



**Forestry Innovation
Investment®**



MARKET DEVELOPMENT SUMMARY



SOUTH KOREA

*Cheongpyeong Cultural Centre steel and wood infill wall project, Gyeonggi province | Photo: Canada Wood Korea (top)
Dong-cheon Urban First Town House, South Jeolla province | Photo: Gwangjang Architects (bottom)*

IMPORTANCE OF FORESTRY AND TRADE DIVERSIFICATION

Because the Canadian forest industry is export-dependent, developing diverse markets is critical to the health of the forest sector and the Canadian economy. Strategic investments made into established export markets such as South Korea help maintain Canada's brand, secure market share and deliver long-term returns.

Why South Korea

- **Highly import-dependent for softwood lumber products**
- **Green policies and consumer attitudes increasingly favour wood construction**
- **Canadian brand and advanced wood technology highly respected**
- **Canada-Korea Free Trade Agreement will eliminate all wood tariffs by 2024**

MEASURING PROGRESS

Since market development activities began in South Korea in 2006, the Canadian effort has achieved considerable success. Canada Wood initiated and continues to lead market development programming in South Korea, supported by Forestry Innovation Investment and Natural Resources Canada funding.

Market development creates large market for B.C. lumber

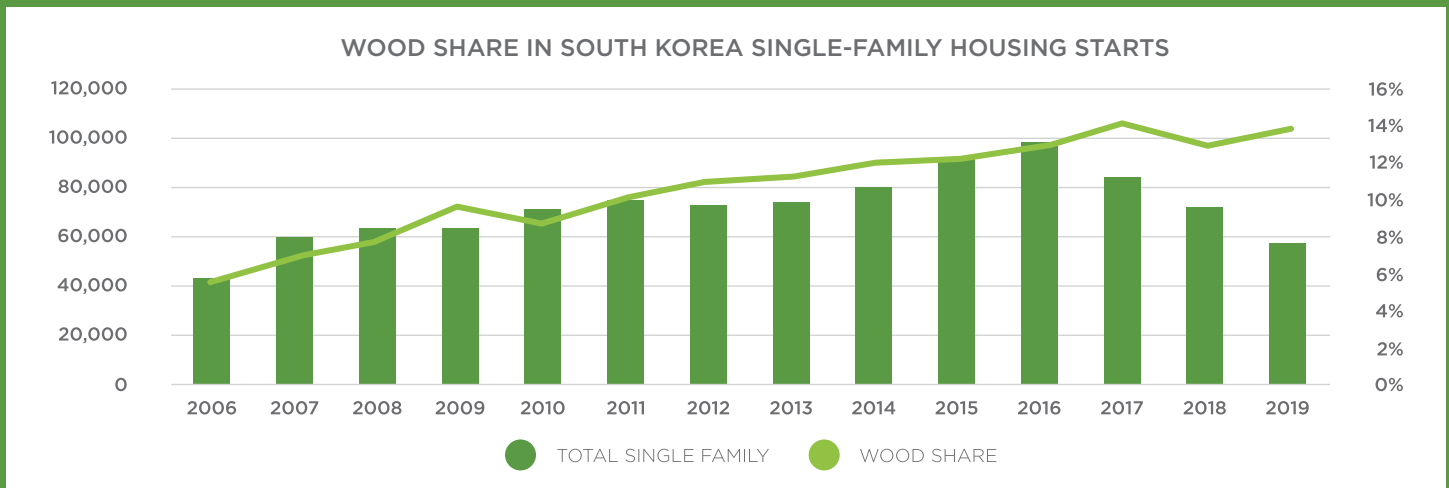
In terms of market growth, South Korea has seen positive uptake of B.C. softwood lumber. From 2006 to 2016—the first 10 years of the market development program—softwood lumber sales more than doubled. Since then, the market has stabilized, in part in response to government policy to cool an overheated housing market.

The market development program has targeted raising awareness of wood-frame construction, building capacity and updating building codes to support wood use in a broader range of construction applications.

