



Forestry Innovation Investment®

FORESTRY INNOVATION INVESTMENT

# YEAR IN REVIEW

2020/21

This three-storey commercial building, the 'PH1', located in North Vancouver's Shipyard District, was erected in just 10 days using a made-in-B.C. prefabricated mass timber system. The building incorporates pre-insulated cross-laminated timber (CLT) panels and meets building code requirements for fire ratings. Built to meet the rigorous energy standards for Passive House, it will use up to 90 percent less energy compared to a conventional building.

To learn more about this project and the many other innovative wood buildings across B.C., **visit [naturallywood.com/projects](https://naturallywood.com/projects)**



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— YEAR IN REVIEW 2020/21 —

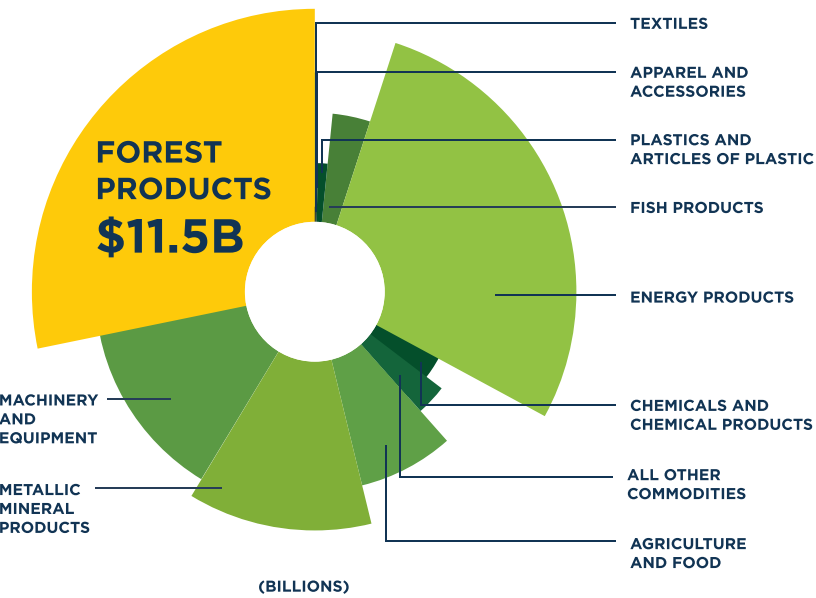
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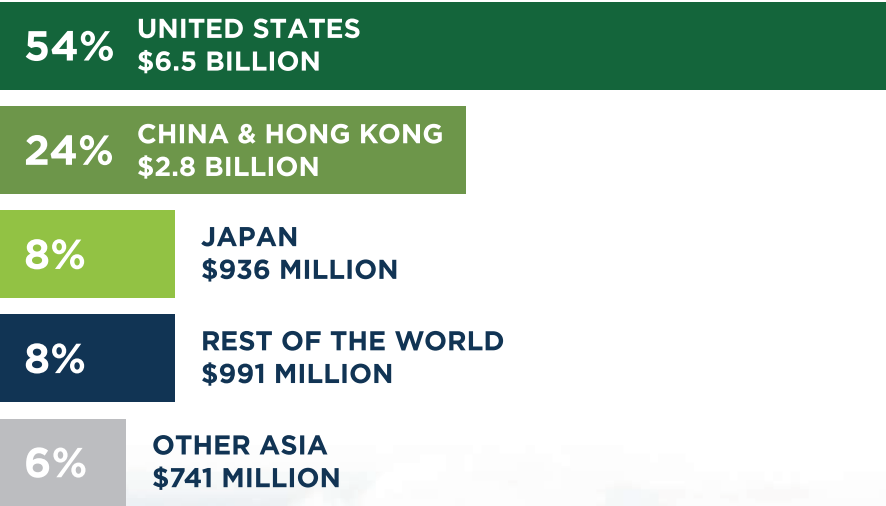


# BUILDING A STRONGER

## B.C. COMMODITY EXPORTS



## B.C. FOREST PRODUCT EXPORT MARKETS 2020



Sources: BC Stats 2020, PWC 2017, BC Ministry of Finance 2020, COFI 2021

### FOREST PRODUCTS



REPRESENT **29%** OF B.C.'S COMMODITY EXPORTS

### 140 COMMUNITIES

ARE SUPPORTED BY B.C.'S FOREST SECTOR

### 120 INDIGENOUS NATIONS AND ORGANIZATIONS

ARE INVOLVED IN THE B.C. FOREST INDUSTRY



# FOREST ECONOMY

## ANNUAL HARVEST

**TOTAL AREA OF B.C.**  
95 MILLION HECTARES

**FORESTED LAND BASE**  
60% OF TOTAL

**LAND AVAILABLE FOR  
TIMBER HARVESTING**  
23% OF TOTAL

**ANNUAL AREA HARVESTED**  
0.35% OF FORESTED LAND BASE

**300 MILLION SEEDLINGS WERE  
PLANTED ON CROWN LAND IN 2020**  
— THE MOST EVER PLANTED IN A  
SINGLE YEAR



# \$1.1 BILLION

IN PROVINCIAL RESOURCE REVENUE  
WAS GENERATED BY B.C.'S FOREST  
SECTOR IN 2020/21



# 100,000+

FULL-TIME EQUIVALENT  
JOBS ARE GENERATED BY  
B.C.'S FOREST SECTOR

## LEADERSHIP IN WOOD USE

**AROUND THE WORLD AND HERE IN B.C.,  
MASS TIMBER IS ON THE RISE.** WORKING  
COLLABORATIVELY WITH THE OFFICE OF MASS  
TIMBER IMPLEMENTATION (OMTI) FII IS WORKING  
TO FURTHER EXPAND B.C.'S LEADERSHIP IN  
INNOVATIVE, MASS TIMBER CONSTRUCTION.



THERE ARE **20, 6+ STOREY** PROJECTS UNDER  
DEVELOPMENT ACROSS B.C., ALL USING  
MASS TIMBER PRODUCTS. THE PROJECTS  
INCLUDE **21-FLOOR** AND **34-FLOOR**  
TOWER CONCEPTS BY LEADING B.C. DEVELOPERS,  
AS WELL AS **TWO, 12-STOREY** BUILDINGS ON  
SOUTHERN VANCOUVER ISLAND.

'Tresah' condo development, Victoria B.C. (top and bottom left) | Photos: Renderings courtesy of D'AMBROSIO Architecture + Urbanism  
'Prototype' building, Vancouver B.C. (bottom right) | Photo: Rendering courtesy of Henriquez Partners Architects



# Message from the Minister

The past year has been immensely challenging for all of us, and the COVID-19 pandemic has reinforced the importance of working together to look after one another as well as the industries that support our communities.

The forest sector is an integral part of B.C.'s economy, with forestry touching communities in every region of the province. It is a pillar in B.C.'s economic recovery—sustaining jobs and generating revenue for government to fund the public services we all rely on. It is why the Province continues to work with the federal government and industry to maintain and grow existing markets while pursuing new opportunities for our traditional and next-generation wood products and technologies.

While demand for wood products remained strong in North America in 2020/21, the B.C. forest industry faced difficult market conditions overseas, including limited growth and demand driven by COVID-19 and related restrictions, evolving logistical costs and challenges, and growing low-cost competition, particularly from Europe where a spruce beetle infestation has temporarily increased lumber production and exports. Government and industry have responded to these challenges by working to strengthen relationships with our existing trade partners while engaging in opportunities to expand and diversify into new markets and segments.

Here in B.C., we are committed to sustainable management of our forests and strive to maximize the value and jobs generated by our forest resource. This includes continuing to advance innovation and build demand for our forest products locally, such as adopting mass timber construction up to 12 storeys and funding mass timber demonstration projects and research to further advance and expand our engineered wood products sector.

Through CleanBC and our energy efficiency initiatives, the B.C. government is working to enhance the performance of the province's built environment and create healthier and greener spaces.

Building with wood from B.C.'s sustainably managed forests is a natural solution that helps mitigate climate change, locking in carbon over the wood products' lifetime. Expanding wood use in B.C. presents opportunities to collaborate with government and industry to act as a global showcase for how wood design can help reach international climate goals. Our Province's forthcoming industrial manufacturing strategy will identify ways in which government can support B.C.'s wood product manufacturing sector to remain resilient, sustainable and innovative.

I am pleased to see the work that Forestry Innovation Investment (FII) and its partners have undertaken to strengthen and expand markets for B.C.'s forest products both here at home, in the U.S. and across Asia. We're committed to supporting FII's investments in people and in businesses in the forestry sector, and we are confident that people in all corners of the province will rise to the challenge as we work together to build a better future with meaningful jobs and a strong, sustainable economy for all.

A stylized, handwritten signature in white ink, likely belonging to Honourable Ravi Kahlon.

Honourable Ravi Kahlon  
Minister of Jobs, Economic Recovery and Innovation | Government of British Columbia



# Message from the CEO

2020/21 was a challenging year for industries, economies and people all over the world as we collectively navigated and responded to the COVID-19 global pandemic. For the B.C. forest sector, it was a year of uncertainty and evolving market dynamics—with ongoing trade tensions, competition from other global supply regions and an unexpected surge in lumber demand in the North American market.

Alongside these unprecedented times, the growing global focus on climate change and lowering carbon emissions is expanding, presenting exciting opportunities for wood use and B.C. forest products. Global priorities are shifting toward green building strategies, building codes are expanding to allow for taller wood buildings and major consumer markets are increasingly demanding products made from sustainably sourced wood products. B.C.'s sustainable forest products are well-positioned to address these market demands—supporting a low-carbon future and sustaining jobs and communities across the province.

This 2020/21 Year in Review highlights how Forestry Innovation Investment (FII), together with government and industry partners, was able to pivot quickly and respond to challenges and opportunities as operating environments evolved in each of our key markets.

Activities across the year focused on removing barriers and growing opportunities for B.C. forest products in priority markets. This included delivering technical support, education and knowledge mobilization in markets including China, Japan and South Korea; and building awareness around the benefits and applications of B.C. species within emerging markets such as India and Vietnam. In the United States, programs focused on encouraging the use of B.C. wood within the multi-family, non-residential, mass timber and the repair and remodeling sectors. Underpinning all of our activities is the promotion of B.C.'s exemplary sustainable forest management practices and third-party forest certification.

In British Columbia, momentum continues to advance innovative, low-carbon wood building solutions. Working with the newly formed Office of Mass Timber Implementation (OMTI) and our other partners, we are working to expand opportunities for wood use in public and private-sector buildings, positioning B.C. as a leader in wood and mass timber innovation. Together with OMTI, we are focused on ensuring the province acts as a global showcase for how building with wood can help lower carbon emissions to meet international climate goals, while highlighting the beauty and versatility of what is possible with B.C. wood species.

Through all of FII's activities, we work collaboratively with industry trade associations, research institutions, provincial and federal governments, and trade development agencies to maximize effectiveness and deliver innovative, forward-looking market development programs.

As the global situation continues to evolve and recover, FII will remain focused on diversifying and expanding markets for B.C. forest products at home and abroad.

We welcome your comments on any aspect of this report or our programs.

A stylized, handwritten signature in white ink, appearing to read 'Michael Loseth'.

Michael Loseth  
President & CEO | Forestry Innovation Investment





# Forestry Innovation Investment

Strengthening and diversifying  
markets for B.C. forest products

FII acknowledges that it is situated on the traditional territories of the x<sup>w</sup>məθk<sup>w</sup>əyəm (Musqueam), Skwxwú7mesh (Squamish) and səłililw ətaʔt (Tsleil-Waututh) Nations.

*Western red cedar second-growth research plot, Malcolm Knapp research forest, Maple Ridge, B.C. | Photo: Moresby Consulting Ltd., courtesy naturallywood.com*



Forestry Innovation Investment (FII) is British Columbia's market development agency for forest products. As a Crown corporation, we help 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. We do this by delivering and co-funding a mix of research and capacity building, as well as market development and promotional activities.

## WE FULFILL OUR MANDATE 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.



### 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 multi-family and mass timber/tall wood 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.

# FII's Core Objectives



## PROMOTING THE MERITS OF B.C. FOREST PRACTICES AND PRODUCTS

Position wood as a preferred building material and B.C. as a leading supplier of world-class environmentally responsible forest products.



## EXPANDING GLOBAL MARKETS

Create and diversify global demand for B.C. forest products in new and emerging markets.



## FOSTERING LEADERSHIP IN WOOD USE

Expand wood technologies and building systems, advancing B.C.'s leadership in wood innovation.



## MAXIMIZING EFFECTIVENESS

Collaborate with industry and government to provide efficient and strategic support for B.C.'s forest sector.



To view FII's Performance Management Framework, Strategic Plan and other corporate documents, visit [bcfii.ca/reports](https://bcfii.ca/reports)

## Performance Management Framework

As a provincial Crown corporation, FII is dedicated to continuous improvement and to ensuring that its goals, programs and market strategies are in line with those of government and industry. FII's Performance Management Framework outlines the process FII uses to monitor and assess the performance of its projects and programs, as well as market development and corporate initiatives.

Drawing on over 17 years of experience and results, FII updated the Framework in 2020 and further aligned other key corporate documents such as the FII Strategic Plan, the FII Service Plan, as well as FII's program and market strategies.

Throughout this document, you'll see highlighted metrics drawn from the strategies of this Framework that indicate year over year measurement and showcase the growth and development of our programs and in our key markets.



# Partners in Market Development

Working together to deliver innovative programs in B.C. and around the world

## \$1=\$3.33

Every dollar invested by FII is supported by an additional \$2.33 in funding from industry, the federal government and other partners. This year, FII's \$6.58 million investment in cost-shared programming was leveraged with partner contributions to deliver a total market diversification program of \$21.91 million.

FII works collaboratively with the federal government, B.C. government ministries and agencies, industry partners and other stakeholders to deliver programs that support the growth and development of the provincial forest sector.

Through coordinating efforts and drawing on resources and expertise from different segments of the industry and government, FII is able to maximize the effectiveness of its programs and distinguish B.C. as a leader in innovation and market development.



Natural Resources  
Canada

Ressources naturelles  
Canada



Global Affairs  
Canada

Affaires mondiales  
Canada

# British Columbia

Promoting leadership and celebrating innovation



*Log boom, Oweekeno Lake, B.C., Machmel camp | Photo: Moresby Creative, courtesy naturallywood.com*



## Overview

In 2020/21—despite challenges of the global pandemic—FII continued to advance wood use within B.C., further building the province's local and international reputation as a showcase for forest products in construction, interior design and daily living.

Collaboration with industry and government partners, as well as adaptability, have been critical to program delivery. FII-supported advancements in mass timber and light-frame construction align with the Government of

B.C.'s COVID-19 economic recovery and climate leadership policy—creating skilled jobs in B.C.'s forestry, manufacturing and construction sectors while also reducing the carbon impact of building and construction activities.

With ongoing strategic investments in research and knowledge mobilization, B.C. continues to be on the leading edge of innovative product development and building system advancement. To further accelerate B.C.'s early adopter status, FII invests in technical guides, case studies and continuing education for architects, engineers and manufacturers, as well as research and approval bodies—ensuring valuable lessons learned are shared across industry.

Working with provincial and federal organizations, FII undertakes information sharing and market outreach activities that provide audiences with fact-based information about B.C.'s globally-recognized sustainable forest management practices and diverse products, maintaining B.C.'s reputation as a supplier of choice.



