



# Sectoral Profile

## Forestry and Logging

### Region of Western Canada and Territories

2017-2019



#### EXECUTIVE SUMMARY

- **Geography:** In 2016 over 50% (25,300) of Canada's forestry jobs and support activities were located in Western Canada. British Columbia (BC) accounts for 40% (19,400) of forestry jobs in Canada and 77% of jobs within the Western Canada.<sup>1</sup>
- **Exports:** Canada is the world's leading exporter of softwood lumber and the fourth-largest forest product exporter.<sup>2</sup> BC's forests, primarily in the Cariboo region, contribute to almost 50% of Canada's softwood production while Alberta forests contribute close to 15%.<sup>3</sup> BC exports more softwood lumber to the United States (US), by quantity (48%) and value (55%), than any other province.<sup>4</sup>
- **Trade:** Western Canada's forestry products contributed favourably to Canada's trade balance at over \$10B in 2016. Western Canada's biggest lumber trading partners are: the US (68% of lumber exports), China (13%), and Japan (10%).<sup>5</sup>
- **Five largest employers:** Canfor, West Fraser, Tolko, Western Forest Products, Catalyst Paper.<sup>6</sup>
- **Outlook:** Logging activity declined over the past decade as a result of weakened downstream demand for pulp and paper. However, there has been a recovery as Western Canada's wood product exports to the US increased by 43% between 2014 and 2016.<sup>7</sup> This recovery may be short-lived as a result of recent wildfires in Northern Alberta (2016) and BC's Cariboo region (2017) that have eroded the timber supply.

#### KEY DRIVERS

**Supply:** Canadian forests contain approximately 47 billion m<sup>3</sup> of wood. BC's coast is home to Canada's fastest growing forest with 432 m<sup>3</sup>/hectare in wood volume – three times the national average.<sup>8</sup> The combined effects of rising temperatures, higher rainfall and carbon dioxide have led to a "fertilization effect" which is accelerating the growth of trees in BC's high-latitude forests. In 2014, BC harvested 43% (66.5 million m<sup>3</sup>) of Canada's total wood. Alberta contributed 15% (23 million m<sup>3</sup>).<sup>9</sup> Wood volume is used by professional foresters

to determine sustainable harvest levels for timber production.<sup>10</sup> However, wildfires and pest damage have eroded supply. Consequently, shortages are anticipated.

**Demand:** US housing starts, particularly single family homes are the primary destination for Western Canada's forest products valued at nearly \$8B or 68% of wood exports.<sup>11,12</sup> Growing demand from markets in China (\$1.5B or 13% in 2016) and Japan of (\$1.1B or 10% in 2016) have helped balance trade exports to the US.<sup>13</sup> Furthermore, because the Western provinces are more focussed on wood products, the impact of weakened global demand for paper products has not been severe in the West.<sup>14</sup>

**Market access:** Western Canada has a location advantage when it comes to growing lumber demand from Asian markets. Between 2007 and 2016, BC lumber export trade to China increased over 10 fold from \$126M to \$1.5B.<sup>15</sup>

**Canada – US currency exchange rate:** Beginning in 2013, a weaker Canadian dollar has made wood exports more attractive stateside and provided good operating profits for Canadian exporters.<sup>16</sup>

**Competition:** Western Canada faces increasing competition from China, Indonesia, Russia and South America which offer low cost forest products. Furthermore, the US south has overtaken BC's interior region as the dominant low-cost lumber supplier in North America.<sup>17</sup>

## BACKGROUND

Canada's forestry sector is export-oriented and cyclical, depending heavily on global market demand, commodity prices and exchange rates.<sup>18</sup> Local forest products operations are of particular importance to Canada's rural and remote locations as a major source of infrastructure, tax revenue and jobs.<sup>19</sup>

