Section 4.2) identified by the Wood First Advisory Committee (WFAC), FII staff, B.C. industry consultation and market assessments as. FII reserves the right to adjust these allocations up until the time that FII enters into formal funding agreements.

Table 5: 2023/24 Wood First Investment Allocations

Investment Category	2023/24 Allocations	
	Call for Proposals	
	Amount	Percent of subtotal
Research and innovation	\$840,000	42%
Strengthening manufacturing and business capability	\$520,000	26%
Education and skills development	\$475,000	24%
Marketing, promotion and outreach	\$165,000	8%
TOTAL	\$2,000,000	

² Information on the Market Initiatives program Call for Proposals can be found at www.bcfii.ca

5.2 COST SHARING

FII-funded work is built on the premise of partnerships and industry cost-sharing contributions. Most of the projects are required to be cost shared with contributions from industry or other sources. It is the proponent's responsibility to seek out, obtain and confirm these contributions by the time of the submission of the application. Industry cost-sharing must be based on cash contributions. In-kind contributions cannot be used as a part of calculating the industry cost-sharing contributions. Projects with a higher-than-required industry contribution, which indicates strong industry support for the project, will be ranked higher in some aspects of the evaluation of proposals.

For 2023/24, the following table identifies the minimum-level cost-sharing requirements.

Table 6: 2023/24 Minimum-Level Cost-Sharing Requirements

	Percent contribution	
	Funding recipient (at least)	FII ¹ (up to)
1. Research and innovation	n/a	100
2. Strengthening manufacturing and business capability		
Company-specific needs assessments	n/a	100
Company-specific site visits, plant assessments or consultations	20	80
Company-specific projects	50	50
3. Education and skills development	20	80
4. Marketing, promotion and outreach	50	50

¹If the funding recipient receives other government funding for a given activity, FII may reduce its share accordingly.

FII reserves the right to adjust these cost sharing ratios up until the time that a final contract has been signed by FII. If FII receives less than the anticipated program funding from the Province, available funding will be adjusted on a pro-rata basis. Proponents will be notified of changes, should any occur.

APPENDIX 1: TARGET AUDIENCES (IN ALPHABETICAL ORDER, NOT IN ORDER OF PRIORITY)

Table 7: Appendix 1 - Target Audiences in Alphabetical Order

Audience	Definition
Architects*	Persons who plan, design, and review the construction of buildings
Assemblers*	Those who (in-plant or on-site) take wood-based components and assemble into a wood-based product (e.g. assemble engineered wood panels, insulation, barriers and cladding into a prefabricated wood wall product)
Builders*	Run a construction project; work with both assemblers (off-site) and installers (on-site)
Building and fire officials—municipal and provincial	Officials concerned with building performance and fire safety
Building inspectors	Persons who ensure that the construction and quality of buildings meet codes and standards
Consumers	Persons considering making a purchase of, or who have in the past purchased, wood-based products or building systems
Developers	Persons who assume the risk and reward to add value to real estate. They arrange rezoning, financing, design, construction and sales/leasing to meet market demand
Educational institutions—Ministry of Advanced Education	The ministry ensuring B.C.'s post-secondary system delivers value while providing educational and training opportunities for young people entering the workforce and existing workers who need to upgrade their skills

Educational institutions— Ministry of Education	The ministry ensuring B.C.'s school system provides children with the knowledge, skills and abilities needed to contribute to a healthy society and prosperous and sustainable economy.
Educational institutions—post-secondary	Includes public education institutions (universities, institutes of technology, colleges), private and out of province public degree granting institutions, seminaries and theological colleges, First Nations-controlled institutes, and other private career-training institutions
Elected officials—municipal and provincial	B.C. elected municipal government officials (includes city, town or village incorporated for local self-government) and provincial government officials
Engineers	Persons who analyse and design buildings and the built environment with expertise in performance of building materials and structural analysis, works closely with architects and other engineering specialists.
Influencers	Anyone (government, non-government, industry, public, etc.) who can affect a purchasing decision at some point in the value chain. Need to identify the specific influencer (person) in each situation, and target communication to that individual
Installers*	Persons who install pre-manufactured products, with some site-fabrication as necessary, on a construction project
Insurer	Persons or company that underwrite an insurance risk
Financiers	Persons or company whose business is providing, investing or lending money.
Manufacturers—primary*	Manufacture raw materials or materials in their near-natural state (e.g. logs) to produce primary products such as cants, lumber
Manufacturers—secondary*	Further process products that have already undergone some manufacturing (e.g. lumber) to produce value-added products (e.g. doors, cabinets, walls, flooring, furniture, glulam, plywood)

Public institutions	School boards, facility manager associations and authorities responsible for the decisions related to public services infrastructure such as schools, healthcare etc.
Quantity surveyors	Persons with expert knowledge on construction costs and contracts who provide services such as cost consulting, cost estimating, value determination, risk management and calculation
Research institutions	Private or public organizations that carry out research into wood-based products or building systems

*In this document, **supply chain** is defined as a chain of events that transforms natural resources, raw materials and components into a finished product that is delivered to the end customer. The audiences involved in the supply chain are considered to be manufacturers—primary and secondary, architects, engineers, quantity surveyors, builders, assemblers and installers.