
Major Primary Timber Processing Facilities in British Columbia

2014



Ministry of
Forests, Lands and
Natural Resource Operations

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2014

Competitiveness and Innovation Branch
Ministry of Forests, Lands and Natural Resource Operations
Victoria, B.C.

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Foreword

This edition of the *Major Primary Timber Processing Facilities in British Columbia* summarizes timber processing mills that operated during 2014. It covers sawmills, veneer mills and panel plants, pulp and paper mills, chip mills, pellet mills, shake and shingle, and pole and post mills. Some do not have primary log processing capabilities and process residual fibre from other mills. For mills that produced more than one product (e.g. lumber and veneer), each operation is listed in the respective section of the report. This report does not include re-manufacturing plants.

Most of the information contained in this report was gathered through 2014 and earlier surveys of individual processing mills. The 2014 surveys included small lumber mills with less than 40 million board feet capacity. Shake and shingle mills were included in this report for the first time since 2010. If survey responses were not provided, the Ministry of Forests, Lands and Natural Resource Operations (the Ministry or FLNRO) staff might use trade publications and corporate annual reports to make estimation. In some cases, the Ministry staff provided estimates based on their knowledge of the operation and information reported in previous years.

The Coast and Interior are defined according to the Coast and Interior segregation as per stumpage appraisal policy. This is consistent with all previous editions of this report. This 2014 report, however, utilizes the three administrative “Areas” (i.e., Coast, South and North) that are used in natural resource management. The Areas and the Natural Resource Districts referenced in this mill listings are presented in the Appendix.

This report is available free of charge on the Ministry of Forests, Lands and Natural Resource Operations Internet site at:

<http://www.for.gov.bc.ca/het/fibre.htm>

Comments, errors or omissions may be sent to the contact information at the website or by mail at the following location:

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The survey and analyses were led and conducted by Jiali (Julie) Leng and supervised by Tim Bogle and Alan Rudson. Stephen Davis, Alex Barnes, John Cook and Judith Elkins have made significant contributions to this report.

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Abbreviations for Products

CHP	- Chip	PLE	- Pole
LBR	- Lumber	PLT	- Pellet
LVL	- Laminated Veneer Lumber	PLY	- Plywood
OSB	- Oriented Strand Board	PNL	- Other Panel
PLP	- Pulp	PST	- Fence Post
PPR	- Paper	UTI	- Utility Pole
SS	- Shake and Shingle	VNR	- Veneer

Introduction

This report presents summary statistics derived from the 2014 and earlier mill surveys and selected analyses of these statistics. Fibre supply and log use in the Province are examined through a series of tables and pie charts. These are followed by time series statistics for lumber, veneer mills, pulp and paper, and pellet mills.

Each year, a list of operating mills in each mill category is compiled, based on the previous list and various sources of information on mill openings and closures. Electronic surveys were sent to mill operators, followed by reminder emails and telephone calls where necessary. Based on responses, mills are classified as a) open with response, b) presumed open without response, c) did not operate at all during the year (temporary or indefinite closure) or d) closed (permanently). Statistics in this report are derived from mills in category a) and b). Mills that have announced permanent closure during the year are recorded as category a) for 2014.

Wood Fibre Supply and Log Use in British Columbia, 2014

Figure 1 shows the estimated primary log use was approximately 67.1 million cubic metres in 2014, up from 64.46 million cubic metres reported in 2013 and 5.7million cubic metres above the 2011 level of 61.4 million cubic metres.

In 2014, log use exceeded log supply by 607,000 cubic metres. There are several possible factors contributing to this difference:

- Log inputs for some facilities might be inaccurate.
- Some mills did not respond to the survey and estimation was based on best available sources.
- The increased use of cruise based billing. Cruise based billing utilizes the volume estimate from the timber cruise as the assessment of the volume from the harvest. Estimates from the timber cruise may be greater or less than the volume of timber which is actually transported to processing facilities.
- Some of the logs utilized in 2014 would have been supplied prior to January 1, 2014, the commencement period for this report.
- Some mills consumed harvest residuals¹ in their secondary manufacturing processes (e.g. chip, pulp and pellet mills), which might not be fully captured by the total harvest volume used in this report.

Lumber mills accounted for an estimated 70.6% of the total primary log use in 2014. The number of lumber mills operating in 2014 was 138, above the 128 mills operating in 2013. The percentage of provincial log exports was slightly down from 10.3% in 2013 to 10.1% of primary log use in 2014. Coastal export volume decreased from 31.3% to

¹ The "harvest residual" in this report means fibre left anywhere on the cut block following harvesting activities and not transported to primary processing facilities (i.e. not a sawlog or a pulp log).

29.7%. Veneer and OSB mills accounted for 9.0% of primary log use while chip mills and pulp mill wood rooms² accounted for 8.8% of primary log use.

Figure 1: Estimated British Columbia Primary Log Use - 2014

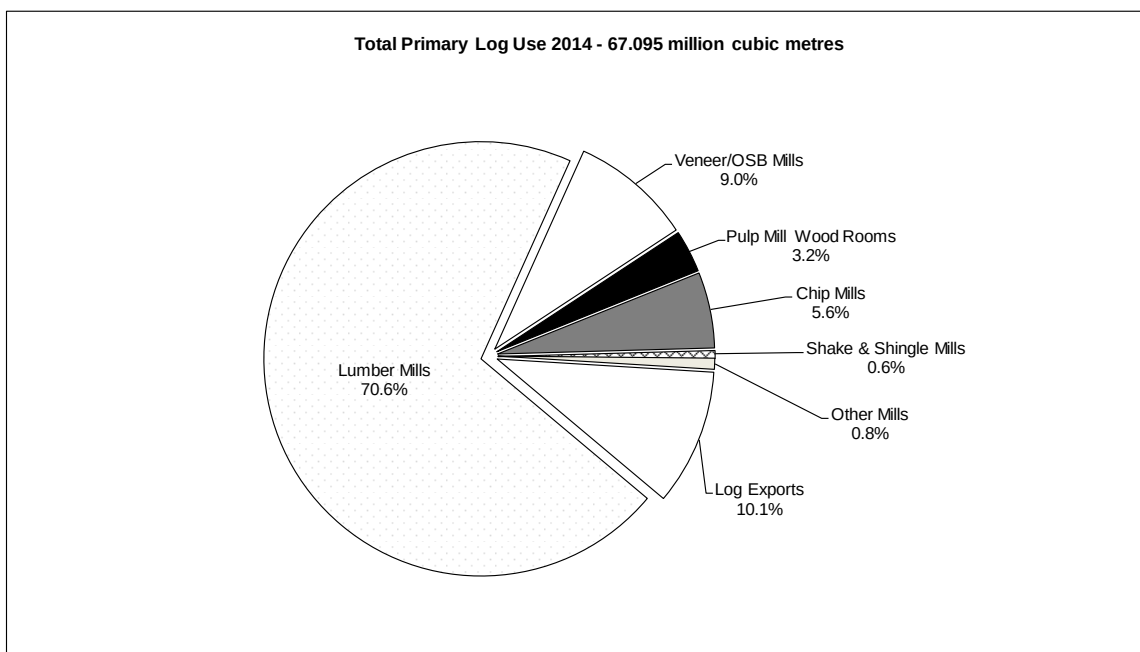
	Coast			Interior			Province		
	Number of Mills	Est. Volume Used (000 m³)	Per Cent	Number of Mills	Est. Volume Used (000 m³)	Per Cent	Number of Mills	Est. Volume Used (000 m³)	Per Cent
Primary Log Use									
Lumber Mills	44	7,847	41.3%	94	39,531	82.2%	138	47,378	70.6%
Veneer/OSB Mills	5	1,715	9.0%	12	4,343	9.0%	17	6,058	9.0%
Pulp Mill Wood Rooms	3	1,523	8.0%	2	596	1.2%	5	2,119	3.2%
Chip Mills	9	1,755	9.2%	11	2,031	4.2%	20	3,786	5.6%
Shake & Shingle Mills	22	398	2.1%	3	3	0.0%	25	401	0.6%
Other Mills	11	130	0.7%	34	420	0.9%	45	550	0.8%
Log Exports		5,653	29.7%		1,150	2.4%		6,803	10.1%
TOTAL	94	19,021	100%	156	48,074	100%	250	67,095	100%
Log Availability									
Total Harvest Excluding									
Pulpwood*		16,247			47,096			63,342	
Total Pulpwood**		3,037			0.085			3,037	
Log Imports								108	
TOTAL		19,283			47,096			66,487	
Difference		262	1.4%***		-978	-2.1%***		-607	-0.9%***