*Alty Lake, B.C. | Photo: Moresby creative, courtesy naturallywood.com*



# Naturallywood.com at the top of search engine results

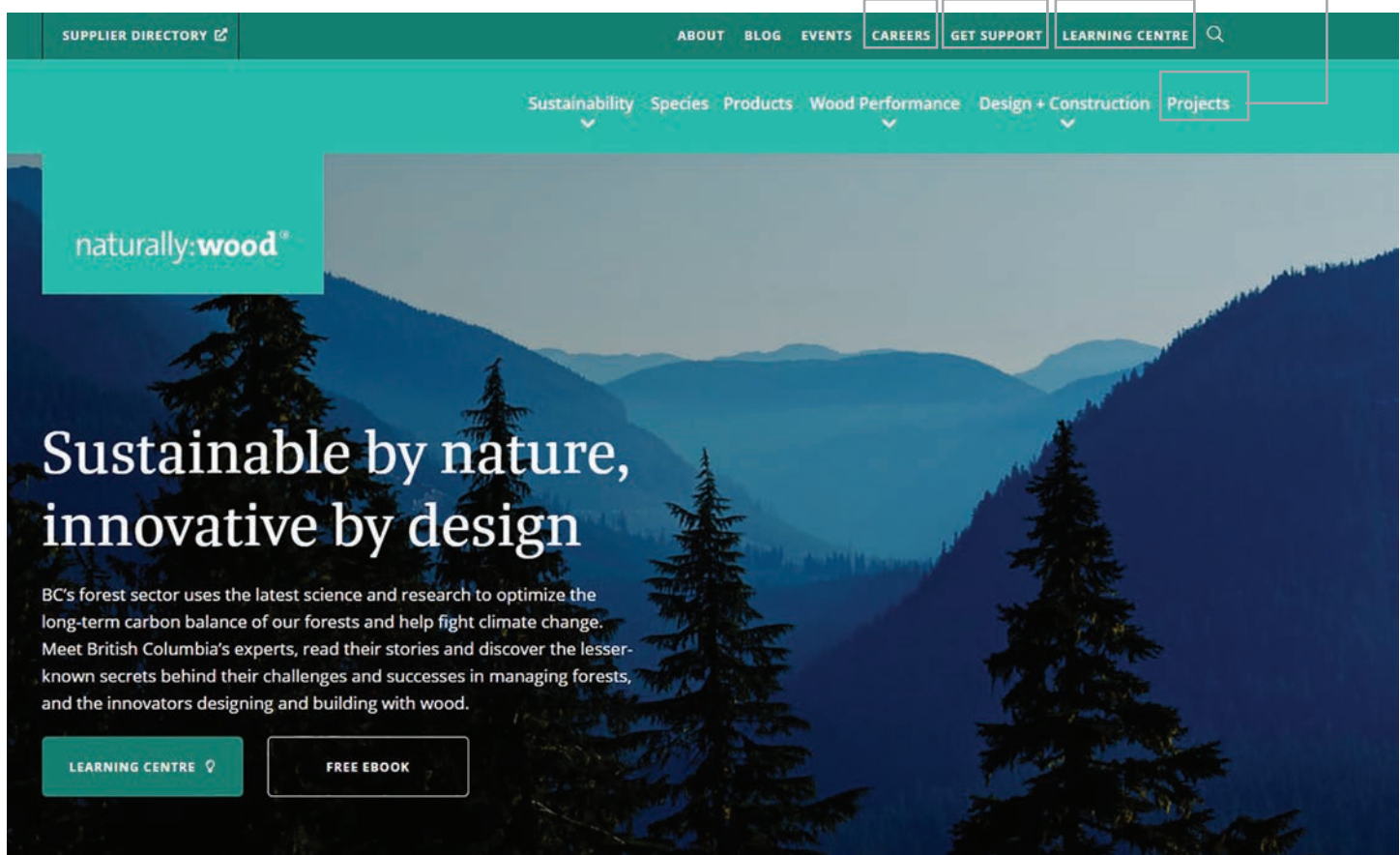
FII launched a refreshed **naturallywood.com** website in September 2020, driving positive results on search engines. Popular search terms include: mass timber, Douglas-fir and prefabricated wood.

Inspiring visitors by featuring hundreds of timber projects spanning all corners of British Columbia.

Featuring resources from factsheets on B.C. forests to technical guides and research on all things forestry and next-generation product innovations.

Helping connect people to growing opportunities in the B.C. forest and construction industries.

Highlighting B.C. organizations, experts and facilities that provide support with wood design, codes, exports, research, testing and education.



The site now serves as a foundation for an expanded range of digital communications including LinkedIn and Facebook social channels that create awareness of B.C.'s leadership in sustainable forest management, innovative forest products and wood building systems, while driving traffic to **naturallywood.com**.

# Building a digital communications ecosystem

Keep up to date on the latest developments in B.C.'s forests, product manufacturing and wood building.

#bcforests #development  
#britishcolumbia #timber #forestry  
#lumber #bcforestry #bclumber  
#innovation #wood #masstimber  
#construction #forestproducts  
#climatesmart

naturally:wood in f

Fill in

## Connecting B.C. suppliers to potential buyers

The naturally:wood BC Supplier Directory helps drive domestic and international business to the B.C. forest products industry.

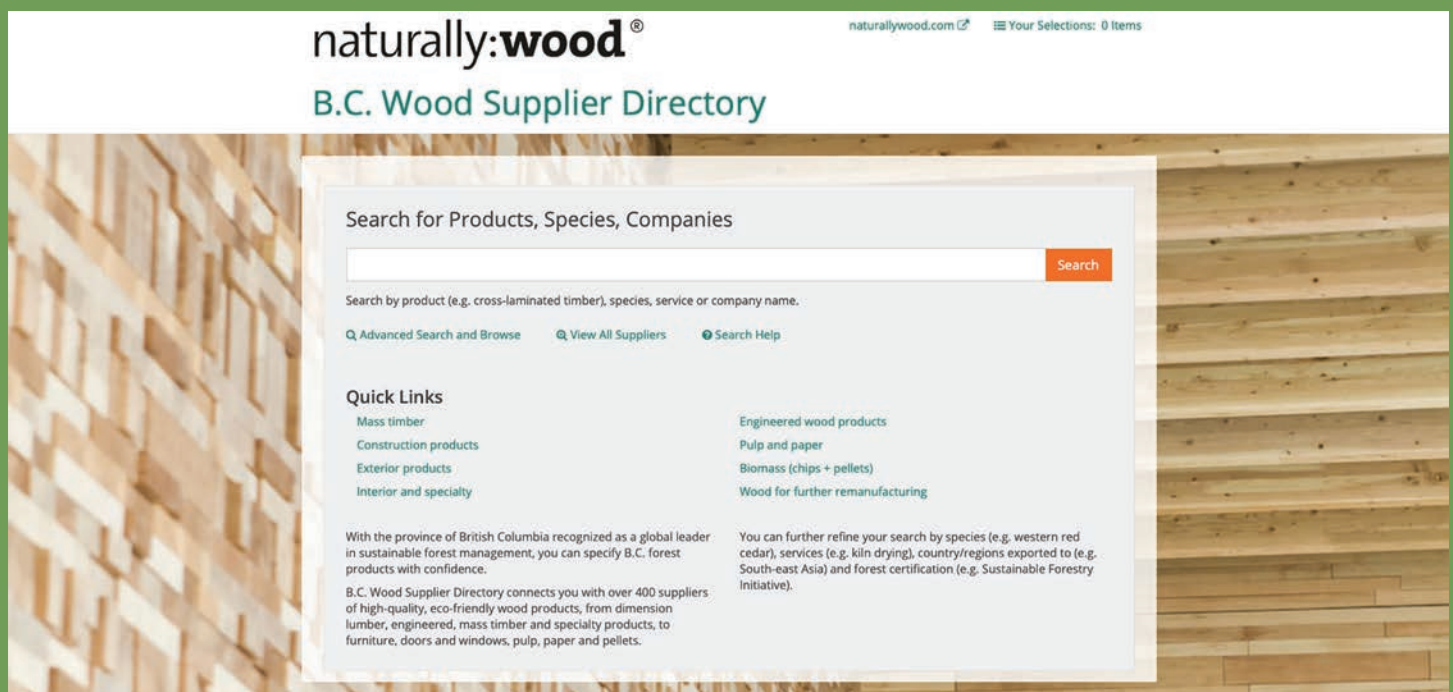
If you would like to add your company to the Supplier Directory, or update the information we have, please contact [info@naturallywood.com](mailto:info@naturallywood.com).

**400+**  
SUPPLIERS LISTED

**33,000+**  
VISITS

**24,000+**  
INTERACTIONS

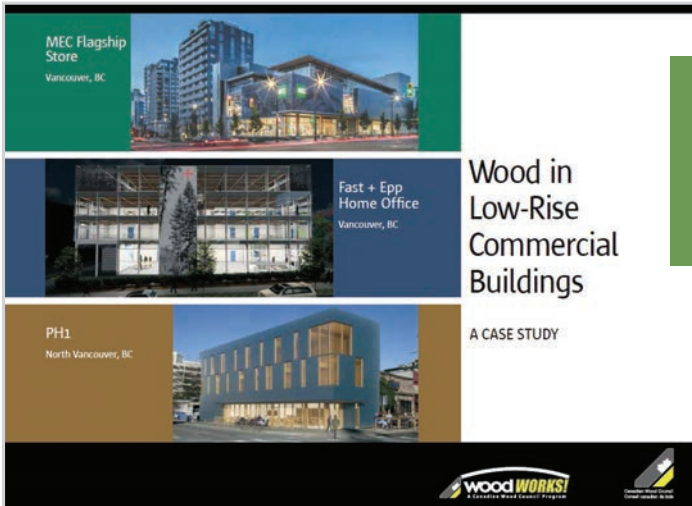
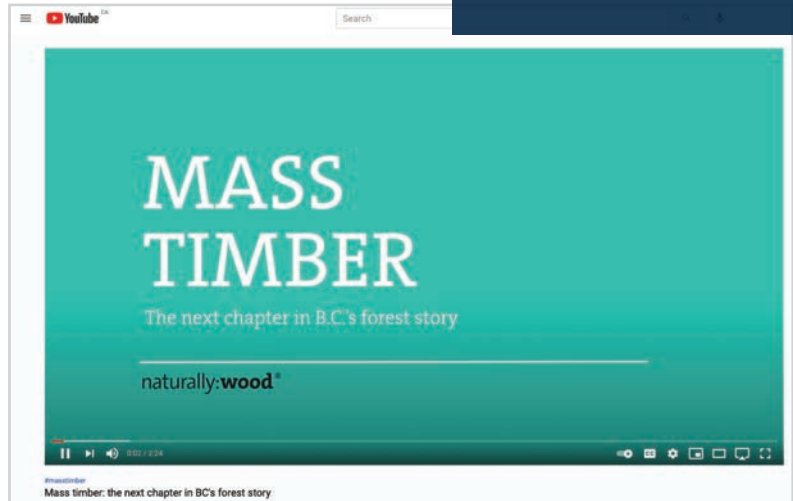
(SEARCHES, REFERRALS  
TO COMPANY WEBSITES  
AND COMPANY CONTACT  
INFORMATION)



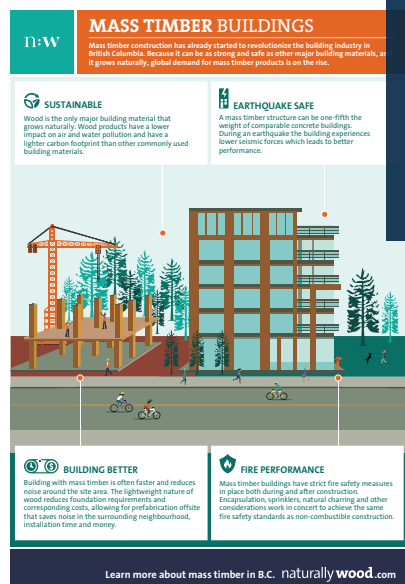
# Mass timber's mass appeal

Mass timber information resources were developed and made available through naturallywood.com to further the acceptance of mass timber and, in turn, grow opportunities for B.C. forest products.

Video with ~1,800 views in first 6 months.



Case study: Wood *WORKS!* BC shares sustainable and economical solutions using mass timber that address some significant technical and logistical challenges through the use of off-site fabrication and virtual construction.



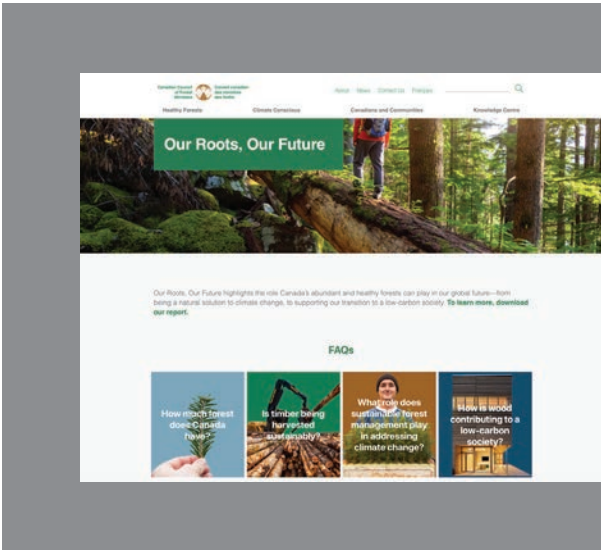
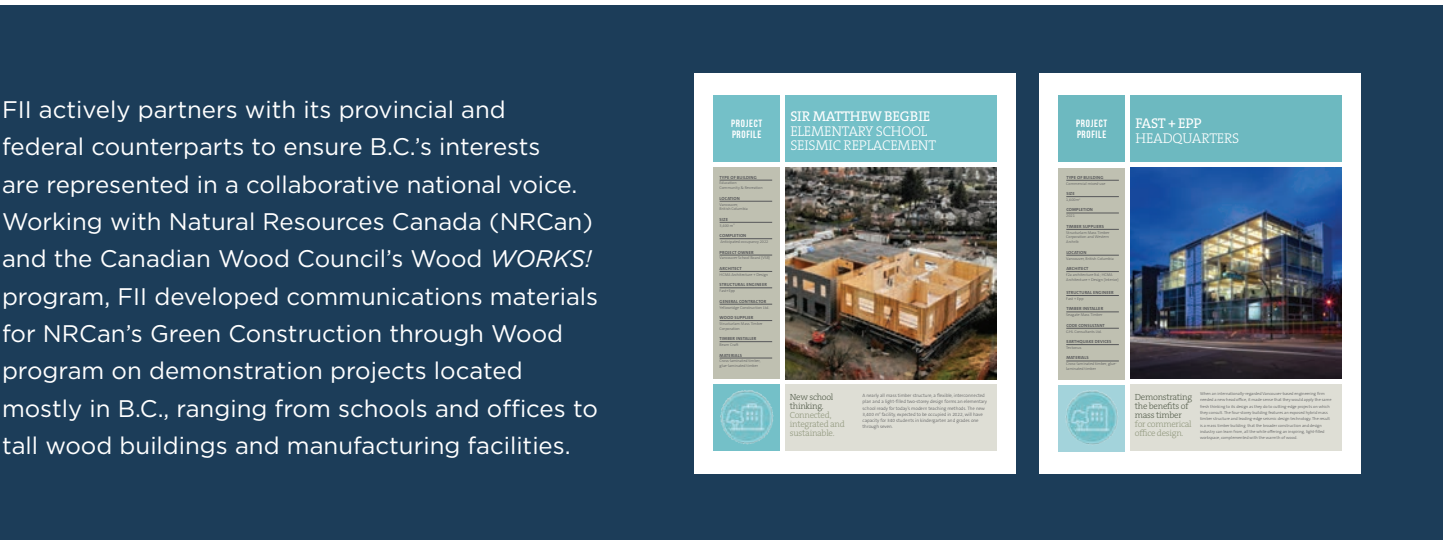
Infographics on the different types of mass timber and its performance advantages, an expanded mass timber products section with individual pages for each product, and pages on mass-timber and hybrid-timber construction.

15,000+ VIEWS OF MASS TIMBER PAGES



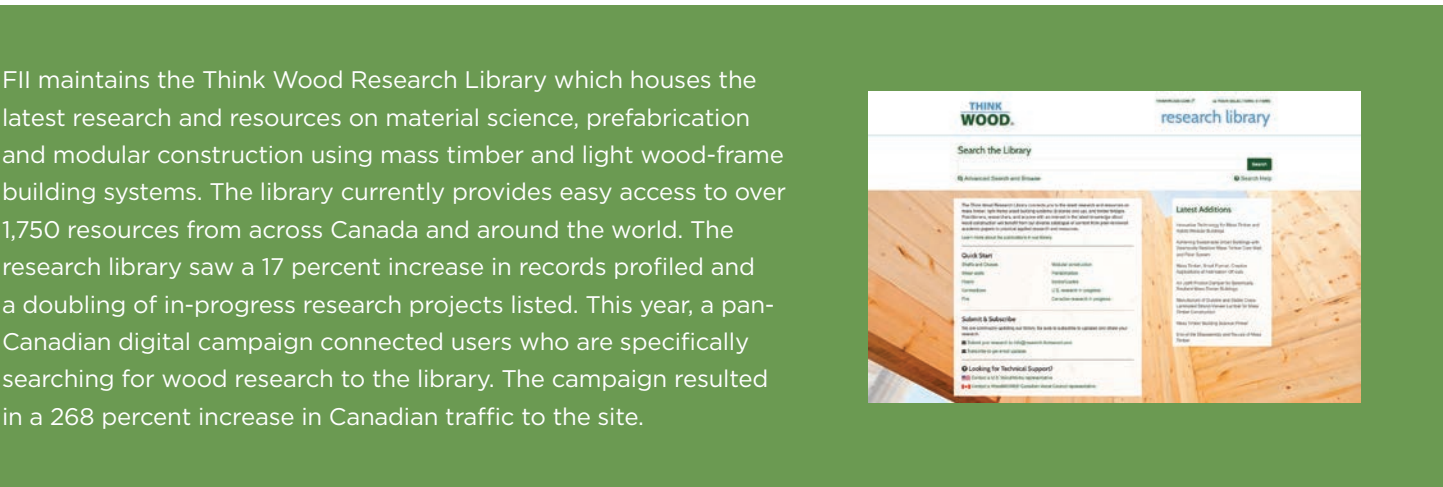
## Collaborating coast to coast

FII actively partners with its provincial and federal counterparts to ensure B.C.'s interests are represented in a collaborative national voice. Working with Natural Resources Canada (NRCan) and the Canadian Wood Council's Wood *WORKS!* program, FII developed communications materials for NRCan's Green Construction through Wood program on demonstration projects located mostly in B.C., ranging from schools and offices to tall wood buildings and manufacturing facilities.



