



**Forestry Innovation
Investment[®]**

2017/18 Investment Strategy

Market Initiatives Program

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1. INTRODUCTION

Maintaining B.C.'s global forest sector leadership requires constant innovation, and continuing effort to develop and diversify markets. Forestry Innovation Investment (FII) was established in 2003 as the provincial agency responsible for maintaining and expanding markets for B.C. forest products. FII works in collaboration with the forest industry, research institutions, the federal government and other stakeholders to deliver innovative, forward-looking programming that responds to today's domestic and international market dynamics, as well as tomorrow's challenges and opportunities.

The British Columbia (B.C.) forest industry is recognized globally for its production of high quality wood products, leadership in sustainable forest management, and for innovation in harvesting, processing and the development of advanced wood construction technologies and building systems. The sector continues to be a major contributor to the provincial economy, representing 36% (\$12.9 billion) of the province's total exports (\$35.9 billion) in 2015¹. The forest industry's total annual economic impact (direct and indirect) is more than \$30 billion². The sector employs more than 60,000 British Columbians directly and supports over 7,000 businesses.³

This document outlines FII's strategy to provide funding through its Market Initiatives program in 2017/18, largely by way of providing funding to non-profit forest sector organizations for work that they propose and ultimately deliver. Industry trade associations and research organizations typically play an important delivery role in many of these market development and market diversification activities, by supporting specific industry sectors, products or species of relevance to the B.C. industry. FII's investments are focused on pursuing government and industry priorities for the sector.

This Investment Strategy details the priorities of FII's Market Initiatives program for the year ahead and provides guidance for organizations that seek FII funding through its annual Market Initiatives Call for Proposals process. FII's investment focus is informed by an ongoing program of market research and specific market development strategies that have been developed jointly by FII, Natural Resources Canada and industry. Industry input is involved at all steps of the strategy development and planning process.

The annual Investment Strategy is developed in the context of FII's Strategic Plan that covers a five-year horizon, and FII's more detailed annual three-year Service Plan⁴. These documents are available on FII's corporate website; www.bcfii.ca

¹ BC Stats

² B.C. Forest Industry Economic Impact Study, MNP LLP, January, 2015

³ BC Stats

⁴ FII's Strategic Plan, Service Plan and other corporate reports are available on the FII website at www.bcfii.ca

2. FII MANDATE AND MISSION

As directed by the Province, the mandate of FII is to:

- Position British Columbia as a global supplier of world-class environmentally friendly forest products;
- Actively maintain, create and diversify demand for B.C. forest products in Canada and in key world markets;
- Help break down non-tariff trade and market barriers to ensure opportunities for B.C. forest products;
- Work with the forest industry to promote B.C.'s forest products and forest management to the global marketplace; and
- Help ensure that the forest sector, through product development and strong international sales, continues to be a leading contributor to the B.C. economy.

Mission

To develop and diversify domestic and international markets for B.C. forest products by working collaboratively with industry, government, and institutional partners, and by making well balanced investments that respond to government and industry priorities while maximizing value to the Province.

3. PURSUING GOVERNMENT PRIORITIES

As a B.C. Government Crown Corporation, FII receives its funding from the B.C. Ministry of International Trade. Part of FII's funding is used to share the cost of industry led market initiatives and part is used to pursue specific objectives the B.C. Government has set for the sector and for FII. In all cases, FII's activities and approach are aligned with the international and domestic market development objectives of both the Ministry of International Trade, and the Ministry of Forests, Lands and Natural Resource Operations. A board of directors, chaired by the Deputy Minister of Forest, Lands and Natural Resource Operations and vice chaired by the Deputy Minister of Jobs, Tourism and Skills Training and Responsible for Labour, ensures consistency with government strategic priorities.

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

FII has organized its efforts under three key programs:

- Market Outreach - communicating the benefits of wood, and positioning B.C. as global leader in the supply of environmentally friendly products from sustainably managed forests (delivered by FII on behalf of, and in consultation with, industry and government partners).

- Wood First - advancing wood use and innovative wood construction technologies at home in B.C. (primarily delivered by third-party organizations with funding managed through an annual competitive Wood First Call for Proposals process).
- Market Initiatives - developing and expanding markets for B.C. wood products internationally.

A brief summary of these initiatives is included below for reference.

Market Outreach Program

Market Outreach works 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. These activities create a solid foundation for answering the questions, “Why wood?” and “Why wood from B.C.?” – upon which many of the market development investments and activities of FII and industry are based.

The program 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. While individual firms and their trade associations do a good job of telling customers about the physical attributes of specific product lines and how they can be used, the Market Outreach program provides audiences with factual, consistent and credible information about the environmental parameters of B.C.’s forest products and the forest practices that underlie their production. Specifically, the program:

- provides information regarding B.C. forest practices and products to architects, engineers, developers and builders, foreign government regulators, importers, and to a limited extent, consumers;
- champions science- and fact-based approaches to document B.C.’s forest practices, and the merits of wood-based construction technologies in the context of mitigating climate change and adopting green building standards;
- collaborates with forest sector stakeholders to encourage consistent and compelling messages about product and building innovations and reducing environmental impacts; and
- monitors and advocates for codes, standards and policies that recognize the merits of wood and B.C. forest products.

Learn more about FII's marketing efforts by visiting the comprehensive information resource, www.naturallywood.com.

Wood First Program

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

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

- raising awareness of the province as a world leader in advanced wood construction and design;
- advancing the use of wood building systems and technologies; and
- encouraging a robust valued-added sector in B.C., through enhanced capacity and competitiveness.
- The activities of the Wood First program are primarily delivered by third-party organizations under a cost-sharing framework that relies partially on contributions from the industry. Cost-sharing rules are approved/confirmed by FII's Board of Directors. Organizations receive funding from FII through an annual competitive Call for Proposals.