*All logs, special forest products, species and grades billed to crown, private and federal land were included. Waste, reject and Xmas trees were excluded.

** "Total Pulpwood" in this report only includes harvest volume data with its grade of U or X or Y from the Ministry's Harvest Billing System.

The pulpwood volume is unknown for the harvest volume data with its grade of 4 or 8 from the Ministry's Harvest Billing System.

***In 2014, cruise-based billing represented about 44% of volume-billed in the Interior and 4% on the Coast.



Sources:

Survey data; Statistics Canada trade data for total provincial exports and imports; BC Ministry of Forests, Lands and Natural Resource Operations log export statistics for the proportion of exports from the Coast versus Interior.

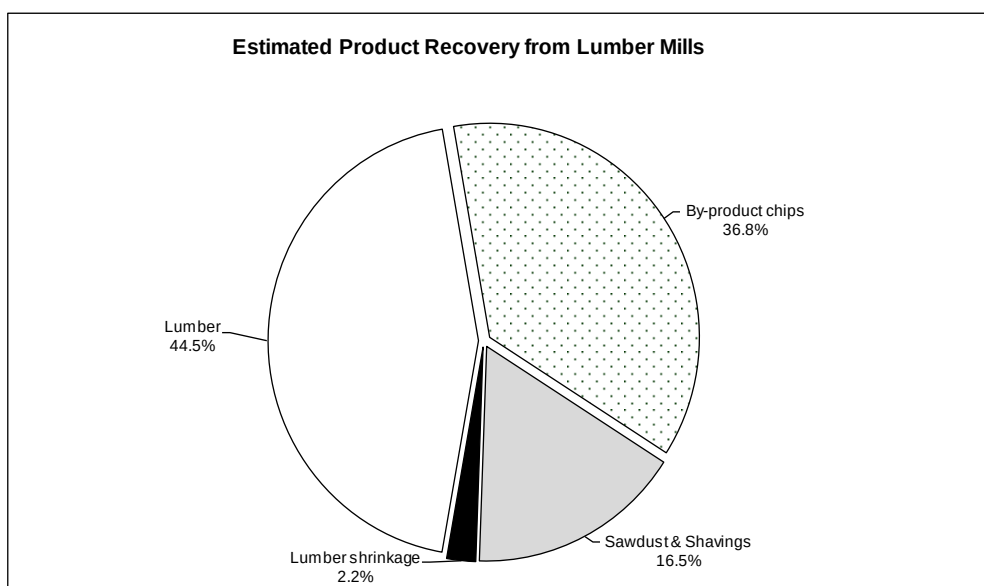
Note: Statistics above do not include mills that were closed or did not operate in 2014.

² When pulp mills are unable to obtain adequate chip supply from lumber mills, operators may choose to purchase whole logs and chip them at the mill site.

Figure 2 estimates product recovery from lumber mills. It shows that 44.5% of the volume of wood entering lumber mills was converted to lumber, 2.2% was lost through lumber shrinkage, and 36.8% was converted to chips. Sawdust and shavings increased from 12.1% in 2013 to 16.5% in 2014.

Figure 2: Estimates of Product Recovery from Lumber Mills - 2014

	Units	Coast	Interior	Province
Number of Mills		44	94	138
Log Input	(million m ³)	7.85	39.53	47.38
Lumber Output				
Lumber Output (nominal measure)	(mmfbm)	1.70	10.90	12.60
Lumber Recovery Factor	(mfbm/m ³)	0.217	0.276	0.266
Conversion Factor *	(m ³ /mfbm)	2.07	1.61	1.67
= Actual Volume of Lumber Produced	(million m ³)	3.52	17.55	21.07
As Per Cent of Log Input	(%)	44.8%	44.4%	44.5%
Lumber Shrinkage				
Shrinkage (5% of lumber production)	(million m ³)	0.18	0.88	1.05
As Per Cent of Log Input	(%)	2.2%	2.2%	2.2%
By Product Chip Output (from Lumber Mills)				
By Product Chip Output**	(million bdu)	1.10	5.20	6.30
By Product Chip Recovery Factor	(bdu/000 m ³)	140	132	133
Conversion Factor*	(m ³ /bdu)	2.86	2.75	2.77
= Volume of Chips Produced	(million m ³)	3.15	14.30	17.45
As Per Cent of Log Input	(%)	40.1%	36.2%	36.8%
Sawdust and Shavings - Estimated Volume				
	(million m ³)	1.01	6.80	7.81
As Per Cent of Log Input	(%)	12.8%	17.2%	16.5%



Notes:

* Conversion factors are used to convert lumber output or by-product chips in nominal measure to solid wood equivalent.

mmfbm = million board feet; mfbm = thousand board feet; m³ = cubic metres; bdu = bone dry unit = 2400 pounds.