Working with NRCan and the Canadian Council of Forest Ministers (CCFM), FII led the development of a refreshed **ccfm.org** website and the development of a popular version of *The State of Canada's Forests* report—called, 'Our Roots, Our Future'—to provide updated national and provincial perspectives in the context of climate change, carbon and Canada's vast, growing forests to Canadian and international audiences.

FII maintains the Think Wood Research Library which houses the latest research and resources on material science, prefabrication and modular construction using mass timber and light wood-frame building systems. The library currently provides easy access to over 1,750 resources from across Canada and around the world. The research library saw a 17 percent increase in records profiled and a doubling of in-progress research projects listed. This year, a pan-Canadian digital campaign connected users who are specifically searching for wood research to the library. The campaign resulted in a 268 percent increase in Canadian traffic to the site.



## Investing in research and knowledge mobilization

B.C.'s global leadership in raising mass timber to new heights and building taller with wood would not be possible without investments in research to remove technical barriers and demonstrate what is possible. Current priorities align with the province's efforts to support codes that allow up to 12 storeys and open opportunities for advanced wood building systems, including mass timber.

In 2020/21, examples of FII-funded mass timber research included:

- **ACOUSTIC** — vibration and sound insulation performance of mass timber floors with concrete toppings
- **CARBON** — Embodied Carbon Pilot Phase
- **CONNECTIONS** — high-performance connections in cross-laminated timber
- **FIRE SUPPRESSION** — enhancing thermal and mechanical performance of engineered wood product adhesives using novel fire retardant nanoclays
- **STRUCTURAL** — advancing knowledge of Midply shear walls
- **TALL WOOD** — developing a large-span timber-based composite floor system for high-rise office buildings

Visit [bcfii.ca/research-library](https://bcfii.ca/research-library)

## New research tool for specifiers

Architecture, engineering and construction firms will now be able to access real estate and construction research and development assets in a simple interactive online resource. This new tool—developed by the Vancouver Regional Construction Association (VRCA) with support from FII—will enable researchers to better understand the capabilities, expertise and activities that are happening in research centres across the province.

The VRCA is an industry association that serves institutional, commercial and industrial general contractors, trade contractors, suppliers and consultants—providing advocacy, education and opportunities for engagement to its more than 700 members.

View the tool: [constructionresearchnetwork.ca](https://constructionresearchnetwork.ca)

## Trending topics and education

1,501 attendees participated in seven virtual Wood **WORKS!** BC technical workshops

**durability**  
**low-rise commercial**  
**fire safety**  
**prefabrication**  
**light wood-frame**  
**mass timber**  
**structural timber engineering**



## Mass timber demonstration program

Announced in September 2020, the Mass Timber Demonstration Program aims to accelerate the use of mass timber in B.C. by supporting early adopters, and help drive economic growth as part of B.C.'s economic recovery plan, StrongerBC. The \$3 million program has supported eight demonstration projects and four technical research projects, advancing mass timber use in a range of building types.

FII will continue to work closely with the successful projects to document and share key lessons learned, results and research findings to help support future mass timber projects across B.C.



2150 Keith Drive | Rendering courtesy of DIALOG

**2150 KEITH DRIVE:** Utilizing a unique timber-braced framing system to achieve seismic resistance.

## It began with light wood-frame

B.C. is recognized as being the first in Canada to allow for up to six storeys of light-frame wood construction for residential buildings. Now, research is leading to a more diverse range of larger and

taller building types—from schools and health care facilities to commercial office and mixed-use retail and residential projects.

Research conducted across 2020/21 by the University of Victoria explored the structural performance of hybrid construction in which light-frame wood systems are incorporated with other

construction materials and/or systems such as mass timber. Results showed that hybrid construction can be beneficial in that it can optimize material efficiency and structural performance. Research is ongoing, with the goal of increasing the use of light-frame wood building systems within taller buildings through hybrid construction.



**SINCE THE 2009 CODE CHANGE, MIDRISE WOOD CONSTRUCTION IN B.C. HAS INCREASED BY 10X (PREDOMINANTLY LIGHT WOOD-FRAME).**



# 2021 Virtual Global Buyers Mission



In response to the pandemic, BC Wood Specialties Group (BC Wood)'s 17th Annual Global Buyers Mission (GBM) saw 51 forest product manufacturers from across the country come together with 677 local and international delegates for a five-day event, delivered for the first time through a virtual format.

BC Wood also hosted 167 specifiers—its largest audience to date—of North American architects, designers, contractors, developers and engineers, to participate in the WoodTALKS™ program, delivered in conjunction with the GBM and providing a valuable education and discussion forum.

**50%**  
OF ATTENDEES  
WERE NEW TO  
THE GBM

**73%**  
OF ATTENDEES  
SAID THEY WERE  
MORE LIKELY  
TO PURCHASE  
CANADIAN  
WOOD PRODUCTS  
FOLLOWING THE  
EVENT

**90%**  
OF ATTENDEES  
INDICATED THE  
EVENT WAS A  
VALUABLE USE  
OF THEIR TIME

## Strengthening manufacturing and building capacity

Efforts continue to focus on strengthening manufacturing and building capacity in wood use in B.C. through training programs in business, marketing, design and technology. BC Wood and UBC's Centre for Advanced Wood Processing (CAWP) worked with 41 B.C. firms on company specific capacity building projects and offered training for 195 firms during the year.

*The Future of Prefabrication Symposium*, hosted by UBC's CAWP, helped attendees gain the knowledge and skills to participate in the growing market for prefabricated mass timber, tall wood, passive house and large multi-family wood and hybrid structures.

Pivoting to a virtual format due to the pandemic, the symposium was more accessible to architects, engineers, manufacturers and building professionals from across B.C. and Canada, as well as Europe and the U.S., where travel time and distance to an in-person event may have limited larger participation.

**ATTENDANCE  
TARGET:**

**70  
PARTICIPANTS**

**ACTUAL  
ATTENDANCE:**

**658  
PARTICIPANTS**

- **240** ENGINEERS, ARCHITECTS AND MANUFACTURERS
- **325** STUDENTS
- **93** EDUCATORS AND INDUSTRY PARTNERS

## Supporting culturally appropriate skills training



Walking online workshop participants through carving a Feast Bowl | Photo: Dean Heron

B.C.'s construction sector is anticipated to grow significantly in the coming decade, making skills training for young people—the workforce of tomorrow—essential. To meet this need, in 2020/21 the Construction Foundation of BC expanded the Indigenous Skills initiative to grow interest in wood working among young people. Working with First Nations schools to explore culturally rooted wood working projects with educators and youth, the project provided hands-on trades discovery for K-12 classes.

Workshops were undertaken in an online learning environment or delivered in-person when safe to do so. Online delivery started with training teachers to lead their classrooms through different projects primarily using cedar. Indigenous youth used traditional carving tools to learn about B.C. wood products that celebrated West Coast Indigenous practices. Supporting education materials were also developed, including an Indigenous Skills Wood Book, IndigenousSkills.ca website, and a series of instructional videos.

**"The students loved this project. The medium and topic made it culturally authentic and relevant, and they were able to connect and enjoy the experience."** - Hildegard Scholtz, Administrator/Instructor, Kyah Wiget Adult Education Society

## Passive house training for remote/northern indigenous communities

Kyah Wiget Education Society (KWES) is a certified Independent school that incorporates cultural content into academic programming for K-12 students, as well as within college-level programming in coordination with the Nicola Valley Institute of Technology.

Through a partnership between Passive House Canada and BC Housing, the Witset First Nation received funding for a 26-unit, three-storey energy-efficient apartment project that is being designed to meet Passive House standards and will serve as a Passive House showcase. With funding from FI's Wood First program, the project will also act as a training ground for energy-efficient construction techniques for local Indigenous workers.

Across 2020/21, KWES trained 13 local members of the Witset First Nation, as well as three members of the Heiltsuk First Nation of Haida Gwaii, on low-carbon building practices such as prefabrication using B.C. wood products to meet Passive House standards.



Photo: Passive House Canada

To further support Passive House training, ZebX offered the workshop, *Architecture for the Anthropocene: How to design and build affordable zero-emissions apartment buildings using wood and other low-carbon materials*. Designed to accelerate adoption of emerging wood-based products and building systems across B.C., six, one-day, case-study workshops were offered to architects, developers and housing policymakers that presented lessons learned by the first-generation of affordable, wood-based, Passive House, multi-unit buildings in North America.





# United States

Diversifying opportunities in  
B.C.'s largest market

2020 Wood Design Award winner, DPR Office, SmithGroup, Buehler Engineering | Photo: Chad Davies



## Overview

The United States is the largest market for B.C.'s forest sector with over 70 percent of B.C. lumber and 97 percent of value-added wood products shipped south of the border in 2020/21.

Despite brief COVID-19-related economic setbacks, the demand for B.C. softwood products in the U.S. remains strong. This is largely due to a recovery in housing construction and the robust repair and remodeling sector—thanks in part to people spending more time at home and the resulting heightened focus on renovations and outdoor landscaping projects.

B.C. wood products continue to play a prominent role in the U.S. construction market. Single-family construction—the main demand driver for B.C. lumber—has returned to levels not seen since the 2008 recession. At the same time, new opportunities for B.C. wood products are continuing to emerge in the multi-family/multi-storey residential and non-residential construction segments, presenting strong potential for mass timber and next-generation engineered wood products and expertise.

Over the year, FII's U.S. efforts continued to focus on supporting industry-led programming to expand the use of wood in priority segments. Through recipient programs, a combination of promotion, technical support and educational efforts have built capacity and interest in wood use with developers, contractors and building and design professionals. Value-added programs targeted the active repair and remodeling sector as well as the mid-rise, hybrid and mass timber construction markets.



*CHS Field | Architect: Ryan A+E, Inc. Snow Kreilich Architects, Photography: Paul Crosby Architectural Photography & Christy Radecic Photography*





80 M Street, Washington, DC | Photo: Hickok Cole (top);  
111 East Grand, Des Moines, IA, Neumann Monson Architects |  
Photo: Mike Sinclair (bottom)

There has been a growing trend: developers and building owners are looking for efficient, innovative and sustainable ways to increase density, and they're pursuing taller and larger wood-frame and mass timber projects as a means to that end. Once rare, five-storey wood-frame buildings have become common across the U.S. and, soon, the U.S. will be home to the tallest mass timber building in the world with the Ascent tall wood project—a 19-over-6, 259-unit high-rise set for completion in 2022.

From retail space to affordable housing to office parks, WoodWorks directly and indirectly influenced nearly 1,580 projects across 2020/21, impacting over 1,121 million board feet of wood product volume, continuing an impressive track record of year-over-year growth, up 16 percent<sup>1</sup> over 2019/20 results. In particular, WoodWorks supported clients on 98 mass timber projects—an almost 30 percent increase from the previous year. The significant growth in mass timber projects is happening across the U.S., with parity between east and west divisions.

Throughout the year, WoodWorks continued its program to provide education and technical support related to the design, engineering and construction of commercial and multi-family wood buildings in the U.S.

<sup>1</sup> Based on wood volume of direct and indirect influenced projects

## Turning lemons into lemonade

IN 2020/21  
**WOODWORKS  
DELIVERED**



**236**  
EDUCATIONAL  
OFFERINGS

While the program has long enjoyed success with webinars, when COVID-19 hit, WoodWorks was faced with either canceling or reimagining 300 in-person events across the U.S.—representing 34,700 education hours.

Thanks to a nimble team—and offerings that featured strong and varied content and speakers—WoodWorks was able to reinforce its reputation for high educational value and translate that to online success. Exceeding their original pre-COVID goal, WoodWorks awarded over 47,000 education hours in 2020/21 through 236 educational offerings.

With this successful pivot into the virtual landscape, WoodWorks' online events now attract two to three times more attendees than traditional regional in-person events have in the past and generate up to three times more new contacts.

## Resources supporting market growth

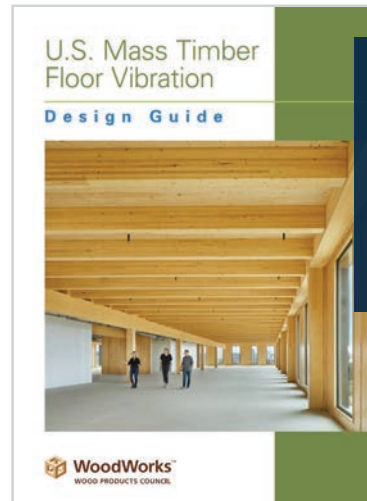
2020/21 was an active year for WoodWorks technical resource development to inspire and educate design and construction professionals, as well as support the growing demand for mass timber building solutions.

Following extensive technical support to make these projects a reality, WoodWorks developed case studies to share lessons learned for a 6-storey + mezzanine wood-frame over 2-storey concrete rental mixed-use building, as well as two 5-storey cross-laminated timber (CLT) office projects.



98-pg free, interactive resource developed in collaboration with Think Wood

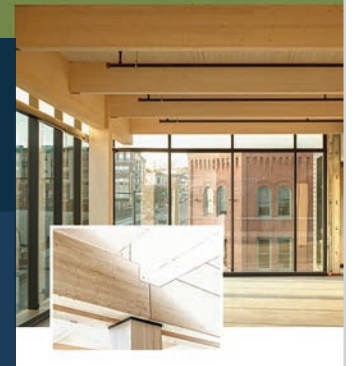
Additional resources developed include:



### **U.S. Mass Timber Floor Vibration Design Guide**

– Synthesizes current design procedures and recommendations for mass timber.

### **WoodWorks Index of Mass Timber Connections**



### **Index of Mass Timber Connections**

– Focuses on structural and architectural connections, addressing considerations such as aesthetics, fire rating requirements, constructability and moisture protection.

### **Insurance for Mass Timber Construction: Assessing Risk and Providing Answers**

– Intended for developer/owners seeking insurance for mass timber buildings, design/construction teams looking to make their projects more insurable, and insurance professionals looking for information on safety and performance.

### **Mass Timber Construction Management**

– Provides an overview of best practices from the WoodWorks Mass Timber Construction Management Program, and the forthcoming Mass Timber Construction Manual.

**“All my projects are timber now. I used to always default to steel....there was a learning curve for sure but I am so comfortable now thanks in large part to WoodWorks.” - U.S. Practicing Engineer**



# Western Red Cedar Lumber Association (WRCLA)

## Reaching new audiences through content marketing

To drive online engagement and expand market reach, the Western Red Cedar Lumber Association (WRCLA) undertook a comprehensive and strategic social media strategy across 2020/21. WRCLA social media campaigns showcased high-impact content through videos, posts, newsletters and blogs. Aimed at raising awareness of—and interest in—western red cedar products, all outreach and advertising directed consumers back to [realcedar.com](https://realcedar.com) for further content and detailed product information.

Another component of the WRCLA social media strategy includes engaging with consumers on its Real Cedar DIY videos and adjusting content accordingly. By responding to consumer feedback, the WRCLA has seen significant growth on YouTube and, in particular, in the number of video views, hours of videos watched and subscriber growth.

To further expand promotional efforts, the WRCLA worked with design influencer, and founder and publisher of Canadian House and Home Media, Lynda Reeves, on a product integration project that involved western red cedar siding incorporated into Lynda's own lake house renovation. This resulted in video, print and social media coverage, driving interest in western red cedar amongst the media property's one million viewers, 2.4 million readers and 2.1 million social media followers.



**Real Cedar**  
Sponsored · 🌳

Build your dream outdoor space! Pergola and Decking Ideas, DIY Plans and More!