Learn more about applying for funding through the Wood First program and about Wood First accomplishments by downloading Wood First - Highlighting Five Years of Accomplishments 2009-2014 at www.bcfii.ca/industry-tools-and-resources/education-marketing-tools.

Market Initiatives Program

A central objective of the FII suite of programs is to identify and pursue opportunities outside the province that generate demand for B.C. forest products, further diversifying and strengthening the B.C. economy. To accomplish this objective, FII is mandated to conduct research and deliver and/or facilitate market development activities that help the forest industry capitalize on high potential market opportunities.

The Market Initiatives program, encourages the development of export markets and new market segments. Expanding B.C.'s trade relationships to fast growing markets in Asia helps to diversify the sector, open up new opportunities, and sustains forest sector employment. Recognizing the long-standing importance of the North American market, FII is also investing in high potential market segments to grow demand for B.C. wood products closer to home. FII works collaboratively with the forest industry, the federal government and the research community, focusing activities and leveraging resources to maximize results. Market Initiatives focuses on:

- Researching opportunities in emerging and potential future markets, and initiating early market development activities;
- Supporting industry trade associations in developing and/or expanding markets and market segments for B.C. forest products;
- Supporting industry efforts to mitigate market access and plant health issues;
- Managing outreach and relationship building in China with Chinese authorities and State-owned real estate development companies, and
- Undertaking early market development and profile building in India.

Typically, FII uses a small portion of its Market Initiatives budget to lead market research efforts to evaluate high-potential emerging opportunities for the sector. In this pre-commercial phase, FII may also initiate early market development activities where opportunities to introduce B.C. forest products in a region or market segment look particularly promising. While pre-commercial work is often led by FII, efforts are generally undertaken in conjunction with the federal government, and with the engagement and support of the forest industry. Where interest and commercial demand has begun to develop and entry risk has been reduced, FII looks to industry and related trade associations to play a more active role in leading market development efforts.

While activities to explore emerging markets are an important element of the Market Initiatives program, the majority of effort and investment under the program is focused on advancing opportunities in existing markets such as the US, China, Japan, South Korea and India where the greatest short- and medium-term opportunities exist for the sector. Most of these market development efforts are delivered by forest sector trade associations, with cost-shared funding support from FII and the federal government.

In January 2015, a Market Priorities Committee of senior industry representatives was established to provide FII with external guidance and advice with respect to establishing priorities for market development programming. Activities under the Market Initiatives program are primarily delivered by third-party organizations on behalf of the industry-government collaborative. Available funding under the program is managed through an annual Call for Proposals process.

FII has separate strategies for its Market Initiatives, Wood First and Market Outreach programs. The Market Initiatives Strategy for 2017/18 (this document) summarizes the activities and areas where FII places the highest priority for market development investments in 2017/18.

4. GUIDING PRINCIPLES FOR INVESTMENTS

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

- **Fact-based market strategies:** Priorities and strategies must be firmly rooted in current, relevant, and comprehensive market information that provides a compelling business case for each market initiative.
- **Generating measured results:** Activities and investments should generate a positive return for the Province of B.C. As a result, FII will continue to give a priority to projects that will generate a financial return well exceeding the initial investment made to support the initiative. Projects must have well-developed performance measures, detail how the project's results and outcomes are measured, and explain how they relate to overall performance objectives.
- **Balancing short- and long-term investments:** FII must evaluate and demonstrate the results of its investments on an annual basis. As a priority, FII looks for projects that generate the desired impact and return on investment in the short term (i.e., within one year). FII recognizes, however, the need to take a long-term perspective in funding some activities in emerging markets where there is a compelling business case to do so, but that the return may take a number of years to be achieved.
- **Encouraging collaboration:** FII encourages collaboration and coordination among B.C. firms, trade associations, academic institutions and other eligible applicants. Higher priority will be given to activities that clearly demonstrate a high degree of stakeholder support and collaboration. FII supports a coordinated international approach, building upon the Canadian brand.
- **Encouraging innovation:** To ensure the best activities are identified for each market, FII encourages industry to bring fresh ideas and approaches to help achieve industry priorities.
- **Supporting growth across the B.C. industry:** Ensuring the overall health of B.C.'s forest economy means that funded activities should benefit as much of the industry as possible. FII seeks to support proposals that encourage growth and market development in terms of:
 - Primary and secondary manufacturing including value-added products;
 - Different producing regions within B.C. that supply a variety of commercial species (e.g., SPF, hem-fir, cedar); and
 - A variety of product groupings including solid wood, engineered wood products, panels, value-added, bio-energy and bio-chemical products, and pulp and paper products.

5. OVERALL BUDGET ALLOCATIONS

FII receives the majority of its annual funding from the Ministry of International Trade. For 2017/18, FII anticipates receiving a level of funding similar to the current year. As in previous years, FII expects to allocate approximately half of its budget to sharing the cost of activities that other organizations propose and ultimately deliver (across its suite of programming). The remainder will be used to fund activities directly managed by staff of FII and its subsidiary companies in China and India.

In 2016/17, FII funded \$6.2 million through the Market Initiatives Call for Proposals process. For 2017/18, FII anticipates investing a similar amount through the Call for Proposals to support activities proposed and delivered by industry and other eligible applicants⁵. The focus of this funding is on priority markets identified through FII's comprehensive research and market development strategies⁶. A summary of these priorities is included in section 6.

As noted above, the 2017/18 Market Initiatives Call for Proposals focuses on international markets and covers activities delivered outside of B.C. Market development activities focused in B.C. are funded through a separate Wood First Call for Proposals⁷.

