**FORESTRY INNOVATION INVESTMENT** 

**WOOD FIRST PROGRAM** 

2023-2026 STRATEGY

**NOVEMBER 2022** 





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## **EXECUTIVE SUMMARY**

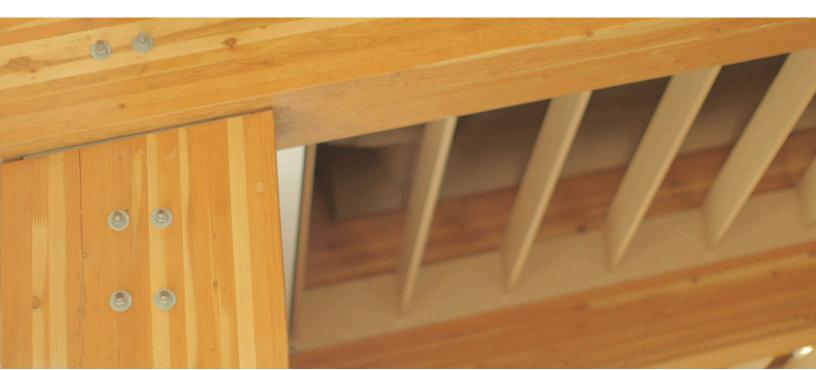
The *Wood First Strategy* is intended to guide and communicate the strategic focus for Forestry Innovation Investment's (FII) Wood First Program over the three-year period from 2023 – 2026. The strategic objectives and associated focus areas set out in this document provide direction for annual investments.

#### PROGRAM OVERVIEW

The Wood First program focuses on advancing wood use in British Columbia (B.C.) by promoting and supporting innovation in manufacturing, building design and construction. The program works with partners in industry, academia, government, municipal and Indigenous communities to ensure early adoption of new products and approaches to building with wood, including taller buildings, mass timber and mass timber hybrid structures. Through these efforts, Wood First is supporting regulatory change, encouraging greater added value in the forest economy, strengthening acceptance of B.C. wood products and showcasing B.C.'s wood technology and building expertise to markets across North America and around the world.

Today, the use of mass timber and advanced wood building systems are on the rise, helping shape more resilient, climate-smart communities. These developments are being driven by emerging trends and issues in materials science, structural engineering, and the rapidly changing technology and building environments. Responding to the opportunities and challenges represented by these dynamics is the focus of this Strategy.







#### STRATEGIC OBJECTIVES AND FOCUS AREAS

Throughout the three-year period of this Strategy, the Wood First program will carry out a broad range of initiatives to meet the following strategic objectives. Identified priority audiences and themes are intended to provide guidance for organizations seeking funding support from FII through the annual Wood First program Call for Proposals.

#### 1. Support Innovation

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

#### 2. Accelerate Adoption

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

#### 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.

Four focus areas provide a framework for program planning and funding, while facilitating the preparation and evaluation of funding applications submitted under the direction of the annual *Wood First Investment Plan*. These focus areas are:

- 1. Strengthening manufacturing and business capability
- 2. Education and skills development
- 3. Research and innovation
- 4. Marketing, promotion and outreach



## WOOD FIRST PROGRAM OVERVIEW

The Wood First program is one of three core programs delivered by FII<sup>1</sup>. The program focuses on advancing wood use in the province by promoting and supporting innovation in manufacturing, building design and construction. This is achieved by positioning wood as a preferred building material and B.C. as a global leader in wood innovation. The program scope includes both residential and non-residential sectors.

By demonstrating leadership in wood use and innovation here in B.C., Wood First supports the Government of British Columbia's objective to generate greater added value in the forest economy and encourages acceptance of B.C. wood products globally. Program initiatives recognize that long-term sustainability of the forest economy requires actively maintaining, creating and diversifying demand for B.C. forest products. By introducing new and advanced wood technologies and building systems, the program is helping to position wood as a preferred building material and B.C. as a leader in forest product and building system innovation. With this positioning established in the domestic market, B.C.'s forest products can be more effectively marketed abroad for construction, interior design and daily living.