**OUTDOOR SPACES THAT INVITE YOU IN**

REALCEDAR.COM  
Cedar Decking, Pergolas, and Free DIY Project Plans! [LEARN MORE](#)

### SOCIAL MEDIA GROWTH

AREA OF GROWTH	RESULTS
Find-A-Retailer visits from Facebook	+43%
Find-A-Retailer visits from Instagram	+45%
Traffic from Facebook	+229%
Traffic from Instagram	+1,112%
Instagram account growth	+6,000 followers (+20%)
Facebook account growth	+14,100 followers (+193%)
YouTube views growth	+430%
YouTube watch time growth	+491%
YouTube subscriber growth	+229%



Photos: Canadian House and Homes / Lynda Reeves Project

## Showcasing the versatility of western red cedar through education

In addition to advertising and marketing campaigns, the WRCLA also offers educational and training programs to the design and building community. These programs work to showcase the versatility and aesthetic properties of western red cedar to architects and help building professionals specify the right products for their projects. A variety of topics were offered across 2020/21, including, *Best Practices, Installation, and Finishing Options for Western Red Cedar, A Return to Natural: Designing with Western Red Cedar and Western Red Cedar-The Renewable, Sustainable Choice*. In addition to educational aspects, the courses are designed to further raise brand awareness and promote the western red cedar value proposition.

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TO DATE, MORE THAN  
**22,000**  
ARCHITECTS  
HAVE PARTICIPATED  
IN REAL CEDAR  
TRAINING



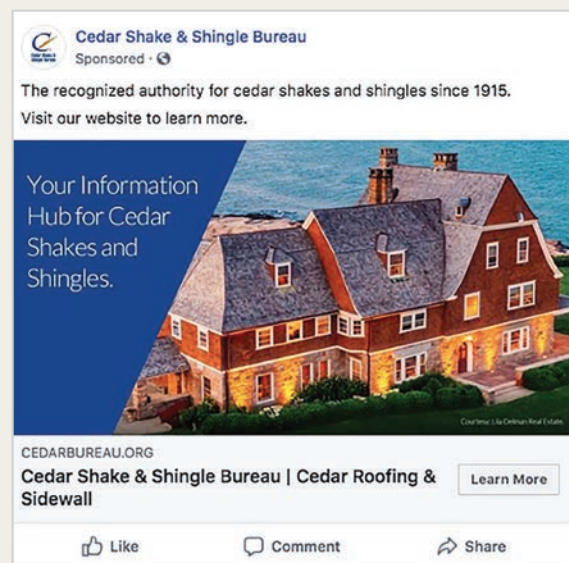
# Cedar Shake & Shingle Bureau (CSSB)

## Expanding knowledge within the design and construction communities

Across 2020/21, the Cedar Shake & Shingle Bureau (CSSB) delivered a multifaceted education and marketing campaign to encourage the use of cedar roofing and sidewall shakes and shingles as a product of choice among specifiers in the U.S. Product specification listings were placed on the ARCAT website—a highly popular resource among the U.S. architecture, design and construction communities for finding building product information and content such as specs, CAD and BIM. Advertisements highlighting CSSB products were also included through an ARCAT online advertising package, including full product descriptions and direct links to the CSSB website which further generated brand and product awareness. The ARCAT website attracts over two million users per year, while the ARCAT advertising packages reach over six million architects, engineers and construction professionals annually. So far, CSSB campaign efforts have resulted in over 7,507 banner, catalogue, video and product views and links to the CSSB website.

## Growing awareness through social media

To further expand awareness and brand recognition, the CSSB conducted a social media campaign, running ads from November 2020 to March 2021 across Facebook and Instagram that directed traffic to the CSSB website. The campaign focused on engaging influencers in the product specification process and answering customer questions, with a goal to modernize the association and compete with alternative products. The campaign was successful, resulting in a 76 percent increase in website traffic over the previous year. With the success of the campaign, social media will remain a top priority of the CSSB moving forward.



**TOTAL REACH**  
**364,204**

**TOTAL IMPRESSIONS**  
**1,643,120**

**TOTAL CLICKS**  
**9,872**



## Pivoting into the virtual landscape

As COVID-19 put a halt on large, in-person tradeshows and events, BC Wood responded by pivoting their market development activities in the United States into the virtual world.

Six BC Wood trade events went virtual in the U.S., allowing participating B.C. member companies to collect 672 new leads through direct contact with potential buyers and decision makers. Estimated incremental sales of almost \$7.9 million were indicated in surveys received by industry members from these virtual activities—a slight increase from 2019/20.

Significant cost and time savings were also noted as a result of going virtual, and 70 percent of participating companies were new to the events, indicating a significant interest and uptake in the online format.

**672**  
**NEW BUSINESS**  
**LEADS**

**\$7.9**  
**MILLION IN**  
**INCREMENTAL SALES**

## BC Wood's Export Readiness Program

BC Wood's Export Readiness Program is focused on helping small and medium sized businesses expand their focus from the domestic market, and to grow their businesses by starting to export their products. The program helps B.C. value-added manufacturers—who would otherwise not have the operational capacity—break into international markets (primarily the U.S.). The program starts by identifying the individual needs of a business, and then works to support these companies to fill these needs through customized training workshops, coaching and peer networking activities.

Although COVID-19 removed any opportunity to deliver the programming in person, BC Wood pivoted to a virtual format that opened new doors for the program as wood product manufacturers across sectors, and across the province, were able to attend the program online from remote locations. This increase in reach resulted in the program doubling the number of participants from the previous year.

### PROGRAM SURVEY RESULTS:

- 100% of the attendees felt their needs were met and they would recommend the program to colleagues
- 86% said they expected their export sales to grow in the next 12 months
- 100% rated the virtual platform very good to excellent





# China

Advancing green  
building techniques

*Chongqing Yunshan Art Museum | Photo: Crown Homes*



## Overview

As the largest export destination for B.C. forest products outside of North America, China is a key priority for the B.C. forest sector. Its strong economy, high demand for housing and large manufacturing sector—together with government policies encouraging low-carbon, energy-efficient and prefabricated construction—create an opportunity to further increase the value of B.C. exports by positioning Canadian wood products as high-quality, environmentally friendly and sustainably sourced.

and promotion, there has been a 723 percent increase in softwood lumber exports to the market and a shift toward higher-value lumber products.

China's market dynamics have shown a key swing from a "market push" to a "pull" for technical expertise on wood construction. Increasing interest in wood has been sparked by the China team's efforts to strategically engage with government entities, stakeholders and high-profile industry partners to demonstrate the solutions industrialized wood construction can provide for high-priority segments such as cultural buildings, tourism, wellness and elderly care facilities. Greater policy focus on environmental issues and the road towards carbon neutrality has highlighted the carbon benefits of using wood, which has generated stronger interest in programs being delivered by FII and Canada Wood. China's wood in manufacturing sector continues to create opportunities for Canadian species following targeted promotional activities and product trials driven by the Canada Wood China team.

FII and Canada Wood have worked together since 2003 to create and expand a wood culture in China—a country that, in recent history, has built in steel, concrete and masonry. Through a comprehensive suite of activities including engaging with government and industry, supporting building code changes, conducting education and training programs, as well as marketing

While the impact of COVID-19 has been felt throughout the world, China stands out as one of the only G20 nations that experienced GDP growth through 2020. This solid economic footing points to a strong foundation for future market growth for Canadian wood.



*Narada Phoenix Valley Resort Villas | Photo: Zhongtian Group*



## 2020 China Wood Construction Awards



Songmiao Village Cabin Villa | Photo: LUO Studio

FII and Canada Wood have been working together for nearly two decades, promoting wood construction to grow the market share for B.C. wood products in China. With the goal of advancing the appreciation of timber architecture in China, Canada Wood China has developed the China Wood Construction Awards—an opportunity to recognize innovators for excellence in building with wood. Established in 2014, the event is held every two years.

Market growth and interest has expanded to a point where the fourth edition of the awards held in 2020 attracted over 91 entries, reflecting many categories and project types from China's resort and tourism sector. After a committee review by industry experts, 59 outstanding projects received awards.



Main Exhibition Hall of The 10th Jiangsu Horticultural EXPO | Photo: Crown Homes (top);  
Qiyuan Mountain Tree House Hotel | Photo: ZT Timber Builder (bottom)

## Accelerating healthy building with wood

In China, biophilic building design—which incorporates natural materials, light and greenery to increase a sense of connection to nature and its related health benefits—is being advanced by government officials at the Ministry of Housing and Urban-Rural Development (MOHURD) and other national-level organizations. This is leading to an acceleration in healthy building development, presenting further opportunities for wood use within China's construction sector.

As a result of this growing emphasis on biophilic design, FII China was invited to present on the biophilic qualities of wood materials in construction at the prestigious China Healthy Building Conference at the China Academy of Building Research in September 2020. Approximately 2.6 million viewers watched the live broadcast of the conference, which indicates a significant interest in the role of health in the construction industry.

## Culture and tourism research with the China Academy of Urban Planning and Design

As economic development in China progresses inland, the FII China team is using strategic partnerships, education and research to promote Canadian wood building systems in the high-potential culture, tourism, wellness and elderly care (CTWE) sectors within these regions.

One recent example of this effort is the collaboration between FII China, Canada Wood China and the Yangtze River Delta branch of the China Academy of Urban Planning and Design (YRD-CAUPD). A joint research report was published in May 2020, which identified wood-frame construction (WFC) demonstration projects in the city of Huzhou, located in the Yangtze River Delta—one of the three fastest-growing regions of China. In August, site visits in the Mogan Mountain region in the west of Huzhou gave YRD-CAUPD first-hand experience with the beauty of wood architectural design and engineering, and the opportunity to hear directly from the owner of those projects on the benefits of building with wood for tourism operators. The joint research team conducted site visits to Chongqing and Chengdu in October 2020 and to Zhejiang in March 2021, with the research outcomes published on March 26, 2021, in a white paper titled, *The development strategy and application prospects of modern WFC in CTWE sectors*. The executive summary of the report, with policy recommendations, has been distributed to a wide network of stakeholders including government departments, associations, think tanks and developers.

Success in this region provides the potential to capture additional market share within the CTWE sectors in the provinces of Jiangsu, Zhejiang, Anhui and the city of Shanghai.

**71%** OF CANADA WOOD EVENT PARTICIPANTS BELIEVE THE USE OF WOOD IN CHINA WILL INCREASE BY **10% OR MORE** OVER THE NEXT 3 YEARS



Huixin Valley Resort Hotel | Photo: Crown Homes



## Partnering with the Chinese Real Estate Foundation



MOU Signing Ceremony between Canada Wood and China Real Estate Association | Photo: Canada Wood China

Under the framework of a new MOU signed May 15, 2020, FII, Canada Wood and the China Real Estate Association (CREA) will work together to support the development of sustainable environmental practices and green building in China's real estate sector. Promoting the applications of wood-frame construction technology and developing modern wood-frame buildings that meet China's market conditions are a central focus of this partnership. For prefabrication, the organizations will work together to educate members on understanding the installation process, developing standards for parts and components, integrating interior decoration, and contributing to the technical standards in China.

Once international travel resumes, the organizations will bring delegations of Chinese real estate developers to engage with Canadian research institutes, forest product producers, wood modular production plants and wood-frame structure design and construction enterprises.

CREA is China's largest real estate association—a national level industry association which plays a key role in implementing MOHURD policies. With more than 40,000 views of the signing ceremony broadcast live on Leju (the digital real estate platform), interest appears to be high, providing a positive early indicator for the collaboration.

## Supporting sustainable development goals in Xiongan

Part of the China team's strategy for expanding market activities into new, high-potential interior regions is working with stakeholders to create opportunities for wood construction as a green, energy-efficient building solution.

One of Canada Wood's advancements in 2020, as part of this strategy, was the joint mission organized with the China Real Estate Association and the Xiongan Green Development Research Institute for China's wood building industry. The mission visited the Xiongan New Area—a rapidly growing area located south of Beijing and west of Tianjin that is expected to boost the economic development of the Beijing-Tianjin-Hebei region through

the development of 198 square kilometres, enabling it to support housing and provide the non-capital functions for Beijing such as industrial and commercial industries. Involving over 35 organizations with 80 participants representing local developers, design institutes and wood building enterprises from across China, the event was designed to collaborate with government partners in Xiongan to engage domestic companies and promote opportunities for wood construction. Knowledge gaps were addressed as to how wood construction aligns with government policy initiatives, including 'zero-waste' cities, rural revitalization and sustainable regional development goals in Xiongan.

The development of the 22 townships planned in Xiongan will act as a model for new urban development and will be studied for potential replication in other developing regions which could lead to additional market growth for B.C. forest products.

# Commercialization of wood infill walls

A core element of the Chinese government's strategy to reduce the cost and carbon footprint of building construction is to focus on industrialized construction with methods such as the use of prefabricated components which are transported from manufacturing plants to the construction site. Currently, buildings are required to have 15 percent of construction project components to be prefabricated offsite, and those requirements are expected to increase to 30 percent by 2030. Following this policy target, Canada Wood has identified prefabricated wood infill walls as a significant opportunity to create demand for Canadian lumber through broader adoption by the construction industry.

On October 30, 2020, Canada Wood accomplished a significant step in the promotion of high-value, prefabricated wood-frame construction in China with the signing of a three-party MOU agreement with the Huaishang district of Bengbu City and Shanghai Electric Matechstone (MTS).

This MOU builds on previous successes with MTS over the past four years, such as the first commercial trial of the concrete-wood infill wall system developed by Matechstone in 2019, using prefabricated energy-saving cladding. Now, this MOU will facilitate the initial commercial application of infill walls at the Anhui Bengbu Qinghe Garden community facilities in Anhui Province.



Anhui Bengbu Qinghe Garden community facilities, a 270,000 m<sup>2</sup> affordable housing development, with 10,000 m<sup>2</sup> for community facilities that will include MPEC infill wall sections.

Shanghai Matechstone Rugao R&D Centre building | Photos: Canada Wood China



## Demonstration projects

A key objective of the market development program in China is demonstrating the practical application of prefabrication in wood-frame and mass timber construction, and as an environmentally friendly, green building material through demonstration projects aligning with MOHURD's priorities.

### Wuxi Inspur big data hybrid building

Completed in 2021 with design and technical support from Canada Wood, the Wuxi Inspur Industrial Park is a large-scale commercial project achieving lower-carbon construction while demonstrating the beauty of wood in a commercial application. The Park consists of a five-storey hybrid office building with a two-storey concrete base combined with a three-storey wood-frame structure and a wood gallery.

In total, the building incorporates 5,610 m<sup>2</sup> of wood construction including B.C. spruce-pine-fir (S-P-F) and Douglas-fir. It showcases a post-and-beam structure, prefabricated infill walls and a light-frame wood floor system, demonstrating the possibilities for B.C. species in this sector, with growth opportunities in the market as other developers learn to integrate these applications into new projects.



Wuxi Inspur Industrial Park renderings | Photos: Shanghai Xingzhu Architectural Design Group



# China's first wood-frame nearly net-zero project starts construction

Changzhou Nearly Zero Energy Wood-Frame Demonstration Building | Photos: Canada Wood China

The Changzhou Nearly Zero Energy Wood-Frame Demonstration Project is China's first wood-frame project consuming nearly net-zero energy. This designation is the outcome of a design assessment by the China Academy of Building Research (CABR)—China's largest and most widely recognized research institution in the building industry.

CABR's recognition of the project achieving the Technical Standard for Nearly Zero Energy Buildings is a milestone for the government's endorsement of wood's contribution to energy saving in the construction sector. It will also strengthen the market's understanding that wood-frame construction is an ideal solution to nearly zero energy building, creating more opportunities for wood use in China's construction industry.

In 2020/21, Canada Wood China continued to make gains with its Industrialized Construction campaign designed to increase awareness of prefabricated wood construction and create demand for Canadian lumber. Their engagement efforts with 46 projects generated the following results:

- 12 projects converted to wood
- 95,789m<sup>2</sup> of floor area





## Wood in manufacturing

As the world's largest furniture producer, China's wood in manufacturing (WIM) sector represents a significant market opportunity for Canadian softwood species, including spruce-pine-fir (S-P-F) and western hemlock.

With a reputation for high-quality products sourced from sustainably managed forests, Canadian lumber is well suited for applications including furniture, windows, doors,

cabinetry/joinery, bed frames, upholstered furniture and other appearance-grade needs.

The objective of the China team's wood in manufacturing strategy is to increase awareness of Canadian wood in the furniture sector, advance Canadian wood product trial programs and promote B.C. species within the furniture market.

SINCE ITS INCEPTION,  
THE PROGRAM HAS GENERATED

**21,918m<sup>3</sup>**

IN S-P-F AND WESTERN  
HEMLOCK SALES,  
REPRESENTING OVER

**CAD  
\$4,795,000**

## Hemlock branding campaign

A new marketing campaign, launched in March 2021 at a major Furniture Expo in Guangzhou, strategically promotes hemlock for high-value furniture applications targeted to young adults.



Hemlock furniture display at 2020 China International Furniture Fair in Shanghai | Photo: Canada Wood China

## MOU with the China National Furniture Association

On January 29, 2021, Canada Wood Group signed an MOU with the China National Furniture Association to encourage the sale of higher-grade lumber and promote Canadian hemlock and hardwood species for consumer markets in China.