Anticipated funding allocations by region for 2017/18 are presented in the following table. FII reserves the right to make adjustments to this information until the time that FII enters into formal funding agreements.

FII Target Allocations – 2017/18	
<i>Region</i>	<i>(\$ Millions)</i>
CHINA	2.30
USA	1.80
JAPAN	1.20
KOREA	0.50
INDIA ⁸	0.30
ALL/OTHER MARKETS	0.30
CANADA ⁹	0.10
<i>TOTAL</i>	6.50

⁵ Eligibility criteria can be found at www.bcfii.ca

⁶ FII funded market research reports and market development strategies are available at www.bcfii.ca

⁷ Information on the Wood First Call for Proposals can be found at www.bcfii.ca

⁸ Does not include funding provided directly to FII's subsidiary company, FII India

⁹ Excludes B.C. domestic investments which are covered under the Wood First Program

Readers who anticipate responding to FII's annual Market Initiatives Call for Proposals should note that a detailed description of cost-sharing requirements and how to apply these to project proposals is provided in a supporting document, the "FII 2017/18 Market Initiatives Call for Proposals Application Guide". Proponents are required to thoroughly review the Application Guide prior to preparing funding proposals. The Guide also contains new information on changes to cost-sharing rules, and other policy changes. The Guide can be downloaded from FII's website at www.bcfii.ca.

6. 2017/18 CALL FOR PROPOSALS PRIORITIES

FII's Market Initiatives priorities for 2017/18 target opportunities in two global regions: Asia and North America.

Asia

Asia remains the primary focus of FII's Investment Strategy. In Asia, the most important markets are currently China, Japan, Korea and India. Emerging opportunities may exist in Southeast Asia (Vietnam, Malaysia, Indonesia, the Philippines, Thailand), and proposals to undertake early stage work in this area are encouraged.

China

As B.C.'s largest market for commodity lumber outside North America, China is a priority market for the B.C. industry and for FII. Continued efforts to advance wood use in China, and to position exports from B.C. in high potential growth and high value segments will remain the focus for 2017/18.

Drivers for wood consumption in China

While high-level drivers continue to create demand for wood in the China market – including urbanization, the growing middle class, and escalating environmental concerns – competition in China is increasing and the pace of growth has slowed.

Recently Canadian market share in China has shrunk as competition within the lumber segment continues to grow. This loss of market share has largely been driven by both reduced shipments of low grades which are shifting to markets with a higher return as well as growth of Russian lumber imports to China. Shipments of Russian lumber are growing particularly in applications where the decisive factor is low price: concrete forming and furring strips. Statistics reveal that imports from Russia over the first five months of 2016 are 45 percent higher than the same period in 2015. Anecdotal comments indicate that European supply is higher grade than Russian wood and may be taking an increasing stake in the manufacturing sector, making it a challenge for Canadian products to gain entry.

Furthermore, China faces an excess of housing in some areas, high debt, and overcapacity in a number of industries. Several economists indicate that China could be entering a period of slower growth over an extended period of time. It is worth noting that while China's GDP growth in 2015 slowed to 6.9%, average global growth stood at only 2.9%. Furthermore, under what the government has dubbed as the "New Normal", China's future growth will be fuelled by domestic consumption rather than the export of low-value goods.

Still, the Chinese government has and will continue to escalate policy responses in an attempt to regain stability. This will likely create short term issues for wood imports in some segments while creating potential opportunities in others. Within this context, the Chinese government has officially given support to a number of different initiatives and concepts that may affect the construction industry and positively impact the use of wood in the medium term. Not all are fully developed but they indicate future policy direction. These include:

- Shifting Central Government focus out of first tier cities;
- Promoting medium to high density housing;
- Improving construction quality and maintenance;
- Reducing construction costs;
- Increasing the rate of construction industrialization (prefabrication);
- Improving seismic stability of buildings in earthquake prone areas; and
- Focusing on mitigating environmental concerns by
 - encouraging energy efficiency improvements in new construction
 - working to meet commitments and goals to reduce greenhouse gas emissions
 - expanding green building initiatives

B.C.'s strategic focus areas in China

During the 2016 China strategy review, two strategic priority areas were identified and endorsed. The primary focus will remain advancing wood use in construction, with a parallel objective of increasing the unit value of construction lumber exports. The second priority is expanding the use of B.C. wood in China's wood products manufacturing sector, positioning B.C.'s unique species and the environmental pedigree that comes with Canadian wood products.

Advancing wood use within the construction sector

Over the past decade industry programs have focused on low-rise light wood frame construction applications in China. Moving forward, FII encourages an expanded emphasis on other high growth, high potential construction applications that tie in with the Chinese governments aforementioned goals. This does not mean abandoning low-rise applications in China.

However, moving forward the emphasis will be increasingly on capturing market share within the mainstream construction industry, suggesting an increased priority on finding applications for wood use in construction in mid to high rise buildings and finding ways to use wood to support construction industrialization and expanding green building. Potential applications include substituting wood for other materials in partition walls, floors, exterior walls and in added storeys. To make such applications viable, Canada must prove the business case for wood versus aerated concrete blocks and other competitive materials.

The second emphasis within wood construction will lie in the resort sector. As China's population becomes increasingly affluent, domestic tourism is booming; a Canada Wood study found domestic tourism is a \$600 billion CAD industry growing by 15 percent annually. While international destinations have seen significant increases in Chinese visitors, the Chinese government has placed a priority on developing and improving tourism facilities at home – to both attract visitors to China and to keep more Chinese tourism spending at home. Many of these tourism focused developments tend to be low-rise and therefore work well with the current wood building codes. In addition, developments tend to favour a "resort" style which can feature both interior and exterior use of wood. This creates an opportunity to promote Canadian wood within the resort sector.

