



Sectoral Profile

Forestry and Logging

Region of Western Canada and Territories

2015-2017



EXECUTIVE SUMMARY

- The forestry and logging sector (NAICS 113) contributed \$4.4B to Canada's Gross Domestic Product (GDP) in 2015.¹ BC's industries contributed to 43% to Canada's forestry and logging GDP, while Alberta's industries contributed 10%.^{2,3}
- Forestry contributed favourably to Canada's trade balance in 2015 at \$296M. Western Canada's biggest lumber trading partners are: China (49% of exports), Japan (20%), South Korea (17%) and the US (13%). In Canada's export trade, BC products make up 100% of lumber exports to South Korea, 99% of lumber exports to Japan, and 98% of lumber exports to China.⁴
- Canada is the world's second largest softwood producer.⁵ BC's forests, primarily the interior, contribute to 50% of Canada's softwood production while Alberta forests contribute 15%.⁶ BC exports more softwood lumber to the United States (US), by quantity (50%) and value (55%), than any other province.⁷
- In 2015 around 50% (24,600) of Canada's forestry jobs and support activities were located in Western Canada. BC accounts for 39% (19,400) of forestry jobs in Canada and 79% of jobs within the Western Canada.⁸
- Over the past decade, logging has declined as a result of weakened downstream demand for pulp and paper. However, there have been signs of a recovery as Western Canada's wood product exports to the US increased by 31% between 2013 and 2015. Natural Resources Canada is forecasting that jobs will remain fairly stable or decline slightly in the short and medium term.⁹

KEY DRIVERS

Resource abundance and wood volume

Canada has 347 million hectares of forest.^{10,11} In 2014 it was estimated that Canada had 47 billion cubic metres (m³) of wood, mostly spruce. BC is the fastest growing forest ecozone where average wood volume is 432 m³ per hectare – three times the national average.¹² BC harvested 66.5 million m³ of wood, 43% of Canada's total harvest in 2014. Alberta contributed 15% (23 million m³).¹³

Market location and access

Western Canada has a location advantage to growing lumber demand from Asian markets. Between 2005 and 2015, BC lumber export trade to China increased over 30 fold from \$9.7M to \$334.7M.¹⁴

Market demand

US housing starts, particularly single family homes using timber construction, continue to be the primary destination for Western Canada's forest products, including manufactured products (\$22.1B or 68% in 2015).^{15,16} Demand from markets in China (\$5B in 2015) and Japan of (\$1.4B in 2015) helped mitigate the impact of the US housing crash (2007-2008).¹⁷ Furthermore, because the Western provinces were more focussed on wood products, the weakened demand for paper products did not impact Western Canada as severely as it did for Eastern Canada.¹⁸

Canada – US currency exchange rate

The weaker Canadian dollar relative to the US dollar beginning in 2013 has benefited Canadian exporters making Canada's wood exports more attractive and providing good operating profits.¹⁹

Globalization and competition

Western Canada faces increasing competition from China, Indonesia, Russia and South America which offer low cost forest products. In September 2015, a BC-based timber company reported that the US has overtaken BC's interior region as the dominant low-cost lumber supplier in North America.²⁰

Innovation and technology

Product diversification in bio-energy, bio-chemical and other value-added products have added to the demand.

BACKGROUND

Canada's forestry sector is export-oriented, depending heavily on global markets and exchange rates. It is cyclical, affected by the global commodity markets and general performance of the world economy.²¹ Furthermore, there is a seasonal component to home building in northern climates which impacts demand for wood products. Local forest products operations are of particular importance to rural and remote locations in Canada as a major source of infrastructure, tax revenue and jobs.²²

Export Markets and Trade Agreements

Since the mid-1900's, the US has been the most important buyer of Canadian lumber. There is a strong correlation between the strength of the US housing market and the health of the Canadian forestry sector. However, in the 1980's, the US government placed tariffs and restrictions on Canadian lumber producers to protect US industries – part of the new “protectionist” movement to grow their domestic industry.