Through this partnership, it will be possible to build awareness of Canada's sustainable forest management practices, improve environmental standards of Chinese furniture production and raise the profile of Canadian wood materials in China.

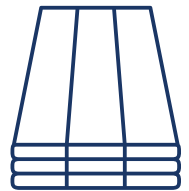


Hemlock branding launching at China International Furniture Fair | Photo: Canada Wood China

## 2020/21 WIM PROGRAM RESULTS:

# 1,592m<sup>3</sup>

### OF WOOD PRODUCTS USED IN CANADIAN TRIAL PROGRAMS



Canada Wood booth at China International Furniture Fair | Photo: Canada Wood China



## Advancement in online training

Canada Wood China strategically invests in research to address technical barriers and uses the outcomes to build capacity in China's design and construction community—advancing the use of wood building systems and growing the wood in manufacturing segment.

Although the COVID-19 pandemic had the potential to significantly reduce in-market training, Canada Wood China responded by swiftly pivoting to offer a broad suite of online training, greatly expanding the range of content, reaching new heights in the number of registered participants, and having more data on user profiles as well as the frequency and length of time each user joins an event.



# 4,792

**TRAINING HOURS  
DELIVERED IN 2020/21**



# 3,740

**REGISTERED STUDENTS ON  
E-LEARNING PLATFORMS  
IN 2020/21**

## Glulam certification jointly developed by Canada Wood and China Academy of Building Research

With demand for mass timber increasing in China, there is now a unique window of opportunity to position Canadian materials for the in-market production of glue-laminated timber (glulam) while also exploring ways to improve China's capacity and technical oversight for glulam manufacturing.

A partnership between the China Academy of Building Research (CABR) and Canada Wood China resulted in the development of a certification standard for structural glulam in early 2020. Over the remainder of the year, key audiences including builders, academics, developers, glulam manufacturers and government officials were targeted for a series of seminars to introduce and create awareness of the building code for glulam, product production standards and CABR's glulam certification process.

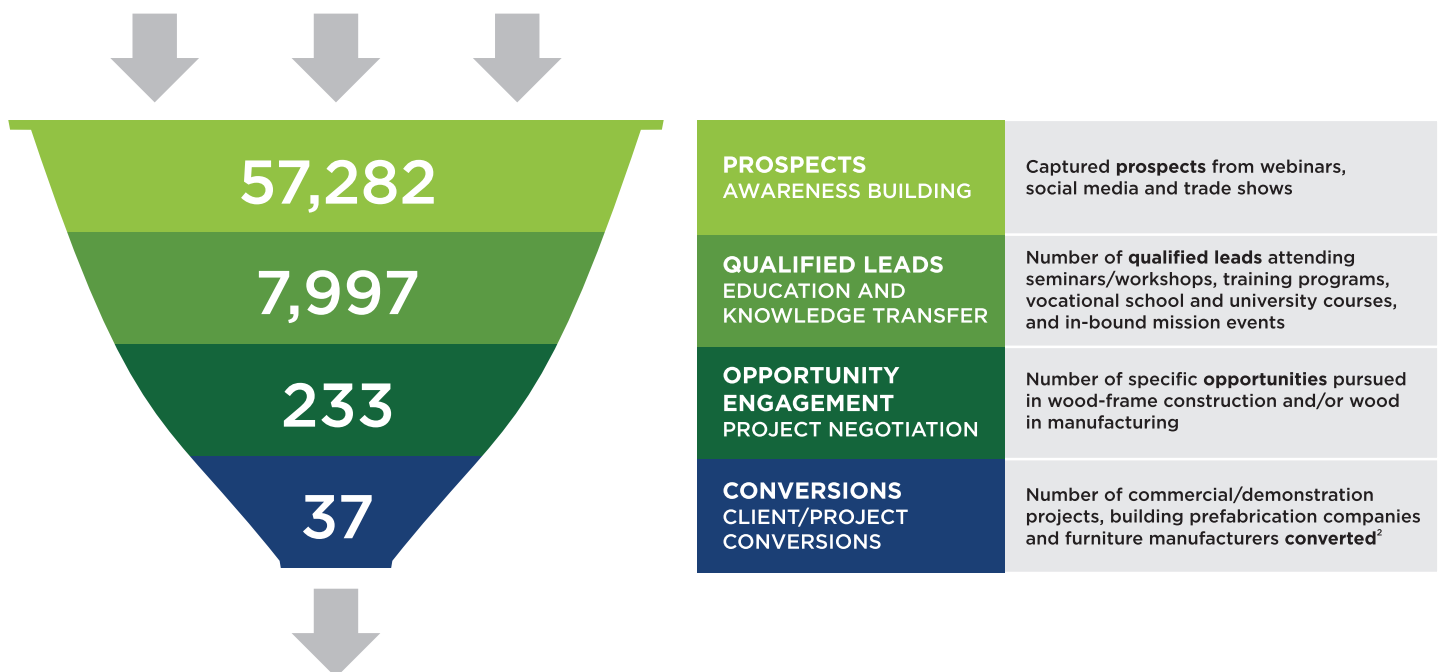
Additional technical support was also provided to factories interested in applying for certification. By providing greater rigour through the development of manufacturing and building safety standards, the industry is now strategically positioned for safer production and projects. This important step will contribute to growing the use of glulam and market share for Canadian products.

## Mapping strategic engagement

Much of FII and Canada Wood's market success can be attributed to establishing key relationships with both government and industry stakeholders, and aligning industrialized construction, green building and manufacturing priorities with wood and wood building systems.

In 2020/21, FII China developed a five-year framework for its stakeholder engagement by mapping 66 key stakeholders across eight major segments. This important planning tool prioritizes and outlines FII's interest for engagement with each stakeholder, targets outcomes and pinpoints actionable items over a five-year planning horizon. This helps facilitate a more strategic engagement process with partners and makes it easier to bring together multiple stakeholders with aligned interests. Contacts identified include decision makers across the government's MOHURD and affiliated institutions, trade associations and state-owned and private enterprises across different regions of China, including the Beijing-Tianjin-Hebei Capital Economic Zone, the Yangzi River Delta Region, and the Chongqing-Chengdu Twin City Economic Circle.

### CANADA WOOD CHINA 2020/21 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS<sup>1</sup>



<sup>1</sup> Summary results for Business Development activities only. Results do not include Canada Wood China's market access program (e.g., addressing regulatory barriers to Canadian wood products/systems through codes and standards) and other related efforts that provide a foundation for the market development program in China.

<sup>2</sup> Conversions directly or indirectly influenced through technical support provided by Canada Wood. Conversions include non-wood projects converted to wood; and projects using non-Canadian wood converted to Canadian wood.



# Japan

Broadening market  
development activities



*Muratakai Shonan Oba Hospital | Photo: Canada Wood Japan*

## Overview

Japan is an important, high-value destination for B.C. wood products. For more than 40 years, the exceptional quality of B.C. products has contributed to a strong Canadian brand reputation in Japan. Changing demographic trends such as the aging population and declining birth rates are resulting in falling housing starts. In response, across 2020/21 Canada Wood Japan made progress on its multi-year strategy to maintain and grow overall market share by diversifying into multi-family and non-residential sectors.

Significant inroads were made with the adoption of high-value products in the residential and non-residential sectors as a result of the Canada Wood team's focus on promotion, demonstration, technical training and product testing. In 2020/21, achievements of note include the adoption of Midply shear walls by one of Japan's largest single-family home developers, and an expansion of the technology into the midrise market. Technical advancements include ministerial approval of nail-laminated timber in structural applications, helping to advance the use of mass timber building systems. Canadian wood products also continued to gain market share in high-potential sectors like agriculture, elder care, hospitals, tourism, architectural finishings and wood pellets.

Although the COVID-19 pandemic resulted in a significant slowdown in residential and non-residential construction, market share for wood building remained consistent, showing continued growth in this area despite a challenging business environment.



*Quarter House | Photo: Canada Wood Japan*



## Advancing technology, accelerating growth

In 2020/21, Canada Wood accelerated adoption of B.C.'s innovative wood building products and solutions in the Japanese market. One example is the Midply wall system—a technology developed by FPIInnovations.

The Midply system is an open-source, high-performance shear wall assembly that offers benefits over conventional sheer walls such as enhanced seismic performance—an important consideration within Japan's construction sector. Promoting Midply wall assemblies is a major undertaking of Canada Wood in Japan. By overcoming barriers to wood use through research and adopting technologies like the Midply system, Canada Wood Japan continues to position B.C. forest products for growth in residential, mid-rise and large non-residential construction projects.

## Midply in single-family homes

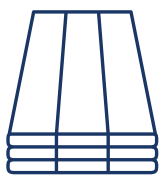
A notable advancement in Japan's single-family market across 2020/21 was the rapid adoption of Midply walls for commercial use by Ichijo Komuten—one of Japan's leading 2x4 single-family home builders. The company is currently installing 300 homes per month with Midply and has completed 2,955 homes featuring the technology over the past year—a notable increase over the 60 homes completed the previous year.

Total wood use in these Midply homes is estimated at over 60,000m<sup>3</sup>, with considerable potential for further growth in earthquake-prone Japan.

This positive outcome resulted from Canada Wood's technical briefings on the system's many benefits including enhanced seismic performance. It is just one example of the market adopting higher-value products and Canadian-developed wood building systems.

### ICHIJO KOMUTEN'S WOOD USE IN MIDPLY HOMES

**OVER  
60,000m<sup>3</sup>**  
TOTAL WOOD USE



**A NEARLY INCREASE  
50x OVER  
2019/20**



Shawn Lawlor and Mr. Masahiro Furuta at Ichijo job site | Photo: Canada Wood Japan

## Midply adoption in 4- to 6-storey wood-frame construction



In November 2020, construction began on the Kagami Building Project—a five-storey, 2x4 midrise mixed-use commercial structure in Toshima Ward, Tokyo. The building is comprised of a concrete first floor, topped by four storeys of wood-frame construction including B.C.-developed Midply shear walls which were refined for use in Japan by the Canada Wood technical team.

The project received an award for innovation in sustainable wooden construction from the Japanese Ministry of Land, Infrastructure, Transportation & Tourism—recognizing both the use of Midply wall systems and environmentally friendly, sustainably-sourced low-carbon building products from B.C.

Enthusiastic about trying Midply, the builder anticipates that this project will have positive ripple effects for 2x4 wooden midrise construction.



Kagami Building project and architecture rendering | Photos: Asami Homes

**IN 2020, MIDRISE (4-STOREY +)  
2x4 STARTS REACHED A TOTAL OF  
135 BUILDINGS**



## COFI's innovative online promotion of 2x4 housing



COFI successfully launched its fourth YouTube Advertising campaign running from June 15, 2020 to February 28, 2021. It is forecasted that this social media advertising alone will increase demand for single-family housing by 3,644 units within the next two years.

Now in its fifth year, COFI's promotion of 2x4 single-family housing to potential homebuyers through YouTube and Facebook continues to gain traction.

Featuring the digitally animated story of the “Three Little Pigs”—who upgraded their old brick house to a new, warm, safe and comfortable 2x4 fire-resistant home—the campaign helps create awareness of the benefits of wood construction.

Views have now reached 2.2 million on COFI Japan's YouTube channel for the animated series, and over 120,000 views online for the Facebook digital communications and 2x4 campaign.

This uptick in interest has helped the campaign achieve its goal of increasing the number of prospective buyers who know and understand the benefits of 2x4 housing when they decide on building or purchasing a new home.

## Converting to B.C. products

Japan's history of building with domestic wood is most evident in its housing sector. While B.C. wood products compete with Japanese species, Canada Wood Japan actively works with architects and structural engineers to highlight the benefits of Canadian lumber and how to use it in post-and-beam applications.

A perfect example of how these efforts are paying off is the Quarter House project. Canada Wood Japan technical staff reached out to the project design team—Ateliee Ueno Architects and Sakata Ryotaro Engineering—to educate them on how Canadian lumber could be used within post-and-beam applications. Canada Wood Japan then followed up with technical support and span tables that enabled the use of B.C. wood within the project. Without this



Quarter House | Photos: Canada Wood Japan

intervention, the project would have been comprised of only European and Japanese wood.

Additional support was provided this past year with the completion of the *Maple Book*—a technical guide for Canadian dimension lumber to further generate adoption of Canadian wood use in post-and-beam construction.

## NLT technical development

With Japan's growing interest in mass timber construction, the Canada Wood Market Access Initiative has focused on developing new markets for wood construction by actively engaging policymakers around codes and standards to eliminate barriers to wood use. Recently, as a result of technical work including fire tests over several years, these efforts have gained approvals for the use of nail-laminated timber (NLT) building systems through third-party building systems certification initiatives.

**REGULATORY BARRIERS INITIATIVE:** CREATE NEW WOOD MARKETS IN THE CONSTRUCTION SECTOR OR EXPAND EXISTING MARKETS THROUGH CODE CHANGES AND REGULATORY REFORMS

**2020/21 OUTCOME:**

**5 REGULATORY BARRIERS REMOVED**

## NLT approved for roof and floor applications in large-scale structures

Following a multi-year fire testing effort, COFI, together with the Japanese 2x4 Home Builders Association, recently received certificates from Japan's Ministry of Land, Infrastructure, Transport and Tourism for quasi fire-resistive structure approvals. This approval opens the Japanese market for NLT.

The ministerial approvals confirm one-hour quasi fire-resistive performance for NLT floor assemblies and 30-minute quasi fire-resistive performance for NLT roof assemblies. The ministerial approvals will be leveraged to help facilitate the spread of large-scale wooden buildings using NLT horizontal diaphragms that are visually exposed.



NLT fire test | Photos: Canada Wood Japan



## Wood in agricultural buildings

With the slowing of housing starts, market development efforts in Japan have been focussed on new segments including midrise and non-residential construction in agriculture, warehouses and commercial sectors.

Together with the Japan Wood Truss Council, Canada Wood has been promoting the benefits of wood trusses over competing steel systems in agricultural buildings, as they are more cost-effective and provide a healthier environment for the animals.

In total, 2020/21 saw 14 new non-residential construction projects incorporate Canadian wood as a result of Canada Wood promotion and technical support.



*Hirano Corporation staff at Maruyama Pig farm project | Photos: Canada Wood Japan*



### Maruyama pig farm

Agricultural buildings make up a growing segment in the non-residential sector. Efforts to expand wood use in this sector are continuing with projects such as the Maruyama Pig Farm, owned and operated by the Hirano Corporation.

Hirano chose to adopt the 2x4 construction method for this barn building because it proved to be roughly 20 percent less expensive than steel. Upon completion in spring 2020, the wood structure was also found to be easier to insulate and keep the indoor environment at a consistent temperature.

In total, the pig barn has a floor area of 1,976m<sup>2</sup>, which consumed roughly 355m<sup>3</sup> of spruce-pine-fir (S-P-F) dimension lumber and Canadian oriented strand board (OSB). Hirano plans to build a number of similar buildings in the future.

## CLS-based large span trusses for hybrid post-and-beam

In 2020/21 Canada Wood Japan advanced the development and design of new hybrid trusses. Following stakeholder engagement and input, the new designs will better meet local industry requirements for cost, onsite manufacturing and aesthetic, expanding opportunities for use in large-scale, non-residential target segments.

The trusses incorporate a new type of joint that uses screws, eliminating the need for nailing plates which presented a cost

constraint and were also considered to be visually unappealing. Additionally, the equipment for the nail plates prevented the trusses from being fabricated on job sites.

Composed of Canadian dimension lumber and hem-fir 4x4, the trusses are anticipated to have 16- to 20-metre spans suitable for the target industrial segments. With the design now complete, further work in bringing the trusses to market will occur over the next two years.

### Murataikai Shonan Oba Hospital

Maintaining market share by targeting new high-potential segments is central to the strategy in Japan.

As residential construction is declining due to an aging population, Canada Wood is actively growing market share in high-potential segments, including within medical, elderly care and other social welfare structures; building systems such as energy efficiency; and building methods such as pre-fabrication, NLT and Midply shear walls.

These efforts are paying off as the wood share in Japan's non-residential market reached 38 percent in 2020/21<sup>1</sup>.

One example is the opening of the Murataikai Shonan Oba Hospital in July 2020. COFI and Canada Wood's work on the project began many years earlier as lead design and construction personnel for this project participated in COFI's non-residential seminars and tour missions over the past ten years.

Currently one of the largest wooden medical facilities to be built in Japan, the three-storey hybrid reinforced concrete and platform-frame structure has a total floor area of 3,288m<sup>2</sup>, consuming 590m<sup>3</sup> of structural wood products in its construction—mainly Canadian OSB and S-P-F dimension lumber. The project marks a significant inroad in the non-residential market share beyond elderly care facilities.

<sup>1</sup> Measured by non-residential construction starts using wood compared to other materials.