Hybrid and heavy timber/glulam construction represents another growth opportunity, in both public and private sector construction. Promoting the natural beauty and aesthetic appeal of wood in structural and visible applications in larger buildings may both increase the consumption of wood in these projects, but also advance the visibility of wood in high profile projects across China. Such projects are key to increasing acceptance and raising awareness of wood as a building material. The 2022 winter Olympics in Beijing is a natural home for these projects.

Positioning Canadian wood for the manufacturing sector

The second focus, that of expanding use of B.C. species in China's wood products manufacturing sector, has received some attention in the past but would benefit from a more aggressive approach going forward. One Canada Wood study revealed that the furniture sector uses approximately 36 million m³ of wood per year, roughly two-thirds hardwood and one-third softwood. This makes manufacturing the second largest wood consuming segment in China and represents more than one-quarter of the imported softwood market. Other manufacturing segments such as doors, windows, interior finish, saunas, and engineered beams also represent areas of interest.

While competition in this sector is strong, FII supports efforts to position B.C. species to take advantage of this large area of wood use. The environmental pedigree of forest products from B.C. can provide an advantage to manufacturers focused on export markets, where proof of sustainability and legality are required. Positioning the advantages and performance of B.C. species and B.C.'s reliability of supply may also be important factors. FII has initiated a remanufacturing strategy and plan among Canadian industry groups to target the furniture and remanufacturing sectors, based upon which market development investments would be made.

FII in conjunction with the industry has developed a refreshed China Strategy. Proponents are required to thoroughly review the refreshed Strategy prior to preparing funding proposals for China.

Japan

As B.C.'s second largest market outside North America, Japan remains an important and high value market for B.C. wood products. B.C. and Canada have a long-standing presence in the Japanese market and Canada and B.C. are widely recognized as leading players in supplying wood products to the Japanese market.

Japan's GDP grew 0.5% in 2015 and at an annualized 1.7% in the first quarter of 2016. The second consumption tax increase from 8% to 10% has been delayed until October 2019 and the Liberal Democratic Party government has introduced a 28 trillion yen (CAD \$350 billion) supplementary fiscal stimulus package on top of record low interest rates and aggressive monetary stimulus measures to prime growth in 2016 and beyond. In 2015 Japan's housing starts increased 1.9% to 909,299 units and 2x4 starts increased 2.8% to 114,617 units. Between January and May 2016, Japan's total housing starts increased 6.6% and 2x4 starts were up 6.1%.

FII, NRCan and industry have a detailed strategy for Japan in place, which should be used to provide additional guidance to the following priorities.

Expanding the opportunity for wood use in multi-family residential, mid-rise, non-residential, public and institutional construction is a key priority in the coming year. Use of wood in multi-family and mid-rise construction has grown in Japan, and efforts to relax height and size limitations for wood use can further expand market opportunities. The Japanese government has encouraged increased wood use in non-residential applications, which also represents growth potential. Recent efforts to use wood in institutional construction, such as elderly care facilities, are showing significant promise. A recent boom in tourism in Japan leading up to the Tokyo 2020 Olympics is also opening up opportunities in the hotel industry segment. In 2016 Japan is expected to receive a record number of 20 million visitors to Japan – nearly doubling foreign tourism in the last 5 years. Work to leverage the previous success in the elderly care sector to the hotel industry is a promising opportunity.

As Japan continues to encourage greater wood use in public buildings, educational facilities, recreational and commercial construction, the B.C. industry has an opportunity to target its products and grow market share. Leveraging B.C.'s experiences, sharing new technology, and profiling our Wood First results to inspire Japan to increase wood use are encouraged. Success in growing the pie for wood use in Japan, either directly or in partnership with Japanese agencies, should benefit B.C. producers.

The single-family housing sector has been a mainstay of past efforts in Japan, both to position coastal species in Japan's post and beam housing segment, and to grow market share for platform frame 2x4 housing. Platform frame housing using Canadian species has gone from a new concept four decades ago, to being a well-accepted building system in Japan today.

While FII acknowledges the importance of single-family construction for the industry, due a range of factors such as weakening demographics and higher quality, longer lasting housing stock, single-family construction is not viewed as offering strong growth opportunities for the future. As such FII views maintaining existing single-family segments as important and invites related proposals, however would place a somewhat greater priority on advancing expanding growth segments in Japan.

As a high value market, Japan represents good niche opportunities for B.C.'s value-added sector. Where a strong business case exists, FII would encourage market development opportunities that will position B.C.'s unique value-added products. Canadian panel products such as Oriented Strand Board (OSB) have developed a presence in the Japanese market, and have room for further growth.

Japanese government programs that promote domestic vs. imported wood, however, remain a concern for the B.C. industry and other off-shore suppliers. There have been a number of examples in recent years where subsidies and policies have been used to promote domestic wood species, whether at the local prefectural level or more national in scope. Continued efforts to monitor government policies and domestic programs, and raise concerns in a timely and coordinated fashion will remain important to maintaining B.C.'s position in Japan. While cooperative opportunities may exist to promote the use of wood more widely, it is important to ensure that any efforts include imported sources of legal and sustainable wood, not just domestic species.

South Korea

South Korea is B.C.'s sixth largest market and B.C. has a 13.6 percent share of total softwood lumber imports. In March 2014, Canada and Korea concluded negotiations and signed a bilateral Free Trade Agreement which is expected to create new opportunities for B.C.'s exports of softwood lumber and specialty products. By 2017, the five percent tariff on lumber imports from B.C. will be eliminated with similar tariffs on plywood and OSB to be removed within 10 years.

