

YEAR IN REVIEW 2018/19

B.C. Leadership and innovation Pg. 12

CHINA

Focus on green building Pg. 24 **JAPAN** Market development opportunities Pg. 34 **INDIA** Making inroads in the market Pg. 42

















Credits from left to right, top to bottom: Port McNeil, Dave Patterson; Yunesit-in Health Centre, Hanceville, Martin Knowles; West Wing, Penticton Lakeside Resort and Conference Centre, John Bilodeau Photography; Private Residence, WRCLA; BSD-TEDA Sales Centre, Tianjin, Canada Wood China; Post and Beam Construction in Private Residence, Tokyo, Canada Wood Japan; Optimal House, Korea, Case Archiplatform; Product Trial, FII India; FII Branch Office and Tavico, FII; Westview Elementary, Powell River, Ed White Photographics

Cover photo: Yi Jing Yuan Multi-functional Hall at the Xijiao State Guest Hotel, Shanghai | Photo: Canada Wood China

- YEAR IN REVIEW 2018/19 -

4 BUILDING A STRONGER FOREST ECONOMY

- 6 MESSAGE FROM THE MINISTER
- 7 MESSAGE FROM THE CEO
- 8 **FORESTRY INNOVATION INVESTMENT** Strengthening and diversifying international markets for B.C. forest products
- 10 **PARTNERS IN MARKET DEVELOPMENT** Working together to deliver innovative programs
- 12 BRITISH COLUMBIA Promoting leadership and celebrating innovation

22 UNITED STATES

Diversifying opportunities in B.C.'s largest market

28 **CHINA**

Advancing green building techniques

34 **JAPAN**

Broadening market development activities

38 SOUTH KOREA

Market development and diversification

42 **INDIA**

Making inroads in the market

48 VIETNAM

Raising the profile of Canadian products

50 RESOURCES FOR INDUSTRY

BUILDING A STRONGER



32% OF B.C.'S COMMODITY **EXPORTS**

REPRESENT

MARKET DIVERSIFICATION

GROWTH OF FOREST PRODUCT EXPORTS TO ASIA



Sources: BC Stats; British Columbia's Forest Industry and the B.C. Economy in 2017, PWC; Labour Force Survey, BC Stats; Economic State of BC Forest Sector, BC Stats; 2019 Budget Estimates, BC Budgets; 2018 B.C. Construction Data, FPInnovations

FOREST ECONOM

ANNUAL HARVEST



FORESTRY SUPPORTS NEARLY

7,000 BUSINESSES ACROSS B.C.

\$1.4 BILLION

B.C. PUBLIC REVENUE GENERATED IN 2018/19 THAT SUPPORTS HEALTH CARE, EDUCATION AND INFRASTRUCTURE



OVER 50,000 PEOPLE DIRECTLY EMPLOYED BY FORESTRY INCLUDING 12,000 IN VALUE-ADDED SECTOR

B.C. WOOD USE

GROWTH IN 5-6 STOREY MULTI-FAMILY WOOD-FRAME CONSTRUCTION





MESSAGE FROM THE MINISTER

For over a century, British Columbia's forestry sector has sustained communities across the province and supported our economy through both job creation and revenue generation. Today, the industry faces several challenges, from rising trade tensions and global competition to volatile lumber prices and fibre supply constraints. Now more than ever, a continued focus on diversification and innovation is critical to ensuring that B.C. remains globally competitive.

With 90 percent of B.C. forest products destined for international markets (\$14.9 billion in 2018), B.C. is focused on identifying, developing and sustaining global markets for its forest products. At the same time, we are working to advance the engineered wood products sector here in B.C. to grow our value-added wood industry. We are increasing opportunities for wood use, including mass timber, across multiple building types through the early adoption of building code changes allowing up to 12 storeys and the identification of opportunities to build taller with wood. Expanding how we build with wood opens new segments and markets for the forest industry, and builds upon B.C.'s impressive innovative wood design and engineering capacity.

As outlined in this report, Forestry Innovation Investment (FII), together with industry and government, delivers essential market development programs in B.C. and in markets around the world. FII's programs are key to expanding opportunities for wood use in B.C. and key international markets, and to maintaining B.C.'s position as a global supplier of worldclass, sustainably harvested, forest products.

Looking forward, the Province is committed to making investments that ensure B.C.'s forest sector remains globally competitive and a key contributor to our economy. FII's funding investments, delivered in close collaboration with the federal government and industry, are a fundamental piece in positioning the B.C. forest sector for the future.

Brune 11 Mate

Honourable Bruce Ralston Minister of Jobs, Trade and Technology Government of British Columbia



MESSAGE FROM THE CEO

Expanding opportunities for the use of B.C. forest products, both domestically and internationally, is of critical importance to ensuring the sector can continue to support B.C. and its local economies. Recognizing the challenges that the forestry industry is facing, including trade dynamics, market shifts, and domestic supply, it's imperative that Forestry Innovation Investment (FII), on behalf of the Province, continues to work with government and industry partners to help maintain, create and diversify markets for B.C. forest products.

FII's programs are helping position B.C. forest products to take advantage of opportunities in emerging and existing markets, including the United States, China, Japan, South Korea, India and Vietnam. Inmarket activities, delivered through and with partners, are helping to raise awareness of B.C.'s forest products, forest management practices and leadership in wood use. At the same time, we are working with overseas partners and stakeholders to help address barriers to wood use and to adopt building standards and codes that allow for the acceptance of B.C. forest products as the source materials for building and manufacturing applications.

The forest sector has been a pillar in supporting B.C.'s economy for over a century. While forestry remains the largest manufacturing industry and source of export earnings for the Province, shifts in domestic and global industry dynamics are prompting the need to generate greater value from our forest resource. This presents exciting opportunities for B.C. to take a leadership role in finding innovative uses for B.C. wood species, including building taller with wood and advancing the use of engineered and mass timber products.

This 2018/19 Year in Review highlights some of the exciting market development activities underway around the world. We welcome your comments on any aspect of this report or our programs.

Michael Loseth President & CEO Forestry Innovation Investment

FORESTRY INNOVATION INVESTMENT

Strengthening and diversifying international markets for B.C. forest products

and the second second



Port McNeil | Photo: Dave Patterson

Forestry Innovation Investment (FII) helps create, maintain and diversify markets for B.C.'s world-class, environmentally friendly forest products. FII's programs break down trade and market barriers, promote the province's forest exports and forest management in the global marketplace, and work to ensure the sector continues to be a leading contributor to the B.C. economy.

WOOD FIRST | GROWING INNOVATION AND CAPACITY IN B.C.

The Wood First program advances new and existing wood construction technologies in B.C. and positions the province as a showcase for innovative products and construction technologies.