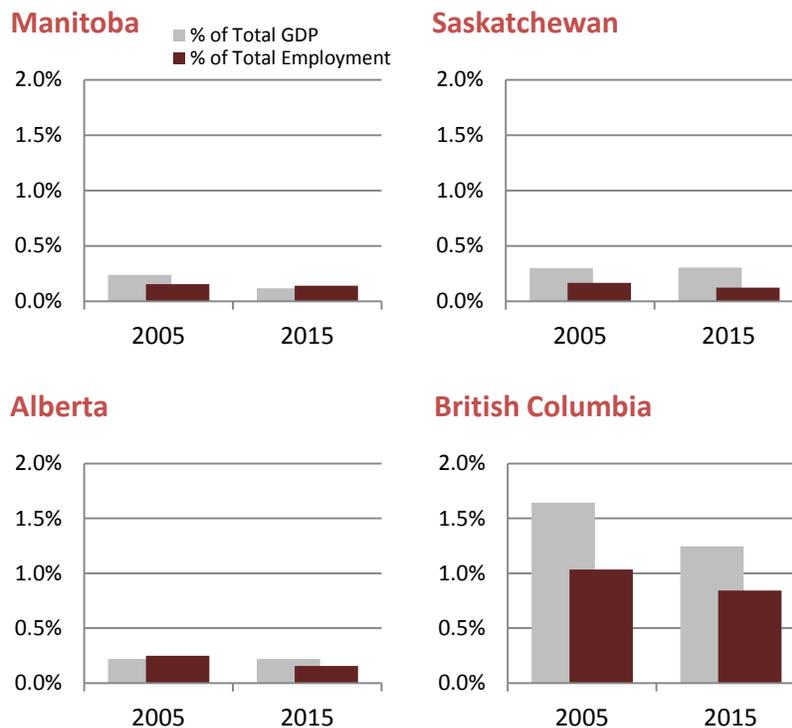
As a result of ongoing trade disputes with the US, lumber producers in Western Canada have endeavoured to diversify their export market. Since the 1990's BC has played a vital role in developing new markets in China for the province's raw logs and pine-beetle damaged timber. Between 2008 and 2010, wood exports from BC to China increased by nearly 300%. By 2011, BC was exporting 7.3 million m³ of lumber to China yearly -- a 1300% increase over 2003.²³ In 2005, the US market share of forest product exports from Canada was 81%. In 2015, it was 68%.²⁴ An announcement by China to ban logging its own natural forests could have major impacts on world markets.²⁵ The BC government reported that they are trying to further diversification by promoting sales to India.²⁶

In 2006, the US-Canada **Softwood Lumber Agreement** (SLA) imposed export charges when lumber prices fell below a pre-determined level. The SLA expired in October 2015 and has not been renewed. Consequently, softwood lumber could become subject to US customs duties by the second quarter of 2017. Major Canadian forest companies have expanded into the US making them less vulnerable to unfavourable trade actions going forward.

The 2016 **Trans-Pacific Partnership Agreement** (TPP) lowers trade barriers between Canada and twelve countries, mainly in the Pacific Rim. As a result, if the TPP is ratified, Canadian exports of forest products to these markets is expected to increase. Although, it has not yet signed on, South Korea, accounting for 18% of Western Canada lumber exports, announced interest in joining the TPP.^{27, 28}

The 2016 **Comprehensive Economic Trade Agreement** (CETA) eliminates 98% of the tariffs between Canada and the 28 European Union (EU) member states. Three percent of Western Canadian wood product is currently exported to the EU.²⁹

Forestry's Provincial % Share of Employment and GDP, 2005 vs. 2015



Note: The GDP percentage includes forestry and logging and support activities for forestry. The percentage of total employment number includes forestry and logging and support activities for forestry.

Sources: 1. Statistics Canada CANSIM Table 379-0030 - Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS), provinces and territories, annual (dollars) 2. Statistics Canada Labour force estimates by detailed industry, age, sex, class of worker

Employment

In 2015, half of Canada's forestry jobs were concentrated in Western Canada. Overall, employment in forestry, logging and support activities reached 24,600 in Western Canada in 2015, an increase of 2.5% year-over-year.

BC accounted for nearly 40% (19,400) of employment in Canada's forestry and logging industry in 2015.³⁰ Alberta also held a notable portion of the nation's forestry and logging employment at 7% (3,600). Employment opportunities in forestry and logging were far less pronounced in Saskatchewan and Manitoba, which held a 1.4% (700) and 1.8% (900) share of national employment, respectively.³¹

The main occupations in forestry and logging are labourers, tradespeople, machinery and equipment operators, managers, and professionals, including engineers. Logging is employing fewer chainsaw operators and more machine operators, resulting in the need for higher levels of knowledge and skills, especially computer skills.

Average wages across Canada went up 7% between 2002 and 2014 for forestry logging & support activities.³² NRCan expects wages to increase but with intermittent local labour shortages there will be significant regional variations in earnings.³³ Alberta and BC tend to have the highest wages.

2015 Employment Trends

Between 2011 and 2015, employment in forestry, logging and support activities:

- Grew 7.4% in BC,
- Grew by 3% in Alberta,
- Declined by 15.9% in Saskatchewan; and
- Was unchanged in Manitoba.