### Diversification of Export Markets and Trade Agreements

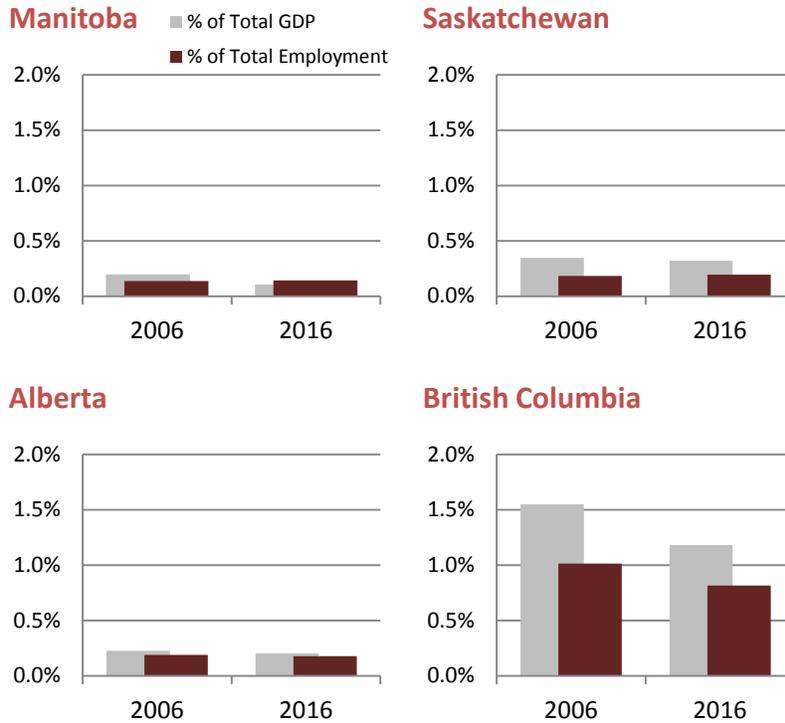
Since the mid-1900's, the US has been the most important buyer of Canadian lumber. There is a strong correlation between the US housing market and the health of the Canadian forestry sector. However, in the 1980's, the US government began placing tariffs and restrictions on Canadian lumber producers to protect US industries. In 2006, the US-Canada **Softwood Lumber Agreement** (SLA) was signed imposing export charges when lumber prices fell below a pre-determined level.

Following the expiry of the SLA in 2015 and unsuccessful negotiations on a long-term settlement, the US Department of Commerce released its final determination of anti-dumping (AD) and countervailing duties (CVD) on Canadian softwood lumber imports in November 2017. The new tariffs on exports to the US average 21% for most Canadian producers. However, in the wake of hurricane damage in Texas and Florida in August 2017, US demand for softwood lumber construction material is expected to spike, along with composite prices which bodes well for the sector.

Additionally, in January 2018, the U.S. Secretary of commerce announced preliminary tariffs on uncoated groundwood paper imported from Canada, determining that exporters from Canada received countervailable subsidies ranging from 4.42 to 9.93 percent.

As a result of decades long ongoing trade disputes with the US, lumber producers in Western Canada have diversified their export markets. Since the 1990’s BC has fostered new markets in China. Between 2015 and 2016 the US market share of forest product exports from Canada declined 13%, from 81% to 68%.<sup>20</sup> The BC government is trying to further diversification by promoting sales to India.<sup>21</sup> Major Canadian forest companies have also expanded production into the US making them less vulnerable to unfavourable trade actions going forward.

**Forestry and Logging Provincial % Share of Employment and GDP, 2006 – 2016**



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 2016, more than half of Canada's forestry jobs were concentrated in Western Canada. Overall, employment in forestry, logging and support activities reached 25,300 in Western Canada, an increase of 2.9% year-over-year.<sup>22</sup>

BC accounted for nearly 40% (19,400) of employment in Canada's forestry and logging industry in 2016.<sup>23</sup> Alberta's forestry and logging employment was 8% (4,000). Employment opportunities in forestry and logging were far less pronounced in Saskatchewan and Manitoba, which held a 1.7% (800) and 2.3% (1,100) share of national employment, respectively.<sup>24</sup>

The main occupations in forestry and logging based on an occupation-industry matrix are labourers, (NOC 8616, 9614), tradespeople, machinery and equipment operators (NOC 8241, 8421, 9431, 9434, 9437), graders (NOC 9436), managers (NOC 8211, 9215), and professionals (NOC 2122, 2223, 8211). Logging is employing fewer chainsaw operators (8421) and more machine operators (8241, 9431, 9437), resulting in the need for higher levels of knowledge and skills, especially computer skills.