Murataikai Shonan Oba Hospital | Photos: Canada Wood Japan



## Survey results highlight program success

One of Canada Wood Japan's main objectives is to increase capacity in construction and design through professional development initiatives. In spring 2020—to gauge effectiveness of the program—Canada Wood partners (COFI and the APA – The Engineered Wood Association) developed an online survey for their seminar attendees which yielded the following insights:

- 80 percent agreed that Canada Wood Japan activities have improved their client service
- 90 percent said their knowledge of 2x4/OSB systems improved
- 50 percent started working on 2x4 construction projects using Canadian OSB after participating in the seminars

## Building upon Canada's growing market-share within the wood pellets sector

Japan is the fastest-growing major market in the world for wood pellets, driven by its ambitious goals to increase green energy production over the next decade and move away from nuclear. This makes Japan a very attractive market for B.C. wood pellet producers, as well as a marketing focus for the Wood Pellet Association of Canada (WPAC).

On February 17, 2021, nearly 300 delegates participated in the WPAC's first-ever virtual Asia Wood Pellet Conference, *Energizing Asia with Sustainable Low-Carbon Biomass*. While the conference typically takes place in Japan, by moving the conference to an online format this year in response to the pandemic, the event drew guests from across Asia and North America.

Many topics and emerging issues were featured for discussion including the evolving Japanese biomass sustainability requirements and Canadian wood pellet sustainability.

### B.C.'S GREEN CREDENTIALS

B.C. is the world's largest producer of wood pellets—a product that's proving to be a gateway to the future of innovation in the bio-energy sector. Utilizing residual fibre from B.C.'s forests, wood pellets have emerged as a valuable low-carbon fuel source and export product.



Photo: Courtesy of Wood Pellet Association of Canada and its media partner Canadian Biomass Magazine

## BC Wood resort seminars

Japan's resort owners/developers, Destination Management Organizations and governments are increasingly interested in developing all-season resorts, and often look to Whistler and other Canadian resorts as shining examples.

BC Wood has packaged this expertise into a series of technical seminars on all-season resort development, using it as an opportunity to highlight the use of mass timber and wood products in hospitality facilities.

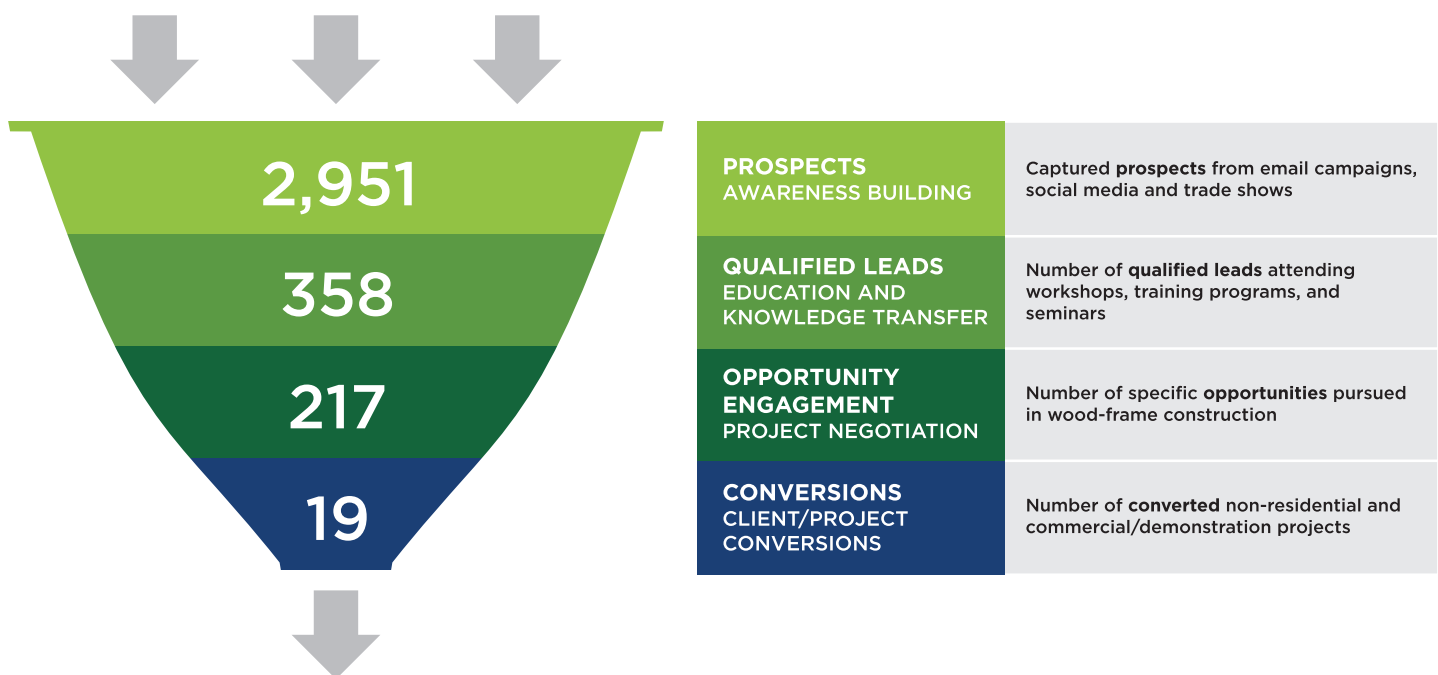
With COVID-19, BC Wood modified the seminar series to an online/in-person hybrid model, which allowed them to expand the content into a three-day technical

conference. Seminars were then tailored to include both the wood building architectural/engineering knowhow for each target segment and Canadian business case studies on how resorts targeting those segments successfully and strategically utilize wood.

Conference attendees gave overwhelmingly positive feedback, with several developers commenting that it opened their eyes to wood's benefits, not only from a beauty and environmental standpoint, but also from a durability, safety and cost perspective. Since then, two major hotel groups have already begun consulting with BC Wood on how to use wood in proposed projects.



### CANADA WOOD JAPAN 2020/21 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS<sup>1</sup>



<sup>1</sup> Summary results for Business Development activities only. Results do not include Canada Wood Japan's market access program (e.g., addressing regulatory barriers to Canadian wood products/systems through codes and standards) and other related efforts that provide a foundation for the market development program in Japan.





# South Korea

Developing a high-potential market

2020 Korea Wood Design Awards: Arcabooks & House | Photo: Mr. Jinbo Choi



## Overview

As a highly import-dependent market for softwood lumber products—less than a quarter of its demand is met with domestic production—South Korea remains an important part of FII's strategy to diversify international opportunities for B.C. wood products.

South Korea has a long tradition of building with wood, and this is only expected to grow in the coming years with code changes; government policies that increasingly favour wood; a growing shift towards sustainable building materials; technology advances; and increased demand for prefabricated building products.

With moderate economic impacts due to the COVID-19 pandemic in 2020, and an anticipated economic rebound in 2021, the market continues to show promise for B.C.'s forest industry.

In 2020/21, FII continued to support market development activities focused on wood use in South Korea's residential construction and value-added sectors. This year saw the culmination of a number of long-term projects led by Canada Wood, including updated building codes which removed limits on wood building heights and sizes, leading the South Korean design and building community to see larger wood buildings as a viable option. 2020/21 also marked the successful completion of a decade-long field test on treated wood that is expected to re-open doors for the use of Canadian species such as spruce and hemlock.

With a highly respected Canadian brand and recognized expertise in advanced wood technology, combined with favourable market conditions, South Korea continues to present exciting opportunities for FII and its partners to further expand knowledge and use of B.C. forest products.



2020 Korea Wood Design Awards: Cafe Arijujin | Photo: Mr. Junhwan Yoon



## Ushering in new opportunities for Canadian wood products

2020 saw the successful completion by Canada Wood of Suyu-dong—a five-storey wooden wall social housing demonstration project for Seoul City.

This innovative wood and concrete hybrid building utilizes a wood-frame infill system for its exterior and partition walls, and nail-laminated timber (NLT) ceilings. This use of wood improved the building's thermal performance while achieving a low-carbon footprint. The carbon stored in the wood products used in this building is equivalent to 44 metric tonnes of carbon dioxide.

In addition, using this hybrid system is cost-effective. A recent third-party cost comparison report conducted in Korea shows wood infill wall systems can save 20 percent in construction costs over traditional concrete walls.

These are just some of the reasons why this innovative project captured the Top Excellence Prize at the 2020 Korea Wood Design Awards. Moving forward, Suyu-dong will act as a showcase for B.C. wood in structural use and could usher in new opportunities for wood products in Korea's construction industry.

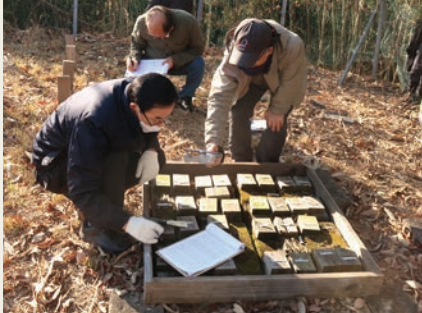
**AS A RESULT OF CANADA WOOD  
KOREA'S TECHNICAL SUPPORT,**

**22** PROJECTS WERE CONVERTED FROM  
100% CONCRETE TO INCORPORATING  
CANADIAN WOOD IN 2020/21



2020 Korea Wood Design Awards: SOSOL Architects Social Housing Demo Project utilizing the wood-frame infill system | Photos: Mr. Kyung Noh

## Decade-long field test to open doors for Canadian wood



Field test of Canadian treated wood at 10th year / Photo: Canada Wood Korea

Pressure-treated wood has been widely used as a durable construction and landscaping material in South Korea and is an important market segment for Canadian wood products. Therefore, removing barriers for use of pressure-treated Canadian wood products has been a key focus area for the Korea team.

To meet the Korean government standards for treated lumber, Canada Wood Korea—in collaboration with FPIInnovations, and its Korean partners, GNTECH and KWPA—initiated a decade-

long outdoor “field stake performance test” with pressure-treated spruce and western hemlock to measure the products’ ability to withstand decay and termite attacks. Annual inspections to review the progress and results were completed in 2020 and indicated effective protection, both in areas with ground contact and in above-ground conditions.

As a result of the 10-year performance findings, Canada Wood Korea expects that Korean treatment provisions may be expanded to accept Canadian species and treatment standards.

## Removing limits on wood building height and size

South Korea recently changed building codes to remove height and floor area limits on wood buildings. Previously, wood buildings were restricted to a maximum height of five storeys and a maximum floor area of 3,000m<sup>2</sup>. This code change, in effect as of November 2020, creates an exciting opportunity for tall wood and mass timber in Korea.

The code change was made possible because the South Korean government recognized that the development of new high-performance wood products, such as cross-laminated timber (CLT), were shown to have high performance in both structural and fire safety. However, amongst developers and designers, hurdles still need to be overcome in terms of awareness and attitudes in the areas of wood’s safety performance and environmental footprint.

Efforts to change the perception of wood within the building and design communities are being aided by Korean media, which has been paying more attention to tall wood buildings and wood as a building material. This

interest has been spurred on by the code updates, as well as Canada Wood’s proactive outreach and promotion of the sector through leveraging social media, nurturing key influencer relationships and building capacity. Media coverage has particularly focused on the benefits of wood use in a built environment, safety performance, the environmental benefits and, especially, the biophilic benefits of exposed wood.

Thanks to the code changes, positive media coverage and the efforts made by leading architects who embrace tall wood mass timber, South Korea is ramping up its capacity to build more wood buildings, creating a larger market opportunity for B.C. wood products in this space moving forward.



The Hangreen, a 191-metre five-storey wooden building in Yeongju, North Gyeongsang Province by the Korea Forest Service / Photo: Mr. Youngchae Park



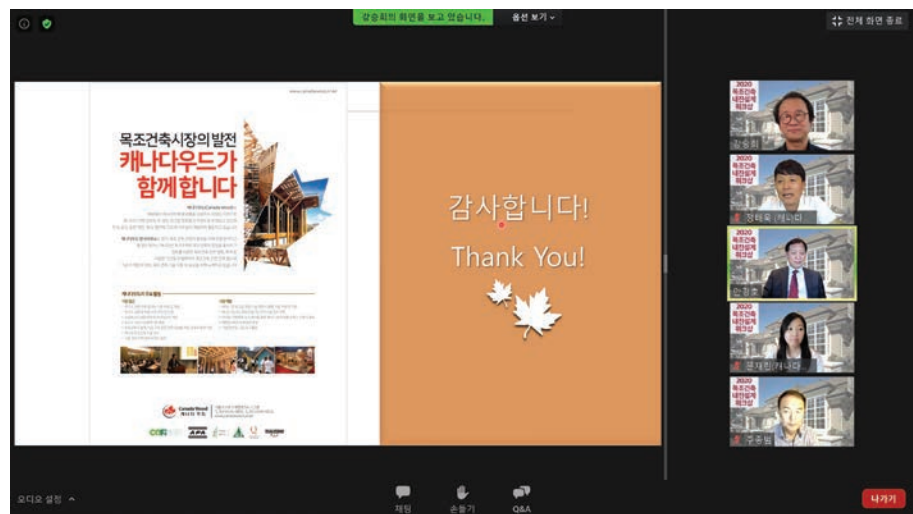


## Learning continues online

Wood Wall Bracing Online Workshop | Photos: Canada Wood Korea

To support outreach, education and capacity-building goals, the Canada Wood Korea team offers a comprehensive training program that addresses wood use in residential and non-residential construction, tall wood, mass timber, as well as industrialized construction and prefabrication. In response to the COVID-19 pandemic, Canada Wood Korea shifted its technology transfer training online, offering e-learning for both its university-based and association-based training.

In 2020/21, Canada Wood Korea also successfully developed the Wood Wall Bracing Calculator and Design Guide Booklet to help architects, engineers and designers simplify their work and gain significant time and cost savings. Specifically, these tools assist in designing wood structural and Midply shearwall systems to comply with building code requirements.



# 965

**TRAINEES ACROSS  
2020/21 TRAINING  
PROGRAMS**

# 45%

**INCREASE IN  
PARTICIPATION  
OVER 2019/20**



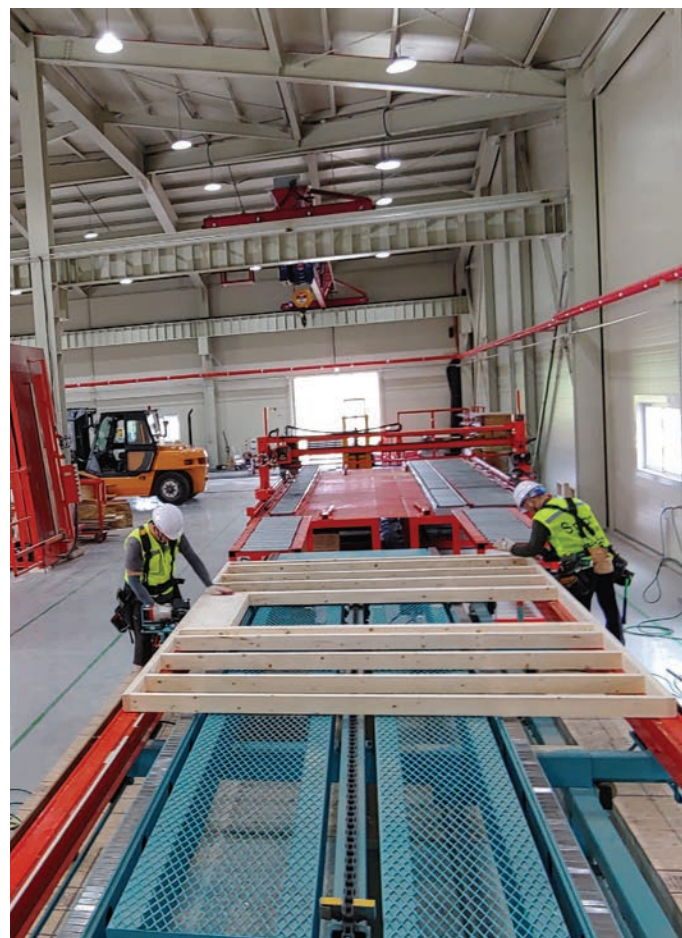
## Industrialized construction provides new opportunities



In South Korea there is a growing interest in applications for wood within industrialized construction—thanks in part to Canada Wood Korea's ongoing efforts to promote wood use through demonstration projects, knowledge transfer, training and capacity building.

In an example of growing market uptake, Smart House, a South Korean wood home builder, partnered with a Canadian panelization fabricator, AmeriCan Structure, to jointly invest in the opening of a new panelization factory. The facility will use Canadian wood species within panelized wood products that are manufactured and precut in the factory and then sent to construction locations for quick assembly. By manufacturing the prefabricated building components, the factory will create a more cost- and time-efficient process for building wood homes.