Growing wood share in the detached home market

Over the last decade, wood has become increasingly common as a building material in the low-rise housing segment, particularly detached single-family homes. This has happened for a combination of reasons: builders and homeowners are realizing the benefits of wood construction, Korea's national decentralization strategy is conducive to wood-frame construction and societal preferences for healthy homes built with wood, rather than concrete or steel, are trending upwards.

Looking forward, the trend towards working from home may shift demand to single-family dwellings from condominiums, while the transition to a carbon neutral economy will promote more green building products, like wood.



From 2006 when the program began to 2016, the number of wood buildings and detached homes in Korea has increased—and so has wood's share of this construction. Though the overall construction market has pulled back considerably from 2016, the wood share has maintained momentum.



South Korea has propelled itself from one of the poorest countries in the world to a high-tech industrialized economy in one generation.

BUILDING A MARKET FOR B.C. WOOD PRODUCTS IN SOUTH KOREA

South Korea is famous for its spectacular rise from one of the poorest countries in the world to a high-tech industrialized economy in just one generation. In the 1960s, GDP per capita was comparable with levels in the poorer countries of Africa and Asia. Since then, South Korea's economy has grown, on average, 7.5 percent per year. In 2004, it joined the trillion-dollar club of world economies.

As the South Korean economy grew in the latter half of the 20th century, the demand for urban housing increased exponentially. The population of Seoul grew from 1 million in 1950 to more than 10 million in 1990 before stabilizing.

Due to a lack of land, most of this new housing was concrete, high-rise apartments in highly dense neighbourhoods. Seoul, for example, has a population density three times that of Vancouver.

As incomes rose, many South Koreans wanted to move to more upscale housing, creating a new market for single-family housing. And, given a cultural attraction to wood products, this new market created an opportunity for both wood-frame construction and value-added wood products.

Canada Wood market entry

Several factors came together at the turn of the 21st century to make South Korea a compelling market for B.C. wood producers. Increasing incomes meant that more South Koreans could afford single-family homes. A small domestic lumber industry meant that builders were increasingly turning to foreign suppliers for wood

products. Trade liberalization in the 1990s meant that South Korea was more open to foreign suppliers. These factors aligned with a strategic push by the Canadian wood industry to open up new overseas markets.

As a result, in 2006 Canada Wood set up a market development office in Seoul, with support from Forestry Innovation Investment and Natural Resources Canada.

Home is where the market is

Since 2006, the Canada Wood marketing program has focused on the single-family residential construction market. The results have been impressive. In the first 10 years of the program, wood building starts grew by more than 220 percent.

Wood-frame construction now has a 15 percent market share of the single-family market, up from only two percent in 2001.

In recent years, these successes have leveraged expansion into new markets, including energy efficient buildings, multi-family construction and industrialized construction.

MORE THAN
128,000 HOMES USING 2X4
CONSTRUCTION HAVE
BEEN BUILT SINCE
THE START OF THE
PROGRAM



By recognizing the value of wood as a construction and finishing material, South Korea presented itself as an opportunity for the Canadian wood product industry to grow market share. Most of Korea's wood consumption currently occurs in the single-family home segment.

Overcoming obstacles

To increase the amount of wood construction in Korea, Canada Wood has had to overcome many obstacles to market growth. These include successfully completing tests and acquiring the necessary government certificates for fire resistance and sound insulation of wood assemblies. Without these certificates, wood would not be permitted in many construction applications.

In the pressure-treated wood sector, a 10-year field test on the use of Canadian lumber was completed in 2020. Favourable results from the test are expected to lead to changes in standards in 2021 that will allow Canadian S-P-F and hem-fir in treated wood applications.

In recent years, this program has expanded to include new categories of wood products such as mass timber, laminated timber products and industrialized products, like wall assemblies.

Photos: 10-year field test annual inspection completed by GNTECH professor Jong Bum Ra and Korea Wood Preservation Association chairman Jae Yoon Ryu | Canada Wood Korea



Building capacity

The rapid increase in the wood-frame housing market has created a need for architects, structural engineers, builders and carpenters who can design and build with wood. Because the construction sector has traditionally focused on concrete and steel construction, the sector's ability to teach these skills has been limited.