Soft Chinese demand for Korean exports and sluggish growth in private consumption and fixed capital formation prompted economic activity to decelerate in the first quarter, but will improve in the second quarter of 2017. The government will implement a KRW 20 trillion (USD 17 billion) stimulus package this year, including a KRW 10 trillion extra budget to boost still sluggish economic growth¹⁰. Policymakers forecast that the domestic economy will sustain its trend of modest growth going forward and that inflation will remain low for the time being. Interest rates in South Korea averaged 3.44 percent from 1999 until 2016, reaching an all-time high of 5.25 percent in October of 2000 and a record low of 1.25 percent in June of 2016. Interest rates in South Korea are reported by Bank of Korea¹¹.

Amid the South Korean government's efforts to prop up the local real estate market, housing starts had increased 8.9% (to 47,265) over the previous year¹², while housing permits increased 13.2% (to 52,266) over the same period. While housing starts and permits were up, the number of home transactions dropped 23.4% in the first six months of 2016 compared to the previous year, an apparent sign of a slowdown in the local real estate market. Resale transactions are not adequate to absorb the excess supply, although they are still building single-family homes. The oversupply appears to be in the apartment market at this time.

¹⁰ <http://www.focus-economics.com/countries/korea>

¹¹ <http://www.tradingeconomics.com/south-korea/interest-rate>

¹² As of May 2016

South Korea's per capita GDP now exceeds US\$33,200 and is viewed as a key factor in the growing demand for higher value single-family (SF) and low-rise multi-family housing. In 2015, these types of housing made up over 31% of all new housing starts, compared to 11% a decade ago. Supported by consumer desires and government goals (long-term plans are to increase the single family/low-rise multi-family (MF) percentage to 50%), this trend is expected to continue past 2020. In addition to their growing wealth, the highly educated populace is seeking healthier living environments and alternatives to traditional (rental) agreements. These factors have favoured growth in wood housing, which is seen as environmentally friendly and healthy, spurred by the expansion of satellite cities and introduction of new building types to meet new consumer needs. Wood construction now makes up 12% of the single-family housing market, up from just 6% in 2005. FII, Natural Resources Canada and industry have a published strategy for the Korea market and are encouraged to review the document.

The Korea strategy recognizes that the main area of opportunity is for wood use in construction, and this remains the key priority for FII investments. Proposals that focus on expansion of wood use in residential construction, actively working to improve wood-frame construction (WFC) building and design quality, and adoption of wood in-fill walls in all applications are key areas of priority.

In addition, non-residential construction has provided a smaller but steady market for wood while receiving little emphasis in the marketplace. Research to identify specific opportunities in this market is encouraged as are proposals that include opportunities to increase wood use in the non-residential construction market.

Opportunities to expand use of wood in both residential and non-residential renovations to meet Long-Life Housing policy goals are also encouraged, as are proposals to convert concrete and steel buildings to using wood in-fill wall systems. Efforts to expand the use of wood in high-value structural and non-structural applications are also encouraged. This includes promoting "showcase" buildings -- high-profile public or accessible private buildings like club houses and recreation facilities -- that will increase the profile of wood as a building material and highlight the potential for Canadian wood products.

As per capita incomes continue to increase in Korea, and more attention is paid to higher quality homes and finishing, opportunities may expand for B.C. value-added products. Where growth opportunities exist, FII would encourage efforts to increase market share for B.C. value-added products in Korea.

Proposals to promote WFC's energy efficiency advantages as well as influence Korean government policy to align with those advantages are also encouraged. While wood is currently viewed quite favourably from an energy efficiency standpoint, there are concerns for the future. Issues have arisen due to proposed Passive House and Net-Zero standard legislation by 2017 and 2025, respectively. While it is not clear exactly what standards will eventually be legislated, experts agree that it will be difficult for the Korean wood construction industry to adapt to Passive House standards in a cost competitive manner by 2017. These standards, requiring very high levels of insulation and significant attention to building envelope air tightness, demand a level of sophistication in the design and construction of wood housing that does not exist in Korea at the present time. While it appears that any legislation in the next few years will concentrate on larger, high profile buildings, there is a need for Canadian interests to agree upon and act upon a plan to enhance wood's energy efficient credentials and sustain growth in Korea.

The Sustainable Wood Product Use Act has allowed the Korea Forest Service, through the Korea Forest Research Institute, to regulate and enforce issues around wood product quality. The enforcement of the “Quality Certification Standards for Preservative Wood” has significantly reduced opportunities for SPF use in the Korean treating industry. In addition, the Korean government began discussions in 2013 regarding a Wood Quality Mark System requiring each piece of imported wood with a Korean grade stamp and a mark specifying point of origin. While FII recognizes that efforts are underway to respond to both issues, monitoring Korea’s evolving regulatory requirements and responding appropriately will remain important for the forest industry and are encouraged by FII.

India

The economic outlook provided by the Organisation for Economic Co-operation and Development suggests growth in India will remain strong and stable in 2015, with a projected 7.3 percent growth rate for the year. Although the inflation rate fell to a decade low of 4.9% the Reserve Bank cut interest rates four times in order to reduce borrowing costs and stimulate consumer spending. The 2014 elected Modi government had announced initiatives that have eased regulatory requirements and lending constraints. These pro-business measures, including the “Housing for All” and the “100 Smart Cities” plans, should support a revival in investment in the Indian market and spur real estate sales and construction spending.

Key trends in the Indian market include rapid urbanization, a growing middle class of consumers with increasing affluence and a leaning toward “westernization” of fashion and décor. The high economic growth rate combined with these trends has led to a sharp rise in the demand for wood and wood products.

While traditionally a tropical hardwood market, log export restrictions in Myanmar, Malaysia, and other tropical countries have forced Indian manufacturers to look for alternate wood supply sources. As such, a shift is taking place from both from hardwoods to softwoods, and from logs to an increasing amount of imported lumber.