MARKET OUTREACH | PROMOTING B.C. FORESTS AND PRODUCTS AROUND THE WORLD

Market Outreach answers the questions "Why wood?" and "Why wood from B.C.?" by positioning the province as a reliable supplier of innovative and quality wood products from sustainably managed forests.



Sayward Forest, Campbell River | Photo: Dave Patterson

Wood Planing | Photo: Brudder

MARKET INITIATIVES | BUILDING MARKETS IN ASIA AND NORTH AMERICA

The Market Initiatives program opens new export opportunities, particularly in fast-growing parts of Asia, and supports employment in the B.C. forest sector by strengthening and diversifying markets.

Recognizing the potentially lucrative markets for B.C. wood products in North America, FII works collaboratively with the forest industry, the valueadded sector, the federal government and the research community to identify opportunities to increase wood's market share in non-residential and multi-family, multi-storey construction. FII subsidiaries in China, India and Vietnam support industry efforts to foster relationships, mitigate market access issues, and conduct market research and early market exploration activities. China also focuses on building and maintaining government-to-government relationships, and works to sustain partnerships with state-owned real estate development companies. In addition, FII partners with trade associations and industry leaders in South Korea and Japan. More detailed descriptions of our programs and the activities of our subsidiaries are available at **bcfii.ca**.

PARTNERS IN MARKET DEVELOPMENT

Working together to deliver innovative programs in B.C. and around the world Close collaboration between government, industry and stakeholders has long been a strength of the B.C. forest sector. In 2018/19, FII worked with nearly two dozen industry trade associations, research institutions, provincial and federal ministries and trade development agencies to deliver a comprehensive suite of market development programs.

This unique approach brings together the expertise and resources of industry as well as two levels of government. It helps the B.C. industry to maximize its global impact and ensure a coordinated effort that benefits the sector.



\$1=\$3.60

Every dollar invested by FII is supported by \$2.60 in funding from industry, the federal government and other partners.

YEAR IN REVIEW 2018/19 FORESTRY INNOVATION INVESTMENT 11

BRITISH COLUMBIA

Promoting leadership and celebrating innovation

OVERVIEW AND STRATEGY

Recognized internationally as a world leader in sustainable forest management, and widely acknowledged as the leading jurisdiction in North America for its innovation and expertise in wood design and construction, B.C. is driving change and creating new paths with the forest sector.

40 percent of B.C.'s public buildings use wood, be it in structural or finishing applications. Building with wood helps lower a structure's carbon footprint and reduces overall environmental impact. As B.C. continues to build taller and larger with wood, mass timber and innovative building solutions with increased prefabrication are gaining momentum.

FII's mandate is to work aggressively to maintain the province's leadership, which involves ongoing education, communication and collaboration. By continuing to invest in the creation of timely and informative resources, innovative building design systems and knowledge sharing, B.C. fosters a positive landscape for wood use.



Anahim Lake Forest | Photo: Michael Bednar

"Using wood is one of the early discussions we have with our clients, for every single project. The environment is being seriously damaged by us emitting carbon into it, and if we can build in wood then we can reverse that process. We sequester carbon and build up a positive balance. So we are always looking at wood first—always."

- Peter Busby, Managing Director Perkins+Will



Brentwood Town Centre Station, Burnaby | Photo: Perkins+Will

Wood Perception Survey shows culture of wood

The Wood First program completed its bi-annual survey assessing the perceptions of key specifying audiences (architects, engineers, developers) and the general public in B.C. For the first time since the survey's inception in 2012, preference for wood has surpassed concrete.

2019 PERCEPTION SURVEY

SPECIFIERS' CULTURAL VALUES AND BELIEFS

The B.C. wood products sector is known for its ingenuity in developing new products.

B.C. is well-positioned to export its products and knowledge of building with wood to other provinces and/or countries.

B.C. is a leader in wood construction.

Wood will be an important part of B.C.'s future.

Wood is an important part of B.C.'s culture today.





B.C. RESIDENTS COMFORT WITH STRUCTURAL MATERIAL-BY PRODUCT





Wood Innovation Research Lab, Prince George | Photo: Michael Elkan Photography

WIRL—an industrial Passive House first in North America

A good example of B.C. leadership in the use of mass timber and innovative wood-framing, the University of Northern B.C.'s (UNBC) Wood Innovation Research Laboratory (WIRL) has just 30 percent of the global warming impact of a conventional building. The 10-metre-tall, singlestorey plus mezzanine mass timber structure includes classroom and office space, and enough headroom to test large-scale integrated wood structures. Prince George is now home to the first North American industrial mass timber building in a cold climate to meet strict international Passive House standards.

Certified Passive House buildings use up to 90 percent less energy for heating and cooling and up to 70 percent less energy overall compared to standard buildings. FII's Wood First program funding continues to support testing and monitoring of WIRL mechanical systems, heating and cooling, and internal temperatures to track the long-term benefits of mass timber industrial buildings. To foster knowledge transfer, an FII-funded case study developed in collaboration with UNBC elaborates on both the design and construction of WIRL. Preferred due to its high strength-to-weight ratio and thermal performance, mass timber also allows for prefabrication, an advantage in cold climates like Prince George.



Case study available on naturallywood.com

Educational materials and resources

Recognizing the growing trend of wood buildings and lessons learned around wood use, timely and informative resources are required to support architects, engineers, designers and wood champions. Through naturally:wood, FII hosts an array of educational tools and resources such as a project gallery, factsheets, case studies and research.

Technology opens doors



How Technology is Transforming B.C.'s Forest Sector, an FII produced video, showcases some of the incredible impacts that new technologies are having on the forest industry. It describes how visualization software, airborne laser scanning, drones, handheld digital

How Technology is Transforming B.C.'s Forest Sector | Photo: FII

devices, and cloud computing are used in the industry, and the role that technology is playing in helping B.C. maintain its position as a global innovator. With more than 2,500 views in the first six months, the video has been used by industry and others to raise awareness of B.C.'s forests and forest management practices.

Since not all buildings are accessible to meet the demand for group tours and viewings, online virtual tours have proven to be an effective way to enable access to buildings. Three virtual tours commissioned



by FII provide viewers with a close-up look at wood use in Samuel Brighouse Elementary School, the Mountain Equipment Co-op (MEC) retail chain head office, and Brock Commons Tallwood House student residence.

All resources can be viewed at **naturallywood.com**.

Naturally Wood highlights wood product innovation in the B.C. building sector

The Naturally Wood collection celebrates B.C.'s unique story of cutting-edge wood architecture and design. The book profiles more than 65 unique and distinctive wood projects. This print and e-publication serves as an effective tool for the forestry, design and construction industries, along with government to promote B.C. forest products, mass timber construction technologies, and B.C.'s leadership in the use of wood. Over 500 people have received copies of the collection. Feedback has been positivethere have been almost 400 downloads from naturallywood.com, an additional 400 print copies have been distributed and a second print run is underway.