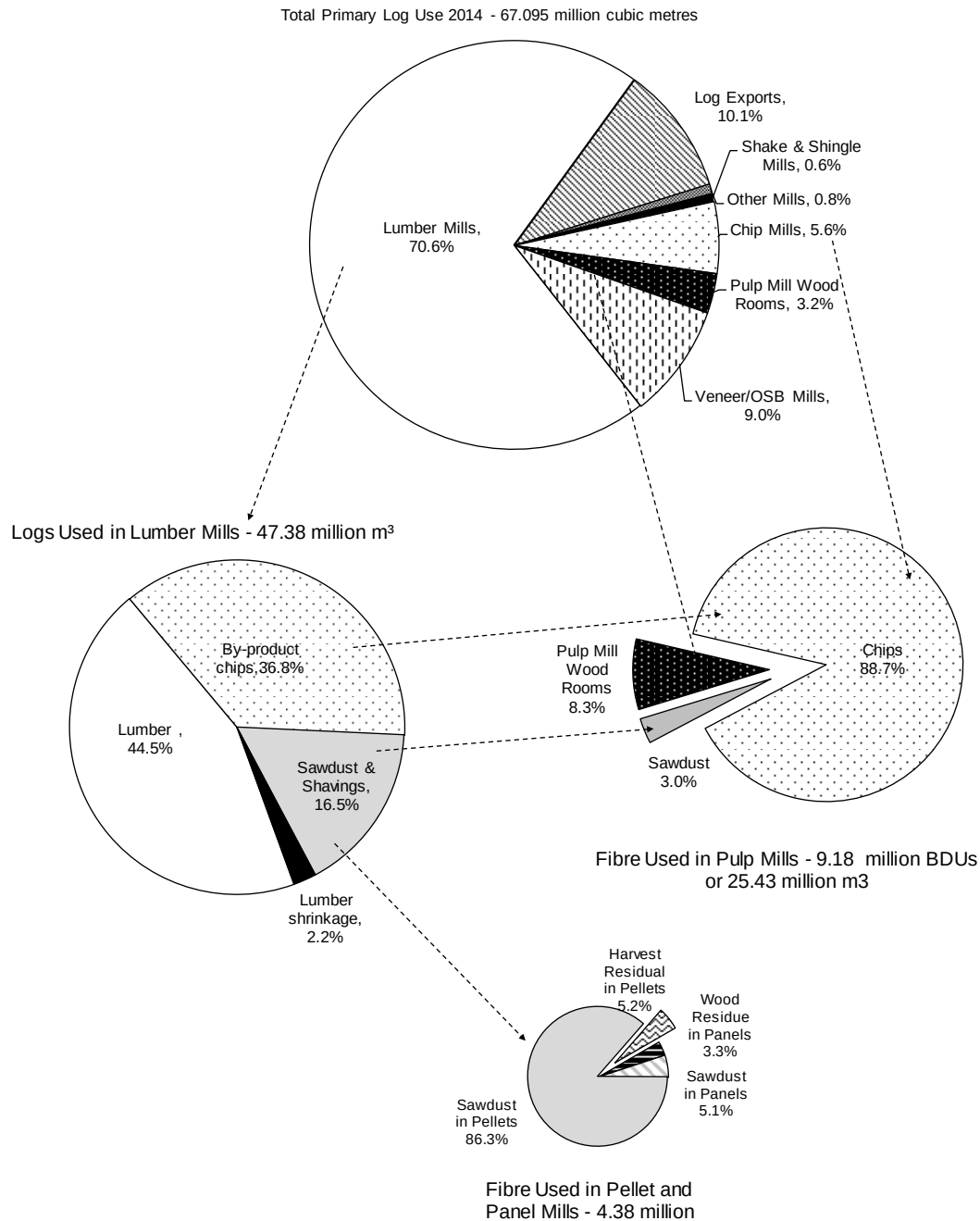
Conversion factors used in the analysis are based on Forintek Canada Corp., "Conversion Factors for the Forest Products Industry in Western Canada", Special Publication No. SP-24R, 1985 and "Major Primary Timber Processing Facilities in British Columbia 2007", Appendix 1, page 24.

** Data used for the Figure 2 in the 2013 Mill List Report was adjusted due to new information received from mill representatives in 2015.

Figure 3 combines information from Figures 1 and 2 with a chart showing the sources of fibre used by pulp mills and pellet and panel mills:

- In 2014, pulp mills were estimated to have used 25.43 million cubic metres in solid wood equivalents. Over 91% of the fibre used by pulp mills in 2014 was in the form of chips and sawdust obtained from other mills, while 8.3% was from logs chipped in the pulp mill.
- Fibre use in pellet and panel mills in 2014 was 4.38 million cubic metres in solid wood equivalents, a decrease of 9.6% from 4.8 million cubic metres in 2013. This accounts for 51% of the reported sawdust and shavings from lumber mills. The remainder is generally burned at lumber mills to fuel kiln-driers and other mill energy requirements.

Figure 3: Estimated British Columbia Log and Fibre Use - 2014



* B.C. is a net importer of chips. A small amount of imported chips may be consumed by some pulp mills.

** In 2014, a small but increasing amount of chips reported by pellet mills originated from harvest residuals. Although some chip and pulp mills consumed harvest residuals in their manufacturing processes, the harvest residual volume is not accurately reported in the Mill Survey. Increasing the economic use of the harvest residuals is a primary objective of the B.C. Governments Fiber Action Plan. With the increasing use of harvest residuals, the log and fibre use picture is likely to change in the future. The Ministry's Forestry and Fibre Working Group, comprised of primary and secondary manufacturers, is making every effort to enable the economic use of harvest residual fibre.

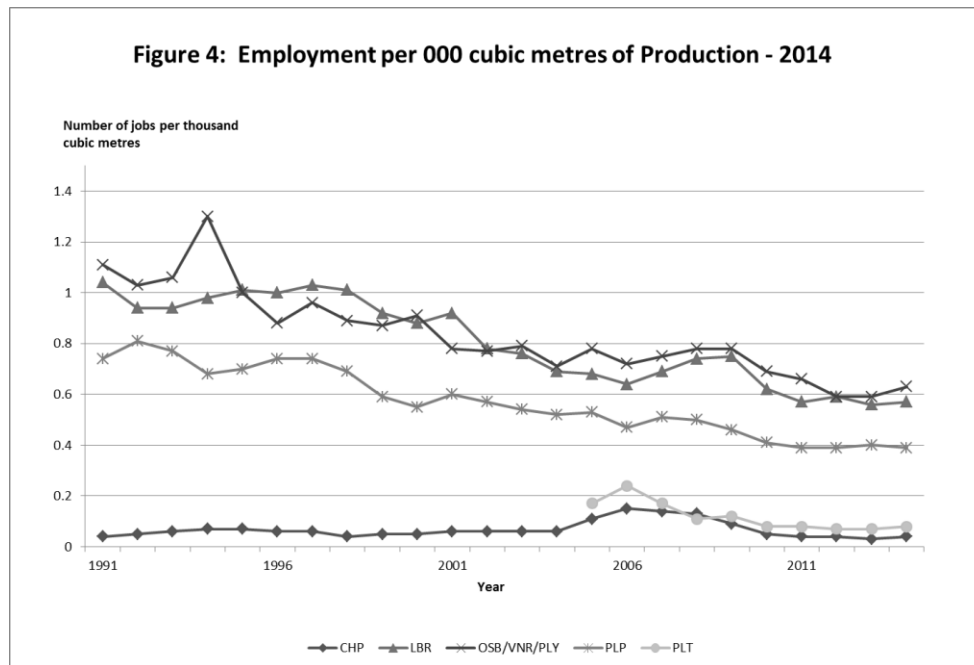
Productivity

Productivity measures are important economic indicators of the efficiency of operations. Labour productivity is reported to have increased substantially over the past decade.