The cumulative volume of fiber deficit by 2035 will be 84 million m³ ¹³. Between 2010 and 2015, India’s imports of lumber increased by more than 360%, whereas, during the same time period India’s overall wood fibre products imports registered a growth of approximately 10%. Most of this increase in lumber imports can be attributed to softwood lumber, which increased from meagre 1% of India’s overall wood fibre imports in 2010 to 5.9% in 2015, registering a stellar 600% increase. This transition of India’s import orientation from logs to lumber and an enhanced willingness to explore softwood species presents a unique opportunity for softwood lumber exporter around the world.

The best opportunities for Canadian softwoods continues to be in the domestic production of doors, door frames, windows, architectural millwork and furniture. Positive long-term construction trends (almost 50 percent increase in building supply needed by 2030) should lead to the development of a robust market for interior products and finishing materials. SPF remains the dominant species in current shipments from B.C. to India; however, interest is developing in coastal species for applications that

¹³ FII- Global Hardwood and Softwood Trends and Impacts Study

have traditionally consumed hardwoods. This suggests positive growth prospects for hemlock, western red cedar, yellow cedar and Douglas fir.

While the furniture and door sector has shown the most promise on a short term basis, the construction sector should also be explored. There are potential opportunities in the resort, tourism and secondary home markets. Particularly in locations not impacted by termite infestation such as the mountainous areas and beaches. India has been recognized as a destination for spiritual tourism for domestic and international tourists. Total contribution by travel and tourism sector to India's GDP is expected to increase from US\$ 136.3 billion in 2015 to US\$ 275.2 billion in 2025. Travel and tourism is the third largest foreign exchange earner for India. In 2014, the country managed foreign exchange earnings of USD 19.7 billion from tourism. It is anticipated that the number of upper middle class will increase from 146,000 to 294,000 by 2021 with a combined net worth of US\$ 4.8 trillion driven by new upper middle class from emerging sectors and new avenues for investments that give higher returns. With increasing affluence on the one hand and a growing realization that there is a need for a relaxed lifestyle at least on weekends, the concept of second homes started growing. Moreover, at present there is a large spectrum of people able to afford second/holiday homes and is continually increasing with more purchasing power due to economic growth¹⁴.

FII will continue its direct investment in India in 2017/18. Activities in India will benefit from increased funding from the Province of BC, with a goal of increasing Canada's brand recognition and the exposure of BC species, and increasing early commercial market entry activities. Investment support will be via a partnership with Natural Resources Canada to support the ongoing operation and outreach activities from the FII India office, and the increasing involvement of the forest industry through Canada Wood. FII encourages funding proposals that can extend and advance the work completed to date in India in the areas of market research, promotion, education, product trials, commercial demonstration activities and market access work. In so doing, FII welcomes requests for industry associations to co-locate their own staff resources and coordinate activities with FII's office in Mumbai, and satellite locations in Delhi and Bangalore.

Southeast Asia

In early 2015, FII, Natural Resources Canada, and the Canada Wood Group completed a market assessment of key markets in Southeast Asia, including Vietnam, Thailand, the Philippines and Indonesia. While not a significant market for B.C. forest product exports today, the region does hold potential for the future. The population of the region exceeds 500 million, and is growing by roughly 7 million people per year. All major economies in the region are growing, creating a range of emerging business opportunities. Markets like Thailand and Indonesia hold promise for increasing domestic consumption of manufactured products, while low labour cost markets like Vietnam continue to provide the greatest short term opportunities for manufacturing for export. The initial analysis would suggest that Vietnam likely represents the strongest short term market opportunity for B.C. of the markets studied.

¹⁴ From Understanding the Prefab Wooden Construction market in India Report (2016) and the 2016 BC Trend Analysis in Export Markets recently completed by FPIInnovations and FII

Vietnam has in the last five years become a major centre for manufacturing a wide range of wood products, including furniture. The furniture industry development is the key driver behind the increasing demand for imported lumber in Vietnam. Vietnam has surpassed Taiwan in furniture exports, and is the second largest Asian exporter after China. Vietnam's 2015 furniture exports totaled CAD \$7.1 billion¹⁵. Vietnam currently imports over one million m³ per year of lumber, of which approximately 50 percent is softwood.

While opportunities for growth exist, there are competitive pressures from other supplying regions. FII would encourage further evaluation of markets in Southeast Asia, with a priority placed on Vietnam. FII has entered into an agreement to further study the Vietnam furniture market and identify the supply chain including importers, distributors and end users. Further, the requirements of end users will be surveyed to determine the best opportunities for Canadian softwood, hardwood and panel products.

As in all markets, FII would encourage a collaborative approach by key industry trade associations. Early market exploratory work, and the development of a focused and coordinated strategy would be early priorities for FII. Where it makes sense, alignment with efforts underway in China to grow B.C. exports in China's manufacturing sector (and similar efforts in India) are encouraged.

North America

In North America, FII places priority on the development of new or expanding market segments and growth in high potential new areas. In the US market a key focus is on non-residential and multifamily-multistory construction, where there is considerable opportunity to increase wood's market share. In Canada, FII supports development of new market segments and proposals outside of B.C.¹⁶.

North America represents the most important market for B.C.'s value-added products, and for high value species such as western red cedar. FII encourages funding proposals that will advance opportunities for B.C. products and species, with a priority on expansion to new/growing market areas or the development of new and emerging market segments. Where possible, FII also encourages supporting small and medium-sized value-added companies to expand their markets in North America, and position themselves for future growth and expansion.