Average wages in forestry and logging went up an average 2% across Canada between 2015 and 2016.<sup>25</sup> Alberta and BC have the highest wages.<sup>26</sup>

Between 2006 and 2016, employment in forestry, logging and support activities grew by 38% in Saskatchewan, 14% in Manitoba, 11% in Alberta, and declined by 11% in BC.

Employment in Western Canada's forest sector has been generally trended up since 2013.<sup>27</sup>

## EMPLOYMENT OUTLOOK

Among the Western provinces, forestry and logging employment growth between 2017 and 2019 is expected to be modest in Alberta and Saskatchewan (0.8% and 0.4%, respectively). However BC, the mainstay of the sector, is expected to see significant decline over the forecast period (-1.9%). Employment in Manitoba is also expected to be weak (-2.4%).

From an economic region perspective, employment growth is forecasted to be strongest in Calgary and Southern Alberta (1.5%). Saskatchewan regions will see a modest increase in employment (0.3% to 0.4%). Manitoba's small forestry and logging workforce is forecast to decline, particularly in Northern Manitoba (-3.4%). All of BC's regions are likely to see a decline in employment (-1.3% to -2.3%). Vancouver Island & Coast and Northern BC will bear the brunt of the decline (-2.3% and -2.1%, respectively).

### Projected employment change for the forestry and logging sector during the 2017-2019 forecast period

Economic Region	Projected Change in Employment	Projected Annual Growth
<b>Manitoba</b>	<b>-100</b>	<b>-2.4%</b>
Southern Manitoba		-1.0%
Winnipeg		-0.5%
Northern Manitoba		-3.4%
<b>Saskatchewan</b>	<b>0</b>	<b>0.4%</b>
Regina & Southern Saskatchewan		0.4%
Saskatoon & Northern Saskatchewan		0.3%
<b>Alberta</b>	<b>100</b>	<b>0.8%</b>
Calgary & Southern Alberta		1.5%
Edmonton, Red Deer, Camrose, & Drumheller		0.5%
Northern Alberta and Banff		0.8%
<b>British Columbia</b>	<b>-1,100</b>	<b>-1.9%</b>
Vancouver Island & Coast		-2.3%
Lower Mainland - Southwest		-1.9%
Okanagan - Kootenay		-1.3%
Northern BC		-2.1%
<b>Yukon</b>	-	-
<b>Northwest Territories</b>	-	-
<b>Nunavut</b>	-	-

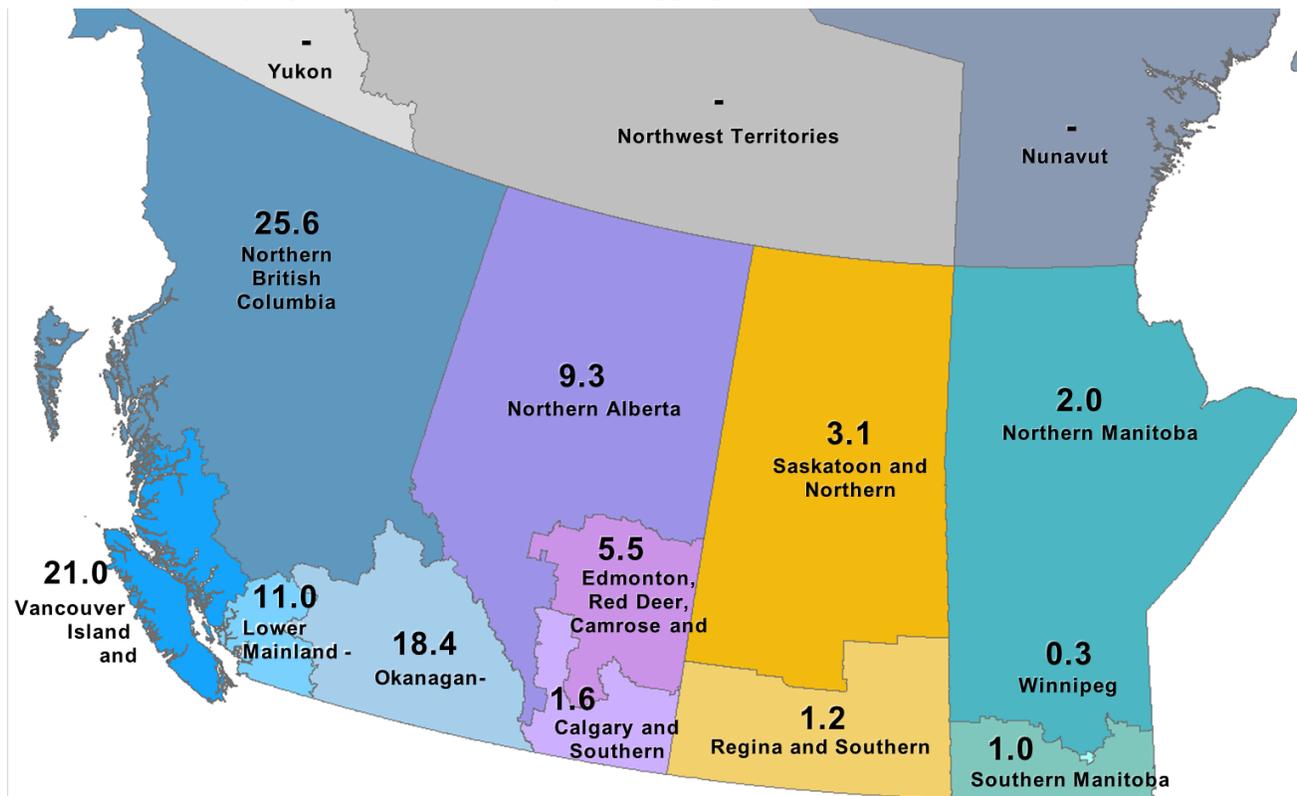
Source: Service Canada Regional Occupational Outlooks in Canada, 2017-2019