Figure 4 shows, the employment per thousand cubic metres of product in solid wood equivalents (i.e., cubic metres of solid product):

- Lumber mills were adapting sawmill-optimization technology to maximize recovery from beetle-killed logs and consequently, employment per thousand cubic metres of production had stayed at a stable level since 2011.
- Employment per thousand cubic metres of production for OSB/VNR/PLY, chip and pellet mills remained relatively stable after 2011.

This chart captures only direct reported mill employment and does not represent any of the indirect employment required to sustain mill operations. Some of the functions carried out in vertically integrated companies during the early 1990s have been contracted out and no longer reside within the company of the mill operator. This may explain some of the apparent loss of employment and increase in labor productivity.



Log Input Capacity

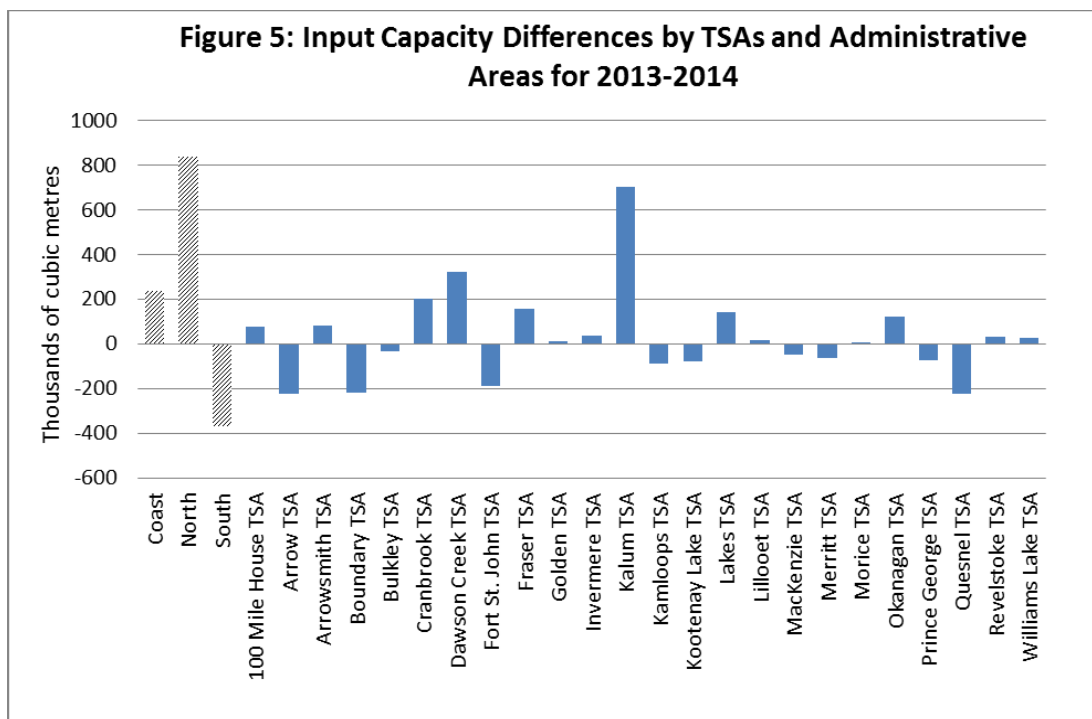
Log Input Capacity³

Figure 5 shows provincial mill capacity changes for LBR/VNR/OSB/LVL mills, summarized by administrative area and timber supply area (TSA)⁴ for mills producing at least 40 million board feet per year in 2013-2014.

The provincial log input capacity in 2014 was 55.19 million cubic metres, up from 54.49 million cubic metres in 2013. Log input for these mills was 52.31 million cubic metres in 2014, up from 51.99 million cubic metres in 2013.

Total log input capacity on the Coast and in the North rose by 236,000 and 836,000 cubic metres respectively, while the input capacity in the South decreased by 369,000 cubic metres.

Log input capacity increased for 14 TSAs due to facility upgrades and shift additions. Log input capacity fell for 10 TSAs due to shift reductions in 2014. The considerable increase of log input capacity for the Kalum TSA was because ROC Holdings Ltd. started responding to the B.C. Mill List Survey.



³ Some log input and input capacity data in 2013 were adjusted in 2015 due to revised data received from mill representatives. As a result, log input and log input capacity data for 2013 in this report might not be consistent with the data shown in the 2013 mill list report.

⁴ The TSA map is available online at: <https://www.for.gov.bc.ca/ftp/HTH/external/publish/web/timber-tenures/tfl-regions-tsas-districts-map-350-dpi-april-10-2014.pdf>

Time Series Data

1) Small, Medium, Large and Very Large Lumber Mills

The total number of operating lumber mills in B.C. increased from 128 in 2013 to 138 in 2014 because some mills started responding to the B.C. Mill List Survey.

Table 1 presents the distribution of B.C. lumber mills by size for the Coast, North and South Areas in 2013 and 2014. As shown in this table, mills are categorized into four size classes, namely small, medium, large and very large.

Table 1: Distribution of B.C. Lumber Mills by Size and Area for 2013 and 2014

Areas	Mill Sizes (Million Board Feet per year)	Size Classes	Number of Mills ⁵		Changes
			2013	2014	
Coast	< 100	Small	33	34	1
	100-200	Medium	8	7	-1
	200-300	Large	2	2	0
	Over 300	Very Large	1	1	0
North	< 100	Small	12	12	0
	100-200	Medium	3	5	2
	200-300	Large	8	9	1
	Over 300	Very Large	6	6	0
South	< 100	Small	31	38	7
	100-200	Medium	13	14	1
	200-300	Large	9	8	-1
	Over 300	Very Large	2	2	0