Digital copies and details on obtaining print copies are available at **naturallywood.com/NWBC**.

FII research supports wood and embodied carbon

FII's research on life cycle assessment and carbon policies in jurisdictions around the world has been informing government and industry discussions, including the Clean Energy Canada Building the Future report.

With an LCA inventory of nine different building types in B.C. now complete, a factsheet, Demonstrating the Benefits of Whole Building Life Cycle Assessment, is helping illustrate the role of wood in mitigating environmental impacts of building and material choices.

The research and factsheet are available on naturallywood.com.





École Mer-et-Montagne, Campbell River | Photo: Derek Lepper

Supporting schools and material choice

With a goal of encouraging wood in building designs for schools that are economical and environmentally sustainable, FII commissioned a report by Stantec and Fast + Epp, Wood Use in British Columbia Schools, in partnership with the Ministry of Education. The report considers the varying capacities in which wood can meet or exceed education infrastructure demands as a building material for structural and non-structural applications, encouraging safe and inspiring learning environments. It also covers some of the options available to building designers incorporating wood, from traditional dimensional lumber framing to innovative exposed mass timer systems.

Mass timber from B.C. forests



Cross-laminated timber (CLT)



Nail-laminated timber (NLT)



Glue-laminated timber (Glulam)



Dowel-laminated timber (DLT)

Accelerating modern construction practices

B.C. architects, engineers and building experts continue to explore opportunities to adopt and streamline mass timber and wood-hybrid design across multi-family and non-residential building applications. Through consultation with a cross-section of architects, engineers and other key stakeholders, schematic drawings and key project considerations for four building types—mixed-use residential, multi-tenant office, seniors housing and commercial mixed-use with supermarket—were developed to encourage consideration of new wood-frame, mass timber and hybrid applications.

Recognizing the evolution of virtual design and prefabrication, FII funded research to help better understand the implementation of Building Information Modelling (BIM) and potential impacts on mass timber, prefabrication and new ways of building and design. The resulting UBC report, *Building Information Modelling/Design for Manufacture and Assembly* (*DfMA*) for Mass Timber, is being used across Canada to prioritize the mainstream application of BIM in manufacturing, design and construction practices.

These and other resources are available on **naturallywood.com** and **woodinnovatesbc.ca**.



Brock Commons Tallwood House Construction Modeling | Rendering: CadMakers



Wander Wood Pavilion | Photo: UBC CAWP

SUPPORTING B.C. BUSINESSES



22 projects LAUNCHED

265 PEOPLE TRAINED

Strengthening manufacturing and business capabilities

Through its Wood First program, FII is accelerating the adoption of existing and new innovative wood-based products and building systems in collaboration with industry, researchers and design professionals. The program aims to strengthen B.C.'s capability to produce competitive wood-based products and building systems that create and respond to market demand. Third-party organizations such as UBC's Centre for Advanced Wood Processing (CAWP) and BC Wood work directly with companies on marketing, sales support, production line efficiencies and product development to strengthen their businesses.

In 2018, a UBC CAWP robotics workshop developed a design-tofabrication system that can be customized to suit local fibre, and helped demonstrate to value-added manufacturers new and innovative ways to work with wood. Wander Wood, the pavilion project that now stands at UBC, was milled, shaped and assembled by a robot and won a Wood *WORKS!* BC Wood Design Award.

Outside the Box, a partnership between CAWP and the Emily Carr Material Matters group, worked with wood champions in order to facilitate knowledge transfer within the building industry. Topics included digital fabrication, wood waste as building blocks, and using laser cutters as a tool.

BC Wood conducted a series of WoodTALKS educational programs profiling B.C's value-added manufacturers. Through conferences, factory tours, workshops and seminars, BC Wood connected manufacturers, architects and municipalities to further increase knowledge and strengthen supply chains.

Wood pellets gain prominence

The Wood Pellet Association of Canada (WPAC) coordinated a social media campaign during the fall of 2018 on wood pellet heating. The fourweek national campaign resulted in a 2,000 percent increase in web traffic over the same four weeks in the prior year, and boasted more than 465,000 impressions and 4,000 unique views.



SUSTAINING BODY AND MIND



Wood First funded several research projects in 2018/19 to further support the culture of living and building with wood in B.C.

NLT Fire Performance Reports

Three reports, developed by FPInnovations, establish fundamental fire performance data for the design and specification of NLT assemblies: *Evaluating Fire Performance of Nail-Laminated Timber, Surface Flammability* and *Influence of Gaps*.

Connection and Performance of Two-Way CLT Plates Phase II

UBC has released phase II of its two-way CLT report, which is currently under peer review. Research looked at the development of large span CLT floor and roof systems with two-way plate bending action.

Connections for Stackable Heavy Timber Modules in Mid-Rise to Tall Wood

Load requirement and major design criteria for connections used in stackable heavy timber modules was explored by UBC.

Wind and Earthquake Design Framework for Tall Wood-Concrete Hybrid Systems

This UBC research developed comprehensive wind and earthquake design guidelines for concrete-joined tall mass timber buildings up to 40 storeys. The report was a conference paper at the 17th World Conference on Earthquake Engineering in Japan.

All research is available on FII's website and via the Think Wood research library.



A forum to share best practices

FII is committed to sharing best practices and leveraging in-market industry and government experiences. In collaboration with Natural Resources Canada, Canada Wood and other funding and program delivery partners, FII delivered the second Wood Best Practices Forum in June 2018. Roughly 50 in-market partners, including funding recipients, associations, research institutions and wood champions from across Canada, the U.S., Europe and Asia, exchanged updates on trending topics and new technologies, discussed best practices and explored opportunities for further collaboration and enhanced efficiencies.

Participants returned to their markets and programs with information on alternative construction and prefabrication methods, fire prevention and energy efficiency technologies, and new ideas on communication strategies and tactics they can readily apply to their markets.

Delegates at the Wood Best Practices Forum | Photo: FII

Opening doors to the global marketplace

More than 800 delegates, including international buyers, industry and government representatives, were in Whistler, B.C. September 2018 for the 15th Annual Global Buyers Mission. BC Wood, the event organizer, estimated that Canadian exhibitors signed more than \$37 million in contracts, many of them with first-time buyers. The event showcased engineered, treated, reclaimed and other value-added wood products. Architects, designers, developers and engineers were also invited to participate in WoodTALKS, a series of seminars featuring renowned speakers.



