



CANADIAN FOREST SERVICE

# SPOTLIGHT

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## A Decade of Diversifying Markets for Canadian Forest Products

Over the past decade, Canada’s forest sector has benefitted from federal investments aimed at increasing demand for Canadian forest products, both at home and abroad. These investments, which have enhanced the sector’s overall competitiveness, have led to a series of notable achievements. These have included

- increasing sales of Canadian forest products in fast growing offshore markets such as China and South Korea;
- expanding the use of wood in new market segments (e.g. non-residential and mid-rise construction);
- working with partners to bring about changes in the National Building Code of Canada to enable the broader use of wood in buildings up to 6 storeys; and,
- demonstrating the versatility and environmental benefits of using wood in large-scale structures.

### Expanding Market Opportunities Abroad...

We live in a globally integrated economy. Increasingly, countries around the world are recognizing the importance of exporting their goods and services to a diversity of markets.

This is the strategy that the federal government has pursued for Canada’s wood products sector since 2002. That year, it created the Canada Wood Export Program to help the sector grow its exports in both traditional markets (e.g. Europe, Japan) and emerging offshore markets (e.g. China, South Korea). The program, conducted in partnership with the provinces and wood product associations, carried out a number of market development activities in these markets, including

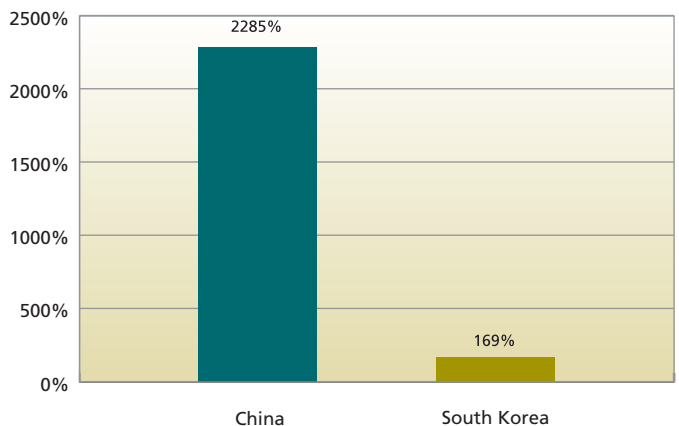
- increasing the knowledge of architects, builders, and specifiers of the use of wood in construction;
- addressing issues that could limit the access of Canadian forest products in a particular market (e.g. phytosanitary issues, product standards, and building codes, training, quality assurance); and,
- participating in outreach activities like trade missions and trade fairs.

The activities were delivered through offices in Shanghai, Beijing, Tokyo, Seoul, Toulouse, and London.

This market diversification strategy has helped Canada’s wood products sector increase, over the past decade, its exports in some rapidly-growing Asian emerging economies. For example, the value of Canadian wood product exports to China increased almost 24-fold between 2002 and 2012 to \$1.4 billion. In South Korea, they grew by 169% to \$165 million during the same period.<sup>1</sup>

This growth helped offset part of the drop in US demand for Canadian lumber which occurred when the US housing market began a severe downturn in 2006, something from which it is only now beginning to gradually recover. It also led to a rebound in forest sector employment in British Columbia due to the province’s strong exports of wood products to China.

Percentage increase in Canadian Exports of Wood Products (2002–2012)



<sup>1</sup> Source: *World Trade Atlas* (WTA). The Canadian lumber statistics included in the WTA are provided by Statistics Canada.

In 2012, the Government of Canada continued to diversify markets for Canadian forest products through the Expanding Market Opportunities program whose market development activities are aimed at both offshore and North American markets. Emerging markets in India and the Middle East were added to its offshore activities.

### .... and in North America

To further enhance the competitiveness of Canada's forest sector, the Government of Canada has, since 2007, also supported industry efforts to increase the use of wood in the non-residential (e.g. schools, health facilities, and commercial outlets) and mid-rise (e.g. buildings up to 6 storeys) construction segments in North America. This has resulted in wood being used in more than 1,354 non-residential construction projects in Canada and the United States since 2007, representing an estimated \$540 million in new wood sales for the wood products sector.

### Addressing Building Code Limitations

The Government has also worked with regulatory agencies and other partners to bring about changes in Canadian building codes and standards that currently limit the widespread use of wood in buildings greater than 4 storeys.

Specifically, it has funded technical research that will provide the scientific basis to support amendments to the National Building Code of Canada (NBCC). These amendments, expected to be reflected in the 2015 edition of the NBCC, will increase the height and size of structures that can be built with wood in Canada to up to 6 storeys. At present, 6-storey wood buildings are only allowed in the provinces of British Columbia and Quebec following recent regulatory changes in their provincial building codes.