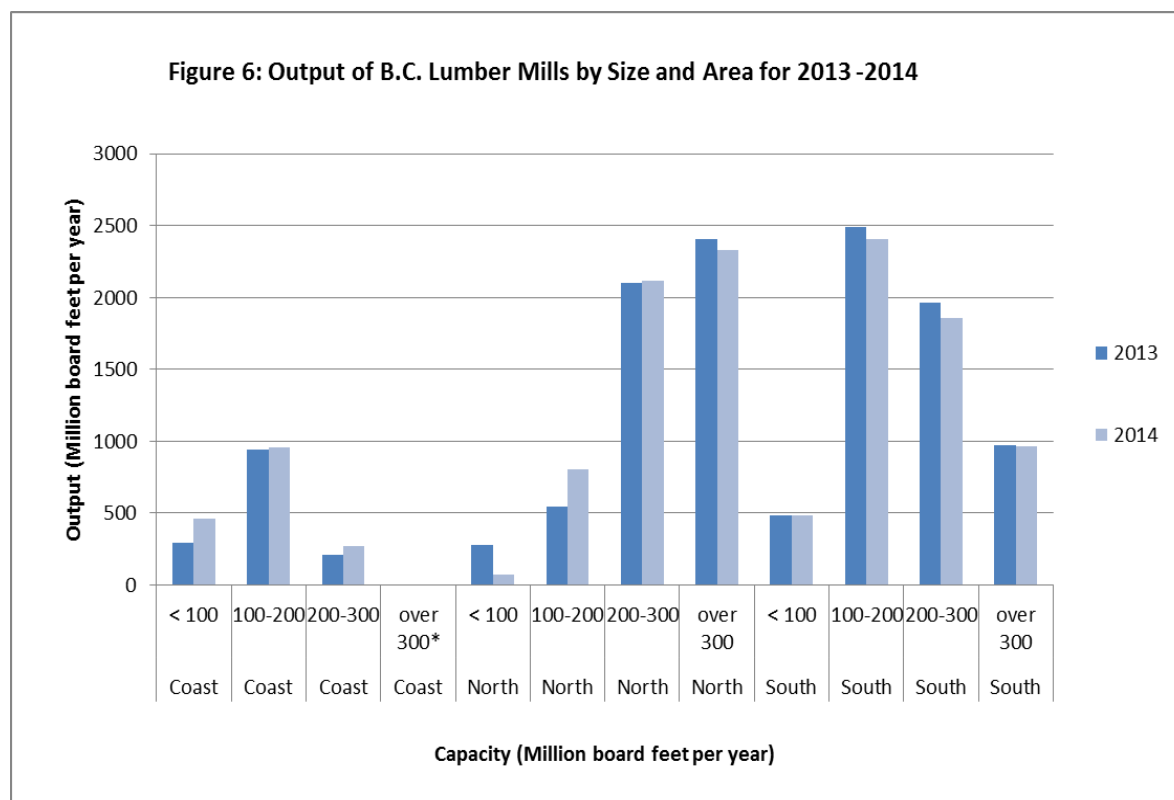
- On the Coast, the number of medium mills decreased by one from 2013, while the number of small mills increased by one in 2014. The number of mills in other size classes did not change.
- In the North, the number of mills in all three classes remained relatively stable in 2013-2014.
- In the South, the number of small mills increased from 31 in 2013 to 38 in 2014. The number of medium mills increased by one, while the number of large mills decreased by one over the same period.

⁵ Some log input capacity data in 2013 were adjusted in 2015 due to revised data received from mill representatives in 2015. As a result, the number of mills for 2013 in this report might not be consistent with the data shown in the *2013 Major Primary Timber Processing Facilities in British Columbia* report.

Figure 6 demonstrates the distribution of output⁶ by mill size for the Coast, North, and South Areas in 2013-2014.

Most of the output in the North was processed by large and very large mills in the 200-300 million board feet per year and over 300 million board feet per year classes. In the South, the medium and large classes produced most of the lumber.

- On the Coast, the output of small mills and large mills increased by 56% and 31% respectively in 2014 over 2013.
- In the North, the output of medium mills increased by 48%, while output of small mills decreased by 73% in 2014.



* The production data for very large mills on the Coast has been suppressed for confidentiality.

⁶ Some 2013 output data was adjusted in 2015 due to revised data received by the Ministry. As a result, the output data for 2013 used in this report might not be consistent with the data shown in the *2013 Major Primary Timber Processing Facilities in British Columbia* report.

The following section shows detailed statistics for all lumber mills with capacity greater than or equal to 40 million board feet per year from 1990 onwards:

Number of Mills:

- Table 2 and Figure 8 show that there were 19 operating mills on the Coast and 54 in the Interior for a total of 73 mills in the Province. One mill on the Coast and two mills in the Interior started responding to the B.C. Mill List Survey in 2014.
- In 2014, Canfor closed their Quesnel sawmill in March and West Fraser shut down their Houston sawmill in May. Western Forest Products closed their Nanaimo sawmill in Q4 2014, while the company increased production at their Duke Point and Saltair sawmills.

Mill Capacity, Output, and Input:

Figures 7a and 7b show the capacity, total lumber output, log input for sawmills on the Coast and in the Interior:

- Coastal capacity remained constant, while the Interior's capacity decreased by 200 million board feet in 2014 over 2013.
- Coastal output rose by 300 million board feet on the processing of 7.3 million cubic metres of logs reaching a level not equaled since 2007.
- The Interior's output dropped by 300 million board feet, processing 900,000 fewer cubic metres of logs than 2014, as a result of mill closures and shift reductions in 2014.

Average Capacity, Capacity Utilization, and Lumber Recovery Factor (LRF):

- As Figure 8 illustrates, the average capacity in the Interior decreased slightly from 204 million board feet per mill per year in 2013 to 200 million board feet per mill per year in 2014. Average capacity was higher in the Interior than on the Coast.
- Figure 9 shows that Interior's capacity utilization declined by five per cent, going from 106% in 2013 to 101% in 2014. The Coastal capacity utilization rate increased from 56% in 2011 to 68% in 2014.
- Figure 10 demonstrates that the lumber recovery factor (LRF) slightly increased on the Coast. The Interior's LRF decreased slightly in 2014 compared to 2013.

Table 2: British Columbia Lumber Mill Summary Statistics for mills with estimated annual capacity of at least 40 million board feet

