



FORESTRY INNOVATION INVESTMENT

YEAR IN REVIEW

2019/20



Forestry Innovation Investment®

“From time out of mind, Tsleil-Waututh, the People of the Inlet, have relied upon the land and water resources of their traditional territory. As the Nation, new seat of government, the Administration and Health Centre continues this tradition by using as much local timber and other natural resources as possible to build a sustainable and resilient reflection of the Tsleil-Waututh community and environment.”

*Dale Komanchuk,
Director of Public Works
Tsleil-Waututh Nation*

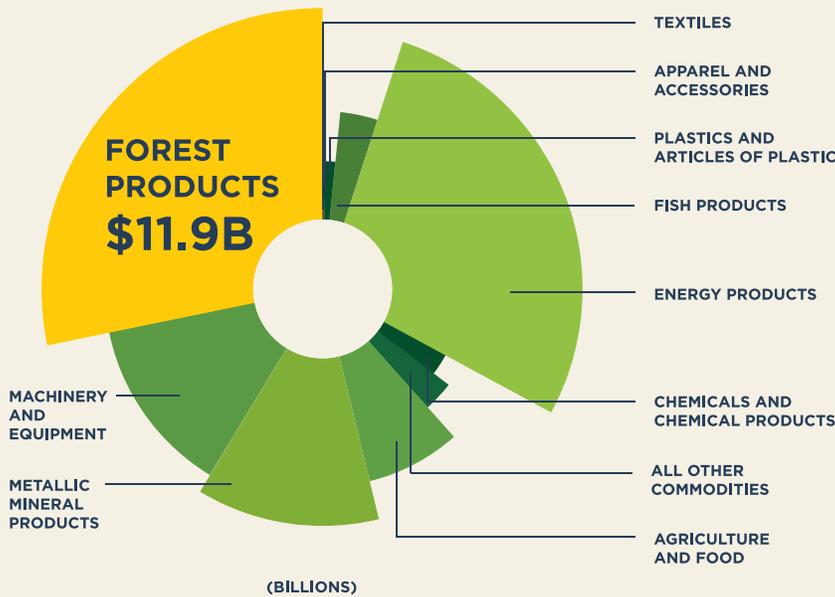


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BUILDING A STRONGER



FOREST PRODUCTS



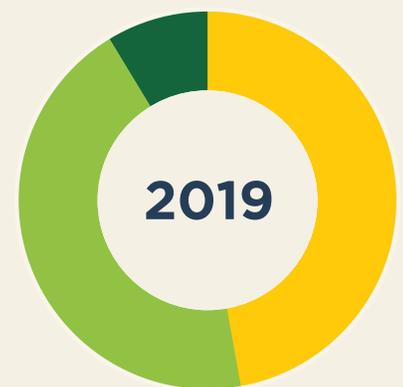
REPRESENT
27.4%

OF B.C.'S COMMODITY
EXPORTS

MARKET DIVERSIFICATION

GROWTH OF FOREST PRODUCT EXPORTS TO ASIA

FROM 2003 - 2019
THE PROPORTION OF
B.C. EXPORTS
TO ASIA HAS ALMOST
DOUBLED



● ASIA ● US ● REST OF THE WORLD

FOREST ECONOMY

ANNUAL HARVEST

TOTAL AREA OF B.C.
95 MILLION HECTARES

FORESTED LAND BASE
60% OF TOTAL

**LAND AVAILABLE FOR
TIMBER HARVESTING**
21% OF TOTAL

ANNUAL AREA HARVESTED
0.2% OF TOTAL

**NUMBER OF SEEDLINGS
PLANTED IN 2019**
OVER 237 MILLION



\$991 MILLION

B.C. PUBLIC REVENUE GENERATED IN 2019/20
THAT SUPPORTS HEALTH CARE, EDUCATION
AND INFRASTRUCTURE



THE FOREST SECTOR
GENERATES OVER
140,000
JOBS IN B.C.
(DIRECT, INDIRECT
AND INDUCED)

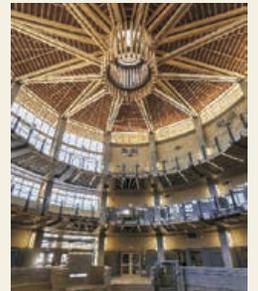
B.C. WOOD USE

B.C. HAS BUILT **MORE THAN HALF OF**
ALL MASS TIMBER BUILDINGS
IN CANADA.



**SINCE 2007, MASS
TIMBER HAS BEEN USED
IN OVER 370 BUILDINGS
IN B.C., INCLUDING:**

- 130 CIVIC AND RECREATIONAL BUILDINGS
- OVER 90 SCHOOLS AND EDUCATIONAL FACILITIES



Minoru Centre for Active Living (top) | Photo: Lucas Finlay Photography; Abbotsford Senior Secondary School (middle) | Photo: Aaron Millar; North Surrey Sport and Ice Complex (bottom) | Photo: Nancy Silva Grife



MESSAGE FROM THE CEO

In this time of global economic and geopolitical challenges, exacerbated by COVID-19, advancing a long-term market development strategy for B.C. forest products is of critical importance to supporting the forest sector and the many jobs and communities that rely on it. On behalf of the Province, Forestry Innovation Investment remains focused on diversifying and expanding markets for B.C. forest products at home and abroad.

Global recognition of wood as a sustainable building material that advances climate change objectives is presenting significant opportunities to promote

B.C. wood species as a preferred choice for manufacturing and construction applications. FII's programs are helping to position B.C. forest products in existing priority markets, including the United States, China, Japan, South Korea, and in emerging markets like India and Vietnam. Using a collaborative delivery model, in partnership with industry and the federal and B.C. governments, FII is working to address barriers to wood use, support the expansion of building codes and standards, educate target audiences on what is possible with wood and demonstrate the performance and beauty of B.C.'s wood species.

Alongside efforts to enhance the value of B.C.'s forest resource, exciting opportunities for innovation exist in the use of B.C. wood and building technologies. As the Province focuses on reducing regulatory hurdles for mass timber use, FII is working to address technical barriers, build capacity in the design and construction community and advance opportunities for building taller with wood. By demonstrating leadership at home, B.C. can export its building products and its expertise, showcasing the province as a global leader in wood construction.

Over the past two years, FII has been working with its partners in the federal government and Canada Wood to update performance management capabilities both within FII, as well as across the many programs that it funds. This work, which is based on a variety of new analytical tools, is helping FII and its partners monitor, assess and act on performance information across our many program areas. This edition of the Year in Review draws on this work to introduce the results for a number of key performance indicators. We hope you find them of interest.

Finally, it's important to recognize that our province, the country and the world have changed dramatically in the period since we first started planning for this publication. In just a few short months, COVID-19 has spread around the world creating unprecedented economic disruption. FII and its partners will continue to support the Province's economic recovery by ensuring that our products and innovative solutions remain front-of-mind with customers and stakeholders in all of B.C.'s key markets.

This 2019/20 Year in Review highlights some of the key market development activities that are underway and the many partners involved in projects that are supporting B.C.'s forest sector. 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

FII's Core Objectives



PROMOTING THE MERITS OF WOOD AND B.C. FORESTS

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.



Forestry Innovation Investment®



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.

An aerial photograph of a lush green forest bordering a dark, calm body of water. The forest is dense with tall evergreen trees. The water reflects the surrounding greenery. A blue semi-transparent overlay covers the bottom left portion of the image, containing white text.

FORESTRY INNOVATION INVESTMENT

Strengthening and
diversifying markets for
B.C. forest products



Photo: Swanky Photography



Reforestation in Sayward Forest, Vancouver Island, B.C. | Photo: Brudder Productions

Forestry Innovation Investment (FII) helps maintain, create and diversify markets for B.C. forest products to ensure the forest sector continues to be a key contributor to the B.C. economy.

FII works in collaboration with the forest industry, research institutions, the federal government, B.C. government and other stakeholders to deliver innovative, forward-looking programming that responds to today's market dynamics, as well as tomorrow's challenges and opportunities. FII does this by delivering and co-funding a mix of research, product testing, market development, promotion and stakeholder engagement programs.

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

The Wood First program advances innovation in wood use and wood construction technologies in B.C., while positioning the province as a showcase for forest products in construction, interior design and daily living.

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

Market Outreach focuses on taking advantage of two significant trends in the marketplace — the emerging recognition of wood products as renewable and sustainable, and increasing demands from consumers for forest products that are produced in an environmentally responsible manner.

The intent is to expand 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.



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

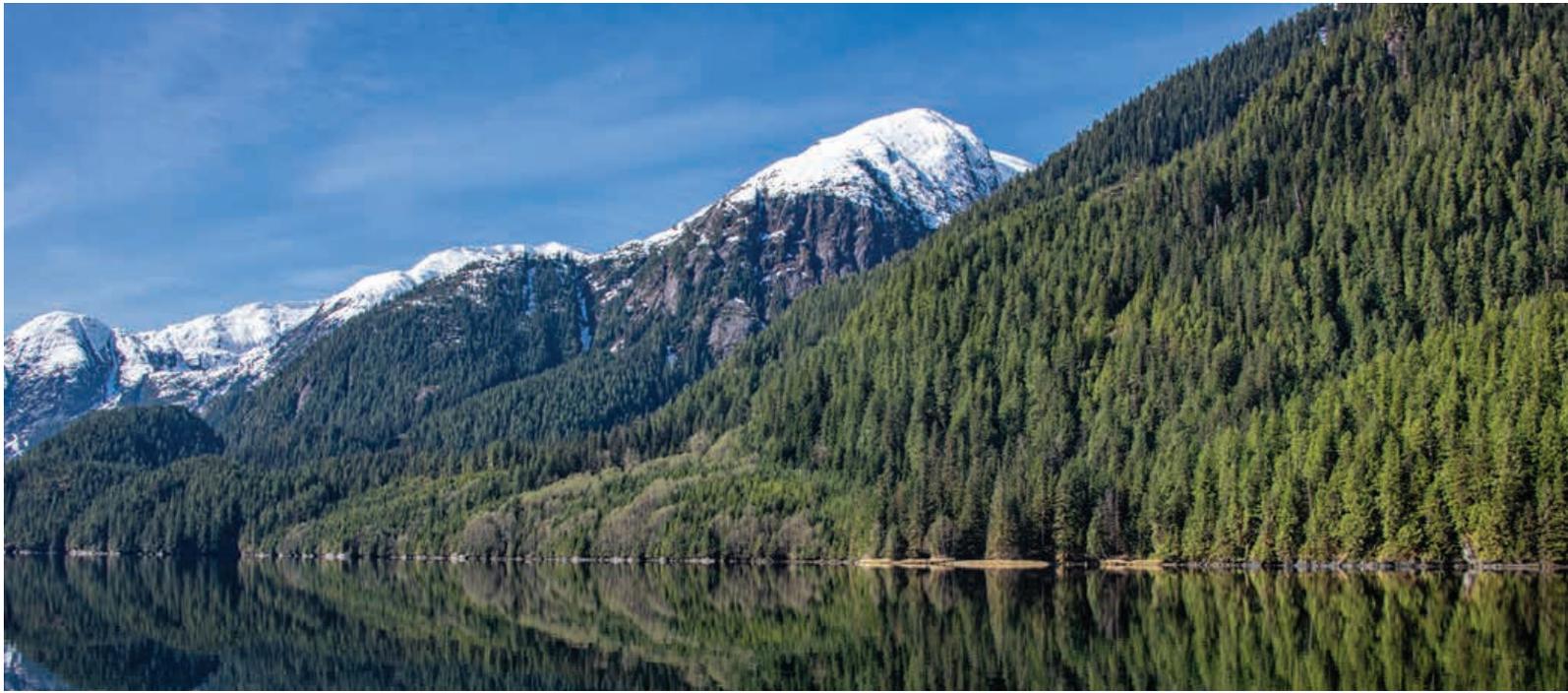
MARKET INITIATIVES | BUILDING MARKETS IN ASIA AND NORTH AMERICA

The Market Initiatives program encourages the development of export markets and new market segments, particularly in the fast-growing markets of Asia. 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 for B.C. wood products in North America with high growth potential, such as the multi-family and mass timber/tall wood sectors.

FII operates subsidiaries in China, India and Vietnam. In China, FII focuses on government relations activities, with Canada Wood directing market development programs. FII activities in India and Vietnam, both newer operations, encompass all elements of pre-commercial market development, including: conducting research; reducing regulatory barriers; undertaking early market development; raising the profile of B.C. forest products; and supporting market entry activities by the forest sector.

More detailed descriptions of FII's programs and overseas office activities are available at **bcfii.ca**.



Cascade Inlet, central coast of B.C. | Photo: Michael Bednar



PERFORMANCE MANAGEMENT

In 2019, FII undertook a review to update its Performance Management Framework. Last updated in 2012, the Framework sets out the approach that FII is using to monitor, assess and act on performance information at the project, program, market and corporate levels. The Framework ensures a strong linkage between FII's goals, objectives, activities and intended results, and provides FII with the information necessary to evaluate the effectiveness of its programs and to continually improve performance over time.

The updated Framework draws from lessons learned over the past 15 years of working with industry and government stakeholders and is fully aligned with the FII Strategic Plan for 2018/19 – 2022/23, as well as the FII Service Plan for 2019/20 – 2021/22. The FII Performance Management Framework is posted on the bcfii.ca website.



PARTNERS IN MARKET DEVELOPMENT

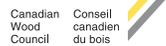
Working together
to deliver innovative
programs in B.C. and
around the world

\$1=\$3.65

Every dollar invested by FII is supported by an additional \$2.65 in funding from industry, government and other partners. This year, FII's \$7.26 million investment was leveraged to a total market diversification program of \$26.5 million.

Cooperation and partnership between government, industry and other stakeholders remains a key strength of the B.C. forest sector. To deliver forward looking, innovative market development programs, FII worked with more than two dozen industry trade associations, government departments, research institutes and universities in 2019/20.

This collaborative delivery model allows FII to draw on the expertise of industry and government while minimizing duplication and maximizing resources to achieve a greater impact. The result is a coordinated approach that delivers a broad range of benefits to the sector.



Centre for Interactive Research on Sustainability
Centre for Advanced Wood Processing



Natural Resources
Canada

Ressources naturelles
Canada



Global Affairs
Canada

Affaires mondiales
Canada

The image shows the interior of a large recreational facility. The most prominent feature is the ceiling, which is a complex, exposed wooden truss system. The trusses are made of light-colored wood and are arranged in a series of parallel lines, creating a rhythmic pattern. The ceiling is supported by large, angled wooden columns that are bolted to concrete bases. In the background, an ice skating rink is visible, with several people skating. The floor is made of concrete, and there are wooden bleachers with metal railings in the foreground. The lighting is warm and even, highlighting the natural grain of the wood.

BRITISH COLUMBIA

Promoting
leadership and
celebrating
innovation

OVERVIEW

In 2019/20, FII continued to advance wood use and innovative wood construction technologies in the province to support industry growth and capacity building for the overall benefit of British Columbians. B.C. is an early adopter of new products and approaches to building with wood, including taller buildings, mass timber and engineered wood products, leading to regulatory change in advance of other Canadian and U.S. jurisdictions.

As more architects and developers embrace these advancements, B.C. will further enhance its capacity to provide design, engineering and construction services to projects across North

America and around the world, as well as supply the higher-value wood products required by these ventures.

This leadership provides added credibility to FII investments that promote the benefits of advanced wood construction technology across Canada, in the U.S. and in priority markets in Asia. These efforts reinforce and complement initiatives that position wood as an environmentally friendly, preferred building material, emphasize B.C.'s credentials as a reliable supplier of quality products from sustainably managed forests and highlight the role wood construction can play in the fight against climate change.



Cheakamus Centre | BlueShore Environmental Learning Centre, Brackendale, B.C. | Photo: Michael Elkan Photography

MASS TIMBER BUILDINGS ON THE RISE IN B.C.

For over a decade, B.C. has been building with new and innovative mass timber products and systems. In over 370 schools and community centres, residences and offices, tourist destinations and manufacturing facilities, mass timber is making a whole new generation of high-performance buildings possible.