Minister Chow at the Global Buyers Mission | Photo: BC Wood

UNITED STATES

Diversifying opportunities in B.C.'s largest market

OVERVIEW AND STRATEGY

B.C. wood products continue to play a prominent role in the U.S. construction market with 60 percent of B.C. lumber and 96 percent of valueadded products shipped south of the border. The demographic shift away from single-family homes continues, and FII efforts in 2018/19 focused on expanding opportunities for wood use in multi-family/multi-storey residential and non-residential construction.

FII's cost-shared investments towards in-person and online continuing education of architects, engineers and contractors on wood and hybrid building systems, mass timber, and western red cedar, including shakes and shingles, helped increase awareness amongst these important and influential audiences. Social media campaigns helped to influence the DIY sector, while digital marketing campaigns were used to expand reach and target value-added applications such as resorts, renovations and high-end homes.

Partnering with the Softwood Lumber Board, the FII-supported Think Wood program refined its focus to target North American architects, developers, residential contractors and remodelers. Its online footprint was expanded to link to a major research library devoted to the latest academic and practitioner research on lightframe, mass timber and taller wood structural systems.



iln Apartments , Portland | Photo: Pete Eckbert

39,804 PRACTITIONER

EDUCATION HOURS DELIVERED THROUGH



170 LUNCH & LEARNS

Influencing wood use in U.S. multi-family/multi-storey

FII's Market Initiatives program invests in education and research to resolve barriers to wood use, encouraging specifiers and design teams to include wood in projects.

WoodWorks continues to encourage design and construction firms to choose wood wherever possible by positioning it as the preferred material for all building types. By boosting interest in innovative applications such as mass timber, they can strategically offer project assistance and education resources to grow the commercial and multi-family market for wood.

Technical content developed by WoodWorks promotes wood solutions to specifiers, helps resolve design challenges, and inspires greater wood use. Two recent papers, one on acoustics and mass timber, and another on practical information on the approved 2021 International Building Code changes relating to taller wood buildings, have been made available to the building community.

These and other resources are available on **woodworks.org**.



Access to technical support led to 319 project conversions in 42 U.S. states, with an estimated incremental wood product value of USD \$675 million.

Code changes create new mass timber opportunities

Following robust committee reviews and research, as well as a U.S. code official visit to UBC's 18-storey Brock Commons Tallwood House, the International Code Council announced in December 2018 that a series of tall mass timber code change proposals were accepted. States that champion wood construction, such as Oregon and Washington, have already moved to accept the ICC approvals prior to publication of the International Building Code in 2021.



Carbon 12 | Photo: Andrew Pogue

Carbon 12, an eight-storey project in Portland, Oregon, was completed in 2018, and at the time was the tallest mass timber building in the U.S. CLT panels were prefabricated for quick installation on site, and offer thermal, acoustic and seismic benefits.

Value-added growth

Twenty-five B.C. value-added producers achieved \$9.7 million in incremental sales facilitated by a BC Wood-coordinated presence at major events across North America, including tradeshows in San Diego, Orlando, San Francisco, Portland and Las Vegas.

With the assistance of BC Wood to organize site visits and to facilitate prospective client contacts, this in-person presence at events afforded B.C. manufacturers the opportunity to connect face-to-face with qualified architects, builders and developers.



International Builders Show, Las Vegas | Photo: BC Wood



Pacific Coast Builders Conference, San Francisco | Photo: BC Wood



One North, Portland | Photo: Andrew Pogue

Encouraging market demand for cedar

Both the Western Red Cedar Lumber Association (WRCLA) and the Cedar Shake and Shingle Bureau (CSSB) have helped foster western red cedar's positive reputation in the U.S.

According to market research conducted in 2017/18 by WRCLA, awareness of western red cedar's advantages over plastic is continuing to drive endorsements and recommendations among U.S. builders and architects.

DIY videos on the WRCLA YouTube channel complemented television spots, along with Facebook, Pinterest and Instagram posts, all of which promoted building with western red cedar products.

Three new case studies were completed by the WRCLA in 2018: the Life House home at

the Killington Ski Resort in Vermont, the Salish Coast School in Port Townsend, WA, and a trio of small-scale DIY projects that stemmed from a Facebook competition where homeowners used plans posted on **realcedar.com**.

In March 2019 the CSSB relaunched their website, which includes a photo gallery featuring cedar roofs and sidings. The site also contains two new continuing education videos on product types, grading, installation and finishing. Available to registered users, the videos can be used to gain continuing education credits from the American Institute of Architects (AIA). An updated FAQ brochure about western red cedar shake and shingles care and maintenance has replaced an older edition, and is available at **cedarbureau.org**.

North America is Thinking Wood

In 2018/19, FII continued its collaboration with the U.S.-based Softwood Lumber Board on the Think Wood communications program, expanding its reach across North America with additional funding support from the Binational Softwood Lumber Council and Natural Resources Canada.

Increasingly, design professionals, developers and building owners in both the U.S. and Canada are searching for news, trends and practical, self-serve resources to stay up-to-date on the latest developments in building and finishing with wood.

Think Wood is the only program that markets structural, exterior and appearance use of wood and lumber- and mass timber-based building systems across the U.S. and Canada through owned, earned and paid online channels.





Building on the successes of past years, Think Wood worked to optimize the website and Research Library, as well as its introductory continuing education materials. Traffic to **ThinkWood.com** increased 55 percent, and over 8,500 design and construction professionals signed up to receive future news and resource updates (a 328 percent increase year over year). Over 380 professionals (up 62 percent over the prior year) requested support and information via the Think Wood website.

Think Wood is now set to pivot towards more targeted and direct engagement of key architect, developer and contractor audiences. Strengthening online access to timely resources and tools, as well as profiling industry expertise and lessons learned will continue to build confidence and capacity and drive demand for wood.

For more information, visit ThinkWood.com.



CHINA

Advancing green building techniques

OVERVIEW AND STRATEGY

As B.C.'s largest market for wood products in Asia, China's increased emphasis on green building and sustainably sourced materials is creating opportunity to demonstrate B.C.'s environmental pedigree in wood construction and manufacturing.

In 2018/19, Canada Wood and FII China continued to pursue opportunities for B.C. forest products in high-value, high-potential applications and leverage government construction initiatives around prefabrication, energy efficiency and sustainability. The program focused on promoting wood use in mainstream construction, particularly hybrid building systems; pursuing new opportunities in select wood construction niches, including tourism and resort sectors; and increasing the use of B.C. wood in China's massive manufacturing sector.

Demonstration projects with key Chinese stakeholders showcased Canadian building technologies and the use of advanced systems, including hybrid wood-and-concrete and prefabricated wood infill wall designs.



Yi Jing Yuan Multi-functional Hall at the Xijiao State Guest Hotel, Shanghai | Photo: Canada Wood China

28 percent of B.C.'s forest products are exported to China.