		1990...	1995...	2000...	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% change 1990- 2014
COAST															
Number of Mills		43	38	36	29	24	24	21	19	21	20	18	18	19	-56%
Total Capacity	billion board feet per year	4.2	3.8	4.0	3.4	2.7	2.7	2.4	2.2	2.5	2.5	2.5	2.5	2.5	-41%
Total Output	billion board feet per year	3.8	3.3	3.1	2.6	2.4	1.7	1.5	1.2	1.4	1.4	1.5	1.4	1.7	-55%
Total Input	million cubic metres per year	17.1	15.0	13.8	11.2	10.3	7.6	6.5	4.9	5.9	6.2	6.4	6.4	7.3	-57%
Average Capacity	million board feet per mill per year	99	100	111	117	114	111	114	116	119	125	139	139	132	33%
Capacity Utilization	output divided by capacity	89%	88%	77%	76%	89%	65%	63%	55%	56%	56%	60%	56%	68%	-23%
Lumber Recovery Factor	'000 board feet per cubic metre	0.220	0.223	0.222	0.231	0.236	0.230	0.231	0.245	0.237	0.226	0.234	0.219	0.233	6%
INTERIOR															
Number of Mills		88	83	77	71	72	72	62	53	52	56	54	52	54	-39%
Total Capacity	billion board feet per year	10.7	10.3	10.7	12.8	12.8	12.4	11.3	10.7	10.4	11.1	10.9	10.6	10.8	1%
Total Output	billion board feet per year	10.0	10.0	10.5	14.1	14.2	13.3	9.7	7.9	9.5	10.5	10.8	11.2	10.9	9%
Total Input	million cubic metres per year	42.2	40.8	39.9	50.2	50.5	47.4	34.7	28.2	34.1	37.0	38.6	39.9	39.0	-7%
Average Capacity	million board feet per mill per year	121	124	139	180	177	172	182	202	200	198	202	204	200	65%
Capacity Utilization	output divided by capacity	93%	97%	99%	111%	111%	107%	86%	74%	91%	95%	99%	106%	101%	8%
Lumber Recovery Factor	'000 board feet per cubic metre	0.236	0.245	0.263	0.282	0.281	0.280	0.280	0.280	0.279	0.284	0.280	0.281	0.279	18%
PROVINCE															
Number of Mills		131	121	113	100	96	96	83	72	73	76	72	70	73	-44%
Total Capacity	billion board feet per year	14.9	14.1	14.7	16.2	15.5	15.1	13.7	12.9	12.9	13.6	13.4	13.1	13.3	-11%
Total Output	billion board feet per year	13.7	13.3	13.6	16.7	16.6	15.0	11.2	9.1	10.9	11.9	12.3	12.6	12.6	-8%
Total Input	million cubic metres per year	59.2	55.7	53.8	61.4	60.8	55.0	41.2	33.1	40.0	43.2	45.0	46.3	46.3	-22%
Average Capacity	million board feet per mill per year	114	117	130	162	162	157	165	179	177	179	186	187	182	60%
Capacity Utilization	output divided by capacity	92%	94%	93%	103%	107%	100%	82%	71%	84%	88%	92%	96%	95%	3%
Lumber Recovery Factor	'000 board feet per cubic metre	0.232	0.239	0.253	0.272	0.273	0.273	0.272	0.275	0.273	0.275	0.273	0.272	0.272	17%

Source: Major Primary Timber Processing Facilities in British Columbia, ministry database, various years

Notes:

Includes only those lumber mills with a minimum estimated annual capacity of 40 million board feet per year.
Capacity estimated assuming two 8-hour shifts, 240 days per year.