UBC Brock Commons
Tallwood House
Vancouver
CLT, glulam, PSL



Surrey Memorial Hospital
Emergency Department
& Critical Care Tower
Surrey
glulam



StructureCraft
Abbotsford
DLT, glulam, LSL, NLT



Richmond
Olympic Oval
Richmond
hybrid glulam-steel arches



P'egg'ig'ilha
Community Centre
Lillooet
CLT, glulam



Wood Innovation
and Design Centre
Prince George
CLT, glulam, LVL, PSL



UBC Earth Sciences
Vancouver
CLT, glulam



École Au-cœur-de-l'île
School
Comox
CLT, glulam



Pacific Autism
Family Centre
Richmond
glulam, LVL, NLT



Pentiction Lakeside
Resort/West Wing
Pentiction
CLT, glulam



Audain
Art Museum
Whistler
LSL, PSL



Brentwood
Station
Burnaby
glulam, NLT

For more information visit naturallywood.com

Positioning B.C. as a world leader

97%

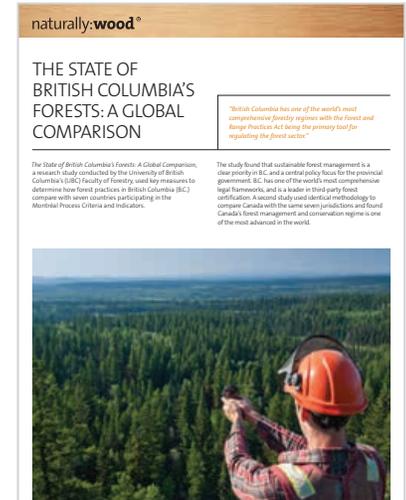
OF INTERNATIONAL CUSTOMERS AGREE B.C. FOREST PRODUCTS ARE A GOOD CHOICE FOR THE ENVIRONMENT¹

¹ When compared to competing jurisdictions. (Based on a survey of international forest sector customers conducted by FII and the Canadian Council of Forest Ministers.)

Research reinforces B.C. is a global leader in sustainable forest management

B.C.'s reputation as a leader in sustainable forest management has been reinforced by a peer-reviewed research study conducted by the University of British Columbia's Faculty of Forestry. *The State of British Columbia's Forests: A Global Comparison* used four key factors — legal framework, management plans, stakeholder involvement and data collection, to compare B.C.'s State of the Forests Report to those of the European Union, Australia, China, Japan, New Zealand, Russia and the U.S.

The study found that B.C. has one of the world's most comprehensive forest regulation regimes and a deforestation rate that is among the lowest in all the jurisdictions studied. A parallel report that compared practices across Canada to other jurisdictions found that Canada's forest management and conservation regime is one of the most advanced in the world.



Factsheet available on naturallywood.com

Connecting buyers and sellers quickly and easily

2019/20

NATURALLY:WOOD SUPPLIER DIRECTORY

14,860

SEARCHES AND REFERRALS TO COMPANY WEBSITES AND EMAIL ADDRESSES

The naturally:wood Supplier Directory helps potential buyers find forest products made in B.C. To make the online directory even more effective, the website was optimized to allow for searching by species, features (e.g. kiln dried), country/regions exported to and forest certification. The directory covers a wide range of quality, eco-friendly forest products, from dimension lumber, mass timber and specialty products, to furniture, doors and windows, pulp, paper and wood pellets.

Contact info@naturallywood.com to ensure listing in the Supplier Directory





Global Buyers Mission trade show floor (above) and an international buyer and interpreter meeting with an exhibitor at the Global Buyers Mission (below) | Photos: BC Wood

Global Buyers Mission: showcasing B.C.'s leadership at home and abroad

BC Wood's 16th Annual Global Buyers Mission (GBM) in September 2019 was another success. More than 700 delegates, including international wood buyers, B.C. architects and representatives from the forest products industry attended the event.

Several exhibiting companies were new to the GBM, offering returning buyers additional opportunities and products not previously seen at the event.

To date, it is estimated that the 2019 event generated more than \$30 million in incremental sales. Buyers new to the GBM made up more than 60 percent of those firms making purchases through the event.

The solid reputation of the GBM was reflected in an 80 percent approval rating by participants, an increase from previous years.

Demonstrating B.C. wood product use in foreign markets

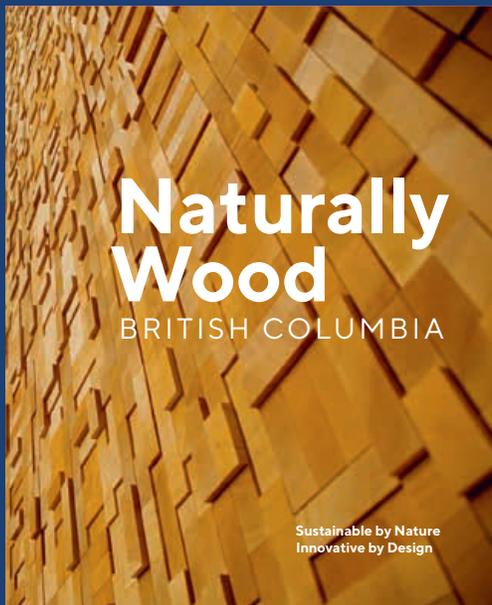
FII completed two case studies, *Wood in Hospitality & Tourism* and *The Benefits of Wood in Assisted Living Facilities*, in response to requests from overseas partners to develop promotional pieces in support of work in these market segments. The studies feature projects in B.C., China, Japan and India that incorporate B.C.'s innovative wood and mass timber products. To extend market reach, both publications are being translated into Mandarin and Korean.

Case studies available at naturallywood.com



Naturally Wood showcase amplified through B.C. campaign

FII leveraged the content of the *Naturally Wood* online showcase and book, published in 2018/19, through a multi-media campaign to reach new audiences. Thirty articles were circulated to news outlets through a targeted media strategy and were further amplified on social media. The book was stocked across B.C. — including BC Ferries, BC Royal Museum, Museum of Anthropology, UBC Bookstore, Squamish Lil'wat Cultural Centre, Audain Art Museum, Hager Books and Munro Books — exposing British Columbians to B.C.'s leadership in wood architecture and design. There were over 780 downloads and over 2,000 hard copies were distributed.



Digital copies and details on obtaining print copies are available at naturallywood.com or via Amazon

Hazelton shows how building with wood creates community

When the Village of Hazelton had to replace its 40-year-old arena due to safety concerns, they knew they wanted to build a centre not only for the community, but with the community. Using an FII-funded, BC Wood 2014 report called, *BC Wood Arenas — Design and Construction of Wood Recreational Facilities* as a guide, the community was able to easily build a new recreation centre with wood. Local labour built the prefabricated wood wall and roof panels on site, and the wood roof is supported by glue-laminated timber beams and columns sourced from B.C. FII and BC Wood produced a video on the project, *Upper Skeena Rec Centre: Building a Community*, with a social media campaign to promote the good news story.

View the video at naturallywood.com



Upper Skeena Recreation Centre, Hazelton, B.C. | Photos: Erna Peter Photography, courtesy Hemsworth Architecture

Cracking the code

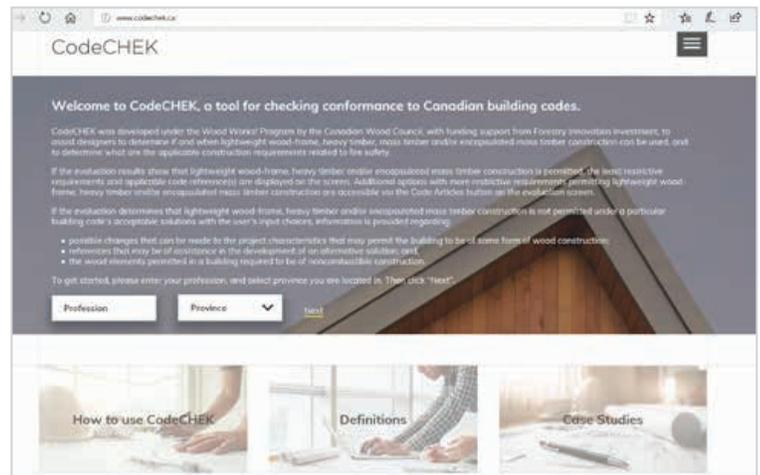
B.C.'s early adoption of the 2020 National Building Code that allows timber buildings up to 12 storeys is driving interest in taller wood buildings. FII has launched a series of initiatives to support and build technical capacity such as the development of detailed guides and education and technical support for design and construction professionals.

Funding research, profiling leading projects and supporting cross-government collaboration are helping to showcase benefits and lessons learned.

As demand for new approaches to building with wood grows, there is a corresponding demand for professionals skilled in advanced wood building design, construction firms that can build these new structures and the specialized wood products required for these projects.

FII and our partners are helping to strengthen capacity in B.C. across these sectors. FII's efforts include funding research to assist with regulatory changes, delivering education programs and networking events to grow the profession, optimizing supply chains and overcoming specific barriers to greater wood use.

STRENGTHENING CAPACITY TO BUILD WITH WOOD



Web-based CodeCHEK speeds up building design

As wood-based building systems become more popular in commercial and multi-storey residential sectors, many developers want to incorporate more wood into their projects. However, with varying building codes across the country, building designers are often unsure as to when and how they can build with wood.

The Canadian Wood Council has created CodeCHEK, a new web-based tool to help designers quickly determine what type of wood-based construction is allowed for their projects under local building codes.

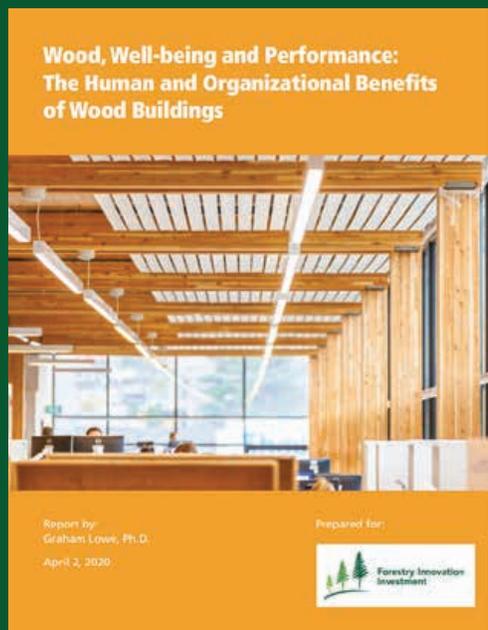
Based on project data input by the designer, CodeCHEK reports if and when lightweight wood-frame, heavy timber, mass timber and/or encapsulated mass timber construction can be used. It also outlines applicable construction requirements related to fire safety and code requirements for permitted projects. If CodeCHEK concludes that wood use is not permitted, it lists options for meeting code requirements and refers the designer to case studies and other resources to assist in redesigning the project.

Visit the tool at codechek.ca

Mass timber research highlights

To grow the knowledge base for designing and building mass timber and taller wood projects, FII funded extensive research in 2019/20, including:

- A summary of world-wide research into biophilic construction (designs that emphasize natural elements, including the extensive use of wood products)
- Design solutions adapting mass timber engineering to healthcare facilities
- A review of potential options to mitigate issues raised by the finance and insurance sectors regarding wood use in larger projects
- A study to identify technical or other impediments to using hem-fir in mass timber products



Since 2007, B.C. has built **MORE THAN HALF** of all mass timber buildings in Canada.

Addressing mass timber research gaps and priorities

Mass timber has made significant advances in recent years as a building system for larger structures, but further work is needed to make it commercially competitive with traditional approaches. To ensure the most significant barriers are dealt with, FII and Natural Resources Canada commissioned the *Survey to Identify Mass Timber Research Needs and Priorities* in 2019/20 to outline these barriers and make recommendations on how to close these gaps.

The survey concluded that the most significant barriers are related to design competency and delays in adopting new technologies and design specifications. Some specific technical issues were also identified. The report confirmed the need for a database to share information on research projects, and the creation of a research network to improve collaboration.

Developed and maintained by FII, a searchable research library (research.thinkwood.com) acts as a foundation for such a database solution — connecting researchers and practitioners with resources on mass timber and other advancements in wood construction. The database has over 1,760 research resources on mass timber, with links to download reports and information.

Visit the library at research.thinkwood.com

Supporting building professionals

Recognizing the need to support early adopters and foster the uptake of mass timber buildings, four case studies were developed to make it easier for specifiers and engineers to incorporate emerging building system methods into their practice. Through a collaborative process between architecture, engineering and construction leaders in B.C., barriers to mass timber adoption were explored and design solutions were developed into diagrams, drawings and key project considerations. The case studies and Revit drawings are being communicated to stakeholders through **naturallywood.com**.

Best practice design approaches and details for affordable, efficient, zero emissions wood buildings have been captured as digital models by the Zero Emissions Building Exchange (ZEBx). Developed following a series of workshops with B.C. architecture, engineering and construction professionals, the models are available for free on naturally:wood, ZEBx and other websites. Supported by the Vancouver Regional Construction Association, ZEBx is a collaborative organization supporting the development of zero emissions buildings in Vancouver and B.C.

Strengthening manufacturing and building capacity

Efforts continued in 2019/20 to build capacity in wood manufacturing sectors. An example of this is an ongoing series of industry workshops held by BC Wood. The workshops targeted small- and medium-sized firms and included marketing, business fundamentals and updates on new technologies and applications.

The strong industry interest in the workshops, as shown by the attendance records, reflects the steady interest among owners and managers for professional development.

UBC's Centre for Advanced Wood Processing also conducted industry workshops focused around new technologies and applications of robotics.

Promoting careers in the wood sector

With shifting industry requirements and many baby boomers entering retirement, the wood construction sector offers extensive career opportunities for young people. To help meet this demand, in 2019/20, FII supported the development of the Construction Foundation of BC's Skills Ready for Wood Initiative.

The program engages youth in a meaningful way to support the exploration of careers in the wood construction industry. The programming includes showcases in areas where there are active wood manufacturing industries and an augmented reality app that gives students the ability to learn more about products and career paths in the industry.

11 B.C. COMPANIES ADOPTED DIVERSIFIED APPLICATIONS OF **MANUFACTURING TECHNOLOGIES, SPECIES AND/OR PROCESSES**

203 B.C. COMPANIES PARTICIPATED IN SEMINARS/WORKSHOPS DESIGNED TO **BUILD SKILLS IN THE AREAS OF BUSINESS, MARKETING, DESIGN AND TECHNOLOGY**



Construction Foundation of BC's Skills Ready for Wood Initiative | Photo: Construction Foundation of BC

Wood construction costing workshop for taller wood buildings

Uncertainty over the cost of mass timber projects can hold developers back from using advanced wood building systems. To bridge this knowledge gap, WoodWORKS! BC developed a workshop to help design and construction professionals understand the differences in pricing wood projects relative to projects using other materials.

The program featured experienced professionals sharing their insights on estimating, including time, labour and material factors. Other topics included costing modular construction, a study of mass timber costing for school construction and a contractor's views on mass timber projects. The workshop was attended by developers, designers, estimators and contractors.