Hemlock Furniture Trials | Photo: Canada Wood China

B.C. species continue to make inroads in manufacturing

Canada Wood China and the Qingdao Jiuzhou Commodity Exchange Centre signed an MOU in May 2018. Qingdao is the largest city in Shandong Province and a major seaport and industrial area. The exchange centre will encourage Chinese furniture manufacturers to use Canadian wood, and in turn Canada Wood will offer technical training and support. A joint working team will be created to encourage collaboration.

A Chinese furniture manufacturer is switching from a Scandinavian supplier to Canadian SPF after a successful trial with Canada Wood in Guangdong province. Since late 2018, the company has placed two orders for a total of 5,000 cubic metres of SPF for furniture and edge-glued panels. Since the switch to SPF, crews report sharpening planer knives less frequently, reducing running time and lowering costs. Samples of the SPF-made furniture were displayed at the Guangzhou Furniture Fair in March 2019.



B.C. SOFTWOOD LUMBER EXPORTS TO CHINA, VALUE BY PRODUCT

Between 2003 and 2018, softwood lumber exports to China rose roughly 1,350 percent in value (\$69 million to \$1.0 billion) and 1,260 percent in volume (368,000 m³ to 5.0 million m³).

New low-carbon economic zone

In April 2018, China announced the location of a new low-carbon extension of Beijing. The Xiongan New Area, home to some of China's largest wetlands, will initially cover 100 square kilometres, eventually expanding to nearly 2,000 square kilometres—nearly three times the size of New York City. Development of the Xiongan wetlands will focus on ecological protection and well-being, with a ring of communities built around it. The China Railway Real Estate Group and Canada Wood China signed an MOU in June 2018 as part of a long-term strategic partnership to promote wood construction in the New Area and help the emerging development become a low-carbon, smart, livable and globally influential city.



MOU Signing | Photo: Canada Wood China





Taixing Prefabrication Facility, Taixing | Photo: Canada Wood China

Successful demonstrations and commercialization

China's first hybrid wood-and-concrete infill wall building won the International Cooperation of Shanghai Prefabrication Technology award at the Shanghai Prefabrication Innovation Forum in July 2018. Built by Canada Wood China and Shanghai Matechstone Co., the Yantong Demo Project in Changzhou combines wood and concrete in a technique that boosts construction efficiency and reduces costs. The project was completed in early 2018.

The success of Matechstone's Yantong demonstration project has led to the first full-scale commercial application of the hybrid technology in a building envelope. The Taixing project in Jiangsu Province, which combines precast concrete and prefabricated wood infill walls with energy-efficient elements in a two-storey, 2,455 square metre R&D complex, opened in June 2019. The project goal is to encourage the widespread adoption of prefabricated wood infill walls by other contractors.



Matechstone Prefabrication Panels, Taixing | Photo: Canada Wood China



Shimenyu Station, Zhe Jiang | Canada Wood Chine

Green business agreement

An agreement to promote green building practices was struck at an annual Sino-Canada meeting on modern wood construction in March 2019 in Beijing. Representatives from China's Ministry of Housing and Urban-Rural Development (MOHURD), Natural Resources Canada, FII China, and Canada Wood also agreed to extend a wood construction training program to the central and provincial levels of the ministry, and to add more valuable industry professionals to an expert panel.

Government engagement continues to advance the use of wood

FII China continues to work with government stakeholders to increase their understanding of wood-frame construction (WFC). Bilateral discussions and working teams have been established throughout the country to further promote the use of wood in China.

In 2018/19 FII China cooperated with MOHURD's Science and Technology Centre to complete a research project and deliver a prefabrication seminar on WFC, where FII China presented on *Positioning of Modern WFC under the Green Xiongan Concept* in Xiongan. FII China also worked with MOHURD in Shanghai, Jiangsu, Hubei, Sichuan and Shandong on seminars, research programs and reports. Given China's emphasis on green building and low carbon development, FII China continues to promote wood construction from an LCA perspective. Working with the China Academy of Building Research, the largest and most diverse research institution in China's building industry, FII China has initiated an LCA report on eight wood buildings to communicate the environmental benefits of using wood to the Chinese market. The Athena Sustainable Materials Institute completed the report, which will be used to engage domestic stakeholders for potential demonstration projects.



Yunshuijian Leisure Resort, Nanjing | Canada Wood China



Wood sector directory gets an update

China's wood building industry is growing quickly, according to an updated version of Canada Wood's *Directory of Wood Builders and Design Institutes* published in February 2019. The previous edition, which was released five years ago, included just 138 builders and 19 institutes while the update lists 189 builders and 30 institutes. The directory, which was based on a thorough market survey, is available online at **canadawood.cn/supplier-directory**.

JAPAN

Broadening market development activities

OVERVIEW AND STRATEGY

Japan remains an important, highvalue market for wood products. For over 40 years, the B.C. industry has been marketing products to Japan and has developed a reputation as a dependable, high quality supplier.

While Japan is a mature market for single-family housing, trends favouring green building solutions as well as recent government policy encouraging wood use in public buildings is presenting opportunities for B.C. wood products in hybrid, multi-family/multi-storey, and non-residential construction. In 2018/19, FII supported efforts to position B.C. wood products in emerging market segments, such as elderly care facilities and the tourism sector.

Canada continued work with Japanese officials to develop codes and standards for earthquake resistant wood use in taller and larger buildings and for application of Canadian building systems such as mass timber, including nail-laminated timber (NLT), platform-frame construction, and Midply shearwall systems, which are now approved by the country's building code.

Mid-rise seismic testing success

A full-scale four-storey seismic test has successfully demonstrated that platform-frame construction can meet Japan's stringent building codes. The static loading test, carried out in November 2018 at the Structural Composite Test Laboratory of the Building Research Institute in Tsukuba City, was the culmination of six months of planning and preparation by the Japan 2x4 Home Builders Association in collaboration with Canadian technical experts. Reporting showed that the structure sustained less damage than predicted after lateral loads were applied to each floor.



Static Loading Test | Photo: Canada Wood Japan

Log homes in the spotlight

BC Wood invited Japan's Log Home Magazine to attend a photo tour of five member companies and finished log homes in the Lower Mainland and Okanagan. Although European machine-cut log homes currently dominate the Japanese niche market, the magazine's editors have reportedly seen renewed interest in handcrafted log homes, both as primary residences and vacation homes. As a result of the tour, a two-part series on B.C.'s log homes is scheduled to be published in this fall's issue of Log Home Magazine.



Log Home Construction | Photo: BC Wood

Wood pellets transportation commitment

The Wood Pellet Association of Canada (WPAC) organized a mission to Japan in January 2019 with representatives of Pinnacle Renewable Energy, Pacific BioEnergy, and Canadian National Railway (CN), including CEO of CN Jean-Jacques Ruest. The purpose of the visit was to reassure Japanese customers of CN's

commitment to the timely and reliable transportation of wood pellets into the market. The delegation also met with the Japanese Ministry of Economy, Trade and Industry to discuss Canadian wood pellet supply and sustainability.