To further increase the use of wood in building construction, the federal government, in collaboration with the Canadian Wood Council, also issued an Expression of Interest (EOI) in May 2013 to encourage the Canadian building industry to design and construct even taller wood buildings domestically. These buildings would have at least 10 storeys. The EOI, which closed on October 18, 2013, is part of a comprehensive plan to support the commercial uptake of tall wood building construction in North America.

In support of the Tall Wood Building Initiative, FPInnovations, Canada's national forest research institute, also released a draft technical guide for building tall wood structures in Canada in August 2013. The guide defines "tall" as a building height that is significantly beyond the current limits of the National Building Code of Canada (NBCC) and what was permitted in the past with traditional sawn timber.

The draft guide, developed in partnership with a diverse group of experts, includes the latest available scientific knowledge of wood-based building systems. It also addresses how these systems perform under various parameters and scenarios. The guide can assist experienced design and construction teams to

gain a better understanding of the unique factors and challenges that need to be taken into account when building high-rise wood structures in Canada.

### Showcasing the Benefits of Wood in Building Construction

To showcase the innovative use of wood in commercial and residential applications, the Government of Canada has, since 2009, also funded a number of wood demonstration projects in Canada and offshore markets. The projects feature various wood-based building solutions ranging from the use of cross laminated timber or laminated strand lumber panels to glulam columns and beams, and others. They also demonstrate the environmental benefits of using wood in construction.

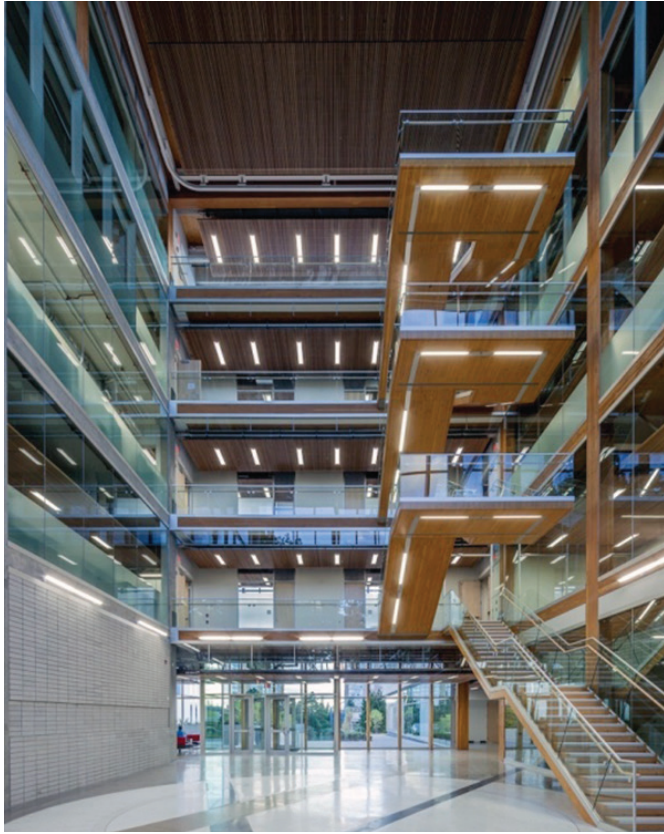
For example, pharmaceutical giant GlaxoSmithKline's new administration building in Quebec City showcases the use of new, highly innovative glued laminated post and beams. The building has a Leadership in Energy and Environmental Design (LEED) Gold certification. It was also recently recognized by le Centre d'expertise sur la construction commerciale en bois (Cecobois) with awards in the architectural concept and sustainable development categories. In addition, it received the Royal Architectural Institute of Canada's award for Innovation in Architecture.

#### What is Cecobois?

Cecobois promotes the use of wood in non-residential and mid-rise construction in the province of Quebec. It is part of the national WoodWorks! initiative.



GlaxoSmithKline Administration Building. Photo courtesy of FPInnovations



UBC's Earth Sciences Building. Photo courtesy of Equilibrium Consulting Inc.

## What is Leadership in Energy and Environmental Design (LEED)?

LEED is a green building rating system that promotes a holistic approach to sustainability by recognizing performance in five key areas of human and environmental health; sustainable site development, water efficiency, energy efficiency, materials selection, and indoor environmental quality.

For its part, the recently built north wing of the Earth Sciences Building at the University of British Columbia used laminated strand lumber panels and glulam post and beams. Cross Laminated timber was also used in its roof. The project won the BC Wood design award in the large institutional building category.

## Sustained Federal Support

Through its strategic investments in market diversification, the federal government has helped Canada's wood products sector export to a wider array of end markets and market segments. This has resulted in an increase in overall demand for Canadian wood products and new jobs for Canadian forestry workers. The investments have also helped to enhance the overall competitiveness for Canada's forest sector.