Reducing barriers

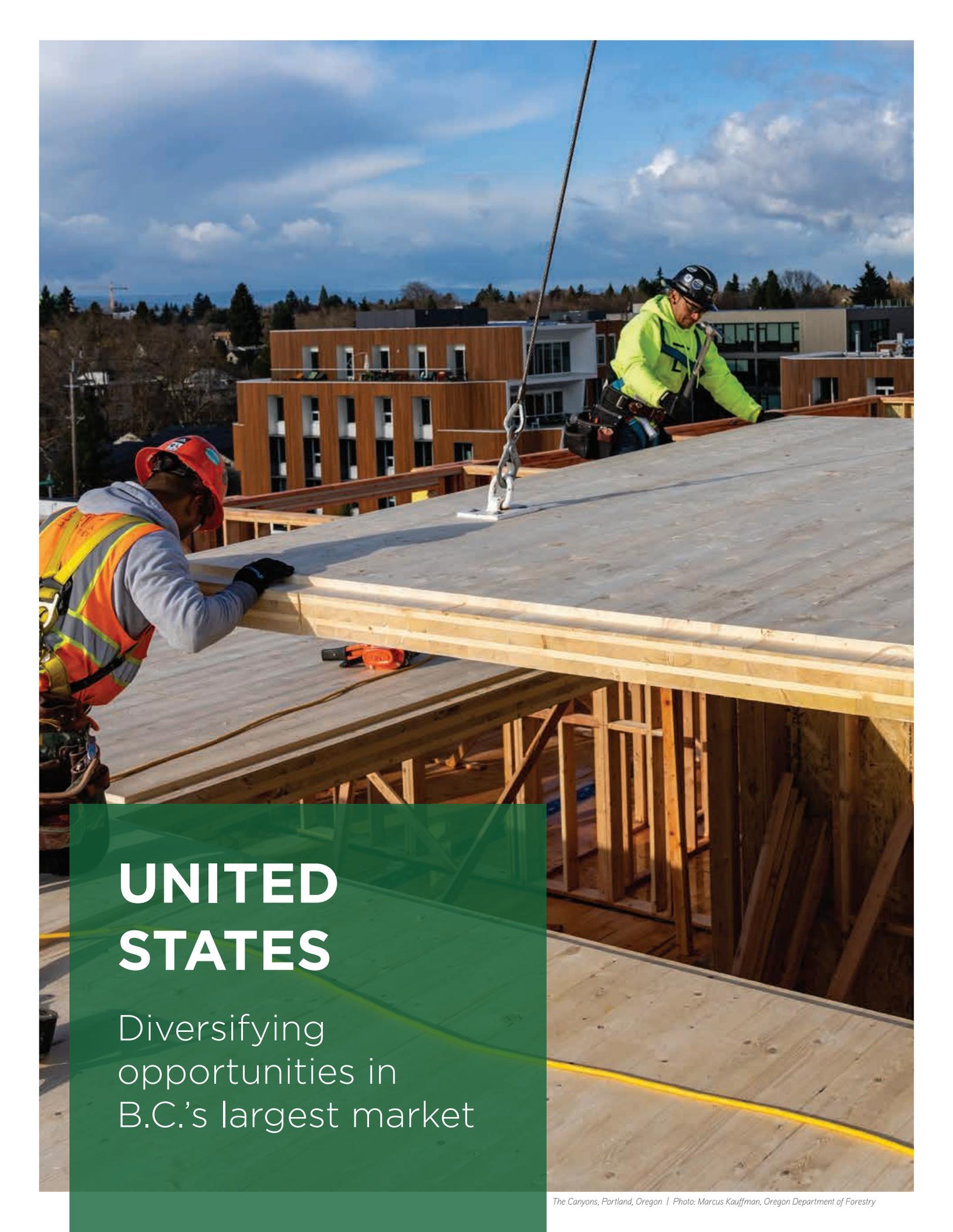
FII supported several initiatives in 2019/20 to deal with issues hindering greater use of mass timber and engineered wood products. These included research on specific technical issues as well as reports to broaden the knowledge base for designing and building mass timber and taller wood projects. Highlights include:

- Fire performance: FPIInnovations completed two projects – one on prefabricated mass timber-cement board flooring, and a second regarding fire safety performance when mass timber surfaces in concealed spaces are exposed (current guidelines require that mass timber surfaces are covered with gypsum board).
- Nail-laminated timber systems: UBC developed guidelines for a mass timber diaphragm (load bearing) system for wall or floor use using nail-laminated timber.
- Prefabricated modular components: UBC undertook research on monocoque behavior in mass timber modules. Monocoque refers to a building system where the exterior wall supports the structure, as in a shipping container.
- Braced frame system for tall timber buildings: UNBC conducted research related to developing guidelines for timber-steel bracing systems to ensure seismic performance consistent with Canadian design and construction practice.

View this research at research.thinkwood.com



Fire test of mass timber floor encapsulated with cement board in the floor furnace at the National Research Council Canada | Photo: FPIInnovations

A photograph of two construction workers on a wooden roof structure. One worker in the foreground is wearing a red hard hat and a high-visibility orange and yellow safety vest over a grey hoodie. Another worker in the background is wearing a black hard hat and a bright yellow safety jacket. They are working on a large, flat wooden surface supported by a complex wooden frame. A thick rope is attached to the structure. In the background, there are modern buildings with wood paneling and a clear blue sky with scattered white clouds.

UNITED STATES

Diversifying opportunities in B.C.'s largest market

OVERVIEW

The U.S. remains the closest and largest market for B.C.'s forest sector with 60 percent of B.C. lumber and 96 percent of value-added products shipped south of the border.

A fresh wave of building code changes, and a continuing demographic shift away from single-family homes is driving growing interest and adoption of mass timber and wood-concrete-steel hybrid solutions. New markets such as the multi-family/multi-storey residential and non-residential construction segments have strong potential for B.C.'s mass timber and next-generation engineered wood products and expertise.

In 2019/20, FII worked with industry partners to drive new, value-added opportunities in these evolving

markets. A combination of promotion, technical support and education programs have built capacity and interest with developers, contractors and building and design professionals. Value-added programs targeted the growing repair and remodeling sector, and coordinated with the programs targeting mid-rise, hybrid and mass timber construction.

Campaigns combined the latest approaches in social and digital media and advertising to ensure an omnichannel online presence, while continuing to emphasize face-to-face contact through technical support consultations and tradeshow oriented to consumers, builders and contractors, and educational programs targeted to architects, engineers and other building professions.



BC Wood and members at the 2020 International Builders Show (IBS) | Photo: BC Wood

GROWING VALUE-ADDED OPPORTUNITIES

Expanding business in the U.S.

Many B.C. value-added firms are relatively small operations challenged to find and position themselves with new and growing opportunities for their products. To help these firms crack the U.S. market, BC Wood has developed an integrated market development program.

The program started with market research to identify value-added opportunities in the western U.S., the area most readily available to smaller B.C. manufacturers. Trade data was analyzed to identify local market needs and gaps that could be filled by B.C. firms.

With potential markets identified, BC Wood conducted a consultation process with members to identify companies that would best fit the *Export Readiness Training Program*. Ten firms made the short list and took part in intensive, customized training workshops, one-on-one coaching and

peer networking. The workshops covered topics such as market development, establishing dealer and distributor networks, online marketing and market identification.

The program incorporates an online platform to reduce cost, support collaboration and make the program accessible to value-added firms in all parts of the province.

Armed with market data from the BC Wood research, these firms are now expanding into the U.S.

90 percent of participants felt their needs were met by participating in this program and 100 percent agreed in the likelihood that this program would help grow their export sales in the next 12 months.



BC Wood and members at the 2020 International Builders Show (IBS) | Photo: BC Wood

BC Wood – U.S. Tradeshows

BC Wood targeted major industry tradeshows in the U.S. in 2019/20 to support the value-added sector in generating sales south of the border. A highlight was partnering with six firms in a display at the International Builders Show in Las Vegas. The show is the largest trade fair in the U.S. for the residential and light commercial sector, with attendance of more than 115,000. The program was leveraged with a seminar coordinated with the Canadian Consulate in Los Angeles that attracted 80 international and U.S. buyers.

Regional trade shows were also targeted by BC Wood. More than 80 U.S. architectural and design firms participated in the Bond Custom Home event in Tucson, Arizona, where five B.C. companies participated in 60+ one-on-one meetings. Four B.C. companies joined BC Wood and the Cedar Shake & Shingle Bureau in an exhibit at the Kona Island Living and Design Show. To strengthen connections made at the show, BC Wood also delivered a Building Connections networking event with participants from Hawaii’s architect and design community.

Attendance at the WestEdge Design Fair was a first for BC Wood, with great success. One of the B.C. firms participating won an award for innovative furniture design. BC Wood leveraged the event by partnering with provincial and federal trade representatives to stage a pre-opening night event at the booth. The fair attracted 13,500 architects, designers, builders and developers.

B.C. firms participating in U.S. trade shows led to estimated incremental sales of over \$7.5 million.



Supporting high quality construction

Keeping installation manuals up to date is a low profile, but important task, as it ensures value-added products are used properly and helps to avoid the negative publicity from poor quality construction projects. To this end, the Cedar Shake & Shingle Bureau (CSSB) extensively revised the New Roof Construction Manual and Exterior and Interior Wall Manual which offer detailed technical information about installation.

The CSSB also extended its social media reach to a wider range of social medial apps to take advantage of changing consumer preferences in how they access information on building products.



Exterior and Interior Wall Manual and New Roof Construction Manual | Photo: Cedar Shake & Shingle Bureau

Social Media: exponential growth and record results

Strategic efforts focused on social media have allowed the Western Red Cedar Lumber Association (WRCLA) to reach and engage target audiences and drive potential buyers to realcedar.com for more information on western red cedar products.

YouTube has become one of the WRCLA's top social media sources for driving year-round traffic to realcedar.com's Find-a-Retailer page. At the time of writing, nine ads were placed on YouTube that reached an audience of 6,652,704.

Pinterest, Facebook and Instagram have also been utilized to significantly increase awareness of western red cedar, address competitive issues and direct thousands of viewers to Real Cedar DIY videos, project plans, the retailer locator and other online resources.

SOCIAL MEDIA GROWTH

AREAS OF GROWTH	RESULTS
Find-a-Retailer visits from Facebook and Instagram	+567%
Find-a-Retailer visits from Pinterest	+240%
Traffic from Facebook & Instagram	+219%
Traffic from Pinterest	+63%
New Instagram followers	+8,600 (110% YOY increase)
Instagram following of Real Cedar	Real Cedar's Instagram now greater than Trex Composite Decking
New Facebook fans	+3,544 (600% YOY increase)



Colin and Justin in front of the Real Cedar bunkie, Haliburton, Ontario



Sunroom interior finished in western red cedar paneling and timbers

Colin and Justin: Great Canadian Cottage

TV home-renovation hosts Colin McAllister and Justin Ryan were hired by the WRCLA to feature in a six-part online video series. Available on the Real Cedar YouTube Channel and a dedicated landing page on [realcedar.com](https://www.realcedar.com), *Colin and Justin: The House that Cedar Fixed*, covers why the designers chose western red cedar to transform a dated, lakefront cottage, and features projects including a 2,500 sq. ft. 2x6 cedar wrap-around deck, a cedar bunk house and a timber-frame sunroom, among others.

Colin and Justin are well known in the United Kingdom and Canada for their TV series, newspaper columns on home renovations and regular appearances on talk shows. WRCLA's partnership with the home renovators is creating opportunities to showcase western red cedar, expand audience reach and drive traffic to [realcedar.com](https://www.realcedar.com).

WoodWorks: growth and leadership

In 2019/20, 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. Over the year, WoodWorks webinars reached almost 5,200 professionals — a 50 percent increase in participation from 2018/19.

\$212

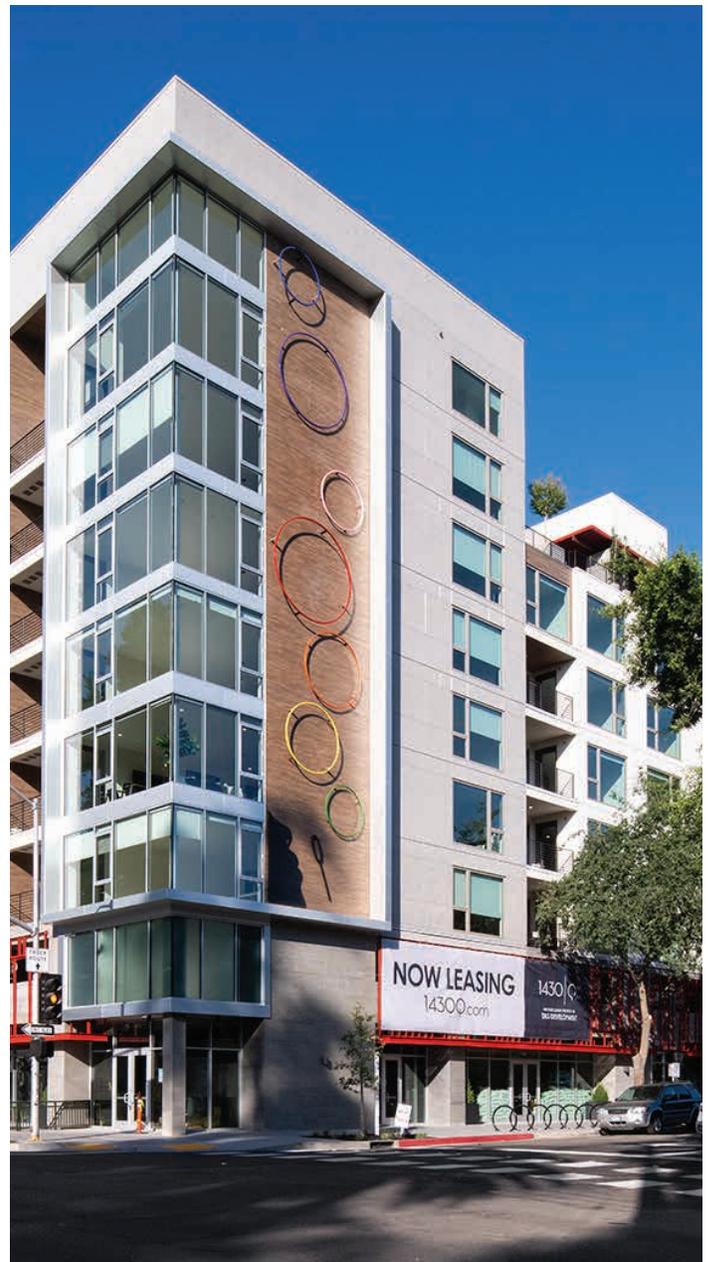
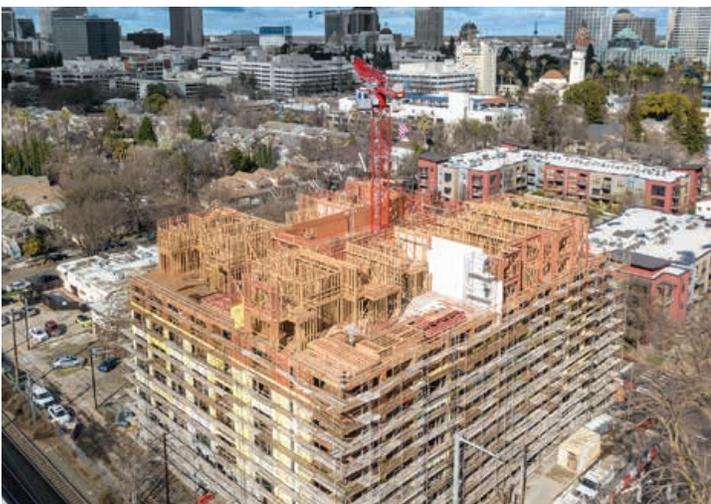
MILLION USD

OF WOOD SALES ATTRIBUTABLE TO INFLUENCED AND CONVERTED **NON-RESIDENTIAL AND MULTI-STOREY/ MULTI-FAMILY RESIDENTIAL PROJECTS**

6-over-2 = new opportunities

An important part of WoodWorks' mandate is helping project teams design larger and taller light wood-frame buildings. Hybrid projects, which include multiple storeys of wood over a concrete podium, offer a great opportunity to demonstrate how this can be achieved.

To educate more designers on hybrid construction, WoodWorks invited a local building official and a code consultant to present on 6-over-2 buildings at a Wood Design Symposium they were hosting in Seattle. This approach would give designers an eight-storey option that is mostly wood, as opposed to an entirely non-wood (concrete/steel) alternative. Seattle is currently the only U.S. jurisdiction allowing six storeys of residential wood construction (instead of five) over multiple storeys of concrete without special approval.



1430 Q Street in Sacramento, California was completed through an alternate means process | Photos: Greg Folkins



The Canyons, Portland, Oregon | Photo: Marcus Kauffman, Oregon Department of Forestry

A cost-competitive, innovative solution

WoodWorks continues to see a rise in the number of wood-hybrid projects combining light wood-frame and mass timber construction to reduce costs while delivering on project design goals.

The Canyons, a 70 unit, 110,000 sq. ft. assisted living building in Portland, Oregon is an example of this innovation. Assisted living facilities are subject to different code requirements than apartment buildings, and the team chose a hybrid structure that included cross-laminated timber (CLT) and light wood-frame construction for the top four storeys, a post-tension concrete slab for the second floor and CLT with steel connectors for the atrium.