United States

Despite positive employment numbers and consumer sentiment in 2015, housing starts remained modest at 1.11 million units. This is well below the estimated demand for shelter production in the US (1.5 million starts), which increases the cumulative housing stock deficit to over 2 million units. Household formations jumped from 0.79 million in 2014 to 1.88 million in 2015; however, even with the 30-year conventional mortgage rate at near record lows (3.96%), homeownership rates dropped in 2015 to 63.8%.

Consumption of softwood lumber in the US increased 4% in 2015. While domestic production remained flat, imports grew 10% to 32.4 million m³. Imports of lumber from B.C. rose 7%, although imports from

¹⁵ 2016 BC Trend Analysis in Export Markets, FPIInnovations

¹⁶ Funding for activities in B.C. must be submitted through the FII Wood First program.

the rest of Canada grew 11%. For the first time since 2001, the rest of Canada sold more volume (43,000 m³ more) than B.C.

Consumption of wood panels also grew 4% in 2015. Similar to softwood, flat domestic production was met with a 17% increase in imports. B.C. exports to the US improved 25% to 1.45 million m³, while exports from the rest of Canada increased to 4.97 million m³.

As the US housing market recovers, demand for imported value-added wood products continues to rise. In the last four years, imports to the US have increased by more than \$10 billion reaching \$24.9 billion in 2015. Following China (\$10.9 billion) and the ASEAN¹⁷ region (\$5.9 billion), Canada exported \$3.1 billion of value-added products to the US in 2015.

FII in conjunction with the industry has developed a refreshed US Strategy. Proponents are requested to thoroughly review the refreshed strategy prior to preparing funding proposals for the US.

Several trends are affecting demand for B.C. wood products in the US including:

- Smaller homes – The average floor area of a detached home in the US has increased 12% since the construction peak in 2006; however, homes built during the recovery were skewed toward move-up¹⁸ and luxury homes. Between 2014 and 2015, growth in average floor area flattened, and it may even decrease in coming years as more starter homes are built. These smaller homes will pull down average home size.
- Homeownership continues to drop – Despite the ongoing economic and housing market recovery, homeownership in the US continues to decline. While household formations jumped from 0.79 million in 2014 to 1.88 million in 2015, homeownership dropped from 64.6% to 63.8%.
- Multi-family construction shifting to taller buildings – Demographic and social factors are moving the market toward more multifamily living, with construction going higher– A decade ago multi-family housing made up only 19% of US residential construction, however with increasing urbanization and densification that proportion topped 36% in 2015. Multi-family starts consume roughly 60% less wood than a single family start – thus these trends have significant implications for the sector. In 2015, 25% of multi-family floor area was built above six storeys, surpassing the pre-recession (2006) high of 22%.
- Supply constraints – Last year saw a labour shortage in the construction sector. In the spring of 2015, 3% of home construction jobs went unfilled compared to less than 2% under normal market conditions. This labour shortage is more acute in multifamily construction. In addition, many point to a shortage of available building lots in central locations is likely slowing housing recovery as the market has lost its appetite for developments in distant suburbs.

¹⁷ The Association of Southeast Asian Nations (ASEAN) includes Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma), and Vietnam.

¹⁸ Home Innovation Research Labs has three categories of new single-family homes: starter (\$182,913), move-up (\$350,102) and luxury (\$706,386).

- Generational housing shifts – The Millennial (18-34) age group is displaying lower homeownership rates than other generations did at the same age. Millennials are more likely to live with their parents later and are less likely to be married or have children. Further, between 2006 and 2015, homeownership rates for those aged 35 to 44 – a prime child-rearing age group – dropped from 69% to 58%.

US market strategy

The US housing sector, in particular single-family home construction, remained the leading consumer of B.C. lumber, panels, cedar and value-added wood products. However, with the market moving toward multifamily living, FII continues to focus its funding support toward work that expands wood beyond the single-family residential segment and into growth opportunity sectors in non-residential (commercial, institutional, recreational, and educational) and multi-family/multi-storey construction. This segment still has significant opportunity to increase wood's market share, and to expand opportunities to use wood both structurally and architecturally. FII welcomes funding proposals that focus on growing wood use in these segments.

Maintaining support for value-added products is also a priority, as are investments targeting high potential applications such as resort homes, log and timber frame structures, pre-fabricated housing, cabinetry, shakes and shingles, and millwork and finishing. Expanding opportunities for engineered wood products, remanufactured lumber and other products supplied by B.C. firms is also a priority. Promotion, research, or technical support for end users that will significantly enhance returns from repair and remodelling opportunities, as well as the development of niche opportunities in US value-added markets remain a core part of the strategy for the US.

FII also recognizes that the US is the most important export market for western red cedar; therefore, activities continued to position cedar in growing market segments and differentiate cedar products from non-wood substitutes are a priority.

Canada

FII continues to have an interest in promoting the use of B.C. forest products in growth segments in Canada. All activities in B.C. will be managed through the Wood First program; activities elsewhere in Canada will be considered in this Call for Proposals.

Despite a strong start to the year, the Conference Board of Canada has downgraded economic growth in 2016 to just 1.4 percent. The wildfires that engulfed much of Fort McMurray and the surrounding areas in May and June are expected to subtract 0.1 percentage points from overall economic growth this year. The US economy got off to a slow start and the world economy is losing steam. These factors will hurt Canada's trade sector.

The largest source of weakness in the economy remains the steep deterioration in business investment. While much of the weakness in business investment is due to the collapse in energy investment, there is still no sign of the long-awaited recovery in non-energy investment. High consumer debt levels remain a concern in Canada particularly should interest rates start to increase in 2017.