## REGIONAL OVERVIEW

- Vancouver Island & Coast:** According to a survey by the Truck Loggers Association, optimism in BC's coastal forest industry has been in decline for over 10 years. Furthermore, 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.
- 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 negatively impacting many small communities in the North. In addition, the 2017 wildfires in BC's Interior seriously eroded the lumber supply. The impacts will likely be felt in 2018 going forward.

- **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 impacted downstream mills and employment.
- **Saskatoon & Northern Saskatchewan:** The forest sector is northern Saskatchewan's second largest industry, generating over \$1B in sales annually.

### 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, 2017-2019

**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.

**Prepared by:** Labour Market Information (LMI) Directorate, Service Canada, Region of Western Canada and the Territories

**For further information,** please contact the LMI team at: [http://www.esdc.gc.ca/cgi-bin/contact/edsc-esdc/eng/contact\\_us.aspx?section=lmi](http://www.esdc.gc.ca/cgi-bin/contact/edsc-esdc/eng/contact_us.aspx?section=lmi)

© Her Majesty the Queen in Right of Canada as represented by Employment and Social Development Canada, 2017, all rights reserved

---

<sup>1</sup> 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). [2016 data] <http://www5.statcan.gc.ca/cansim/a26?id=2820008&pattern=&p2=-1&stByVal=1&p1=1&tabMode=dataTable&retrLang=eng&csid=&lang=eng> (accessed: November 10, 2017)

<sup>2</sup> Natural Resources Canada. (November 2, 2016) Indicators: Exports <http://www.nrcan.gc.ca/forests/report/economy/16558> (accessed: July 17, 2017)

<sup>3</sup> Statistics Canada. Table 303-0064 – Lumber production, shipments and stocks, by Canada and provinces, monthly (cubic metres), CANSIM database. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3030064&pattern=&csid=> (accessed: July 17, 2017)

<sup>4</sup> Government of British Columbia. (October 2016) BC stats. Exports and Imports – Data. Exports of Softwood Lumber (440710) to the United States by Province. <http://www.bcstats.gov.bc.ca/StatisticsBySubject/ExportsImports/Data.aspx> (accessed July 17, 2017)

<sup>5</sup> Government of Canada. Trade data online. <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> [HS Code 44 Wood and Articles of Wood] [2016 data] (accessed November 10, 2017)

<sup>6</sup> Business Vancouver. July 5, 2017. Biggest forestry companies in B.C. in 2016 (subscriber only)

<sup>7</sup> Government of Canada. Trade Data Online. . <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> [HS Code 44 Wood and Articles of Wood] [2014 - 2016 data] (accessed November 10, 2017)

<sup>8</sup> Natural Resources Canada. (September 22, 2016). State of Canada's forests report. <http://www.nrcan.gc.ca/forests/report/area/16399> (accessed: December 14, 2017)