South Korea is also anticipating a large-scale building market boom and a growing demand for large-scale wooden structures for which the factory will help the country prepare. The growth of industrialized wood construction will help to sustain and expand market opportunities for structural lumber and other Canadian wood products in South Korea.



*Prefabrication and installation of prefab house by a Korean prefab-modular manufacturer  
| Photo: Smart House*



## BC Wood expands opportunities within the South Korean Resort Sector

One of BC Wood's key strategies for growing opportunities in Asia is pursuing the South Korean resort market.

By leveraging Canada's reputation as having some of the best resorts in the world, BC Wood has built a platform to provide quality education on resort planning and development, showcasing the importance of wood design and construction alongside wooden architectural expertise.

In response to COVID-19, BC Wood adapted their successful in-person seminars to virtual platforms, targeting audiences who have the ability to specify wood products in hospitality facilities. BC Wood developed a hybrid, two-day seminar approach, with Canadian experts presenting through Zoom, coupled with in-person events for participants which could also be attended remotely. The first day focused on heavy timber structures and the second day concentrated on resort-related mass timber structures.

Feedback from resort owners and developers, key government officials and destination management organizations has been very positive. BC Wood Korea will continue to grow these relationships, provide support and build on this year's hybrid seminars with an even more refined curriculum.



## Canada Wood Korea wins prestigious award

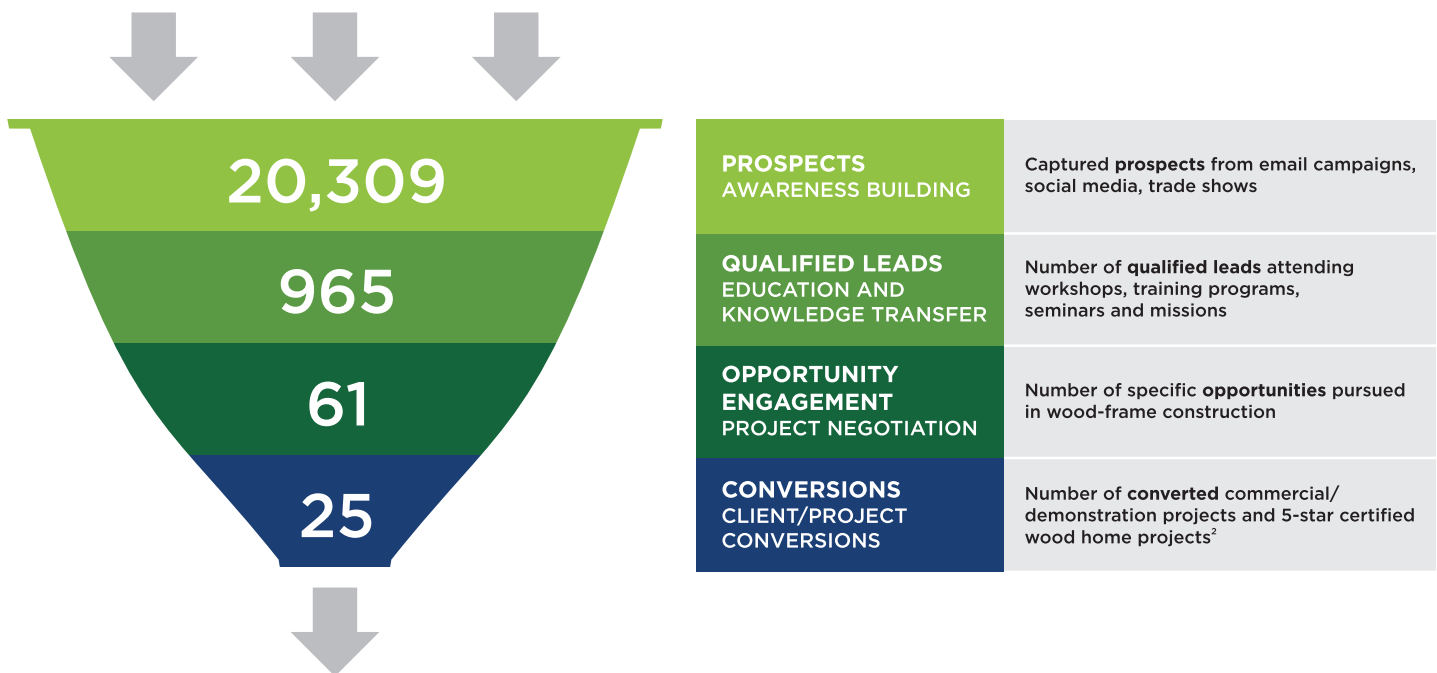
For more than a decade, Canada Wood Korea has worked with government, housing agencies, building code and product standard authorities, architects, home builders and structural engineers to advocate for wood buildings made with Canadian forest products.

Tai Jeong, country director of Canada Wood Korea, has played a crucial role in fostering the growth of the light wood-frame construction industry in South Korea. With the prestigious Association Chairman Award from the Korea Institute of Registered Architects, he was recognized for these significant contributions, particularly in improving the quality of eco-friendly buildings and promoting green building materials and technologies.



The prestigious Association Chairman Award from the Korea Institute of Registered Architects | Photo: Canada Wood Korea

### CANADA WOOD KOREA 2020/21 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS<sup>1</sup>



<sup>1</sup> Summary results for Business Development activities only. Results do not include Canada Wood Korea's market access program (e.g., addressing regulatory barriers to Canadian wood products/systems through codes and standards), government relations program and other related efforts that provide a foundation for the market development program in South Korea.

<sup>2</sup> Direct program influence includes commercial/demonstration wood projects converted to using Midply, SuperE and/or infill walls. Indirect program influence includes 5-star certified wood frame homes built as a result of Canada Wood influence.



# India

Making inroads in  
the Indian market



*Single-storey 2BHK house in Chennai by WoodNiido*



## Overview

For B.C.'s forest sector, India is a small market with large potential due to its growing manufacturing industry and limited access to a diminishing supply of global hardwoods. This presents an opportunity for Canadian species to not only fill this gap, but to offer the additional advantage of being a brand strongly associated with sustainably sourced, certified forest products.

Although COVID-19 has slowed India's rapid economic growth, the long-term outlook remains strong, particularly given population size and a growing middle class. During the initial months of the pandemic, the FII India team quickly pivoted and expanded educational

programming through an increased number of webinars. Product trials also continued and were used to not only demonstrate the benefits of Canadian species, but also to showcase new products like the finger-jointed edge-glued (FJEG) panel, an important solution to technical barriers experienced by some local manufacturers. With an increasing number of local wood importers and wholesalers (known as stockists) carrying a range of B.C. species, products and grades, India's wood in manufacturing (WIM) market is poised to provide new opportunities for market growth.

In addition, awareness of the advantages of light wood-frame construction is also expanding as a result of ongoing market development efforts and recent demonstration projects led by FII India. Competition from other importing countries, distance to market, lack of familiarity with using softwood species, and price sensitivity of Indian importers remain challenges to greater use of B.C. species. However, FII's work with strategic partners—and focus on research, education and promotion to increase awareness of, and knowledge about, B.C. wood species—continues to accelerate momentum.



*Laminated tongue & groove resort-style cottage built by Woodbarn India, now on display in Goa.*



## Staying connected to build capacity

Educational seminars and training workshops are central to FII's work to inform Indian manufacturers, stockists, architects and other key stakeholders on the merits and applications of B.C. wood species. With this approach, FII India is able to build demand for B.C. forest products in strategic markets across the country.

Traditionally, in-person meetings have been the preferred way to build relationships that generate project leads. However, following COVID-19 restrictions on gatherings, the team quickly adapted and hosted a series of ten webinars—allowing capacity building and market development efforts to continue, despite challenges posed by the pandemic.

To tap into the market's growing interest in the use of wood in structural applications, FII India's first webinar focused on *Wood in Structural Use*, covering the environmental benefits, cost and time savings, building efficiency and safety benefits associated with wood in construction. Different types of sustainably harvested, Canadian wood products and local demonstration projects were highlighted, with spruce-pine-fir (S-P-F) featured as the ideal species for structural applications due to its great strength-to-weight ratio, dimensional stability and outstanding working properties.

Over 83 percent of *Wood in Structural Use* attendees indicated they were very likely to recommend Canadian wood for future projects. The success of the webinars will lead FII to continue this type of format in a post-pandemic business environment, further expanding the team's ability to connect with local stakeholders.



**10**  
**WEBINARS**



**1,723**  
**PARTICIPANTS**

**By pivoting to an online format and delivering a webinar series, FII offered training to more participants than through in-person formats offered in previous years.**



To respond to COVID-19 safety protocols, including an increased emphasis on hand sanitation, FII India worked with a local company—Chalet International—to conceptualize and develop a sustainable alternative to traditional hand sanitizer dispensers.

The innovative, hands-free dispenser is made with Canadian S-P-F and uses a foot pump to dispense the sanitizer. The eco-friendly design may be finished in a variety of stains and is ideal for hospitals, hotels, business entryways and other public interaction points.

## Promoting B.C.'s sustainable forest management practices

Around the world, decision makers at the government, industry and consumer levels are recognizing that wood products sourced from sustainably managed forests are critical to the protection of global forests and to help tackle climate change. As a result, there are increasing levels of demand for third-party certified wood by India's furniture and handicraft manufacturing sectors.

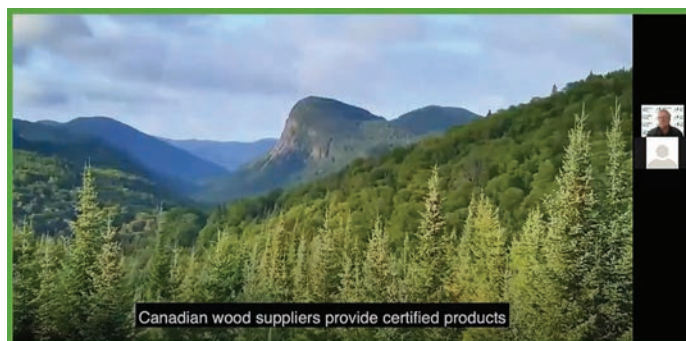
FII is tapping into this opportunity by highlighting B.C.'s sustainably sourced, certified forest products across communications channels including exhibitions, training workshops, networking events, webinars and promotions.

For example, in January 2021, FII India conducted a *Certified Wood from Sustainably Managed Forests* webinar that was attended by manufacturers, interior designers, architects, builders and developers from around the country.

Further supporting this important subject is a range of digital advertising, social media campaigns and

naturally:wood assets such as *The Story of BC Wood* video—all of which help inform local wood industry professionals about B.C.'s sustainable forest management and certification practices.

By continuing to focus communications efforts, FII India is positioning B.C. as a leader in sustainable forest management and a reliable supplier of certified wood products within India's growing manufacturing sectors.



## Ensuring B.C. wood availability across the country

 **18%**  
INCREASE IN  
STOCKISTS  
ACROSS 2020/21

Maintaining and expanding a network of local stockists (wood wholesalers/dealers) across India is a key strategy to ensuring a timely and consistent supply of B.C. wood is available in the market.

Stockists purchase and maintain an inventory of a range of B.C. species, products and grades, providing an immediate supply for local customers, like builders and manufacturers.

Today, a network of 41 stockists—up nearly 18 percent over last year—span the country with locations in 23 cities, including three new markets this year. Locations include major urban centres such as Delhi, Mumbai, Chennai, Jaipur and Bengaluru.



## FII product trials lead to orders for Canadian species

Since entering the Indian market, FII has been focusing efforts on increasing interest in B.C. species within India's furniture manufacturing sector through the *Try Canadian Wood* program. This has proven to be an efficient way of showcasing the advantages of using B.C. wood species for furniture applications and enabling manufacturers to gain direct experience in using Canadian products. Many of these product trials have led to the purchase of B.C. wood.

### RECENT 2020/21 ORDERS STEMMING FROM FII PRODUCT TRIALS INCLUDE:



#### SETHIA HANDICRAFTS

A large manufacturer and exporter of solid wood furniture in Rajasthan purchased B.C. western hemlock and Douglas-fir from local stockists for living room and bedroom furniture.



#### LATIYAL HANDICRAFTS

A furniture producer in Rajasthan recently purchased both western hemlock and Douglas-fir for furniture trials. Items made with Douglas-fir were then used to showcase B.C. wood products to their buyers.



#### JODHANA ARTS & CRAFTS

An export-focused company located in Jodhpur that services major buyers in North America purchased three containers of western hemlock for interior furniture applications following its trial.

Successes such as these are an important factor in continuing to expand awareness of B.C. species across India and have been instrumental in converting manufacturers to using Canadian wood in this high-potential market.

**68** PRODUCT TRIALS WERE COMPLETED IN 2020/21 | **126%** INCREASE OVER 2019/20

## Addressing barriers with solutions



FII also uses product trials to address technical challenges to better meet the market's needs.

One example of such an effort in 2020/21 was the introduction of the western hemlock finger-jointed edge-glued (FJEG) panel—a ready-to-use product for manufacturing door frames—through a product trial with over 40 manufacturers. Produced in partnership with FII Vietnam, the manufacturing process removes unwanted defects that are present in

lumber, thereby giving a clean, knot-free appearance and high recovery in the production of door frames. The product can also be cut or manufactured into a range of desired sizes, eliminating lumber size limitations.

Initial results were very positive, with manufacturers even identifying additional applications such as door shutters, furniture and interior fittings. FII India is now working with four Indian companies to manufacture FJEG panels in India.

# Demonstration projects strategically position Canadian wood

Demonstration projects inspire builders and architects by showing them how Canadian wood products can help meet the growing interest in building with wood in India's residential and hospitality sectors.

In 2020/21, FII India strategically advanced its demonstration projects program by targeting the rising trend in structural wood use for farmhouses/country homes, as well as wooden resort homes in hill areas and in coastal areas. With six completed projects and another 13 in progress, efforts over the past year have resulted in a wide variety of showcases in the hospitality and residential construction segments.

By providing professional guidance from initial planning to execution, demonstration project teams are well supported with access to a range of building professionals in wood architecture and structural engineering. Each project team is also able to directly experience the many benefits of building with Canadian wood including its impressive strength-to-weight ratio which requires less intrusive, lower-cost footings and foundation work.

The demonstration projects also highlighted the benefits of prefabricated construction, including significantly shorter time frames required to complete such projects, which result in critical savings on on-site labour requirements.



*One bedroom studio cottage in Bengaluru. This studio-style cottage, built using wood-frame construction, is strategically positioned in Bengaluru to draw architects, developers and designers.*



*Single-storey 2BHK house in Chennai - This WoodNiido cottage promotes the North American style light wood-frame technology and incorporates applications of Douglas-fir, western hemlock, S-P-F, yellow cedar and western red cedar.*





**India's  
hospitality sector  
is a natural fit  
for B.C. wood's  
beauty and  
durability**



B.C. wood's natural beauty, warmth and calming, peaceful aesthetic—plus its durability, performance and safety—make it a perfect fit for use in resorts. India's hospitality industry presents a growing opportunity for B.C. wood species—this is why building inroads with local architects, designers and manufacturers servicing the sector is one of FII India's strategic focuses.

To showcase the unique advantages of using B.C. wood products in hospitality projects, FII India provided technical support on the construction of Sitaram Beach Retreat—a premium Ayurvedic centre located in Kerala, on India's southwest coast.

Designed by distinguished local architect, N. Mahesh, and built in traditional Kerala carpentry style, Sitaram features Canadian wood in both structural applications and interiors and demonstrates how sustainably sourced Canadian wood species may be used for projects that speak to traditional Indian architecture.

In 2020/21, FII India completed a case study on the project to further showcase how B.C. wood products may be used within India's growing hospitality sector.