Canada Wood has closed this gap with an ongoing training and accreditation program. In addition to training more than 3,000 people through university and association-based programs, Canada Wood has hosted more than 12,000 people at seminars and workshops since 2009.

The programs have adapted to the COVID-19 pandemic by shifting to virtual classrooms and other online offerings.

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.

Super-E® promotion

In addition to providing general training in wood construction, Canada Wood has targeted energy efficiency as a growth area. Interest in more energy-efficient buildings is increasing in South Korea and is a major component of the government's carbon neutral strategy.

Canada Wood is partnering with the Korea Wood Construction Association to promote the Canadian Super-E® building system and train firms to build to this internationally recognized standard. To date, eight firms are certified as Super-E® builders and 13 projects have been completed.



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

GROWING MARKET SHARE—NEXT STEPS

While Canadian wood product exports to South Korea have increased considerably since market development efforts began, the future is even more promising. Government policies promoting green building, energy efficiency and carbon storage will benefit wood, as will ongoing societal preferences for low-rise, healthy housing that uses wood in structural and appearance applications.

The priorities of the market development program reflect these trends while building on past successes.



Maple Village Super-E house construction / Photo: Canada Wood Korea

Market priorities

- Residential home construction (single-family and townhouse)
 - Supporting the core market for B.C. lumber
- Industrialized construction (multi-storey/multi-family residential, non-residential and tall wood mass timber) and prefabrication
 - Targeting growth areas in new uses of wood
- Energy-efficient buildings (Super-E & net-zero)
 - Taking advantage of government programs to reduce carbon emissions
- Value-added products
 - Promoting B.C. value-added products through the BC Wood Specialties Group

Common to all markets are efforts to remove barriers that may inhibit sales of Canadian wood products in the identified markets.

Government policy driving wood use

Government policy has a huge influence on the demand for wood, therefore marketing efforts are designed to leverage these priorities and initiatives.

Since adopting a building energy standard in 2004, the Korean Government has continued to promote energy efficiency. The government also provides financial incentives and low-interest loans for projects that meet energy efficiency targets.

Through the Korea Wood Construction Association, promotion of the Canadian Super-E® building system gives developers a turn-key solution to take advantage of

these government programs. A government requirement that all new public buildings meet a net-zero standard will create even more opportunities for advanced Canadian wood systems.

The government is also encouraging low-rise construction through a decentralization strategy that includes lower property taxes. Combined with low mortgage rates, demand in the single-family and low-rise, multi-family segments is projected to grow as the Korean real estate market recovers. The current, strong positioning of 2x4 construction for these segments will continue to be a cornerstone of marketing efforts.



Shifts in consumer preferences

The South Korean high-end construction market presents good opportunities for Canadian building products, particularly rural or leisure housing featuring unique wood designs.

As new homes are built, Korean customers are increasingly looking to purchase high-end finished wood products, primarily for interior finishing applications. Finished wood products such as doors, windows, flooring, mouldings, kitchen cabinets and furniture products are considered natural and healthy and are often preferred, despite higher costs. Growing market share for Canadian forest products includes educating Korean buyers, specifiers and key industry figures on the benefits of procuring Canadian products derived from sustainably managed forests.

*Maple Village Super-E house interior /
Photo: Canada Wood Korea*



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

Interest in taller wood buildings is reaching new heights in Korea. A recently completed six-storey wood demonstration project has garnered media interest and is expected to boost the acceptability of wood infill walls in both residential and commercial buildings.