Mass timber growth

Mass timber continues to gain acceptance across the U.S. As of June 2020, 921 multi-family, commercial or institutional mass timber projects had been constructed or were in design in all 50 states. This total includes modern mass timber and post-and-beam structures built since 2013. About half of requests to WoodWorks for advice and assistance are in the low-rise commercial and assembly category.

MASS TIMBER PROJECTS IN DESIGN AND CONSTRUCTED IN THE U.S. (JUNE 2020)





CHINA

Advancing
green building
techniques

OVERVIEW

China continues to be a key priority for the B.C. forest sector. It is the largest export destination for B.C. forest products in Asia and the second largest global market for the province after the U.S. Although competition in the market, particularly from Russia and Central Europe, has intensified in recent years, China's demand for wood continues to expand with imports of softwood reaching \$6.53 billion (CAD) in 2019, up 0.9 percent from

2018. At the same time, China's policy environment at both the national and local levels is rapidly embracing green solutions across the construction sector, including the use of wood and wood-based building systems. Together, growing demand and favourable policies are creating new opportunities for imported wood products not only in China's traditional coastal markets, but also the country's many new inland industrial zones.



Ecological Fish Farm Resort, Hubei province | Photo: Hubei Fuhan Green Building Corporation

Market development in China requires an understanding of the country's unique economic, social and environmental needs; it also requires a targeted approach that responds to local market drivers and government policy initiatives.

For FII and its Canada Wood industry partners, this has meant adapting the China strategy to respond to the growing awareness in China of the benefits of using prefabrication and wood construction to fight climate change. In doing so, the program effort is driving a shift toward sales of higher-quality, higher-value B.C. wood that can help differentiate B.C. suppliers from global competitors.

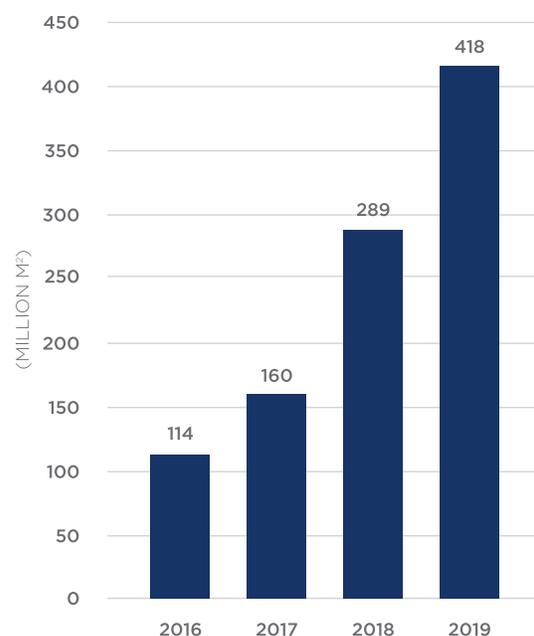
Canada Wood and FII China (the China team) continued these efforts throughout 2019/20 by positioning B.C. species in high-potential segments, including encouraging wood use in hybrid construction applications, tourism and resort sector construction, mid-rise and taller construction. Activities focused on demonstration projects, technical support and addressing code and regulatory barriers to building with wood products.

Other programs supported the marketing of B.C. species to the wood in manufacturing sector and in inland regions of China that are now outpacing coastal areas.

Targeting higher-value wood products

Industrialized construction — prefabricating building components in factories — is a major part of the Chinese government's strategy to reduce the cost and carbon footprint of building construction, and improve the quality of the built environment. Spearheaded by the Ministry of Housing and Urban-Rural Development (MOHURD), industrialized construction has seen rapid growth in China over the past three years. Positioning B.C. wood products and building systems to tap into industrialized construction opportunities is a key goal of the Government Relations group at FII China. This means working closely with MOHURD at the national and provincial levels, something that has been an ongoing part of the China strategy. In 2019/20, the efforts of the China team to advance the use of wood in China's industrialized construction segment resulted in a total of seven new prefabrication projects converted to using Canadian wood.

PREFABRICATED CONSTRUCTION STARTS, 2016-2019



A manufactured opportunity: infill walls

China's construction sector, which is dominated by steel and concrete, is shifting rapidly to industrialized (prefab) methods of construction. Wood infill walls are an ideal product for industrialized manufacturing, as they must be built to precise standards and, being light-weight, can be easily transported to construction sites.

In recent years, the China team has been promoting infill walls through training, technical support and demonstration projects. As manufacturers have gained experience in building infill walls, the marketing team has also successfully broadened interest into other wood products, including nail-laminated timber, glue-laminated timber (glulam) and roof trusses. Along with targeted outreach to manufacturers, work is being done with regulators to ensure wood infill walls comply with acoustic and other building standards.

2019/20

7 INDUSTRIALIZED
CONSTRUCTION
PROJECTS
CONVERTED TO
USING B.C. WOOD

Pioneering infill walls

A significant milestone was achieved in 2019 with the first commercial trial of a hybrid concrete-wood infill wall system using the new PEC (prefabricated energy-saving cladding) 2.0 standard at the Rugao Demonstration Project of Shanghai Electric Matechstone Engineering Group (MTS). The China team has been working with MTS since 2017 to develop prefabricated, energy efficient wood wall technology. The demonstration project successfully positions MTS, which has applied for a patent for the new infill system, as a pioneer in construction industrialization and green building.



Canadian delegates visit Rugao factory demonstration of Shanghai Electric Matechstone Engineering Group (MTS), Jinagsu province | Photo: Canada Wood China

BROADENING MARKETS

Go west! Wood-frame construction expands into new areas of China

As economic development in China spreads inland from coastal regions, construction activity is increasing rapidly and, with it, new opportunities for wood-frame construction.

Builders and government officials in these regions often have limited knowledge of wood-frame building systems. To overcome this knowledge gap, the China

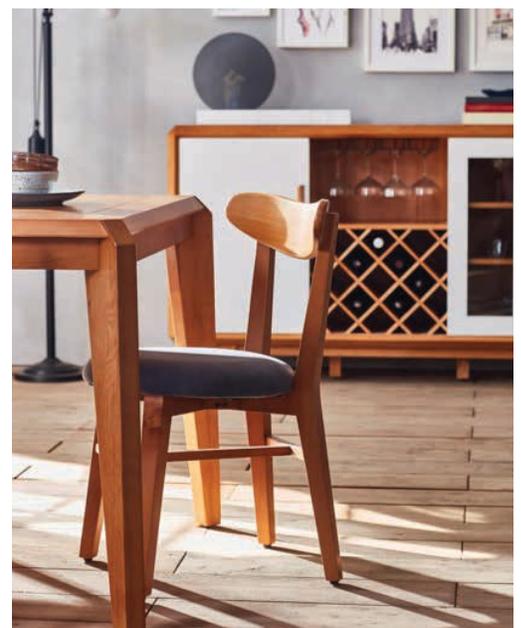
team is using a combination of training seminars, missions, market research and demonstration projects to raise awareness and build the credibility of wood construction. Capacity is being increased by assisting local firms in setting up production lines for infill walls and glue-laminated timber. The initial program is targeting four cities and regions in central China with a combined population of more than 180 million.

Wood in manufacturing sector opens to Canadian species

Hemlock and spruce-pine-fir (S-P-F) are attracting the interest of the Chinese wood in manufacturing (WIM) sector following targeted promotional efforts by the China team. As of fall 2019, product trials had been conducted with 62 manufacturers, leading to \$2.6 million in hemlock and S-P-F sales. The species are being used for furniture, doors, window frames and interior panelling.

“In the production process, our workers found that Canadian western hemlock wood is easy to process and mill. Even when combined with metal and glass materials, it matches well with our production.”

- Foshan Yiyuan Crafts



Hemlock furniture manufactured by Foshan Yiyuan, Guangdong province | Photo: Canada Wood China



BSD-TEDA Sino-Canadian Eco-District Townhouse project Lot 61, Tianjin | Photo: Canada Wood China

GREEN BUILDING

Tianjin Eco-District anchors green building strategy

New, planned communities are popping up throughout China. Many are built using the latest innovations in urban planning and construction technology. The China team considers these projects ideal opportunities to promote advanced Canadian wood technology, particularly in terms of reducing the carbon footprint of new construction.

The Tianjin Eco-District Demonstration Project is the major plank in this multi-year, market development platform. Launched in 2012 through an agreement between the Chinese government and Natural Resources

Canada (NRCan), Tianjin has been used to promote Canadian Super E® building systems (energy saving, wood-based construction) for housing, infill wall technology and mass timber construction for commercial and hospitality buildings. Financial support for the demonstration project was provided by NRCan, with technical support coming from Canada Wood China.

The projects, which are now moving to a third, completely commercial phase, are used regularly for tours of officials from other parts of China who are developing their own planned communities.

Urban development officials updated on wood product prefabrication

Reducing the carbon footprint of new building projects is a major push in China as part of a national strategy to fight climate change. Prefabrication and wood-frame construction are two important components of this strategy, but in many parts of China the local government officials who issue building permits have limited knowledge of these solutions.

To close this gap, the China team, in partnership with MOHURD and NRCan, organized a training conference on green building, prefabrication and wood-frame construction. Nearly 70 government officials, representing cities and regions with a combined population of 360 million, attended the two-day event in Suzhou City.

The conference represented another step in the effort to convince MOHURD officials of the advantages of converting to wood infill technology; it also reinforced the strong working relationship that the China team has developed with the ministry and local government officials in Jiangsu and Suzhou.



Sino-Canadian Workshop on Technology of Prefabricated Building and Modern Wood-Frame Construction, Jiangsu province | Photo: Canada Wood China

BUILDING CLOSER RELATIONSHIPS TO PROMOTE CANADIAN WOOD PRODUCTS

Growing wood use in China's resort sector

China's resort sector has become increasingly interested in using wood in structural and design applications. The FII and Canada Wood team in China has been working to tap into this growing trend by building inroads with Chinese resort developers and showcasing Canadian wood products as a preferred, sustainable building material. These engagements are continuing to show progress with 25 client resort projects adopting Canadian wood in their construction in 2019/20.

As an example of this effort, the team in China recently partnered with a Chinese development company, Yangxin Public Construction, on an office building project in Binzhou in Shandong province. The building was initially intended to be a steel structure, but the Canada Wood team worked with local MOHURD officials to convert the project to a steel-wood hybrid, using wood infill wall systems and approximately 300 cubic metres of Canadian spruce-pine-fir (S-P-F). Canada Wood China then provided guidance, resources and technical instruction to the developers to ensure quality control and to clearly demonstrate how Canadian wood products may effectively be used in structural applications.

The team worked to resolve the developer's initial uncertainties about building with wood and to bring Canadian wood species to top of mind for future projects. As a result, Yangxin Public Construction is now working with Canada Wood to expand its "pear garden" tourism park (also in Binzhou in Shandong province) using Canadian wood as the primary building material. Plans for the park project include a mass timber structure for its visitor centre and multiple 2x4 structures for amenity facilities.

25 PROJECTS CONVERTED TO USING WOOD IN THE RESORT SECTOR IN 2019/20



NLT Fire Resistance Test, Beijing | Photo: Canada Wood China

Opening new markets through regulatory change

Mass timber construction is attracting growing interest in China, but commercial use can be hampered by a lack of standards and regulations. Glue-laminated timber (glulam) is one example, where the hospitality sector wants to build more mass timber resorts, but certification of projects is challenging due to fragmented codes and standards.

Under its “Regulatory Barriers Initiative”, the China team has initiated a project, funded through Natural Resources Canada, with the Chinese Academy of Building Research, to update the certification process for glulam. Work is also underway to ensure favourable positioning of wood products in new, mandatory national codes. Nail-laminated timber (NLT) products are also being supported, through sponsorship of fire testing for NLT floor panels.

REGULATORY BARRIERS INITIATIVE:

CREATE NEW WOOD MARKETS IN CONSTRUCTION SECTOR OR EXPAND EXISTING MARKETS THROUGH CODE CHANGES AND REGULATORY REFORMS

2019/20 OUTCOME:

15 REGULATORY BARRIERS REMOVED

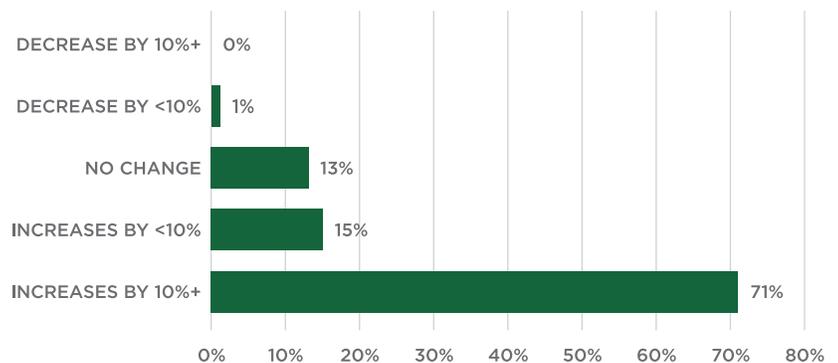
Chinese pre-fab technology highlighted in rapid construction of COVID-19 hospitals

Built in only two weeks, the construction of two hospitals to treat COVID-19 patients in China gained international news headlines in January 2020 as a remarkable feat of engineering, logistics and construction. Less publicized was that the project was only possible due to China's growing capacity in computerized building design and prefabrication. Both are being emphasized as part of a national strategy to increase the efficiency of the construction sector, drive down costs, reduce waste and build greener. The China team published a report highlighting this connection and noting that wood-frame construction is one of three building systems approved for use in pre-fab projects.

Seminar participants bullish on the future of wood use

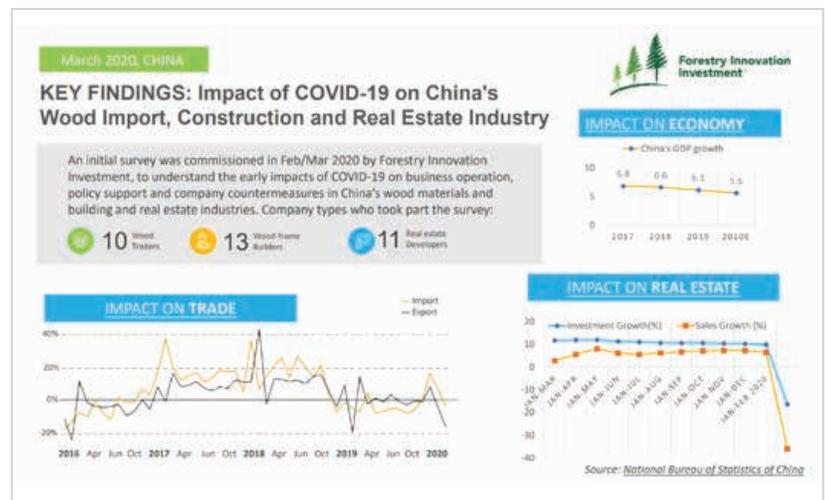
In 2019/20, Canada Wood China organized 22 seminars as part of its market access and market development efforts: eight focused on resort development, seven on industrialized construction and another seven on the use of wood in manufacturing. A total of 1,646 people attended. Exit surveys conducted as part of these events suggest a high confidence in the future of wood use in the market. According to respondents, 86 percent expected their company's use of wood in construction and/or manufacturing would increase over the coming three years and 71 percent anticipated wood use in their business would increase by more than 10 percent.

MARKET PROSPECTS FOR WOOD USE



FII survey tracks impact of COVID-19 on Chinese wood-frame construction sector

Chinese real estate developers and construction firms reported a sharp downturn in wood-frame construction in the first quarter of 2020 as the country went through a lockdown; however, ports resumed operating at the end of February and wood-frame builders were able to maintain normal inventories throughout the period. Respondents anticipated improving conditions as the year progresses. These are just a few of the findings from a survey of 34 key stakeholders commissioned by the China team to assess the impact of COVID-19 on China's wood import, construction and real estate industries.