Employment in Western Canada's forest sector has been generally trended up since hitting a historic low of 19,900 in 2009. Across Canada growth has been stagnant at less than 1%.³⁴

EMPLOYMENT OUTLOOK

Among the western provinces, Alberta (+300) is expected to experience the most growth in forestry and logging between 2015 and 2017. Employment gains in Manitoba (+100) and Saskatchewan (+100) will also be significant considering the size of their industry. BC is expected to see a modest decline in employment (-500).

From an economic region perspective, employment growth is forecasted to be strong in Northern Manitoba (8.9%) and Calgary & Southern Alberta (4.8%); while Vancouver Island & Coast will experience the largest decline (-1.5%).

Projected employment change for the forestry and logging sector during the 2015-2017 forecast period

Economic Region	Projected Change in Employment	Projected Annual Growth
Manitoba	100	5.0%
Southern Manitoba		2.6%
Winnipeg		1.9%
Northern Manitoba		8.9%
Saskatchewan	100	2.9%
Regina & Southern Saskatchewan		2.3%
Saskatoon & Northern Saskatchewan		3.0%
Alberta	300	3.3%
Calgary & Southern Alberta		4.8%
Edmonton, Red Deer, Camrose, & Drumheller		1.5%
Northern Alberta and Banff		3.2%
British Columbia	-500	-0.9%
Vancouver Island & Coast		-1.5%
Lower Mainland - Southwest		-1.1%
Okanagan - Kootenay		-0.6%
Northern BC		-0.6%

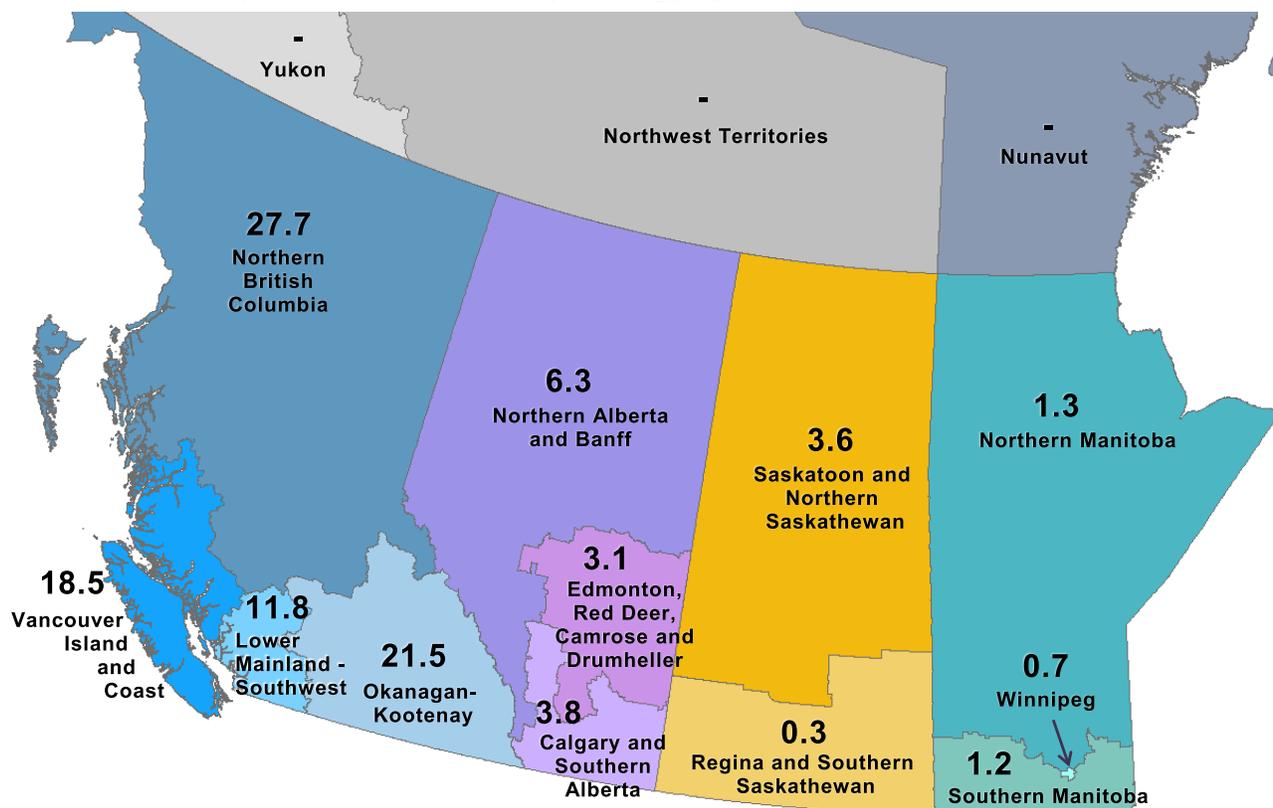
Source: Service Canada Regional Occupational Outlooks in Canada, 2015-2017