True to the model of sustainability, increasing wood use in structural and architectural applications benefits the province economically, environmentally, and socially. The development of advanced wood technologies and building systems fosters innovation and growth in value-added manufacturing, helping to create and sustain a diverse range of jobs and skillsets. Further, by encouraging greater use of wood products in construction, Wood First also supports efforts to reduce the carbon footprint of buildings, helping to create a more sustainable low-carbon future.

Today's built environment is a major carbon emitter, presenting significant opportunities for innovative wood use to create more sustainable and less carbon intensive buildings. Wood reduces the carbon footprint of the built environment, creating healthier, more comfortable spaces. Advancing wood use in B.C. presents opportunities to evolve technologies and expertise and demonstrate how wood design can help reach climate mitigation goals around the world.

<sup>&</sup>lt;sup>1</sup> The other two core program areas are Market Outreach and Market Initiatives.



#### PROGRAM STRUCTURE

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 input and guidance to the overall program strategy and makes recommendations on specific program priorities. Based on direction from this range of stakeholders, FII prepares an annual Investment Plan that prioritizes and allocates available funding across several focus areas including research, education, marketing and value-added capacity building. The activities of the Wood First program are delivered primarily by third-party organizations under a cost-sharing framework that relies in-part on contributions from industry.

#### STRATEGY PURPOSE

The Wood First Strategy is intended to guide and communicate the strategic focus for Forestry Innovation Investment's (FII) Wood First Program over the period 2023 – 2026. The strategic objectives and associated focus areas set out in this document provide direction for the annual investments needed to achieve the Wood First program goal. This Strategy is aligned with the five-year FII *Strategic Plan*<sup>2</sup> and three-year FII *Service Plan*, and reflects input and guidance provided by the Wood First Advisory Committee (WFAC), strategic partners, FII staff and consultants.

#### **Wood First Goal**

British Columbia is a leader in using innovative forest products and building systems.

<sup>&</sup>lt;sup>2</sup> FII's Strategic Plan, Service Plan and other corporate reports are available on the FII website at www.bcfii.ca



## WOOD FIRST FUNDING: LINKING STRATEGY WITH INVESTMENT PLAN

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

Through an annual call for proposals process, FII will invite non-profit organizations to submit proposals for the delivery of services in line with the specific allocations, activities and audiences outlined in an annual investment plan guided by this Strategy. The *Wood First Investment Plan* serves as a key reference tool for interested organizations to develop funding proposals. Proposals conforming to the requirements of FII will be evaluated against the Investment Plan and the objectives of this Strategy by a panel comprised of FII staff, the Chair of the Wood First Advisory Committee and independent industry experts. Final funding decisions are made by FII's CEO and are guided by this Wood First Strategy, the *Wood First Investment Plan* and recommendations of the evaluation panel. Successful applicants will be invited to enter into formal service delivery agreements with FII.

Funding recipients will be accountable for any 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 achieving the objectives of the Wood First and realizing target behaviours. FII expects projects to 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 and projects. FII continuously assesses these outcomes to refine the Wood First Strategy and its strategic priorities.



## OPERATING ENVIRONMENT

#### INDUSTRY LANDSCAPE

British Columbia is a world-leading manufacturer of forest products. In 2021, B.C. exported a record \$16.7 billion (\$CAD) in forest products, with softwood lumber making up over half of this value. The strength of B.C. is evident in that three of the five largest lumber companies in the world are headquartered in the province.

Diversification of markets and products is key to maintaining a robust forest sector in the province. In 2021, B.C. exported 86% of the 21.9 million cubic meters of lumber produced. Of these exports, approximately three-quarters were destined for a single market: the United States. To lessen the forest sector's dependence on a single market, FII is working with the forest sector and the federal government to develop a variety of other markets for B.C. wood, including in Japan, China, South Korea, Vietnam and India.

Supplementing the primary sector is B.C.'s diverse value-added or secondary processing industry. The sector produces a wide range of products, from finger-jointed lumber to plywood, furniture, doors, windows, millwork and cabinets. In addition to these traditional products, B.C.'s secondary manufacturers also produce a variety of mass timber and next generation lumber products, including glue-laminated timber (glulam), laminated veneer lumber (LVL) and cross-laminated timber (CLT). These products are both complimentary to existing softwood lumber industry and key components in advanced wood and hybrid building systems that are now reaching heights and sizes not previously possible. In 2021, B.C. exported over \$800 million in value-added wood products.