Showa Shell's Keihin Biomass Power Plant, Kawasaki | Photo: WPAC





Sources: Global Trade Atlas. WPAC research | Wood Pellet Association of Canada

Canada has a 70 percent share of Japan's wood pellet market; B.C. accounts for 90 percent of all Canadian wood pellet exports to Japan.

Midply shearwalls receive recognition in official guide

The first update since 2007 to Japan's Green Book structural design manual—the official platform-frame construction (PFC) structural design guide for building officials and architects—has added Midply shearwalls to its PFC code. The addition, made in 2018, is expected to encourage use of PFC in high- and mid-rise projects, and increase awareness of Canadian shearwall technologies. More than 400 industry representatives turned out in November for the first update seminar, which featured a presentation on Midply shearwalls.



NLT gains approval

Growing Japanese demand for exposed wood in buildings is creating an opportunity for Canadian mass timber suppliers to feature nail-laminated timber (NLT). After consultation with the Japan 2x4 Home Builder's Association, Canada Wood now expects to receive ministerial approval for NLT floor assemblies in quasifireproof applications in 2019, opening Japan's mass timber market for Canadian softwood lumber.



NLT Testing | Photo: Canada Wood Japan

51 percent of elderly care facilities in Japan are made with wood.

Seniors care facilities embrace platform-frame construction

Kamishakujii Kohoen complex is a two-storey, 44-room platform-frame elderly care facility recently completed in Tokyo that uses SPF lumber and OSB from Western Canada. The choice of materials is a direct result of a visit to Canada by the chairman of the facility's owner a decade ago to learn about platform-frame construction. Recently, B.C. Minister of State for Trade George Chow had a chance to tour the site while visiting Tokyo.



Minister Chow (second from right) at Kamishakujii Kohen, Tokyo | Photo: Canada Wood Japan

Canadian wood showcased at Japanese home shows

Canada Wood launched the Canadian R&D Demonstration Centre to more than 27,000 delegates at the Japan Home Show in Tokyo in November 2018. The Centre displayed full-sized structural components and assemblies featuring products developed by Canada Wood. The pavillion, a full-scale demonstration home, showcased Canadian building technology developed by 12 B.C. companies. With steady traffic to the displays, 373 new contacts were developed and surveyed.

A delegation from Ontario joined BC Wood at the March 2019 Nikkei Messe home show in Toyko. The annual event, which attracted 200,000 delegates, is the largest gathering of construction industry professionals in Japan. Highlighting commercial hospitality projects, the exhibits attracted steady attention, as well as new interest from architects planning non-residential wood projects.



Canadian R&D Demonstration Home, Japan Home Show, Tokyo | Photo: Canada Wood Japan

SOUTH KOREA

Developing and diversifying a key market

OVERVIEW AND STRATEGY

South Korea is the fifth largest market for B.C. wood products, and FII continues to support activities to expand wood use in both construction and manufacturing.

Single-family homes remain a major part of the market, but the availability of seismically sound wood systems, such as cross-laminated timber (CLT), has made wood a viable part of taller projects that must meet updated building codes.

Canada Wood is actively working to help educate design and construction

companies and building officials on wood's performance, and implement solutions to address changing building codes and standards. Support for highly energy efficient Super-E® certification training is helping familiarize the Korean construction industry with the environmentally friendly options offered by Canadian wood, through trade show seminars, workshops, and in formal educational settings in B.C. The province is exploring opportunities to capitalize on the Canada-Korea Free Trade Agreement, and has renewed an economic action plan with Gyonggi Province.

Seoul welcomes wood innovators

In August 2018, Canada Wood Korea exhibited at the world's largest international event devoted to innovations in wood and timber construction. The 15th World Conference on Timber Engineering, which is held every two years in different parts of the world, was held in Seoul. More than 600 engineers, executives and academics gathered to explore traditional and modern timber construction technologies and developments under the theme of *Again, Golden Era of Timber*. Canada Wood promoted Midply shearwalls, which meet the seismic demands of Korea's new building code.



World Conference on Timber Engineering, Seoul | Photo: Canada Wood Korea

Canadian treated wood excels in long-term testing

After more than eight years of ground contact, treated Canadian SPF in Korea showed no signs of decay or termite damage, according to a wood preservation expert at the Gyeongnam National University of Science and Technology. Untreated wood samples, by comparison, had all deteriorated significantly. The samples, which had been treated to Canadian standards, were placed at the Jinju field testing site in the fall of 2010.



Jinju Field Testing | Photo: Canada Wood Korea



NIFoS | Photo: NIFoS

Collaboration for social good

Canada Wood Korea collaborated with the Inha University Department of Architecture's Design Research Innovation Lab on an annual social contribution and architectural experimentation project, The Gift. With guidance and technical support provided by Canada Wood Korea, students helped design and build a new pavilion for the Seoksu-dong neighbourhood in Anyang City. The pavilion was constructed using Canadian lumber, and the project has helped Anyang City secure more than \$20 million in national funding for urban regeneration.



The Gift Pavilion, Anyang | Photo: Canada Wood Korea

Building taller with wood

Plans for South Korea's tallest wood building were approved in 2018 after passing structural, insulation and fire-resistance tests conducted by the National Institute of Forest Science (NIFoS). The five-storey, cross-laminated timber building project stemmed from Canada Wood Korea's codes and standard development efforts to increase the scope of wood-frame construction (WFC) and to obtain fire performance certificates for WFC up to five storeys. "The smooth progress of the construction of the tallest wood building is the signal of a new leap in the era of high-rise wood building in Korea," Lee Chang Jae, president of the NIFoS, said. If the project is successful, more tall wood mass timber buildings are expected to be built.

New construction techniques comply with strengthened building codes

Canada Wood Korea is helping meet the demand for earthquake-resistant construction technologies that comply with newly updated building codes. An international workshop at the 2018 Korea Architecture Fair and Festival introduced more than 160 professionals to new construction techniques that resist the lateral forces associated with seismic activity. The workshop, which explored braced-wall provisions for smallscale structures, engineered shearwalls, and high-performance Midply shearwalls, was accredited by the Korea Institute of Registered Architects.

Sharing Canadian expertise

BC Wood participated in the 2019 Housing Brand show in Seoul, hosting a one-day seminar on designing and using Canadian wood interior finishing materials in addition to their annual pavillion this year. Visiting builders showed interest in learning how prefabricated solutions from Canada can help address stricter building codes due to seismic concern, and how they can utilize Canadian engineering expertise in their designs.