Industrialized construction

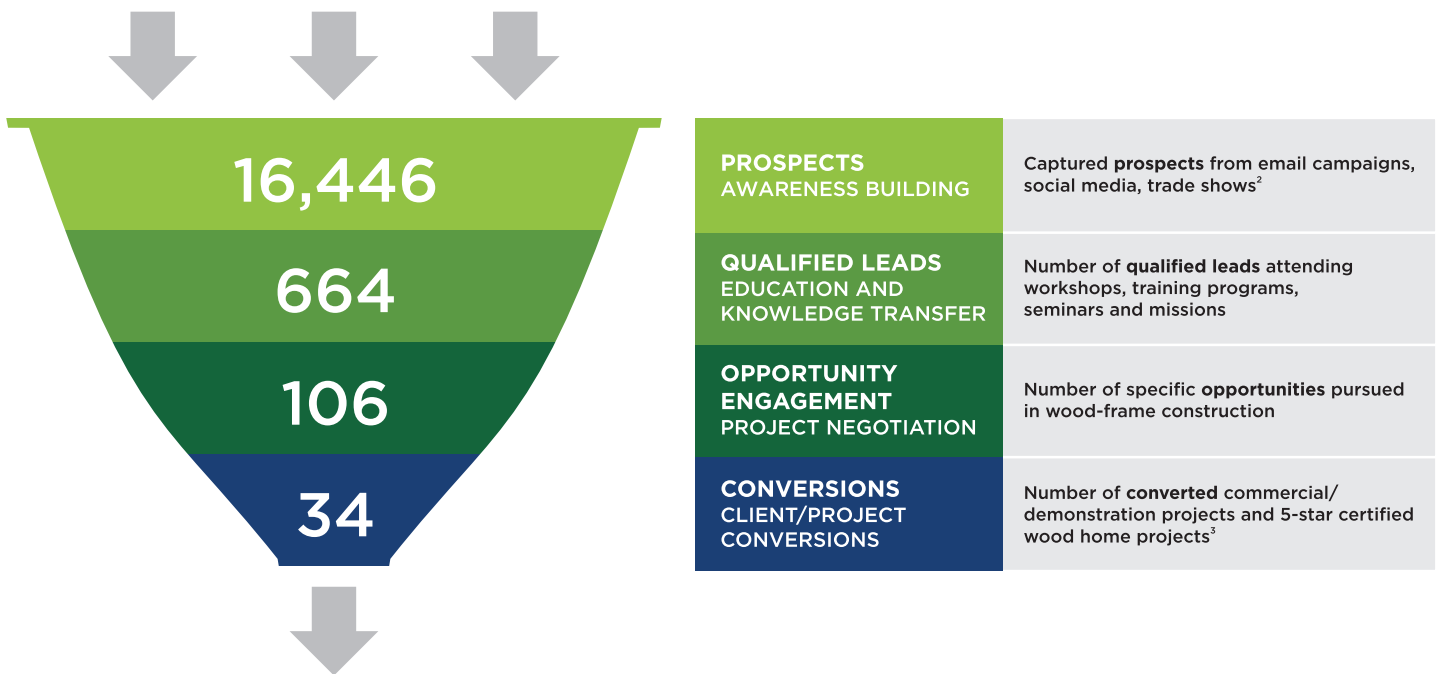
Industrialization or prefabrication of building components is a government initiative to address a growing labour shortage as South Korea's population ages, as well as to improve construction quality. Industrialization is a broad term that encompasses pure wood and hybrid products and a wide range of components including walls, partitions, floors, roof trusses and precut mass timber.

Aside from low-rise construction, the use of infill walls shows excellent prospects, as do new advanced building systems that allow taller buildings to be constructed with wood from B.C. Promoting wood as a solution to meeting government targets—and providing the necessary wood-specific technical and regulatory guidance—will result in greater market share for B.C. To align with the Korean government's policy changes, Canada Wood re-positioned its advanced builder training courses.

Korea Performance Measures

FII and Canada Wood closely monitor performance measures to track progress and accomplishments against Korea program activities. On an annual basis, both outcomes against key program priorities as well as aggregate outcomes from overall program delivery are tracked to ensure the program is achieving what it set out to accomplish.

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.

KEY FUNDERS

Market development efforts in Korea are delivered by industry (through Canada Wood Korea) with support from the Province of B.C. (through Forestry Innovation Investment) and the federal government of Canada (through Natural Resources Canada). Leveraging resources ensures that Korea remains a key—and growing—market for Canadian softwood lumber products.

Canada