The construction sector in B.C. has been a traditional driver of demand for both lumber and value-added wood products. In recent years, the construction market has focused on larger and taller structures. Changes in building codes in 2009, which included the provision for light frame construction up to 6 stories, allowed wood construction to follow the market upward. As wood buildings pushed higher, allowance for wood use in 7-12 story buildings was added to the 2020 building code; however, fully addressing this market opportunity is requiring new design and construction methods, as well as the expansion of advanced wood building products.

Today, British Columbia not only leads North America in mid-rise wood construction, it also leads the continent in the advancement of mass timber production, design, and construction. Beginning with North America's first CLT plant in 2011, B.C. has seen a cluster of producers, designers, and builders emerge to serve both the domestic and export markets. Since 2007, approximately 350 mass timber structures have been started or completed in the province. This is more than the rest of Canada combined, and about half of the total for all of the US over the same period.

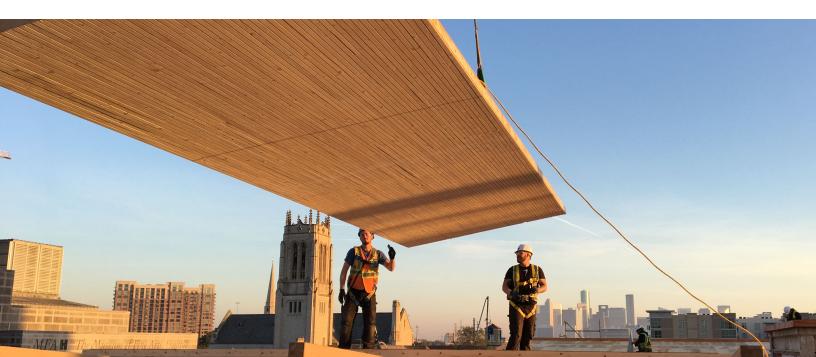


#### **Domestic vs. Export Markets**

Over 90% of 1-6 storey residential construction in B.C. is built in wood; this is a greater share than in any other jurisdiction in the world. While the share held by wood in B.C.'s non-residential construction segment is lower, the province also leads the rest of Canada, the US and Japan in this segment. Despite the high proportion of wood use in B.C. residential construction, and its growing acceptance in non-residential applications, the province's domestic market is not large enough to support an industry with global-scale production capacity (B.C., with only 1.4% of North America's population, produces almost 20% of the lumber consumed on the continent).

Consequently, the B.C. forest industry is highly focused on serving the needs of export markets, particularly the US – the world's largest market for wood products – which have the capacity to embrace traditional and next generation wood products in newer, high-potential construction applications. By working to advance the use of innovative wood products and building systems at home, the Wood First program is helping to develop the experience, expertise and credibility to collaborate internationally, share knowledge and encourage other markets to adopt the use of wood in taller and larger construction. Through these activities, FII and its partners in industry, the research community and government are leveraging domestic success in wood innovation to strengthen B.C.'s exports and impact around the world.

Construction of Museum of Fine Arts, Houston | Credit: StructureCraft





#### TRENDS AND EMERGING ISSUES

Around the world, mass timber, engineered wood product development and advanced wood building systems are on the rise, helping shape more resilient, climate-smart communities. These developments are being driven by demographics and environmental issues, enabled by advancements in materials science and structural engineering. Responding to the opportunities and threats represented by these dynamics is the focus of this Strategy.

#### **CLIMATE ACTION**

In the private sector and at all levels of government in Canada and around the world, policy decisions are increasingly being driven by the need to reduce greenhouse gas emissions and pursue climate change targets and objectives. B.C. is committed to reducing greenhouse gas emissions by 16% below 2007 levels by 2025, 40% by 2030, 60% by 2040 and 80% by 2050.