According to Royal Bank Canada, Nation-wide indicators continued to suggest that there is a low probability of a widespread and steep downturn in Canada's housing market in the next 12 months. At the local level, indicators paint distinct risk profiles with overheating concerns topping the list in Vancouver and Toronto, and weak economy posing the main threat in Calgary. Affordability-related risks continued to increase significantly in Vancouver and Toronto this year, as prices accelerated further, especially for single-detached homes. Vancouver, in particular, showed strong signs of overheating, although recent declines in sales brought some cooling. The surprise introduction by the B.C. government of a new 15% tax on home purchased by foreign nationals in Metro Vancouver added a new layer of risk for the Vancouver market.

Exports should be the primary driver of growth, as Canada rides the coat-tails of a resurgent US economy. A weaker Canadian dollar should also help in this regard. As firms expand to meet demand, business investment is expected to increase its contribution to growth, pulling up full-time employment and wages along with it. Although labour market conditions should improve, households are forecast to temper their spending growth somewhat in 2017.

The share of multifamily units in total housing starts has noticeably increased over the past decade and this represents an area of further potential. While wood dominates low-rise residential construction in Canada, opportunities exist to expand wood use in non-residential, commercial, recreational, industrial, and institutional sectors. With the 2015 National Building Code advancing wood use in mid-rise construction to six storeys for both residential and commercial occupancies, opportunities exist to propel these regulatory changes into expanded business for the wood industry.

Over the past decade while other markets weakened, the Canadian market has remained crucial for B.C.'s value-added sector. Where high potential opportunities exist with a strong business case for growth, FII will entertain proposals to further expand value-added opportunities in Canada.

With much of the domestic market focused on traditional uses for wood products, FII will prioritize proposals that are able to demonstrate new market potential or significant growth opportunities in traditional or new segments. As Canada represents a mature market, proposals will need to make a strong business case for how additional promotional or research activities in traditional segments will significantly enhance returns from the domestic market.

Other Markets & Opportunities

FII recognizes that other markets and market segments are important to the industry, beyond those identified above. Where a compelling business case exists, FII will entertain funding proposals in existing markets. Where a compelling business case can be made for further investment in an existing market, it must be presented in a manner that focuses on genuinely new opportunities and anticipate impacts of FII's additional investment.

Emerging markets

FII recognizes the importance of continuing to identifying new opportunities in the world's rapidly growing emerging markets. FII is open to funding applicants proposing pioneering activities and leading early market development efforts. FII encourages proponents interested in researching new market potential or pursuing new markets/segments not identified in this strategy to include a business case for FII funding.

Forest bio-products

FII investments predominately focus on innovation and market development related to the forest sector's primary and value-added wood products. However, FII recognizes that a fundamental shift is taking hold in the global market for forest products. Driven by concerns about climate change and the use of fossil fuels and other non-renewable energy sources, significant new opportunities are emerging to convert wood based bio-mass into everything from electricity and heat to transportation fuels, bio-chemicals and plastics, and next generation bio-materials. This vast new forest "bio-economy" has the potential to become an important segment of B.C.'s forest economy.

FII actively encourages industry in their efforts to identify and commercialize a new generation of forest bio-products. As other funding mechanisms currently support early stage research into bio-products, FII will not duplicate these investments. However, FII welcomes proposals that focus on better understanding the market(s) for commercial, or near-commercial forest-based bio-products. Proposals for investigations in this area could include analysis of market potential and/or propose research to identify market segments offering opportunity for the B.C. forest industry. For established and accepted products, such as wood pellets, proposals may focus on pursuing markets with strong commercial potential.

Pulp & paper

The pulp and paper sector remains an important and considerable contributor to B.C.'s forest economy. Approximately 40 percent of every tree harvested in B.C. is manufactured into pulp and paper products which are sold around the world. Eighty-five percent of fibre for pulp and paper comes from wood chips and residues from the solid wood sector. The health of the whole forest products sector depends on a vibrant market for pulp and paper products to ensure the maximum usage of fibre supply.

FII recognizes that the pulp and paper sector operates in a different market context than the solid wood sector. In the case of pulp and paper, there are relatively few buyers and sellers and so the requirement for the type of industry-wide "market development" facilitated by FII is less as compared to company-specific sales activities which are not supported by FII programs. However, FII remains open to receiving proposals from the pulp and paper sector where submissions are consistent with FII's operating principles (i.e. provision of industry-wide benefit) and where they will assist the sector to thrive in parallel to the solid wood industry.

7. HOW TO USE THIS INVESTMENT STRATEGY

The information included in this document provides an overview of Forestry Innovation Investment (FII) market development priorities for 2017/18. The Investment Strategy is a key element of FII's Market Initiatives Call for Proposals process, providing guidance to organizations interested in proposing activities to FII for cost-shared funding.

The Market Initiatives Call for Proposals will open on **1 November, 2016**. Proposals must be submitted via the online funding management system no later than **23:59, 14 December, 2016**. Late proposals will not be accepted for evaluation. FII will accept and evaluate proposals in line with the market areas identified. FII also publishes detailed market development strategies, market research and other tools and resources for industry on the Research section of its website (www.bcfii.ca) and via its online funding portal (www.woodmarketdevelopment.ca). Please note that FII has published a detailed user guide to the online funding system to assist applicants in constructing online proposals. This guide is also available via the online funding portal or on the Investment and Funding section of the FII website.

Funding applicants are expected to align market development programs and funding proposals with the priorities identified in this Investment Strategy. Proposals for funding should also clearly note where other funding has been secured from government or quasi-governmental organizations to support the work proposed.

Applicants should clearly articulate in their funding proposals how proposed activities fit with this strategy. This can be done in a new section of the proposal template called "Link to Strategy" as well as in the Focus Area Rationales of their proposal. Funding applicants are required to review FII's 2017/18 Call for Proposals Application Guide, and other information provided as a part of the Call for Proposals process. All relevant information can be found at www.bcfii.ca, or by contacting FII.