<sup>9</sup> Natural Resources Canada. (September 21, 2016) Forest Resources. Statistical Data. [2014 data] <https://cfs.nrcan.gc.ca/statsprofile/overview/ca> (accessed: October 3, 2016)

Note: Vancouver Island and Coast and North Coast regions are part of the Pacific Maritime Ecozone with 4.6B m<sup>3</sup> of fastest growing forests. BC's Thompson-Okanagan, Kootenay and Cariboo regions are part of the Montane Cordillera ecozone with 7.8B m<sup>3</sup> in wood volume. BC's Nechako and Northeast region are part of the Boreal Cordillera ecozone which stretches into the Yukon with 2.3B m<sup>3</sup> in wood volume.

<sup>10</sup> Ibid.

<sup>11</sup> Natural Resources Canada. (September 22, 2016). State of Canada's forests report. [2015 data] <http://www.nrcan.gc.ca/forests/report/economy/16517> (accessed: October 3, 2016)

<sup>12</sup> Government of Canada. Trade data online. <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> (accessed November 10, 2017) [HS Code 44 Wood and Articles of Wood]

<sup>13</sup> Government of Canada. Trade data online. <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> [HS Code 44 Wood and Articles of Wood] (accessed November 10, 2017)

<sup>14</sup> Natural Resources Canada. (September 22, 2016). State of Canada's forests report. <http://www.nrcan.gc.ca/forests/report/industry-change/16524>

<sup>15</sup> Government of Canada. Trade Data Online. <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home> [2007 - 2016 data] [HS Code 44 Wood and Articles of Wood] (accessed: November 10, 2017)

<sup>16</sup> 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)

<sup>17</sup> 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)

<sup>18</sup> Alex Barnes. (August 2016) British Columbia Ministry of Forests, Lands and Natural Resource Operations. 2015 Economic State of the B.C. Forest Sector.

[http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/forest-industry-economics/economic-state/2015\\_economic\\_state\\_of\\_bc\\_forest\\_sector.pdf](http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/forest-industry-economics/economic-state/2015_economic_state_of_bc_forest_sector.pdf) (accessed October 13, 2016)

<sup>19</sup> Natural Resources Canada. (2014). Forest composition across Canada.

<http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/35727.pdf> (accessed September 26, 2016)

<sup>20</sup> Government of British Columbia. BC Stats - Exports and Imports Data. [2005 - 2016 data]

<http://www.bcstats.gov.bc.ca/StatisticsBySubject/ExportsImports/Data.aspx> (accessed November 10, 2017)

<sup>21</sup> Alex Barnes. (August 2016) British Columbia Ministry of Forests, Lands and Natural Resource Operations. 2015 Economic State of the B.C. Forest Sector.

[http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/forest-industry-economics/economic-state/2015\\_economic\\_state\\_of\\_bc\\_forest\\_sector.pdf](http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/forest-industry-economics/economic-state/2015_economic_state_of_bc_forest_sector.pdf) (accessed: October 13, 2016)

<sup>22</sup> 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).

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2820008&&pattern=&stByVal=1&p1=1&p2=37&tabMode=dataTable&csid=> [NAICS 113 1153; data 2015 and 2016] (accessed: November 10, 2017)

<sup>23</sup> 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).

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2820008&&pattern=&stByVal=1&p1=1&p2=37&tabMode=dataTable&csid=> [NAICS 113 1153; data 2016] (accessed: November 10, 2017)

<sup>24</sup> 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).

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2820008&&pattern=&stByVal=1&p1=1&p2=37&tabMode=dataTable&csid=> [NAICS 113 1153; data 2006 - 2016] (accessed: November 10, 2017)

<sup>25</sup> Natural Resources Canada. (September 23, 2016). State of Canada's forests report.

<http://www.nrcan.gc.ca/forests/report/benefits/16408> (accessed: September 29, 2016)

<sup>26</sup> Natural Resources Canada. (September 23, 2016). State of Canada's forests report.

<http://www.nrcan.gc.ca/forests/report/benefits/16408> (accessed: September 29, 2016)

<sup>27</sup> 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).

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2820008> [NAICS 113 1153; data 2006 - 2016] (accessed: November 10, 2017)