REGIONAL OVERVIEW

- Vancouver Island & Coast: In April 2016 Vancouver Island communities voted to seek a total ban on old growth harvesting on Crown land citing old growth as a tourism resource. According to a survey by the Truck Loggers Association, optimism in BC's coastal forest industry has declined since 2004.
- Lower Mainland & Southwest: This region has historically been one of the largest centres for forestry related employment in Canada. Two of the nation's largest forest product companies, Canfor and West Fraser Timber, are headquartered in Vancouver.

- Northern BC: Forestry is vital to the economy in northern BC. A number of small towns rely on good paying jobs in areas where employment opportunities are limited; however, layoffs have been common over the past decade and they can have an adverse effect on the communities impacted.
- Northern Alberta: The 2016 wild fires in Fort McMurray area are expected to have a long-term effect on the logging industry. The burning of mature timber will impact downstream mills and employment.
- Saskatoon & Northern Saskatchewan: While not on the same scale as BC, the forest sector is important to Saskatchewan's northern economy. It is northern Saskatchewan's second largest industry, generating over \$1B in sales annually.
- Yukon, Northwest Territories & Nunavut: The forest sector is small in the territories because much of the land is above the tree line.

Distribution of employment in the forestry and logging sector across Western Canada (%)



Note: Territorial employment in this sector represents less than 0.1% across Western Canada

Source: Service Canada Regional Occupational Outlooks in Canada, 2015-2017

Note: In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.

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¹ Statistics Canada. Table 379-0031 – Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS), annual (dollars), CANSIM (database).
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3790031&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=> (accessed: October 11, 2016)

(Note: Support activities for Forestry (NAICS 1153) is not included because this CANSIM table does not separate it from Support activities for forestry and agriculture (NAICS 115) at the National level)

² Forestry Innovation Investment Limited. (July 2016) British Columbia forest sector key data and stats, 2016.
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³ Statistics Canada. Table 379-0030 – Gross domestic product (GDP) at basic prices, by North American Industry Classification System (NAICS), provinces and territories, annual (dollars), CANSIM (database).
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⁸ Statistics Canada. Table 282-0008 - Labour force survey estimates (LFS), by North American Industry Classification System (NAICS), sex and age group, annual (persons unless otherwise noted), CANSIM (database).
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<http://www.nrcan.gc.ca/forests/report/benefits/16554> (accessed: October 4, 2016)

¹⁰ Natural Resources Canada. (September 22, 2016). State of Canada's forests report.
<http://www.nrcan.gc.ca/forests/report/17563> (accessed: October 3, 2016)

¹¹ National Forest Database. July 11, 2016. National Forest and Forest Management Statistics.

http://nfdp.ccfm.org/index_e.php (accessed: October 12, 2016)

¹² Natural Resources Canada. (September 22, 2016). State of Canada's forests report. <http://www.nrcan.gc.ca/forests/report/area/16399> (accessed: October 3, 2016)

¹³ Natural Resources Canada. (September 21, 2016) Forest Resources. Statistical Data. <https://cfs.nrcan.gc.ca/statsprofile/overview/ca> (accessed: October 3, 2016)

¹⁴ Innovation, Science and Economic Development Canada. (April 18, 2016). Trade Data Online. <https://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/home> (accessed: October 14, 2016)

¹⁵ Natural Resources Canada. (September 22, 2016). State of Canada's forests report. <http://www.nrcan.gc.ca/forests/report/economy/16517> (accessed: October 3, 2016)

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¹⁹ Natural Resources Canada. (September 22, 2016). State of Canada's forests report. <http://www.nrcan.gc.ca/forests/report/industry-change/16560> (accessed: October 3, 2016)

²⁰ Derrick Penner. Vancouver Sun. (August 25, 2015). <http://www.vancouversun.com/business/Conifex+joins+lumber+producers+bound+south/11316635/story.html> (accessed: October 3, 2016)

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²⁸ Jessica J. Lee. (October 23, 2015). The Diplomat. The truth about South Korea's TPP shift.
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³⁰ Statistics Canada. Table 282-0008 – Labour force survey estimates (LFS), by North American Industry Classification System (NAICS), sex and age group, annual (persons unless otherwise noted), CANSIM (database).
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