**Figure 7a: B.C. Lumber Mills (at least 40 million board feet)
Coast Capacity, Output and Log Input**

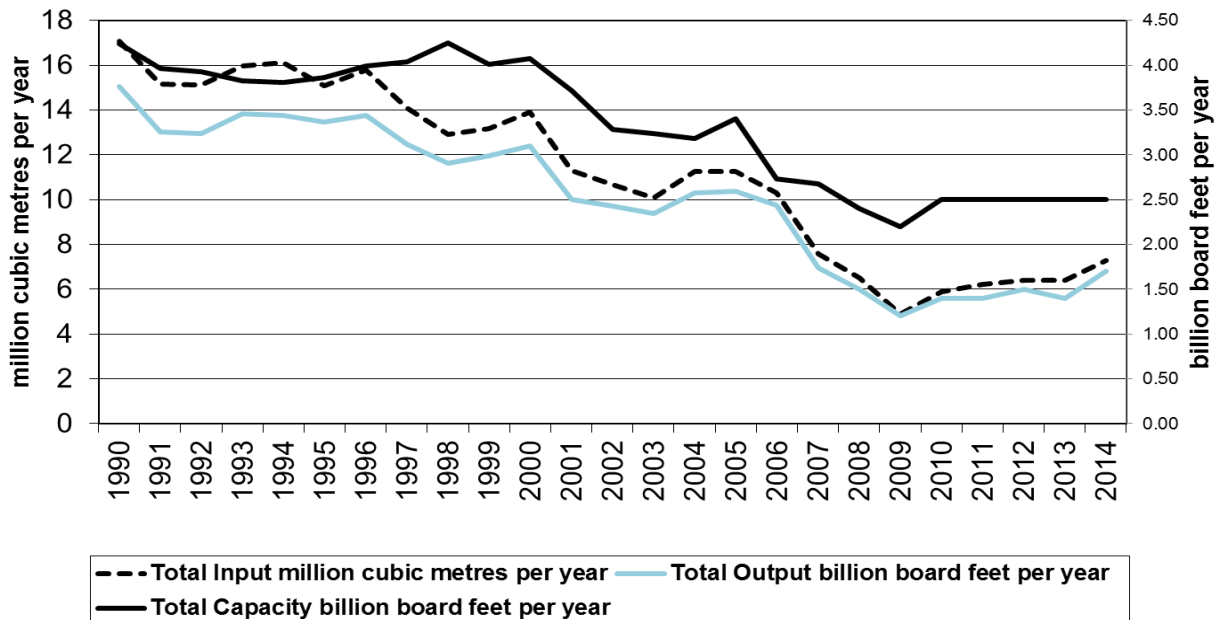


**Figure 7b: B.C. Lumber Mills (at least 40 million board feet)
Interior Capacity, Output and Log Input**

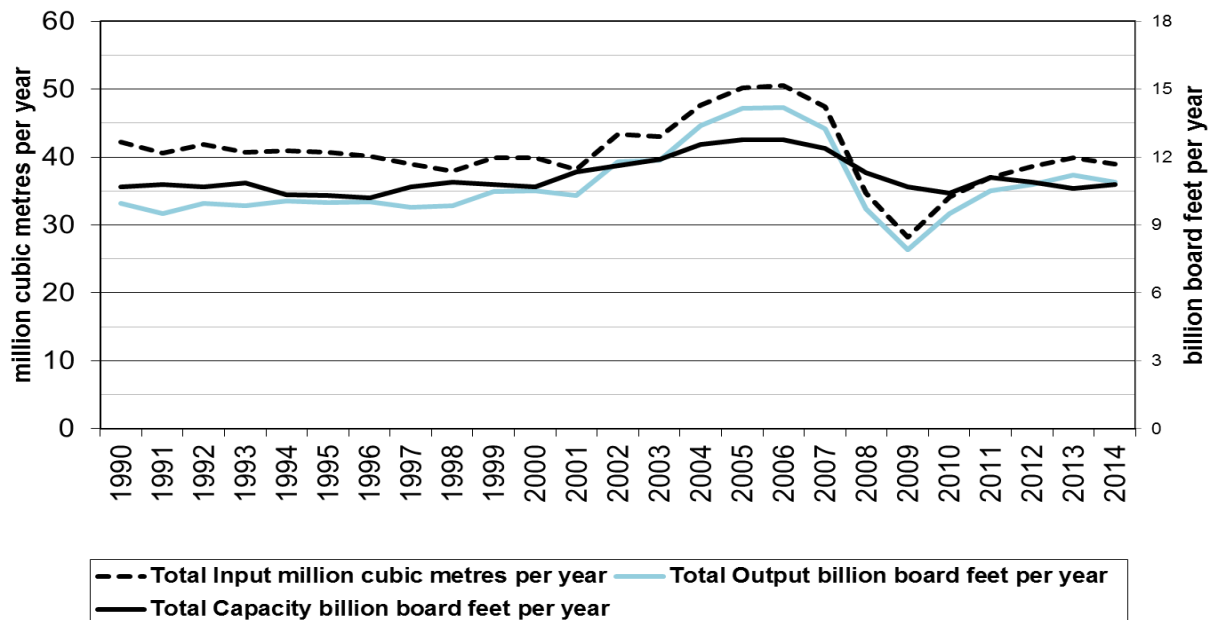


**Figure 8: B.C. Lumber Mills (at least 40 million board feet)
Number of Mills and Average Capacity**

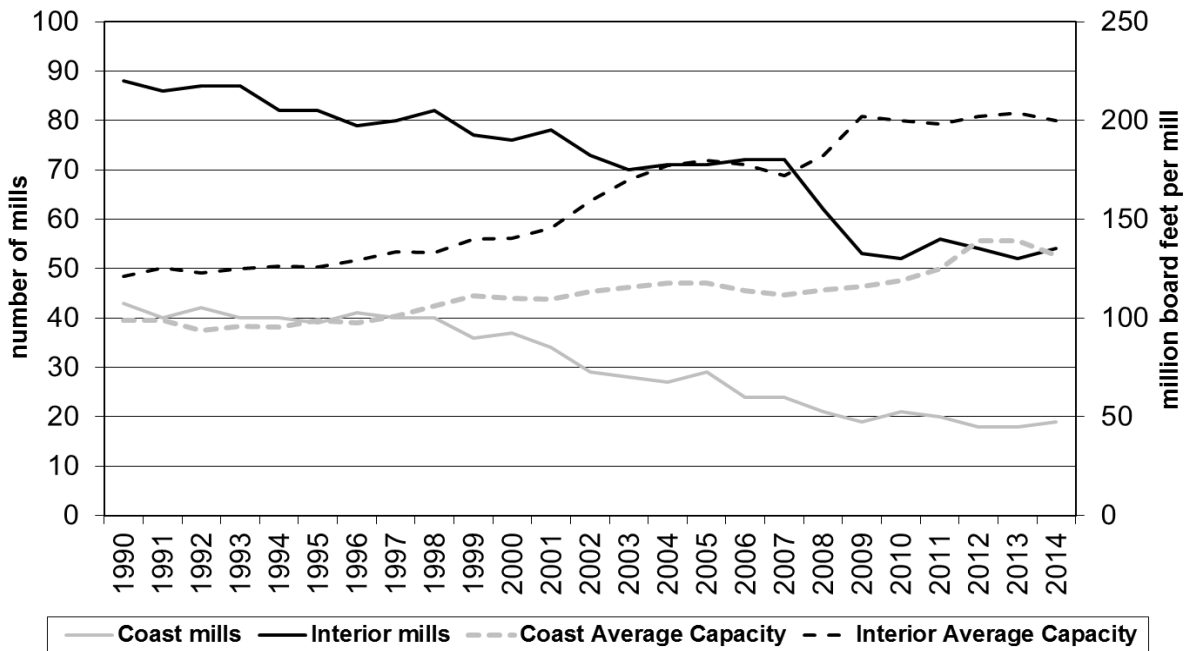


**Figure 9: B.C. Lumber Mills (at least 40 million board feet)
Capacity Utilization**

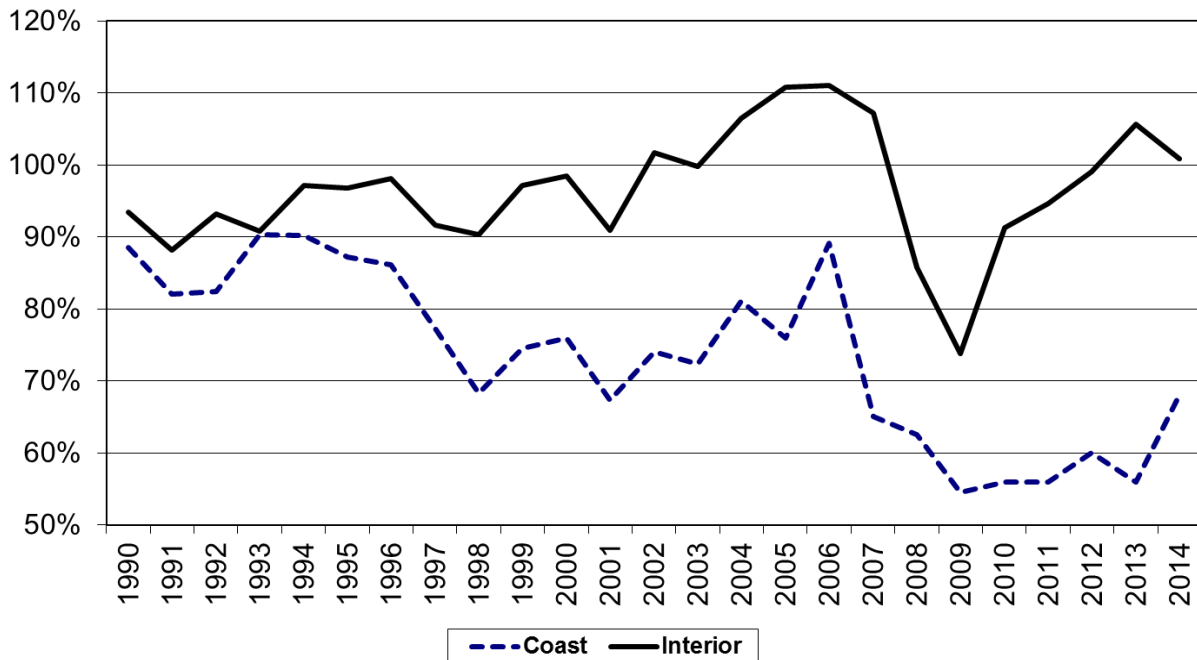
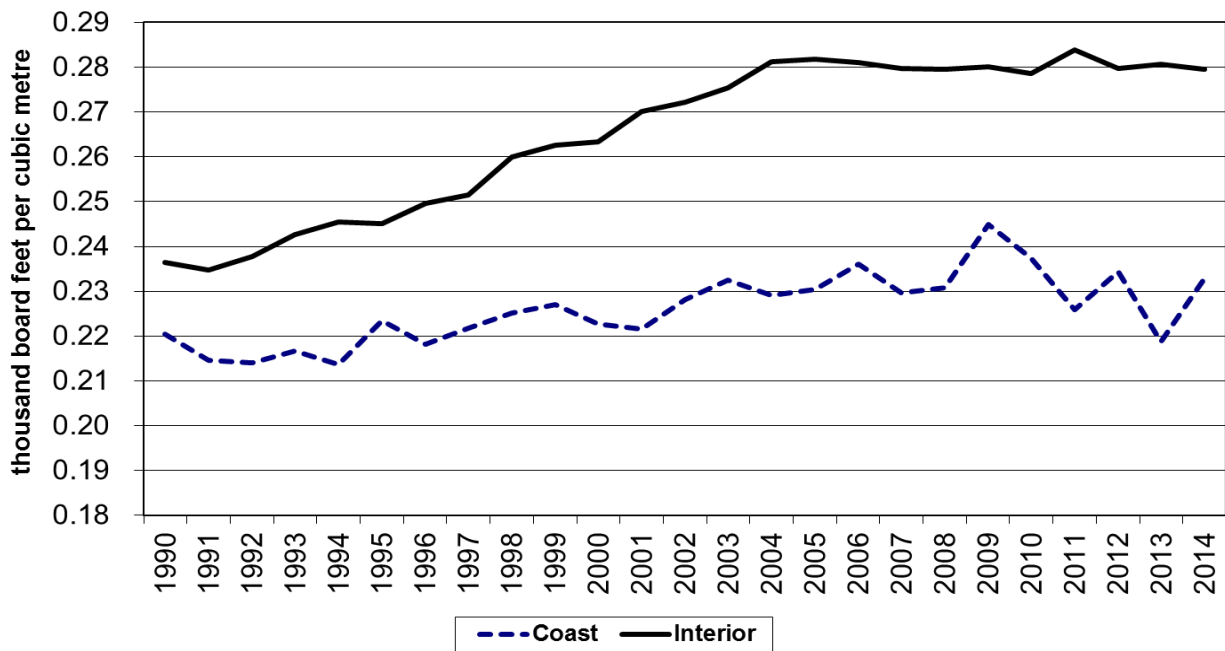