Survey: Impact of COVID-19 on Chinese wood-frame construction sector | Photo: Canada Wood China

Webinar highlights prefabricated wood construction in China

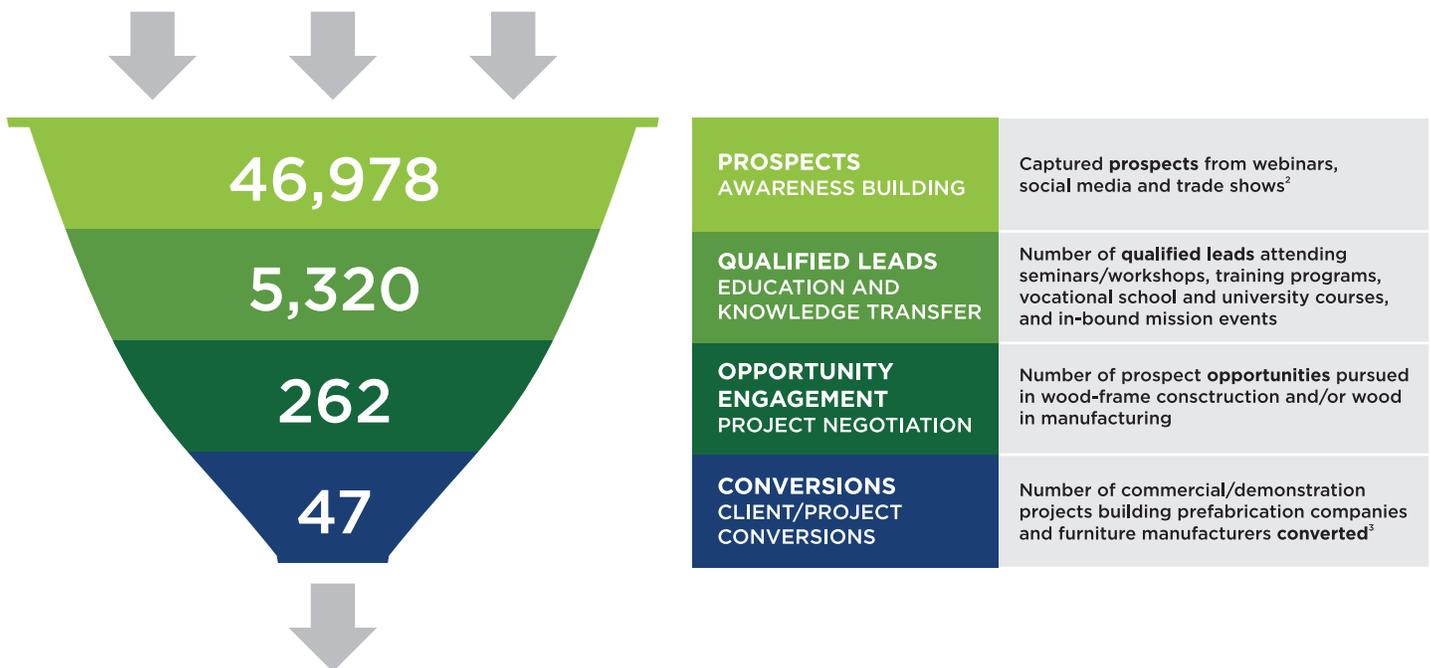
With in-person events deferred, the China team is maintaining its profile with construction professionals through webinars and other online events. The first in this series, a webinar on prefabricated wood construction, drew an audience of 3,200 participants on March 31. Case studies included the Brock Commons Tallwood House student residence at UBC. A “Builder’s Toolbox” was used as an educational tool to build interest and enthusiasm in Canadian sponsored webinars.

The use of webinars, while not initially part of the 2019/20 business plan, will become the “new normal” going forward. Not only are they less expensive to deliver than traditional in-person events, they are opening the door to a broad range of non-traditional audiences, such as the concrete industry and university students, that would otherwise have been too costly to engage with on a large scale.



Canada Wood specialized gift, the 'Builder's Toolbox' | Photo: Canada Wood China

CANADA WOOD CHINA 2019/20 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS¹



¹ 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), government relations program and other related efforts that provide a foundation for the market development program in China.

² The number of “Prospects” are cumulative over the history of the program. Numbers reported for “Qualified Leads”, “Opportunity Engagement”, and “Conversions” are for 2019/20.

³ 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

OVERVIEW

As B.C.'s second-largest market outside North America, Japan remains an important and high-value market for B.C. wood products.

While housing starts have declined with an aging population, government policy encouraging wood use is presenting opportunities for B.C. wood products in hybrid, multi-family/multi-storey, and non-residential construction.

In 2019/20, the Japan market development strategy continued to take advantage of these new markets, by focusing on promotion, demonstration, technical training and product testing. During the year, initiatives were undertaken in housing and support services for seniors, hybrid construction in the commercial sector, agricultural buildings, mass timber, wood pellets

and resort sector applications. While changing demographics will continue to challenge the construction sector in Japan, progress is being made in both maintaining B.C.'s existing markets as well as in pursuing new opportunities. From securing exciting new projects for the B.C.-developed Midply system to completing testing to ensure that building codes keep pace with advances in wood technology, the program in 2019/20 continued to bring B.C.'s innovative wood building products and solutions to the Japanese market.

To mitigate rising concerns in Japan over market volatility and fibre supply, targeted messaging and outreach was undertaken during the year to reassure buyers of the continued quality and supply of B.C.'s sustainably harvested forest products and our forest sector's commitments to the Japanese market.



Erimo Pig Farm, Hokkaido prefecture | Photo: Hokkaido Chuo Bokujo

TAKING ADVANTAGE OF NEW MARKETS

Green credentials of B.C. wood pellets promoted in Japan

Japan is the fastest growing major market for wood pellets in the world and offers solid growth potential for B.C. suppliers. Canadian wood pellet exports to Japan grew almost ten-fold from 2014 (62,000 tonnes) to 2019 (590,000 tonnes) and now hold a 37 percent share of pellet imports. Wood pellet sales to Japan is a significant and important success story for B.C. as 95 percent of Canadian pellet shipments to Japan originate in B.C.

To further bolster the reputation of B.C. pellet suppliers in Japan, the Wood Pellet Association of Canada sponsored a Biomass conference in Tokyo, including a Canadian Wood Pellet Day and a series of speaking events. B.C. Chief Forester, Diane Nicholls, attended and spoke to B.C.'s sustainable forest practices and the green credentials of B.C. wood pellets. More than 300 industry and government officials attended the Canadian-sponsored events.



10th Biomass Pellets Trade & Power Conference, Tokyo | Photo: Center for Management Technology/WPAC

B.C. EXPORTS OF WOOD PELLETS TO JAPAN

	TONNES	\$CAD
2012	105,640	\$ 15,707,588
2013	75,885	\$ 12,462,414
2014	61,701	\$ 11,181,155
2015	80,203	\$ 13,764,076
2016	272,376	\$ 45,430,851
2017	245,179	\$ 42,669,792
2018	621,908	\$ 115,618,509
2019	560,817	\$ 101,861,801

Source: Global Trade Atlas



Erimo Pig Farm, Hokkaido prefecture | Photo: Hokkaido Chuo Bokujyo

NON-RESIDENTIAL CONSTRUCTION PROGRAM

MARKET DEVELOPMENT OBJECTIVE:
GROW WOOD SHARE OF NON-RESIDENTIAL STARTS

9

NEW PROJECTS
CONVERTED
TO USING
CANADIAN WOOD

2,666,785m²
OF FLOOR AREA
CONSTRUCTED
USING WOOD IN
TARGETED
SECTORS

Note: the market development program is focused on mixed residential & commercial; agricultural; restaurants & accommodation; medical-elderly care & welfare; and business services.

Japan Wood Truss Council partnership

Recent restructuring in the Japanese agri-business sector has led to a boom in B.C. wood product use in agricultural buildings from Okinawa to Hokkaido. Partnering with the Japan Wood Truss Council, Canada Wood Japan has been promoting the benefits of wood trusses over competing steel systems in agricultural buildings. The results have been impressive, with the council reporting an increase in truss use by more than 54 percent in the past year.

The Erimo Farm project, as an example, includes nine new barns to expand pork production in Hokkaido. The barns cover 18,120 m² and use almost 1,000 m³ of S-P-F dimensional lumber for roof trusses and wall assemblies.

In total, 2019/20 saw nine new non-residential construction projects incorporate Canadian wood in their design due to Canada Wood promotion efforts and technical support.

Seiwa multi-family projects

Thanks to COFI promotional efforts, Seiwa Corporation, a proponent of using B.C. structural wood products and an industry leader in wood-frame apartment construction, expanded their use of 2x4 platform construction into three-storey apartments. Seiwa has completed 50 three-storey apartment projects and has plans to increase wooden apartment construction across Japan in the future.



Seiwa 2x4 multi-family apartment building, Chiba prefecture | Photo: Canada Wood Japan

1st Canada-Japan Wood Conference strengthens ties

In November 2019, 103 Japanese industry stakeholders participated in the first Canada-Japan Wood Conference in Tokyo. Senior Japanese industry representatives provided updates on their market needs while B.C. officials and industry provided reassurances that B.C. will continue to be a reliable supplier of sustainably harvested forest products and a leading source of innovative technology for advanced building systems.

Coinciding with the annual fall forest sector mission to Japan — led by the Minister of Forests, Lands, Natural Resource Operations and Rural Development — the event helped to re-affirm B.C.'s market commitment and trade linkages among key Japanese stakeholders.

PRODUCT INNOVATION AND MARKET ACCESS

Nursery school project is a first for Midply technology

Canada Wood Japan's "Product Mix" initiative is focused on broadening the use of engineered wood products and systems in Japan's construction sector, including the B.C.-developed Midply wall system. The first use of infill Midply wall systems using hem-fir and oriented strand board (OSB) is now underway at a nursery school project near Tokyo. The Makado Kagamimochi Nursery School is a one-storey post-and-beam structure designed with wide openings between the beams. Canada Wood provided technical assistance for the project architect in securing building permit approval for using hem-fir and OSB wall units and facilitated the sourcing of coastal B.C. hemlock for the project. Promoting Midply is a major undertaking of Canada Wood in Japan, as Midply wall systems offer substantial performance improvements over traditional wall assemblies, including greater effectiveness at resisting earthquakes. Midply technology is helping to position B.C. forest products for growth in large non-residential construction projects.



Makado Nursery School Project, Tochigi prefecture | Photo: Canada Wood Japan

PRODUCT MIX INITIATIVE

6 DESIGNERS/BUILDERS
CONVERTED TO USING
ENGINEERED WOOD SOLUTIONS



NLT Fire Testing, Ibaraki prefecture | Photo: Canada Wood Japan

Tested under fire: NLT achieves milestone

Increasing market access for different uses of wood is an ongoing part of market development in Japan through the Canada Wood Market Access Initiative. With Japan's growing interest in mass timber construction, Canada Wood has focused in recent years on gaining approvals for the use of nail-laminated timber (NLT) building systems.

Fire testing is an important step in this process. Partnering with the Japan 2x4 Home Builders Association, Canada Wood organized 30-minute and 60-minute fire testing of NLT for roofing and flooring panels, both of which were successful. Final approval has been confirmed and will build on favourable revisions to building codes and standards regarding the use of NLT.

The Market Access Initiative reported the successful elimination of eight regulatory barriers to the use of wood in Japan during the year.

REGULATORY BARRIERS INITIATIVE:

CREATE NEW WOOD
MARKETS IN CONSTRUCTION
SECTOR OR EXPAND EXISTING
MARKETS THROUGH CODE
CHANGES AND
REGULATORY REFORMS

2019/20 OUTCOME:

8 REGULATORY
BARRIERS
REMOVED

BC Wood resort planning seminars adapt to COVID-19 restrictions

Whistler and other major resorts in B.C. are highly regarded in Japan as examples of how resort communities can develop all-season capacity and attract visitors from around the world. BC Wood has packaged this expertise into a series of technical seminars on all-season resort development, as well as the use of mass timber and wood products in hospitality facilities.

The first seminars were held in March 2020 and incorporated measures related to COVID-19 safety. The response from the 70 industry and government participants was enthusiastic, both for the content and the efforts taken by BC Wood regarding social-distancing and other COVID-19 related safety measures. Summaries of the presentations, and a new case study, were later circulated to resort developers and local governments to broaden awareness of the seminars.

The seminar series was supported with funding from the Government of Canada (Natural Resources Canada).

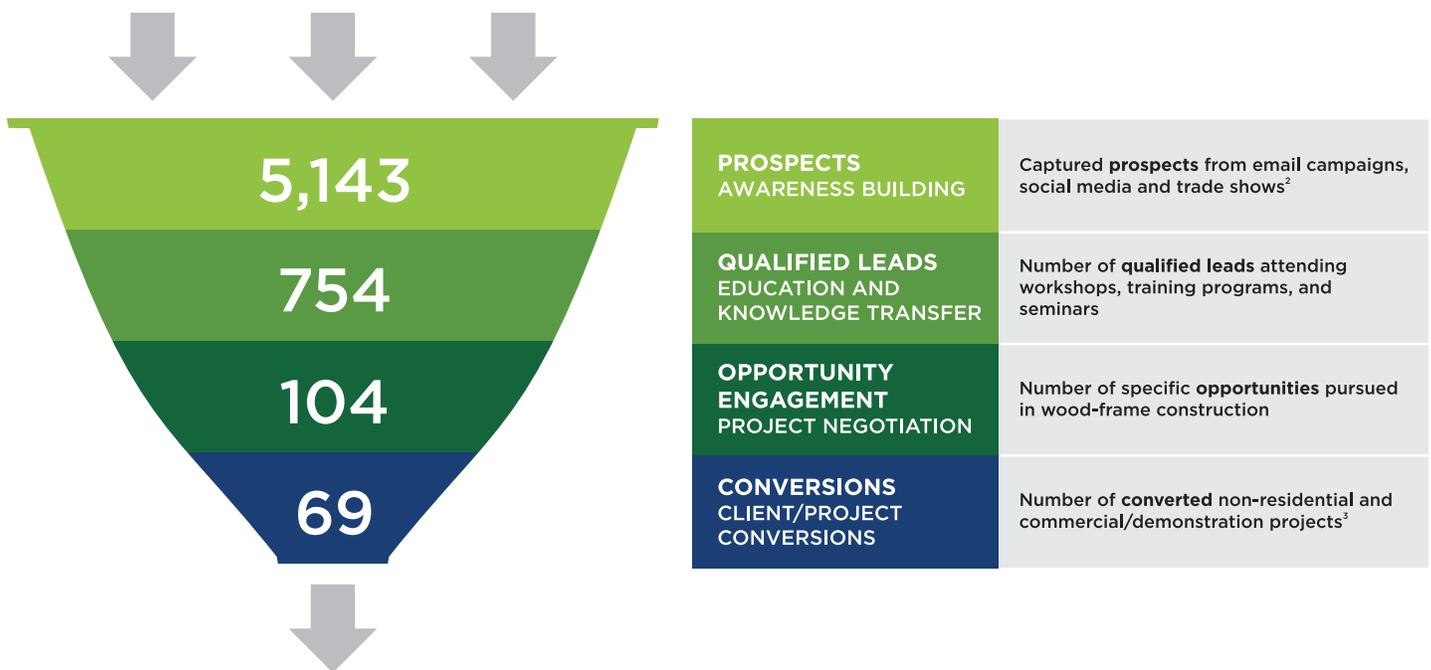
2019/20
VALUE-ADDED PROGRAM

\$8,422,700
IN INCREMENTAL SALES



Resort Seminar, Tokyo | Photo: BC Wood

CANADA WOOD JAPAN 2019/20 BUSINESS DEVELOPMENT ACTIVITIES — SUMMARY RESULTS¹



¹ 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.

² The number of "Prospects" are cumulative over the history of the program. Numbers reported for "Qualified Leads", "Opportunity Engagement", and "Conversions" are for 2019/20.

³ Includes nine non-residential wood projects directly influenced by Canada Wood programming; and another 60 homes (built using the mid-ply wall system) that were indirectly influenced by Canada Wood technical support. Conversions include non-wood projects converted to wood; and projects specifying non-Canadian wood/plywood converted to Canadian wood/OSB.