- B.C.'s renewable forest resources and an electricity grid that can deliver close to 100% zero-emissions electricity offer major opportunities in a new global economic environment. In B.C. building construction, companies have started investing in low-carbon solutions and sustainable financing ahead of government regulations.
- The federal Low-Carbon Assets Through Life Cycle Assessment Initiative supports lowcarbon procurement and buildings that support the lowest carbon footprint. A key output will be a centralized Canadian life cycle inventory database. This will help reach the full potential of low-carbon buildings across Canada and support embodied carbon targets and fair comparisons of building designs and materials.
- Low-carbon buildings are a key component of the CleanBC climate action plan. The
  province aims to expand market adoption of low-carbon materials focusing on mass
  timber, reduce construction waste and work towards a construction-sector circular
  economy. Along with CleanBC's Low Carbon Building Material Strategy and Circular
  Economy Strategy, the Mass Timber Action Plan supports a more sustainable lowcarbon future.
- The First Nations Leadership Council had developed a BC First Nations Climate Strategy and Action Plan informed by First Nation priorities and knowledge. The plan aims to build capacity and self-sufficiency within First Nations communities to ensure that housing and buildings within First Nations communities are culturally appropriate, energy efficient and resilient to climate change.
- The City of Vancouver has been a North American leader in policy on embodied carbon in construction. The Green Buildings Policy for Rezonings requires developers to estimate the embodied carbon in new construction. The city's embodied carbon strategy will set embodied carbon targets and make it easier and less expensive to use lower carbon materials such as mass timber. Many B.C. municipalities are following suit with their own policies for low-carbon construction.



#### URBANIZATION AND DENSIFICATION

As in many jurisdictions around the world, demographics, government policy and social factors are driving demand in B.C. for complete, well-connected, mixed-use neighborhoods that allow residents to work, live, play, shop, and learn closer to home. While population growth in the Metro Vancouver region remains steady, growth of smaller B.C. urban centers is accelerating as new residents seek lower-cost housing and a more sustainable lifestyle.

- Cost of housing in B.C. has put a strong focus on construction cost, speed to market and the need for innovative and affordable solutions.
- Sustainable density requires a higher percentage of multi-family housing, commercial and community structures that can stand for at least 50 to 100 years, that can enable renovations and flexible floorplans.
- Authorities having jurisdiction and speed at which planning and approvals of the
  appropriate mix of housing along with required neighbourhood infrastructure (i.e.
  schools, community and health care facilities, etc.) is critical in addressing housing and
  community development particularly for high-density applications and taller buildings.
- Increasingly of interest to owners, renters and occupants, high-performance buildings achieve many benefits including lower operating and life-cycle costs, lower greenhouse gas emissions, higher resilience, healthier living through better air quality, thermal comfort, reduced noise and the inclusion of natural materials (i.e. biophilic benefits).

#### CHANGING WOOD CONSUMPTION - MULTI-FAMILY, TALLER STRUCTURES

Innovations in structural wood and next-generation wood building products (e.g., cross laminated timber and other engineered wood products); the related development of advanced wood and hybrid building systems; and a series of advancements in building codes are allowing wood to be incorporated in a range of larger and more complex structures. This is opening new markets for wood products at home and helping the domestic forest industry manage for the shift away from single family construction.

- In 2007, 1-6 storey construction represented over three-quarters of multifamily starts in B.C.; today it is only half, with the balance being 7+ storeys. For wood to be used in this taller segment of the market, mass timber and hybrid building systems are required. Moving forward, it will be critical to ensure that both building codes and building systems evolve to recognize the wide structural and environmental potential of woodbased products and systems.
- There will continue to be market opportunity for wood and hybrid buildings, finishing solutions for residential and mixed-use buildings 7-12 storeys and for non-residential commercial buildings. Within the non-residential category, the offices, retail and restaurants sub-segments are of greatest interest because of the wood allowed under the current building code.



#### MANUFACTURING AND CONSTRUCTION SUPPLY CHAIN CAPACITY

Knowledge, skill and capacity gaps among manufacturers, engineers, design professionals, construction trades and developers are ongoing barriers to advancing wood use in midrise and taller wood segments.