WOOD HOUSING IN SOUTH KOREA SINGLE DETACHED UNITS AND MARKET SHARE



Wood innovations combined in demonstration home

A Korean firm, with technology, design and construction support from Canada Wood Korea, has for the first time combined three innovative construction technologies in one building. The demonstration house for the Maple Village Development Project in the City of Yongin-si, Gyeonggi-do Province, was completed by CASE Archiplatform in March 2019. It integrates off-site wood-frame prefabrication, Midply shearwalls, and Super-E[®] certification, making the house inexpensive, earthquake-resistant and energy-efficient. The project is just the first of 20 singlefamily detached houses to be built.



CASE Demo House | Photo: Canada Wood Korea

Hybrid construction opens opportunities in multi-family

A new approach to multi-family home construction that takes advantage of both concrete and wood is being pioneered with technical support from Canada Wood Korea. A three-storey hybrid demonstration house designed by Nova Architects and completed in Seongnam in March 2019 incorporates light-weight, prefabricated wood infill shearwalls along with concrete floors and supporting columns. According to NOVA CEO Seung Hee Kang, "Applying wood infill [shear]walls to multiple-dwelling houses... will contribute to the development of a healthy housing culture, which is one of the main advantages of wood-frame buildings."



Nova Architects Demo Project | Photo: Canada Wood Korea

INDIA

Making inroads in the Indian market

C

(8)

OVERVIEW AND STRATEGY

FII India continues to strategically advance its operations in the Indian market, with strong support from Natural Resources Canada and the Canada Wood Group. Over the next 15 years, India's projected wood fibre supply-demand gap is estimated to be 35 million cubic metres, assuming the country's economy continues to grow at a moderate five to six percent per year. This highlights the potential opportunity for B.C. softwood, as India's wood products industry will need to address this deficit by exploring new species and sources. Branded as Canadian Wood, FII India stays focused with efforts on product trials and demonstration projects. The work done to grow market share for Canadian softwood species, continues

through education, promotion and market outreach programs.

With India's expanding economy and diminishing global supply of hardwood species, there is an opportunity to continue to position B.C. wood in the furniture manufacturing industry, including applications such as doors, windows, architectural millwork and furniture.

Awareness of the advantages of prefabricated and on-site light woodframe construction is growing thanks to FII-supported training courses in India. At the same time, incoming architectural tours of luxury homes in B.C., are enabling Canada's wood products to gain exposure in India.



Hemlock Product Trials | Photos: FII Indi

Furniture trials drive orders

Through the "Try Canadian Wood" program, FII India introduced key user groups to B.C. softwood lumber by providing a small sample volume of lumber to qualified manufacturers for product trials. The team provides technical assistance to ensure that the trials are successful, and through ongoing follow-up ensures that connections are made to local stockists for commercial orders, or that enquiries are sent to B.C. lumber companies. In 2018/19, more than 26 product trial and commercialization projects have been completed, and another 45 are ongoing.

One of the most successful trial programs has been in the state of Rajasthan. Targeting the Rajasthan furniture export manufacturing hub has led to conversions from hardwoods to B.C. softwood species, as well as commercial orders from overseas buyers. Two successful trials of note include Jodhana Arts and Crafts, where furniture samples made from western hemlock were approved for sale from Crate & Barrel (U.S.) and Freedom (New Zealand). Metal World, Hyderabad, has also placed a commercial order for 1,500 yellow cedar door frames.



Hemlock Trial, Rajasthan | Photo: FII India

B.C. softwood lumber exports to India



COASTAL SPECIES



FII India continues to find opportunities for B.C. species to displace hardwood in the market, and coastal species are finding increasing market acceptance in a number of applications. Over the last four years, the value of coastal species going into the market has increased, due in large part to the efforts FII India has made in building a business case for the use of species such as western hemlock and yellow cedar to fill the market gap caused by the dwindling global supply of hardwoods. Share of softwood imports has increased 12 percent in 5 years.

SHARE OF SOFTWOOD VS HARDWOOD IMPORTS BY VOLUME



Education and outreach target key stakeholders

In continuing the efforts to educate the Indian market FII India delivered 24 educational seminars and 36 training workshops in different cities in 2018/19. This outreach targeted high profile architects, interior designers, manufacturers, contractors, carpenters and wood importers to increase awareness of B.C. as a sustainable source of certified wood, as well as B.C. species, their properties and applications.

FII India relaunched their website, integrating additional resources and a project gallery to help improve knowledge of using B.C. softwood lumber. Significant work has been done to increase demand for B.C. forest products in market, which has enabled an expanded domestic supply chain.



Significant increase in stockists

FII India has worked on increasing stockists (importers) who carry inventory of B.C. species to enable immediate access to lumber on the ground, which eliminates long shipping times and creates easy, reliable access to Canadian wood. The total number of stockists is currently at 29 across India, a substantial increase from having only one or two suppliers operating in market in 2014.



The Pallet Brewhouse & Kitchen, Bengaluru | Photo: FII India

SPF interior design wins international awards

The Pallet Brewhouse & Kitchen in Bengaluru has won several international awards for its interior design, which features B.C. SPF. The Pallet's interior uses softwood lumber in a pallet design, and the material choice was a direct result of ongoing dialogue between FII India and the project's architect. Chosen for design flexibility and ready availability, the finished project used more than 1,300 cubic feet of SPF.

Showcasing what's possible with wood

In November 2018, Canadian Wood won the most sustainable design booth award at the Greenbuild India conference in Mumbai. The conference gave Canadian Wood the opportunity to celebrate sustainable practices with over 4,000 architects, designers, builders and buyers at the four-day conference and exhibition, which was attended by more than 18,000 sustainability professionals.

In March 2019, a delegation of B.C. forest industry representatives travelled to India as part of a mission to visit local manufacturers and to take part in DelhiWood 2019. The 250 square metre Canadian Wood booth welcomed more than 2,000 visitors, as the show brought together timber traders, importers, wholesalers and stockists from all over India.



Architectural delegation inspired by B.C.'s use of wood

Eighteen of India's leading architects visited B.C. in November 2018 to gather information about the advantages of building with softwood lumber. The delegation met with technical and engineering experts and were given private tours of luxury homes in Whistler.

As a result of this mission, there has been a significant uptake in demand for Western-style luxury construction. A prominent design firm is India is currently working with a B.C. architect to replicate an 18 million dollar Whistler home in-market.

Light wood-frame training

Interest is growing in India for light wood-frame construction applications, particularly for the tourism sector and for use in public and recreational buildings. In 2018/19, FII India conducted two training courses to promote North Americanstyle light wood-frame houses to wood working companies in India. These workshops received an overwhelming response with 33 participants from 24 companies attending.