The image shows the interior of a modern house. The ceiling is made of light-colored wood planks, arranged in a pattern that follows the slope of the roof. Two long, narrow, recessed light fixtures are embedded in the ceiling, providing a warm glow. A balcony with a wooden railing is visible in the foreground. In the background, there is a large window with a black frame, offering a view of a cityscape with buildings and a tiled roof. A smaller window is also visible on the left wall.

SOUTH KOREA

Developing and
diversifying a
key market

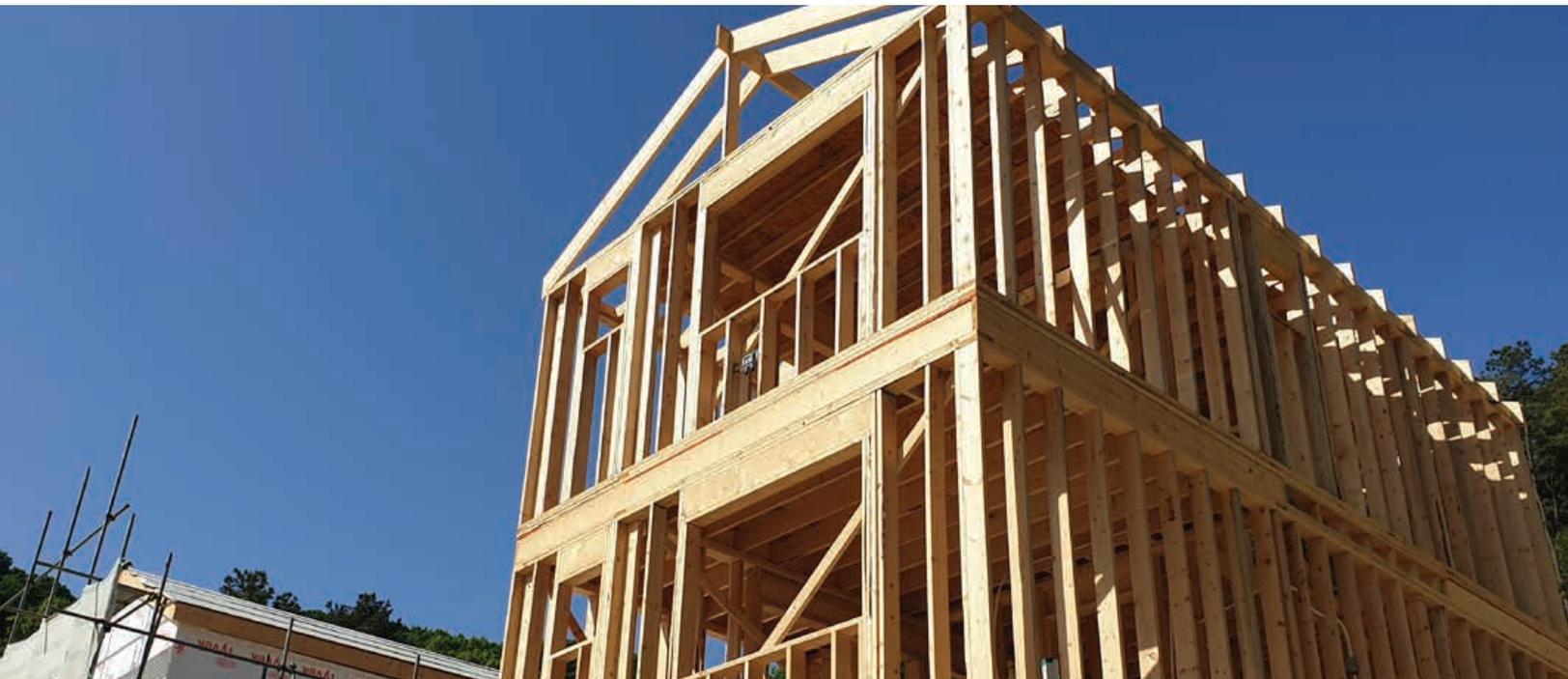
OVERVIEW

As a country with a long tradition of building with wood, but an ability to supply less than a quarter of its demand from domestic production, South Korea remains an important part of FII's strategy to diversify international markets for B.C. wood products.

In 2019/20, FII continued to support market development activities focused on wood use in construction and the value-added sector. Led by the Canada Wood Korea team, demonstration projects, education programs and promotional activities were undertaken to raise awareness of Canadian wood products and advanced building technologies.

During the year, emerging government priorities focused on energy-efficient building construction and prefabrication, which created opportunities to promote Canadian solutions such as infill wall systems and the highly energy efficient Super-E® technology. Communicating the superior seismic performance of Canadian wood-based building solutions was a major area of focus for the team.

Work with government officials continued to eliminate regulatory barriers in wood-frame construction that impact pressure treated wood and oriented strand board (OSB) markets.



Dong-cheon Urban First Town House, South Jeolla province | Photo: Gwangjang Architects



Wood Wall Bracing Workshop, Seoul | Photo: Canada Wood Korea

BUILDING CAPACITY, STREAMLINING APPROVALS

Seismic safety workshops
strengthen professional skills

In response to government and industry concerns that Korean buildings may not be safe from strong earthquakes, Canada Wood Korea, in partnership with the Timber Engineering Lab of Chungnam National University, developed a workshop on wood wall bracing for architects and engineers.

Designed for small wood-frame housing and based on North American standards, the program qualifies for professional credits for both architects and structural engineers as part of ongoing continuing education requirements. The first offering of the workshop was attended by more than 140 professionals.

RESIDENTIAL CONSTRUCTION PROGRAM:

INCREASE VOLUME OF
CANADIAN WOOD
USED IN RESIDENTIAL
CONSTRUCTION

2019/20 OUTCOME:

WOOD-FRAME SHARE
NEW DETACHED
HOUSING STARTS
INCREASED TO

14%

As a dominant player in the market, Canadian wood use in residential construction projects increases alongside overall growth in wood-frame housing starts.

Updated standards support faster approval of wood-frame housing

Following recent changes, building codes in South Korea related to the safety of buildings in earthquakes require that new buildings meet updated design standards for various building systems, including wood-frame construction. In the absence of meeting the revised standards, new buildings must be approved on an individual basis, leading to lengthy delays.

To unplug this bottleneck, Canada Wood Korea, through its Regulatory Barriers Initiative, has been working to develop a prescriptive (government approved) design code for wood construction — *The Small Scaled Building Code-Timber Structure*. It is based on North American wood wall bracing and Midply Shearwall systems. The code has been approved by the Ministry of Land, Infrastructure and Transport (MLIT) and is now in the next stage of government review. This code approval will support faster adoption of wood construction and alleviate the approvals bottleneck.

5-star wood housing certification program

Growing wood-frame construction's share of the housing market is a key performance objective for the Canada Wood program in Korea. To encourage greater use of the wood-frame system, Canada Wood Korea and the Korean Wood Construction Association (KWCA) launched an enhanced 5-star wood housing certification program focused on building interest in sustainable housing. Centred on in-depth inspection of wood-frame construction and quality standards, the program supports the local wood-frame housing industry, while assuring homebuyers that they are purchasing well-built, quality assured homes.

The program continues to play a major role in supporting Korea's shift towards net-zero, energy efficient buildings, with over 260 buildings registered under the program to date.



Korean professionals trained in Canada

To learn more about using advanced wood building systems in South Korea, 17 Korean professionals joined a 12-day Technical Mission to Canada in 2019. Architects in South Korea champion new approaches to building, making them the ideal profession to promote innovative Canadian solutions to energy efficiency and design challenges.

The mission included an introduction to Midply wall 2.0 by FPInnovations — a major upgrade on current Midply wall systems — a tour of a net zero home in Vancouver, and the use of nail-laminated timber (NLT) and other mass timber technology at UBC and the new MEC headquarters in Vancouver.

The trade mission had an immediate impact in South Korea, as one of the delegates changed a project to incorporate mass timber technology. Choon-Sik Lee, Lead Architect of DOMUS Architects, converted two floors of a four-storey hybrid government office building project from concrete to glulam post-and-beam with a double 2x10 joist floor system.

The redesign reflects growing awareness in South Korea that large-scale wooden structures are competitive with reinforced concrete structures on both structural and cost factors while offering environmental advantages such as sustainability, low carbon and energy efficiency.



2019 Technical Mission to Canada, group photo at FPInnovations, Vancouver | Photo: Canada Wood Korea



Sancheong-gun Government Office, Gyeongnam province | Photo: Canada Wood Korea



Four-storey hybrid office building project, Gyeongnam province | Photo: Canada Wood Korea



Canada Wood's Dagagu house demo project, Incheon Metropolitan City | Photo: Canada Wood Korea

PROMOTING INNOVATION

Super-E® technology gains traction in South Korea

Canada Wood Korea continues to position Canadian wood products and building systems as solutions to South Korea's low carbon and sustainability goals. The Canadian Super-E® training is a major part of this effort, as the technology fits well with the market's need for building healthier and more energy-efficient homes.

The first intensive Super-E® training was held in 2019 to build design capacity in Korea. The program was supported by the Korean Wood Construction Association with 31 professionals in attendance. Following the training program, a Super-E® demonstration house was completed at the Maple Village Development project. A follow-up project, the Dagagu Demo House project, was completed in early 2020.

Super-E® aligns with the government's efforts to encourage the construction of passive and zero energy buildings by 2025.



Intensive Super-E® training, Gyeonggi province | Photo: Canada Wood Korea

2019/20

8 BUILDERS FULLY SUPER-E-CERTIFIED

Formally certified by Canadian authorities to build homes to the Super-E energy efficiency standard as set out by the Super-E office on behalf of Natural Resources Canada.

92 PROFESSIONALS RECEIVED CANADA WOOD TRAINING CERTIFICATION

Canada Wood designation for participation in a Canada training seminar designed to familiarize participants with Super-E.



Cheongpyeong Cultural Centre steel and wood infill wall project, Gyeonggi province | Photo: Canada Wood Korea

Manufacturing a growing opportunity: infill wall systems

Industrialized prefabrication of building systems is rapidly gaining popularity in the South Korea construction sector, as it addresses labor shortages in on-site construction and provides higher quality control and cost efficiencies.

Wood infill wall systems are being promoted by Canada Wood Korea as ideal for prefabrication. These efforts are generating significant interest, particularly as larger projects sign on to the use of wood infill walls. One example of this growing interest is a project to renovate and expand the Sokcho government training center for the City of Seoul. SOLTO Zibin Architects won the design contest, in part due to their use of wood infill systems. The building covers more than 10,000 m² over six storeys.

The Sokcho training center will be Canada Wood Korea's lead demonstration project in 2020.



Growing the resort sector

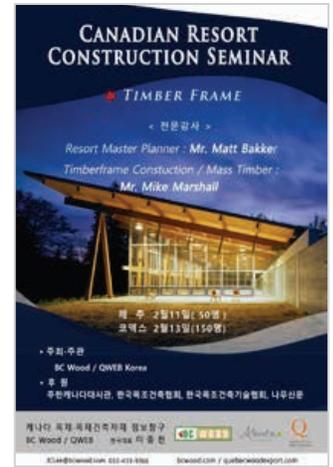
More than 200 stakeholders attended two BC Wood seminars on resort development in February, 2020. The seminars leverage B.C.'s reputation as a developer of world-class resorts, like Whistler. Presentations featured resort planning, mass timber and wood use in hospitality facilities, and how to extend alpine-focused resorts into all-season venues.



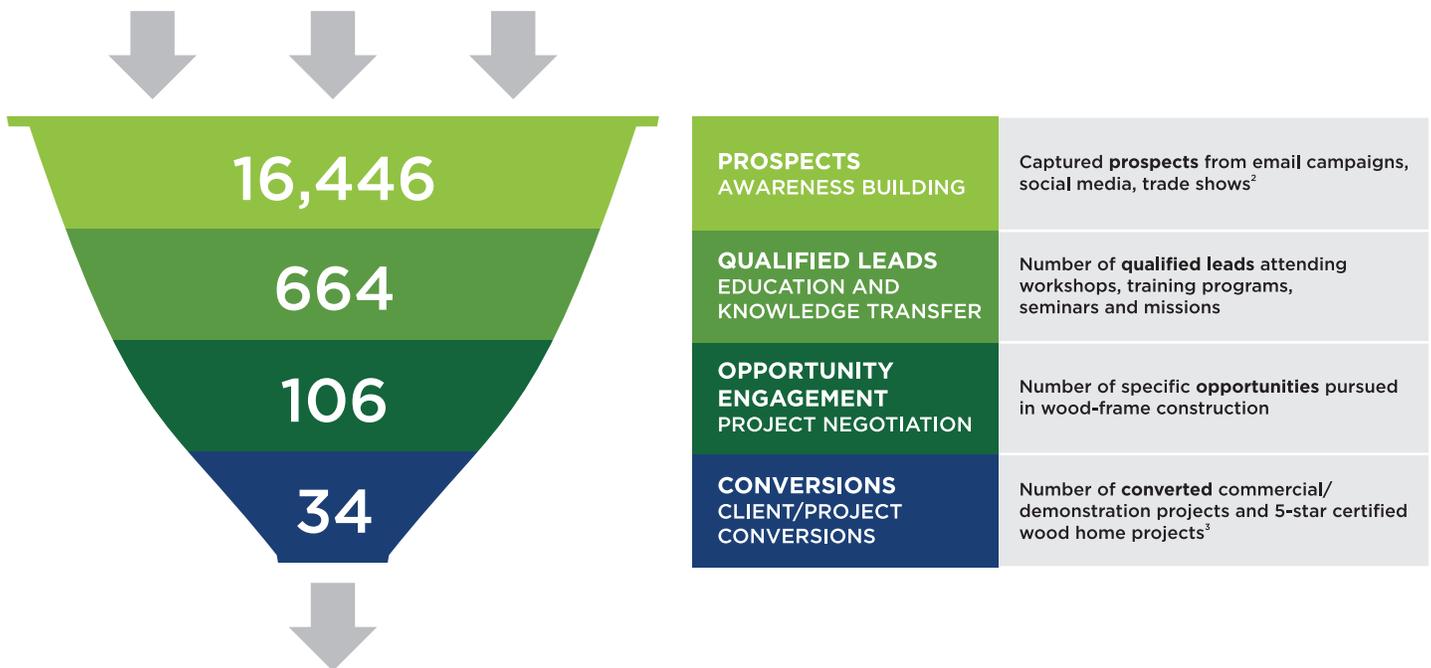
Canadian Resort Construction Seminar, Seoul | Photo: BC Wood

A companion technical training program introduced a new case study brochure aimed at developers, resort owners, tourism associations and local government. The brochure highlights how Whistler, Squamish and the Okanagan have become year-round destinations while showcasing the important role of wood design and construction in this success.

The seminar series was supported with funding from the Government of Canada (Natural Resources Canada).