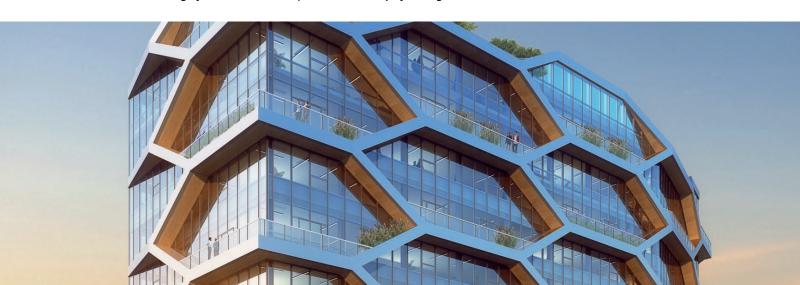
- B.C. experienced tall wood building practitioners will be in demand, particularly as the growth of mass timber construction in the U.S. outpaces growth in Canada.
- Current architecture and engineering curriculum in post-secondary institutions carries limited wood content, pointing to shortage of professionals and trades trained in designing, building and maintaining wooden structures.
- B.C.'s construction industry as a whole is experiencing a shift from analogue to digital practices and there is a pressing need to ensure workers at all levels have the digital skills to support this transition.

#### INCREASING INDUSTRIALIZATION OF CONSTRUCTION (PREFABRICATION)

Government and corporate initiatives are increasing focus on industrialization of construction to better use resources, increase the speed of construction and reduce on-site waste.

- Prefabrication has the potential to help communities address the shortage of affordable housing by providing a fast, cost-effective and sustainable construction solution even during periods of skilled labour shortages. Panelization or prefabrication of wall, floor and ceiling assemblies, techniques for which wood is well adapted, show strong potential.
- Design for Manufacture and Assembly (DfMA) and Building Information Modelling (BIM)
  will be a cornerstone in the growth of prefabrication. Work is being done in Canada and
  around the world to develop and demonstrate potential solutions to move the
  construction industry forward, including streamlining and standardizing the digital
  modelling throughout the supply chain from the design, manufacture, assembly and
  operation of buildings.

Rendering of 2150 Keith Drive | Credit: Courtesy of Dialog





#### **Healthy Forests, Adding Value**

A sustainable quota—the allowable annual cut (AAC)—is determined independently by B.C.'s Chief Forester based on detailed technical analysis and public comment from information ranging from technical forestry reports to First Nations and public input and the government's social and economic goals. The Chief Forester determines the allowable annual cut for each of B.C.'s 71 timber supply areas and tree farm licences. Their role is to manage B.C.'s forests and range lands in a sustainable, ecosystem-based manner, using the best science available and culturally-relevant data as the foundation for decision-making.

In recent years, timber supply has been impacted by unprecedented mountain pine and spruce bark beetle outbreaks and wildfires. Of late, logging deferrals of select old growth forests are also under review. Considering these natural disasters and evolving public values, AACs continue to be adjusted with the objective of ensuring healthy forests and a stable timber supply for the future.

British Columbia's current AAC includes allowance for some logging still required to remove large volumes of damaged trees. Following removal of this excess dead wood, the AAC in B.C.'s interior forests will be returned to levels predicated largely on healthy forests experiencing natural insect and fire cycles. On B.C.'s Coast, AACs are expected to remain relatively steady. As always, B.C.'s forests will continue to reflect the characteristics of the diverse biogeoclimatic regions and public values they represent.

Advancing and diversifying manufacturing of primary wood products into higher value-added products makes the most of the resource while maximizing market prospects. The industry is also exploring new opportunities in abundant but under-utilized species, such as second-growth western hemlock.

Reforestation in Sayward Forest | Credit: Brudder Productions





## STRATEGIC OBJECTIVES

The following objectives provide direction and context for the Wood First program. Associated with each Wood First strategic objective are general conditions or indicators which provide references for the assessment of progress in advancing these objectives.

#### OBJECTIVE 1: SUPPORT INNOVATION

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

#### OBJECTIVE 2: ACCELERATE ADOPTION

Architects, engineers, builders and developers 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.



# FOCUS AREAS: GUIDING THE WOOD FIRST STRATEGY

Throughout the three-year period of this Strategy, the Wood First program will focus on the following strategic priorities to leverage the opportunities and challenges facing British Columbia in its efforts to advance wood use.