*Photos courtesy of Sitaram Ayurvedic Beach Resort*

# Growing awareness through advertising

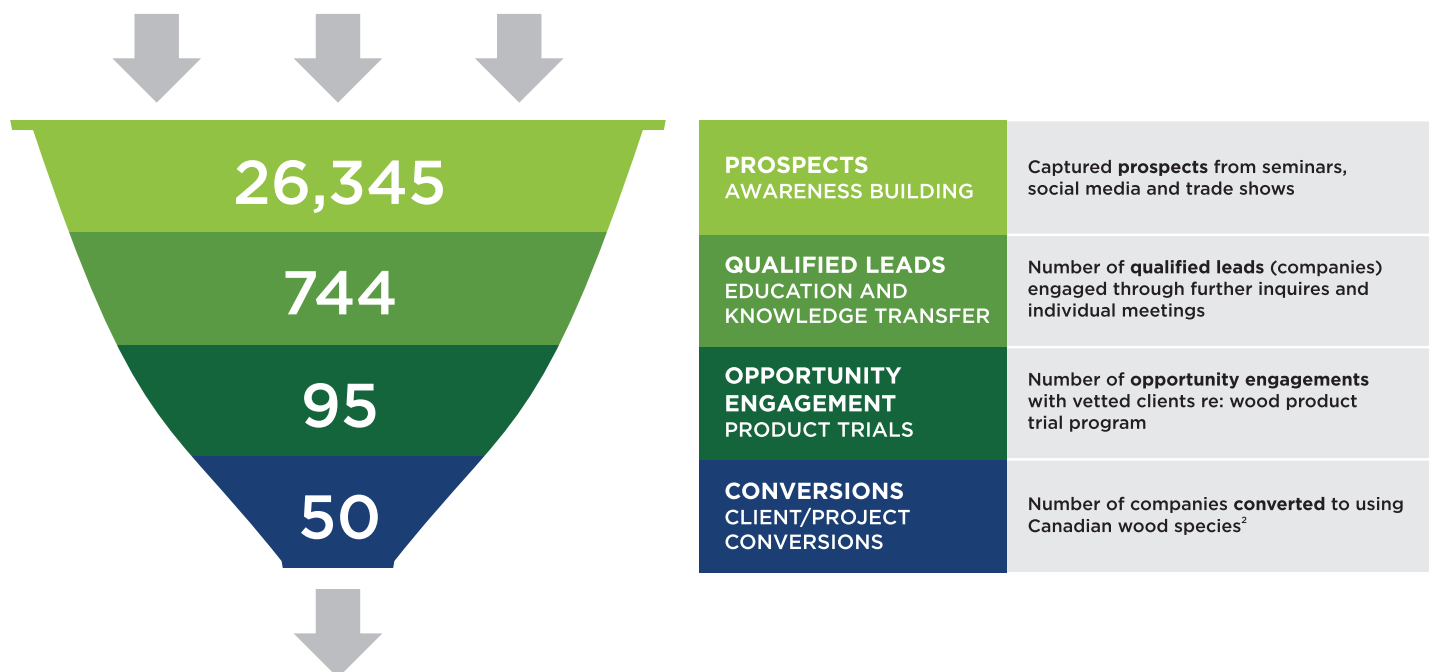
Increasing awareness of B.C. species through outreach, promotion and education is a key component of the strategic direction to build on the growing commercial interest and uptake in the Indian market for B.C. wood species.

To heighten awareness, outreach and education programs are supported with targeted advertising and promotional campaigns delivered through paid and earned media both in print and online.

With COVID-19 causing an increase in online activity, FII India's 2020/21 promotional strategy shifted to a primarily digital focus, including online ads, display banners, search campaigns, YouTube videos, emails and Whatsapp messaging. These efforts resulted in almost four million digital impressions and a more than 400 percent increase in YouTube video views.



## FII INDIA 2020/21 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS<sup>1</sup>



<sup>1</sup> Summary results for Business Development activities only. Results do not include FII India's initiatives to support market access (e.g., addressing regulatory and institutional barriers to Canadian wood products) and related efforts that provide a foundation for the market development program in India.

<sup>2</sup> Total number of companies engaged with FII India's Business Development team that purchased wood products directly from B.C. suppliers during 2020/21.





# Vietnam

Raising the profile  
of Canadian wood  
products

*Western hemlock | Photo: KK Law*

## Overview

Vietnam's furniture industry is one of the fastest-growing and most dynamic in the world—it is now the fifth-largest exporter of wooden furniture globally and the second-largest in the Asia-Pacific region.

Vietnam's rapid and broad response to COVID-19 in early 2020 positioned the country for a quicker economic recovery than other Asia-Pacific nations. Its economy continued to grow during this period and Vietnam's furniture manufacturing sector thrived. In fact, 2020 exports of wood and forestry products, with

furniture making up the majority of these, were valued at USD \$12.3 billion—up from USD \$10.5 billion in 2019.

Demand for wood products in Vietnam continues to outpace domestic supply, creating opportunity for Canada's certified wood imports to meet the sector's need for sustainably sourced materials—a core requirement of a growing number of international customers. At the same time, many of the 5,000 major furniture manufacturers operating across Vietnam have yet to capitalize on the benefits and suitability of softwood products. These market dynamics present an exciting opportunity for Canadian softwood products and B.C. species in particular.

In 2020/21, FII's strategic focus in Vietnam revolved around continuing to expand knowledge and use of B.C. forest products within the growing manufacturing sector through conducting product trials and building relationships with key Vietnamese wholesalers and manufacturers.



Canadian wood samples | Photo: FII



## Showcasing B.C. wood species in Vietnam's manufacturing sector

Vietnam continues to be a global hotspot for attracting international buyers sourcing furniture and other manufactured wood products.

*Try Canadian Wood* product trials have been a key strategy in introducing B.C. softwood products not previously well-known in the market by highlighting the benefits and showcasing species particularly well-suited to furniture applications.

Between April 2020 and March 2021, 41 product trials were completed, driving interest in a variety of B.C. species.

The majority of product trials used western hemlock—prized for its favourable finishing properties and ability to accept any paint, stain or clear finish—for a range of indoor furniture and moulding applications, including sofa frames and baseboards. Western red cedar and yellow cedar were trialled for use in outdoor applications, while S-P-F gained traction within furniture, door core and other industrial applications.

The results of these product trials have been very positive, with a number of manufacturers placing commercial orders for B.C. species, while others are eager to show foreign buyers the finished products in person when travel reopens post-pandemic.

**41** PRODUCT TRIALS WERE COMPLETED IN 2020/21

**127%** INCREASE OVER LAST YEAR



Western hemlock furniture trials | Photos: FII



A cornerstone of FII Vietnam’s market expansion strategy is fostering strong local partnerships with importers, traders and stockists—wood wholesalers/dealers that act as a local supplier network for Canadian wood products.

Across 2020/21, FII Vietnam continued to build on an important relationship with Tavico—one of South Vietnam’s largest stockists of softwood and hardwood products from around the world. With a large customer base consisting of furniture, window and door manufacturers, as well as traders, architects, designers and contractors, Tavico encourages these customers to visit their showroom which includes a Canadian Wood Vietnam display area featuring a range of furniture. Tavico sales staff are then able to educate customers on the workability and end-use applications of the B.C. products, thanks to training provided by FII Vietnam. Attached to the showroom is a warehouse with inventory of B.C. species for purchase.

However, pandemic-related restrictions on international travel and trade event cancellations caused a downturn in visitors to the Tavico warehouse/showroom. In response to this, the FII Vietnam team pivoted their strategy to continue to build momentum with Tavico and its domestic customers.

In January 2021, FII Vietnam promoted B.C. wood to domestic buyers and formed relationships with local manufacturers at a Tavico event geared towards a Vietnamese audience.

FII’s prominent, high-traffic showroom locations at the event showcased Canadian raw wood materials and highlighted the possibilities of B.C.’s sustainable lumber through high-quality finished furniture and joinery products on display.

Participating in this event allowed FII Vietnam to further demonstrate its ongoing commitment to this important market; build on relationships with existing partners; generate leads; and reinforce a strong, mutually beneficial relationship with Tavico as an important proponent of Canadian lumber.



Canadian wood showroom at Tavico | Photos: FII



## Promoting the Canadian Wood brand



**Born in Canada. Made in Vietnam.**  
**Xuất xứ từ Canada. Sản xuất tại Việt Nam.**

High-quality certified lumber from sustainably managed forests of British Columbia, Canada.  
 Gỗ và chất lượng cao được chứng nhận từ các khu rừng được quản lý bền vững của tỉnh bang British Columbia, Canada.

**Gỗ Độc Cần Bờ Tây | Hemlock**

TRY CANADIAN WOOD  
 LIÊN HỆ CANADIAN WOOD  
[www.canadianwood.com.vn](http://www.canadianwood.com.vn) 

 Canadian Wood



## Try Canadian Wood Liên Hệ Canada Wood

**Western Hemlock | Gỗ Độc Cần Bờ Tây**  
 Ready-to-use lumber • High strength to weight ratio  
 Excellent treatability  
 Gỗ xẻ sử dụng ngay • Có khả năng chịu lực cao  
 Khả năng chịu gia công xuất sắc

 **Canadian Wood**

[www.canadianwood.com.vn](http://www.canadianwood.com.vn) 

To increase brand awareness of B.C. softwood products with Vietnam's furniture manufacturers, FII Vietnam conducted targeted multi-lingual advertising campaigns across 2020/21. Mirroring FII India's *Born in Canada, Made in India* campaign, both print and digital media were developed with a call to action encouraging manufacturers to, *Try Canadian Wood*, utilizing specific species within a variety of furniture applications. The ads showcased B.C. species in finished furniture products, while highlighting Canada's sustainable forest management practices. Ads were placed within several well-known Vietnamese manufacturing and interior design magazines, both in print and online. The Canadian Wood Vietnam website continues to be the digital hub for information and resources with all promotional campaigns linking directly to [www.canadianwood.com.vn](http://www.canadianwood.com.vn).

## Vietnam market dynamics benefit B.C. wood

As Vietnam's furniture manufacturing sector has continued to grow over recent years, so too have B.C. softwood lumber imports.

Vietnam's wooden furniture exports were CAD \$8 billion in 2020, up \$1.3 billion from 2019 despite COVID-19 disruptions, while imports of softwood lumber from all countries also grew 19 percent to CAD \$299 million.

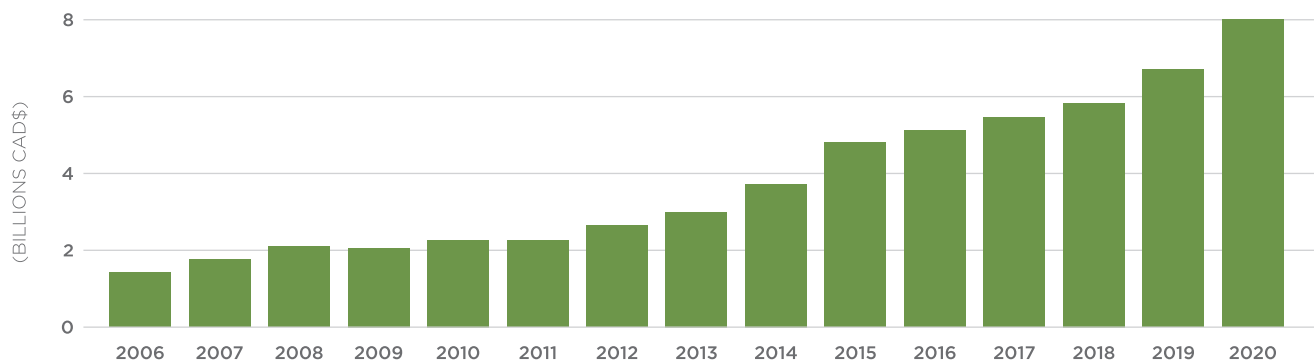
While B.C. softwood lumber volumes are still modest compared to competing jurisdictions, B.C. exports to Vietnam were over CAD \$7.5 million in 2020, up

37 percent from 2019, signalling strong future potential for B.C. species.

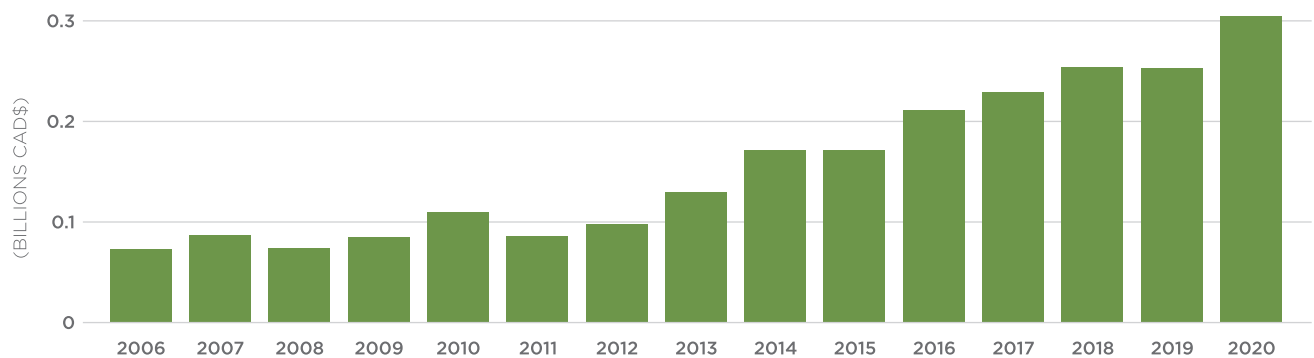
Trade dynamics show even more opportunity for B.C. forest products in Vietnam. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) free trade agreement reduces barriers to trade, positively impacting both imports from and exports to CPTPP countries.

Taken together with Vietnam's increasing demand for legal, sustainable and certified sources of wood, the opportunity for B.C. species demand in Vietnam is very promising.

VIETNAM FURNITURE EXPORTS (GLOBAL)



VIETNAM SOFTWOOD LUMBER IMPORTS (GLOBAL)





# Industry Resources

Forestry Innovation Investment (FII) produces a variety of resources intended to help support the growth and development of the B.C. forest sector – all of which is available to industry free of charge.



West Fraser Sawmill, Quesnel, B.C. | Photo: Brudder Productions



Log boom in British Columbia | Photo: Nik West, courtesy naturallywood.com

## BC Research Library

The BC research library houses resources on a wide variety of topics relevant to the B.C. forest sector, including market and export data, sector reports, as well as product, technical, building/construction and environmental information—all of which is funded and commissioned by FII and its funding recipients.

Visit [bcfii.ca/research-library](https://bcfii.ca/research-library)

## Image Library

Recently updated to improve accessibility and user experience, FII's image library has almost 5,000 images and video clips showcasing everything from B.C. forests and forestry activities to manufacturing, building and construction, as well as trade and overseas market uses of wood products. All visuals are available to the B.C. forest industry and stakeholders at *no charge*.

Learn more at [imagelibrary.bcfii.ca](https://imagelibrary.bcfii.ca)

Forest on the north coast of B.C. (Khutzeymateen Inlet) | Photo: Michael Bednar





Forest scene in British Columbia | Photo: Nik West, courtesy naturallywood.com

## naturally:wood

naturally:wood is a comprehensive online information resource promoting British Columbia as a global supplier of quality, environmentally responsible forest products from sustainably managed forests. The website has over 80 factsheets, case studies, videos and reports. Naturally:wood LinkedIn, Facebook and YouTube channels also profile diverse and trending forestry, product and building innovations in B.C.

Visit [naturallywood.com](https://naturallywood.com)



Wood at Stawamus Chief | Photo: Candace Kenyon

## BC Supplier Directory

The BC Supplier Directory connects buyers with over 400 suppliers of high-quality, eco-friendly wood products, from dimension lumber, mass timber and engineered products, to furniture, doors and windows, pulp, paper and pellets.

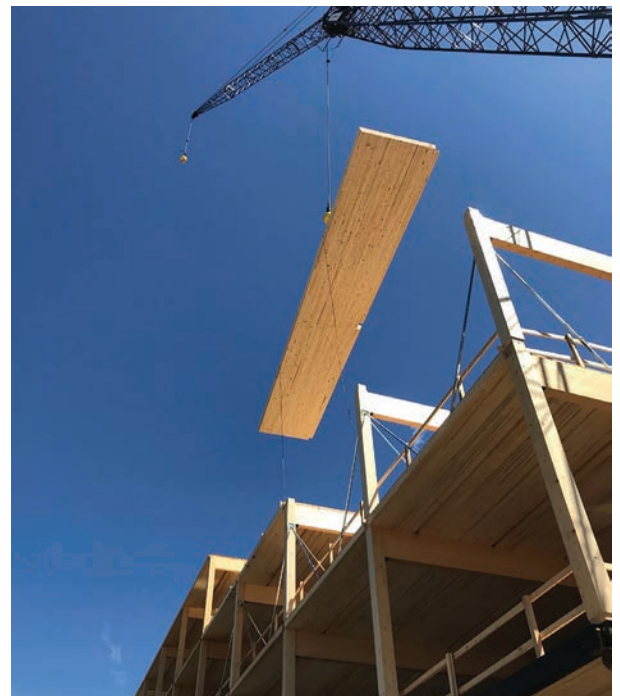
**Browse the Supplier Directory and/or ensure your business' listing is up to date at [suppliers.naturallywood.com](https://suppliers.naturallywood.com)**

## Think Wood Research Library

Developed and maintained by FII, the Think Wood Research Library connects researchers and practitioners to the latest research and resources on mass timber, light-frame wood building systems (five stories and up). The database has over 1,750 research resources, with links to download reports and information.

Visit [research.thinkwood.com](https://research.thinkwood.com)

**We welcome your comments on any aspect of our website, resources or programs. Please feel free to get in touch with us at [info@bcfii.ca](mailto:info@bcfii.ca).**



Dowel-laminated timber (DLT) | Photo: Structurecraft Builders



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