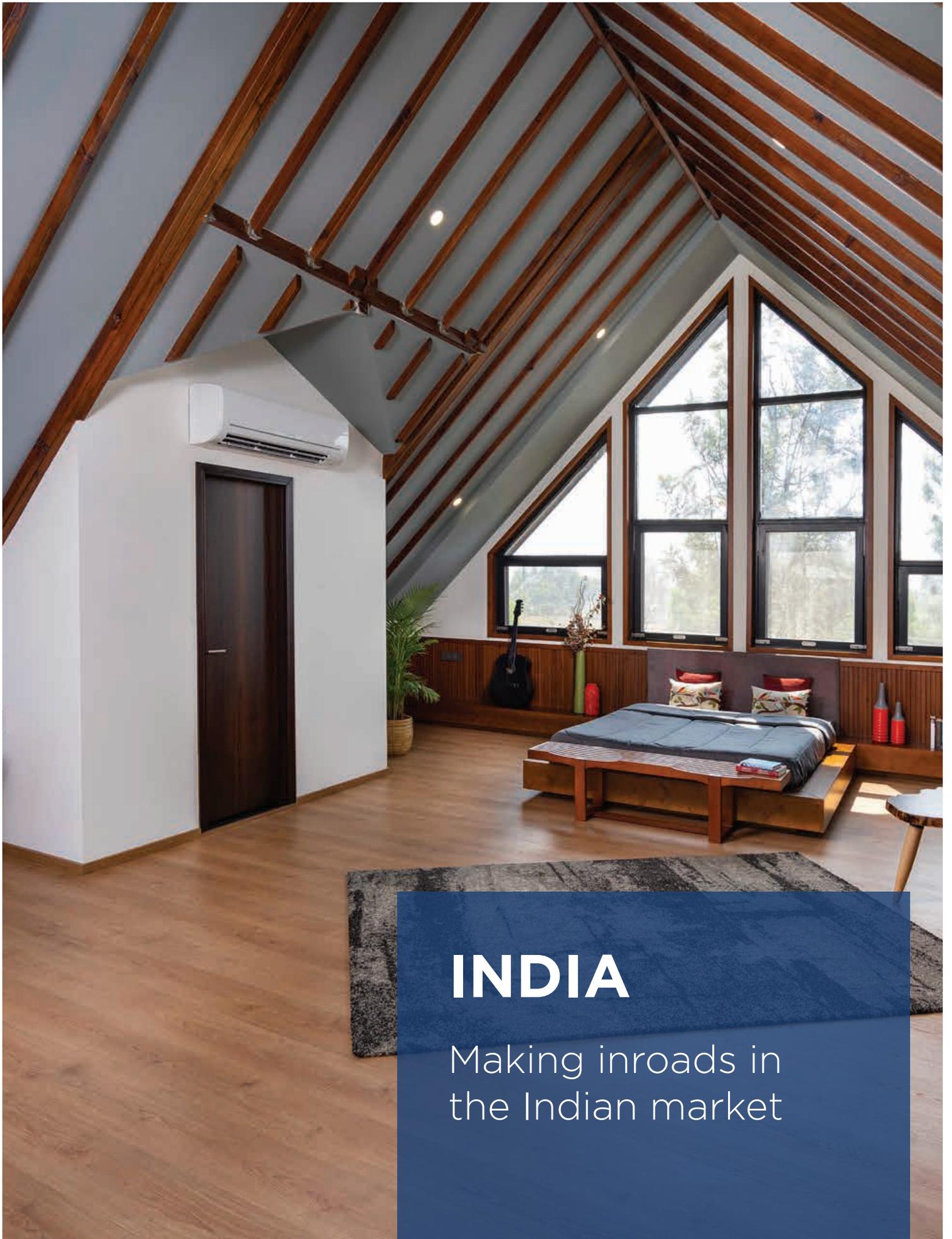
CANADA WOOD KOREA 2019/20 BUSINESS DEVELOPMENT ACTIVITIES – SUMMARY RESULTS¹



¹ 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.

² The number of "Prospects" are cumulative over the history of the program. Numbers reported for "Qualified Leads", "Opportunity Engagement", and "Conversions" are for 2019/20.

³ Direct program influence includes 12 commercial/demonstration wood projects converted to using mid-ply, Super-E and/or infill walls. Indirect program influence includes 22 5-star certified wood frame homes built as a result of Canada Wood influence.



INDIA

Making inroads in
the Indian market

OVERVIEW

India is an emerging market for B.C. and Canadian softwood products. With an economy that is forecast to overtake Germany and Japan in the next 10 years, and a middle class that is projected to increase by 380 million people over the period to 2022, India's demand for housing, furniture and other consumer items is rising rapidly. This is fueling a growing demand-supply gap for wood and creating new opportunities for B.C. and Canadian softwood products in the market.

Through the India team (FII India and Canada Wood India), and with support from industry and Natural Resources

Canada, Canadian Wood has become one of the most recognized brands of softwood products in the market today. This is helping to pave the way for a comprehensive effort to develop the India market for B.C. and Canadian softwood species.

In 2019/20, product trials and demonstration projects were key elements of the strategy — both are effective at building credibility with potential buyers. The programs included providing coordination and assistance to Canadian suppliers and technical support and assistance to potential customers in India.



Beleza by the Beach Resort, Goa | Photo: FII India

While the primary focus of the program is to encourage use in the wood in manufacturing sector, the India team also participated in several structural projects involving tongue and groove, post-and-beam, and light-wood-frame applications.

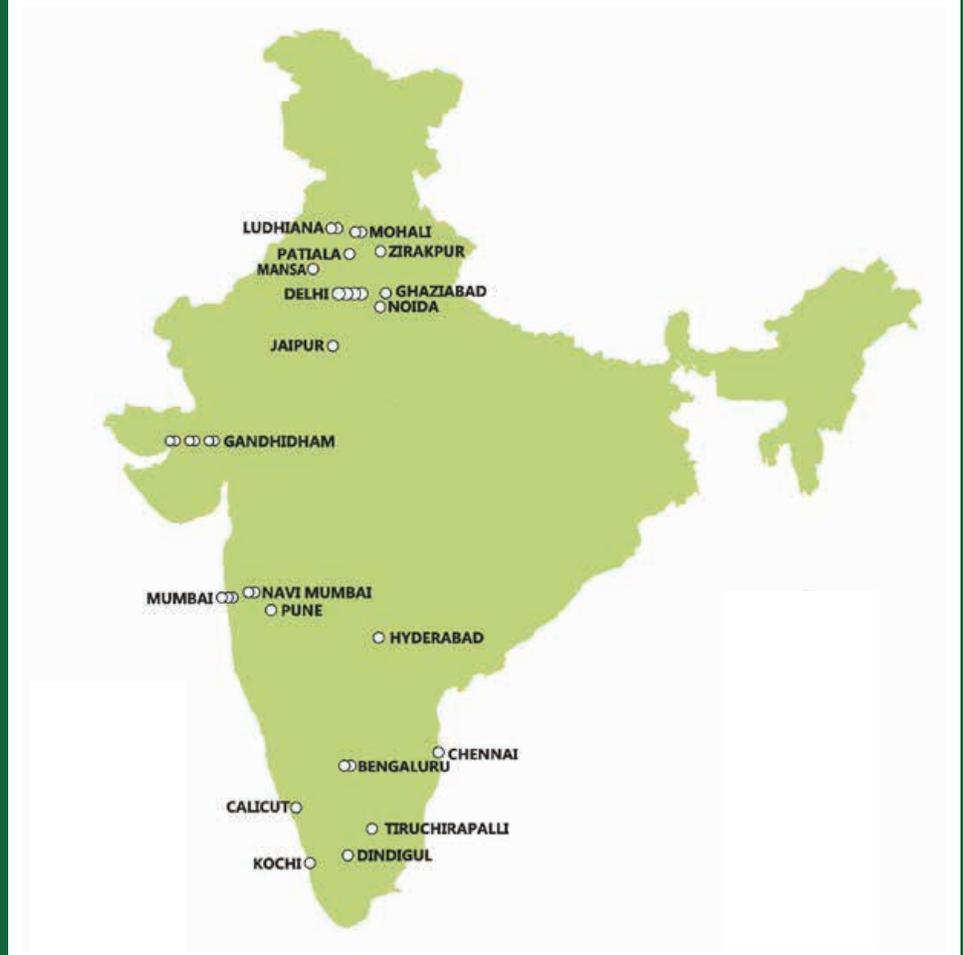
The India team also delivered an extensive education and outreach program and profiled Canadian Wood through a series of major tradeshows around the country. These efforts are generating increased brand and species recognition and showing early signs of commercial interest and uptake in the market.

Another key priority has been to develop a local supplier network for Canadian wood products in India. The 34th local “stockist” was established in 2019/20, purchasing and inventorying a range of B.C. species and grades. Local stockists ensure an immediate supply for local end user needs and are critical in early stage market development, while customers (i.e., local builders and manufacturers) develop sufficient downstream demand to allow for direct from B.C. purchases.

Getting Canadian wood to market — FII India expands its distribution network across the country

- FII India’s stockists (wood wholesalers/dealers) carry a range of B.C. softwood species, products and grades. By ensuring that B.C. and Canadian wood products are available as and when needed, stockists play a critical role in the development of the market for Canadian wood in India.
- Developing the depth and breadth of the stockist network has been a key priority for FII India. Today, a network of 34 stockists span the country with locations in Delhi, Mumbai, Pune, Punjab, Rajasthan, Gujarat and multiple centres across South India.

34 STOCKISTS IN 20 CITIES ARE PURCHASING/ INVENTORYING B.C. SOFTWOODS



Map design from Indian Ministry of external affairs - <https://www.mea.gov.in/india-at-glance.htm>
 Locations source - <https://www.mapsofworld.com/india/indian-city.html>

SHOWCASING THE FEATURES AND BENEFITS OF CANADIAN WOOD

Try Canadian Wood

Product trials of B.C. softwood species under India’s “Try Canadian Wood” program continue to engage and motivate Indian manufacturers to test B.C. wood in their applications. The trials are cost-effective, help to raise the overall profile of Canadian wood and, through hands-on experience, overcome misperceptions about Canadian species and strengthen technical skills in working with softwood. FII India completed 30 product trails in the 2019/20 fiscal year.

Product trials

- Gulmohar Lane** is a high-end furniture manufacturer in Jaipur. Their products are based on two primary pillars — design and hand-craftsmanship. The manufacturer was approached by FII India to trial western hemlock and S-P-F to replace traditional hardwood species. The declining quality and availability of hardwoods in the market was a concern for Gulmohar Lane, as the company is known for their premium furniture. The product trials demonstrated the B.C. species’ effectiveness and visual appeal in furniture manufacturing. The manufacturer is now regularly using both western hemlock and S-P-F as preferred raw materials for their product range.
- Bramola:** To showcase how B.C. species may be used in modern, stylish furniture applications, FII India partnered with Bramola — a high-end furniture manufacturer in Delhi — to develop an exclusive range of furniture using western hemlock. Bramola responded by developing an artistic range of indoor furniture made with western hemlock that included a sofa, chairs, a console, chests of drawers, side tables and more. The highlight of the range was an oval centre table with a Mandala (tribal art) hand-painted pattern. The eye-catching range of furniture was then displayed at the IndiaWood 2020 Trade Show in March. The fact that Canadian wood species are certified and come from sustainably managed forests also appeals to the growing number of environmentally conscious consumers in India who are demanding products made with eco-friendly raw materials.

WOOD IN MANUFACTURING

Market development objective: Generate experience with B.C. softwoods in traditional products			
KPI	2018/19 (actual)	2019/20 (target)	2019/20 (actual)
Product Trials	24	26	30



Hemlock product trials, Gulmohar Lane | Photo: FII India

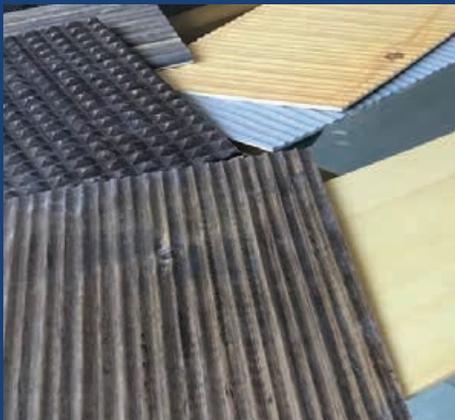


Hemlock product trials, Bramola | Photo: FII India

Engineered thin panels

Thin-panel technology is allowing an Indian firm to grow a new market for yellow cedar and hemlock. Evo Wood has pioneered the manufacturing of thin (3mm to 8mm) panels in 4x8 sheets for furniture overlays using lower-quality wood as a substrate. Demand is building, as the combination reduces costs while offering manufacturers a finished look in a premium species.

FII India supported the demonstration project by helping to source B.C. species and provide technical support to Evo Wood. In an example of cross-market promotion, FII staff in Vietnam also introduced the panels from India to Vietnamese manufacturers, with several firms interested in sourcing the product from Evo Wood.



Engineered panels in yellow cedar and western hemlock | Photo: FII India



Interior fit out of the Taj Rishikesh Hotel made from B.C. wood species, Uttarakhand | Photo: FII India

Demo projects – Taj Rishikesh hotel

Completed in 2019, the Taj Rishikesh hotel in India's northern state of Uttarakhand features both B.C. hemlock for the interior paneling on walls and ceiling areas, and Douglas-fir for windows, doors, soffits and ceiling panelling. The combination of a rock facade and wood trim reflects local construction styles and provides a beautiful architectural finish for this high-end resort facility. The project was the culmination of three years of collaboration between FII India and the developer.



This wood-frame construction style home was built and promoted by Pyramid Timbers and MAS Furniture. Canadian Wood booth at the IndiaWood 2020 Trade Show | Photo: Fil India



This double laminated tongue and groove display home was built and promoted by Wood Barn. Canadian Wood booth at the IndiaWood 2020 Trade Show | Photo: Fil India

IndiaWood 2020 Trade Show

With 75,000 visitors, and a focus on wood innovation, IndiaWood 2020 complements the goal of raising the profile of higher-value Canadian wood products in the Indian market. However, with 875 exhibitors, the India team needed to find a way to stand out from the competition and reach the architects, interior designers and real estate developers attending the show.

The solution was to be innovative. The India team arranged for two complete wood homes to be displayed in the Canadian Wood booth; the resort-style homes were both made by local Indian firms at their own cost and featured B.C. species. The homes demonstrated wood-frame construction and tongue and groove styles of building using Canadian S-P-F. Companion displays allowed visitors to connect with B.C. firms and learn more about Canadian wood species.

Along with promoting B.C. wood, the two homes highlighted how wood construction can meet the emerging interest in designing eco-friendly resorts and vacation homes, opening an opportunity for the introduction of B.C. species and building techniques.

HIGH-IMPACT PROMOTION

Event type	No. of events	No. of participants	No. of unique enquiries generated
Educational seminars	15	630	262
Networking seminars	05	415	NA
Major trade shows	01	427	312
Regional exhibitions	04	637	490
Conferences	01	60	50
Total	26	2169	1114

Reaching out

Educational seminars and training sessions are used by the India team to disseminate information, tools and training to local importers and manufacturers. In delivering these programs, the team often partners with stockists who market Canadian wood to individual buyers. Twenty-six events focused on “Creative Solutions with Canadian Wood” were staged in 2019/20 that generated 1,114 business leads. Included in these totals were educational seminars in 15 cities, networking events in five cities and 36 training workshops in 30 cities.

Building the Canadian Wood brand

Stakeholders report the India team has made enormous strides in creating an environment for B.C. suppliers to gain a foothold in the market. This feedback is based on a third-party survey of almost 120 stakeholders in the winter of 2019/20, including importers, stockists, manufacturers, architects and developers.

Unlike the competition, B.C.’s presence in India was considered to give the province a leg up on other softwood exporting nations. Almost 90 percent of respondents said the Canadian Wood program has had a positive impact on the sale of Canadian lumber in India.

Looking ahead, survey respondents predict an increasing demand for softwood and for Canadian wood products, with most demand for Canadian wood coming from the interior finishings market. Some architects and developers also predict that S-P-F use in structural applications will extend from the traditional base in the north to other parts of the country. Of late, the interest in structural use of wood by prominent architects and project developers is opening new vistas for the consumption of S-P-F across India, something previously confined to the north.