- 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

Wood First priorities are organized into focus areas to provide a framework for planning, funding and assessment from year to year, as well as guide the direction of the annual Wood First Investment Plan.

- 1. Strengthening manufacturing and business capability
- 2. Education and skills development
- 3. Research and innovation
- 4. Marketing, promotion and outreach

Further detail on specific tactics, activities, audiences and desired outcomes can be found in the annual *Wood First Investment Plan* which is developed in the context of this Strategy and the annual *British Columbia Market Development Summary*.



1 Lonsdale Avenue Commercial Building | Credit: KK Law

## FOCUS AREA 1: STRENGTHENING MANUFACTURING AND BUSINESS CAPABILITY

Escalating interest for next-generation and innovative wood-based products and building systems is driving a need to improve the capacity and competitiveness of the manufacturing sector and all parts of the supply chain—primary and secondary manufacturers, architects, engineers, quantity surveyors, builders, assemblers, installers. FII's Wood First program places priority on the evolution of B.C. manufacturing capacity and knowledge to encourage competitive supply and services in order to meet North American demand.

Preparing for the work of tomorrow can sustain current and next-generation production workers, supervisory, skilled trades and professionals in many communities across B.C. – rural and urban. As government and businesses seek better use of resources, faster builds, lower costs and reduced on-site waste, wood— particularly mass timber—can enable a highly integrated way to construct modern buildings. The future of the construction industry and mass timber will increasingly involve prefabrication, automation, virtual and 3D design.

Jobs and processes will need to evolve to incorporate new technologies, approaches and innovations. Whether manufacturing, remanufacturing or building deconstruction - prefabrication, automation (including robotics), BIM/DfMA, product design, plant layout support, software development, logistics and design engineering - all part of the processes and solutions to innovate, as well as mitigate risks and costs.

By leveraging B.C.'s world-leading structural, fire and code engineering expertise, and its network of innovative specialist fabrication companies, there is opportunity to evolve technical knowledge and competitiveness of B.C.-made mass timber solutions. Nurturing networks of experts and partners to build and share technical knowledge and skill sets, as well as facilitating dialogue through professional associations and educational institutions will be important to develop innovative, yet sustainable approaches to address process and quality optimization in the supply and quality of wood and hybrid products and systems that can respond to market needs.



CLT production | Credit: Swanky Photography

#### FOCUS AREA 2: EDUCATION AND SKILLS DEVELOPMENT

Education and skills development are needed to accelerate technical understanding and support a growing system of technical tools and workforce that can support the next generation of designing and building with wood. This includes products and building systems covering a range of species, design applications and construction techniques. Innovations and performance of wood-based products and building systems (particularly mass timber and hybrid) are a priority to break down misperceptions and barriers to wood acceptance in current building regulations, as well as alternative solutions.

Increased awareness of wood and wood-hybrid systems in existing building code provisions, alternative solutions and new building systems for larger and taller buildings by building officials, insurers, financiers and developers should help to accelerate the demand in B.C. for taller and larger wood buildings, as well as support the continued evolution of codes and innovation in high-rise mass timber/hybrid mass timber systems. Case studies and lessons learned, particularly learnings from early adopters involved with 2020 National Building Code applications and business case considerations involving wood and mass timber, will support audiences looking to manage and optimize costs and processes involving taller multi-family and commercial buildings.

In partnership with industry, post-secondary institutions, professional associations, Indigenous programs - educators and trainers should be equipped to teach trade, undergraduate, graduate and continuing education courses on wood engineering and design. The role of digital technologies such as BIM/DfMA in structural wood applications, low carbon and circular building modelling is increasingly important.

There are an increasing number of stakeholders and early innovators who are leading the way, building expert networks and showcasing B.C.'s wood products, design and construction expertise. Lessons learned in the Metro Vancouver region can be leveraged and applied to other regions and communities in B.C. and beyond. FII's Wood First program encourages the development and sharing of a wide variety of resources including research and testing results, technical tools and construction guides and project profiles, which should be incorporated into post-secondary, professional development and continuing education programs and standards.



Mass Timber Fire Demonstration Testing | Credit: courtesy of Canadian Wood Council.