As a result, Pyramid Timber Associates Ltd., a manufacturer of high-end doors and doorjambs, is currently constructing a 2,000 square foot wood-frame show home for future resort type projects. They intend to construct a total of four show homes on their factory property. FII India has provided wood products and construction supervision on the Pyramid project, to ensure it is built to North American standards. Pyramid has committed to working with FII India to assess the reaction in the market to wood-frame construction and to share customer feedback and market intelligence.



Pyramid Demo Project, Mysuru | Photo: FII India

VIETNAM

Raising the profile of Canadian products

FII Branch Office and Tavico | Photo: FII

OVERVIEW AND STRATEGY

As the second largest Asian exporter of furniture after China, Vietnam's valueadded wood products processing has now outpaced the growth of domestic wood supply, presenting opportunity to introduce the import of B.C. species for use in furniture and other manufactured goods. Product trials and demonstration projects have figured prominently in efforts to expand the market for B.C. wood. Given the positive signs from early market exploration FII has opened a branch office in market, and is working to raise the profile of Canadian products at trade shows and with advertising campaigns.

In 2018/19, with funding support from NRCan, investments focused on identifying opportunities for B.C. species in the Vietnam furniture market and introducing key players in the supply chain, including importers, distributors and end users to B.C. species. The response suggests considerable opportunities for B.C. firms willing to invest in developing relationships with Vietnamese manufacturers.

B.C. wood in Vietnam

FII made important strides raising the profile of Canadian wood products in 2018/19. Over the past year the team represented Canada's forest products manufacturers at two international furniture and home accessory fairs, BIFA Wood Vietnam, which welcomed 4,000 delegates in October 2018, and VIFA-EXPO, with more than 12,000 international delegates in March 2019.

A range of marketing materials, including wood samples, publications and promotional signage were created and distributed in the Vietnam market to drive awareness. In addition, a new website, **canadianwood.com.vn**, was launched, available in both English and Vietnamese. These efforts have supported the potential of B.C. softwood lumber in Vietnam's manufacturing industry.



Successful product trials drive orders

Mirrored after India's "Try Canadian Wood" program, FII supplied small quantities of Canadian softwood species to strategic groups of manufacturers to try the products locally. Product trials are a low-cost way to encourage new audiences to sample Canadian products, and showcase the use of species that are not well known in Vietnam, particularly in the furniture, door and window sector. Feedback from customers on appearance, and manufacturers on performance, strength and durability has been overwhelmingly positive, and multiple quotes have been requested.

Seventeen product trials were successfully initiated in Vietnam in 2018/19, with many additional trials in the pipeline. Two of the product trial companies have received an initial order for tables made from B.C. western hemlock. Over 400 units were delivered to showrooms in the United States, with a goal of driving larger scale future orders.

One door manufacturing company ordered three containers of SPF and three containers of western hemlock to produce 800 doors for the local market. SPF will be used as the door core, and will be overlaid with hemlock.



Hemlock Furniture Trials | Photo: Fll

RESOURCES FOR INDUSTRY

Westview Elementary, Powell River | Photo: Ed White Photographics

FII hosts a number of resources available online, all aimed at maintaining B.C.'s reputation as a global leader recognized for its high-quality wood products, sustainable forest management and leadership in advanced wood technologies and building systems. Additional data and reports ensure that B.C. organizations have access to information critical to their efforts in overseas markets. With more than 300 resources covering more than a dozen markets, over 40 were published in 2018/19.

All resources are available to the B.C. forest sector and FII partners at no charge. For access, visit **bcfii.ca**.

Market research and reports

A collection of resources created by industry leaders aimed at analyzing market-specific trends impacting the forest sector. They provide key insights to B.C. organizations with a presence overseas, and for those looking to further diversify their businesses.

Technical & environmental research

Research conducted by key players in the academic research and built environment sectors that help organizations understand the technical and environmental aspects of using wood. Topics range from technical data to the qualitative analysis of wood use in various project types and knowledge sharing of innovative building technologies.

Export data and statistics

Market data relating to the export of B.C. softwood lumber products is shared on a monthly basis, as updated by B.C. stats. Research also includes key data and statistics regarding the B.C. forest sector.

Think Wood research library

An online tool that hosts more than 1,600 research reports, academic journal publications, conference proceedings and books related to mass timber and light wood-frame structural systems. It includes the latest research found on scientific databases and journals, research organizations, and private corporations from around the world.

Image and video library

Download and use any of our 3,000+ high-quality professional photographs at no charge. Raw video footage is also available upon request.

For access, visit imagelibrary.bcfii.ca.

Marketing materials

Developed by FII, **naturally:wood** is a comprehensive information resource that promotes B.C. as a source of quality, environmentally-responsible forest products from sustainably managed forests. It includes details on B.C. forest management, forest products and species, wood design and emerging trends.

Visit **naturallywood.com** to explore these and many more resources.

Sustainable forest management

FII provides research and materials that highlight B.C.'s status as a global leader in sustainable forest management. New publications include:

- How Technology is Transforming B.C.'s Forest Sector video
- Comparing B.C. to the World: Forest Regulation and Certification factsheet
- B.C.'s Sustainable Forest Management Practices factsheet

Forest products and species

B.C. produces a wide variety of wood products using more than 40 species of native trees. Popular resources include:

- Softwood and hardwood species descriptions
- Forests, Wood and Climate Change factsheet

Wood design in B.C.

Wood can be used in many types of buildings, from single-family homes to condominiums, multi-storey offices, schools, industrial facilities, recreational centres and arenas. Popular resources include:

- Online virtual tours: Mountain Equipment Co-op Head Office, Brock Commons Tallwood House and Samuel Brighouse Elementary School
- Project Gallery

The **naturally:wood** Supplier Directory lists 450+ B.C. forest product companies and is searchable by product, species and export market. There were over 23,300 interactions with companies listed in the directory in 2018/19.

To join the list, contact info@naturallywood.com.

Emerging trends

Materials that showcase how advances in wood science and building technologies are expanding opportunities for wood in construction are available. Popular resources include:

- Mass timber case studies, videos and research reports
- Wood Innovation Research Lab case study
- Wood Use in B.C. Schools report

WOODBC

Wood Innovates BC profiles the latest B.C. expertise, wood design resources, and workshops, to encourage exchange on technological developments, research, building and manufacturing efficiencies and innovations. To learn about the support available to industry, visit **woodinnovatesbc.ca**.



naturally:wood® has developed:



Profiles of B.C. projects using wood in structural and finishing applications



Videos on sustainable forest management in B.C. and leading-edge wood innovations **450+** B.C. forest product company listings in the naturally:wood Supplier Directory





CORPORATE OFFICE 1200 - 1130 WEST PENDER STREET VANCOUVER, BC CANADA V6E 4A4 T 604 685 7507 | F 604 685 5373 INFO@BCFII.CA | WWW.BCFII.CA