OVERALL,
94%

OF STAKEHOLDERS
REPORTED A POSITIVE
EXPERIENCE USING
CANADIAN
WOOD PRODUCTS

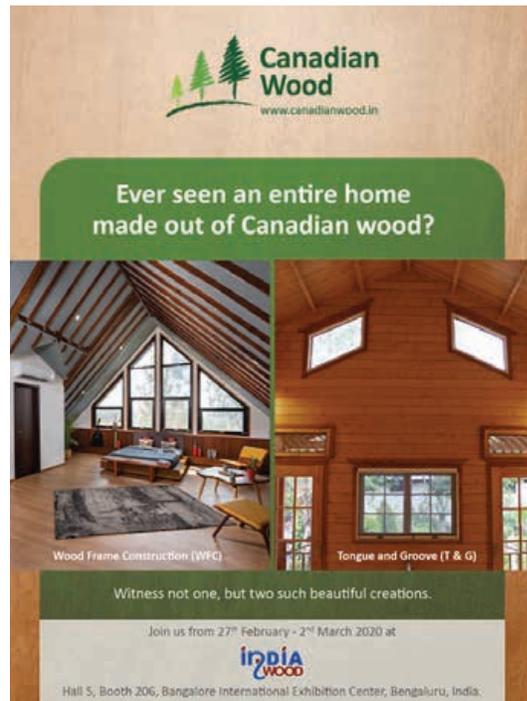
AND

87%

INDICATED THAT THEY
ARE LIKELY TO USE
CANADIAN
SPECIES
IN THE FUTURE

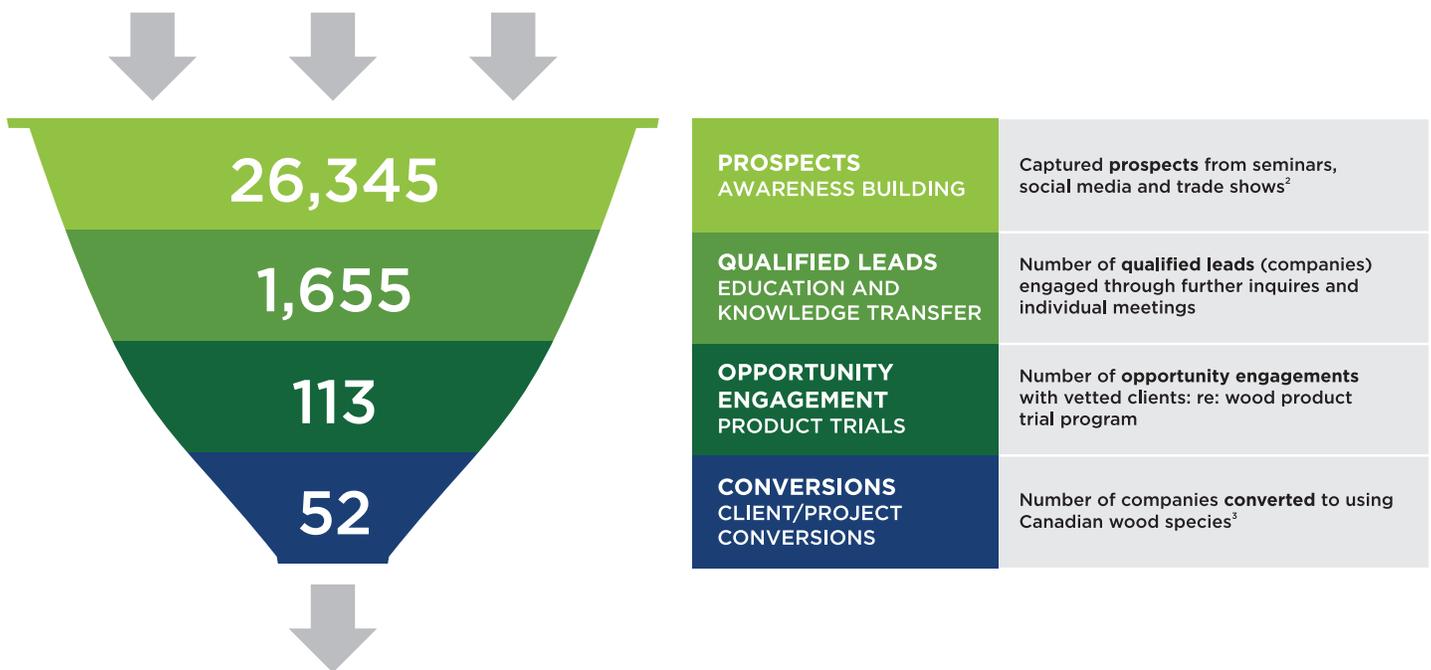
Advertising and promotion

To rise above the competition, outreach and education programs are supported with targeted advertising and promotional campaigns delivered through paid and earned media both in print and online. For example, the Canadian Wood booth at the IndiaWood 2020 Trade Show was promoted in advance through a combination of direct mail, social media, digital and trade advertising. Tracking by the India team showed a solid response to these promotions and helped drive traffic to the booth.



Canadian Wood promotional collateral for IndiaWood 2020 Trade Show | Photo: FII India

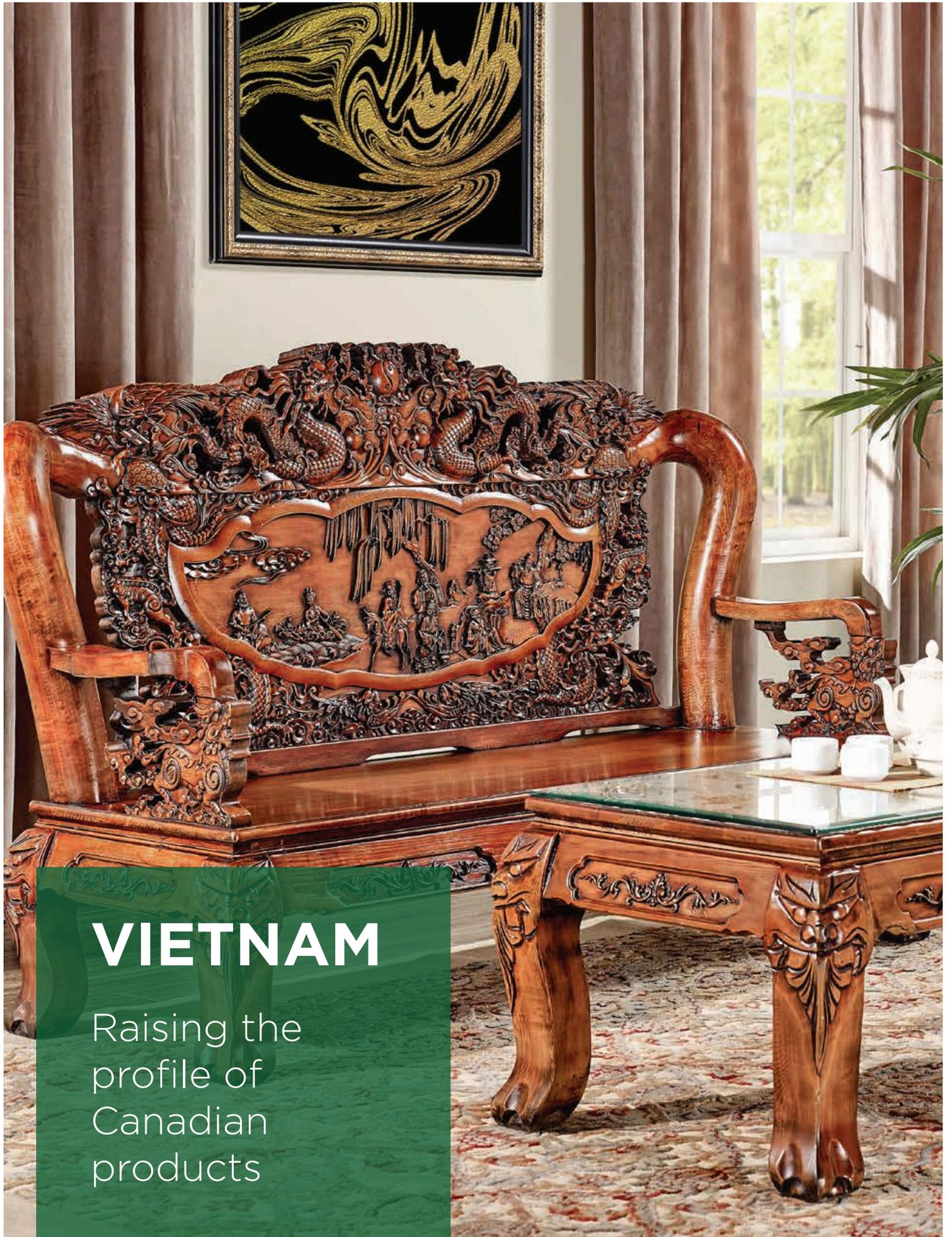
FII INDIA 2019/20 BUSINESS DEVELOPMENT ACTIVITIES – SUMMARY RESULTS¹



¹ 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.

² The number of "Prospects" are cumulative over the history of the program. Numbers reported for "Qualified Leads", "Opportunity Engagement", and "Conversions" are for 2019/20.

³ Total number of companies engaged with FII India's Business Development team (34 timber traders and 18 manufacturers) that purchased wood products directly from B.C. suppliers during 2019/20.



VIETNAM

Raising the
profile of
Canadian
products

Carved hemlock bench and table, Canadian Wood product trials | Photo: Fill

OVERVIEW

Vietnam has a long and distinguished history of producing furniture products for its domestic market. Building on this history, and on more than a decade of massive investment, the country is now the second largest exporter of furniture in the Asia-Pacific region¹, and fifth in the world². In 2019, furniture exports from Vietnam were valued at almost USD \$10 billion and are projected to grow at a rate of approximately 15 percent per year.

The rapid growth of the Vietnamese furniture sector has meant that its demand for wood has far outpaced growth in the domestic supply. In response, imports of wood³ into Vietnam have grown from approximately 200,000 cubic metres in 2000 to over 4.8 million cubic metres in 2019⁴. Over the past five years alone, wood imports grew by 167 percent.

As Vietnam looks for more certified sustainable sources, now a core requirement of a growing number of countries and customers, this is presenting a significant new opportunity to introduce B.C.'s unique species to the market.

In 2019/20, with ongoing funding support from Natural Resources Canada (NRCan), FII continued to expand market development activities in Vietnam with a focus on exploring opportunities for B.C. softwood species in southern Vietnam where there are now some 4,000 major furniture manufacturers, the largest employing as many as 10,000 workers. Program efforts during the year included identifying key players in the supply chain such as importers, distributors and end users; introducing these firms to B.C. species through an aggressive program of product trials; and undertaking targeted promotion, including at major industry trade events.

¹ Behind China

² Behind China, Germany, Italy, and Poland

³ "wood" is combined softwood lumber, softwood logs, hardwood lumber, and hardwood logs

⁴ Due to lack of Vietnamese state data, imports are calculated via reported export data from major verified trade partners



Hemlock furniture trials | Photo: FII

Product trials update

International buyers from around the world are flocking to Vietnam to source furniture and related wood products. An effective way to position B.C. species is to work with local manufacturers to introduce them to the many benefits of B.C.'s unique softwood products. By offering small samples of B.C. wood to select manufacturers, FII has been able to lead these firms to develop new product lines or prototypes which are then showcased to international buyers. This wood in manufacturing (WIM) effort is modeled on the successful "Try Canadian Wood" program introduced by FII in India and is gaining traction in the market.

B.C. species that have become popular as a result of the trials include western hemlock, spruce-pine-fir (S-P-F) and western red cedar. Due to its favourable finishing properties and ability to accept any paint, stain or clear finish, western hemlock has emerged as a preferred product for use in a wide variety of furniture applications. Hemlock has also seen some success with interior and exterior doors, while S-P-F has gained traction within furniture and door core applications. Western red cedar was already a popular choice for saunas and panelling, but product trials are now underway to expand its use into outdoor furniture and patio sets.

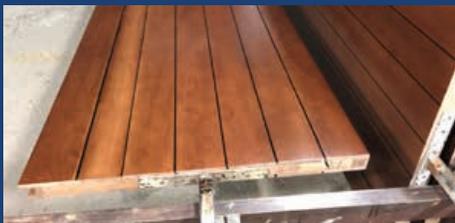
While these efforts to cultivate manufacturers take time, 2019/20 saw FII successfully complete 18 product trials with positive early results, including commercial orders of hemlock furniture for export to the U.S., and a domestic order of 800 doors made with S-P-F (core) and hemlock (exterior).

WOOD IN MANUFACTURING

Market development objective: Generate experience with B.C. softwoods in traditional products			
KPI	2018/19 (actual)	2019/20 (target)	2019/20 (actual)
Product trials	16	16	18

Opening the door to hemlock sales

One Vietnamese manufacturer recently finished their first order of more than 1,000 hemlock doors. The doors have an S-P-F core, with the outer vertical rails (stiles) and door jambs made with engineered products. The face and back of the doors were overlaid with 12mm thick clear hemlock. The response to the doors has been so favourable that the company is working on additional orders.



Leveraging supply chains

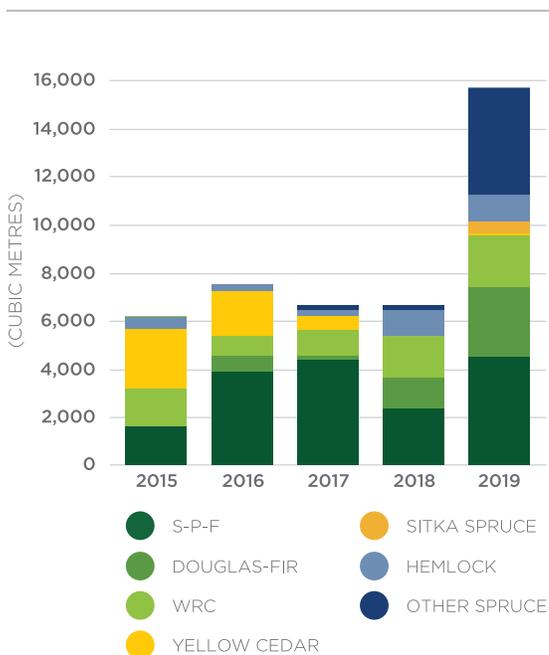
The supply chain for WIM in Asia often consists of components being manufactured in one country and then shipped to another country for final assembly. With five offices in Asian countries, FII and Canada Wood are able to share in-market knowledge and leverage local contacts to best take advantage of these trade flows. In Vietnam, for example, the Development Co. Ltd. recently produced hemlock finger-joined, laminated panels for FII to ship to India for use in product trials in door manufacturing. More than 30 companies will be product-testing the panels in door jamb assemblies.

Trade mission strengthens ties

In the fall of 2019, a 14-person delegation travelled from B.C. to Vietnam, visiting furniture manufacturers, meeting with importers and traders and sponsoring a Canadian Wood (FII) booth at Vietnam Wood 2019 — the industry’s major trade show with over 12,000 attendees.

Growth of SWL exports to Vietnam

2019 saw a marked increase in B.C. forest product exports to Vietnam.



Vietnam Wood 2019 Trade Show | Photo: FII



2019 Canadian Delegation to Vietnam - Manufacturer Tours | Photo: FII



WOOD PELLETS

GREEN AND GROWING: THE FAST RISE OF THE WOOD PELLET MARKET

The fast growth of the B.C. wood pellet sector shows how targeted market development can take advantage of emerging market trends and create new markets for B.C. forest products.

Canadian production has grown to about 3.5 million tonnes per year, with B.C. producers accounting for about three quarters of the volume. Similar to the solid wood market, the Canadian pellet industry has pursued aggressive market development to position itself as a leading supplier to world markets. Some 90 percent of Canadian pellet production is exported.

Certified as being sourced from sustainably managed forests, Canadian wood pellets qualify as a green energy source. This makes them eligible to be used to offset coal use in electricity generation and industrial heating as part of programs to cut carbon output and fight climate change. Wood pellets are also used in the consumer sector for heating in pellet stoves. Demand for wood pellets is split roughly equally between the electricity and heating markets.

The Wood Pellet Association of Canada (WPAC) leads market development initiatives with ongoing support from FII. Efforts initially focused on Europe due to the EU's aggressive moves to reduce carbon consumption through subsidies directed to green energy sources. Canada now has a five percent share of the European market, or sales of about 1.8 million tonnes per year.

To offset competitive pressures in Europe, WPAC began marketing in Japan a few years ago. Japan is the fastest growing major market in the world for wood pellets and has set aggressive goals to increase green energy production over the next decade. Japanese imports of wood pellets grew 55 percent last year alone (refer to the Japan section of this report). B.C.'s sustainable forest practices, favourable shipping and the strong brand of Canadian wood all supported WPAC's marketing efforts.

In less than 10 years, global demand for wood pellets has grown four-fold to an estimated 50 MILLION TONNES of consumption in 2020.

In both Europe and Japan, WPAC efforts have focused on maintaining awareness of B.C. as a preferred, reliable supplier through promotion targeted at the bio-energy sector. Outreach to regulators and trade associations is undertaken to ensure that evolving standards on green energy do not restrict Canadian suppliers. Market research helps identify emerging market opportunities, such as in the consumer sector, or shifts in supply.

Moving forward, WPAC intends to continue the current strategies in the EU and Japan with a goal of maintaining overall sales between the two markets.



Photo: Wood Pellet Association of Canada (WPAC)

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