#### FOCUS AREA 3: RESEARCH AND INNOVATION

The development of next-generation wood products and systems will support innovation and growth in B.C.'s value-added manufacturing and next-generation building systems. Technical research in engineering and material sciences, development of guides, market and other non-technical research, as well as optimizing academic and research networks can inform decisions involving wood specification.

It is important for insurers, building and fire officials to build knowledge and proficiency in reviewing applications involving existing codes and alternative solutions. Developers, financiers, designers and public officials can benefit from improved understanding of the best practices in high performance wood-frame, mass timber and wood hybrid design and construction. Structural and post-occupancy performance, restoration and rehabilitation, prefabrication, midrise options and taller construction are priorities. Understanding and support for future building code changes, particularly as it relates to performance-based design and systems, acoustics and vibration, and prefabrication processes for wood and wood hybrid building systems in large, mid-rise and tall buildings will continue to enable optimized and market-ready solutions.

Responsible, low carbon or net zero buildings move beyond a focus on reducing emissions from operations like heating and cooling and consider emissions from building materials – including how they are made and how they are used at a building's end of life. Responsible next steps include exploration of opportunities to decrease emissions or embodied carbon across building materials and design, including wood and wood hybrid solutions. wood-based insulation; and wood-based products for a circular built environment<sup>3</sup>

FII's Wood First program recognizes that applied research is needed to overcome these and other barriers in advancing the applications of wood-based products and building systems, as well as improve performance of wood in applications that offer significant market potential within B.C.

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<sup>&</sup>lt;sup>3</sup> Design for disassembly and adaptation, cascading use of wood, waste prevention, reduced lifecycle impacts of wood



Forestry Innovation Investment and naturally:wood booth

## FOCUS AREA 4: MARKETING, PROMOTION AND OUTREACH

FII's Wood First program supports market leaders to advance innovation in the use of wood by documenting and sharing lessons learned and best practices.

Communicating solutions to issues important to local regions and communities in B.C. - resilience (including post-disaster), durability, climate change mitigation, health and costs related to mid-rise and taller residential and non-residential wood buildings - will help align B.C. wood design and building capacity and services with B.C. and North America building needs.

B.C.'s leadership in wood product and building system design, engineering, construction and manufacturing enables a robust position to encourage other North American and overseas markets to specify and use of B.C. wood products.



## PERFORMANCE MEASURES AND INDICATORS

The quantitative and qualitative measures and indicators for the Wood First Program objectives are measured and tracked in the annual FII *Service Plan*, annual recipient agreement key performance measures, and bi-annual *Wood First Preferences and Perceptions of Wood in B.C.* survey. Key performance measures and targets are:

Performance Measure	2022/23	2023/24	2024/25	2025/26
	Target	Target	Target	Target
Total sales (CAD, millions) of wood attributed to program interventions — B.C.'s non-residential and multistorey/multi-family residential construction markets.	70 (baseline)	74	76	78

Data Source: Canadian Wood Council

Performance Measure	2020/21 Results	2022/23 Target	2024/25 Target
Professionals who think that B.C. should rely more on wood to meet its housing and infrastructure needs	78%	79%	80%
Professionals whose preferred structural building material is wood or wood-hybrid when working on residential multi-family buildings of 5-6 storeys.	85%	86%	88%
Professionals whose preferred structural building material is wood or wood-hybrid when working on residential multi-family buildings of 7-12 storeys.	33%	35%	38%



Professionals whose preferred structural building material is wood or wood-hybrid when working on non-residential buildings up to 4 storeys.	45%	46%	47%
Professionals whose preferred structural building material is wood or wood-hybrid when working on non-residential buildings of 7-12 storeys.	27%	28%	30%
Professionals who think the B.C. wood products sector is known for its ingenuity in developing new products.	74%	75%	76%
Professionals who think B.C. is a leader in wood construction.	84%	85%	86%
Professionals who think that B.C. is well-positioned to export its products and knowledge of building with wood to other provinces and/or countries.	84%	85%	86%
Professionals who think that wood is an environmentally sustainable material.	89%	90%	91%

Data Source: FII, Wood First Preferences and Perceptions of Wood in B.C. Bi-annual Survey