**Figure 10: B.C. Lumber Mills (at least 40 million board feet)
Lumber Recovery Factor**



2) Veneer Mills

Veneer is used as an input to plywood manufacturing and other engineered wood products such as laminated veneer lumber. Six veneer mills in B.C. have a plywood mill on the same site.

The following section gives a provincial overview of veneer mill statistics from 1990 onwards:

Number of Mills:

- As shown in Table 3, there were 13 veneer mills operating in B.C.⁷: four mills on the Coast and nine mills in the South.

Mill Capacity, Output, and Input:

- Figure 11 demonstrates that both capacity and output of veneer mills remained stable between 2013 and 2014.

Average Capacity, Capacity Utilization, and LRF:

- Figure 12 demonstrates that average capacity decreased by 7.6% in 2013-2014.
- Figure 13 illustrates that capacity utilization nearing or exceeding 130% between 2002 and 2007 due to shift additions. Operations were back to normal capacity in 2008-2011. The capacity utilization rate stayed at its peak level of 137% in 2014.
- Figure 14 shows the recovery factor was slightly down by 4.6% in 2014 over 2013 but still the third highest level over the period of 1990-2014.

⁷ Small mills using an average of less than 25,000 cubic metres of logs per year were not included in these statistics.

Table 3: British Columbia Veneer Mill Summary Statistics

		1990...	1995...	2000...	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% change 1990- 2014
Number of Mills		20	17	16	17	16	15	13	12	10	11	12	12	13	-35%
Total Capacity	(billion square feet 3/8" basis)	2.1	2.1	2.0	2.6	2.5	2.3	2.0	2.1	2.0	2.2	1.8	1.9	1.9	-10%
Total Output	(billion square feet 3/8" basis)	2.3	2.4	2.6	3.7	3.3	2.9	2.3	1.9	2.0	2.2	2.4	2.6	2.6	13%
Total Log Input	(thousand cubic metres)	4.4	4.1	4.4	6.3	5.7	5.1	4.0	3.4	3.6	3.8	3.9	4.1	4.3	-2%
Average Capacity	(million square feet per mill)	105	124	125	153	156	153	154	175	200	200	150	158	146	51%
Average Log Input	(thousand cubic metres per mill)	220	244	274	371	356	340	308	283	360	345	325	342	331	55%
Capacity Utilization	(output divided by capacity)	110%	112%	126%	141%	132%	126%	115%	90%	100%	100%	133%	137%	137%	25%
Recovery Factor	(square feet per cubic metre log input)	523	585	591	587	579	569	575	559	556	579	615	634	605	21%

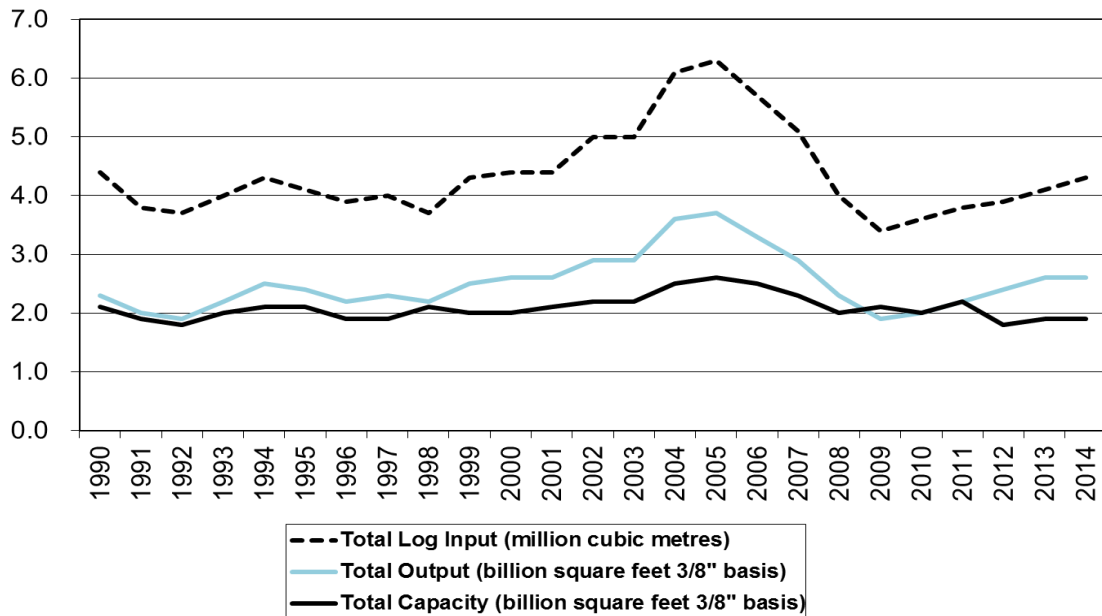
Source: Major Primary Timber Processing Facilities in British Columbia, ministry database, various years

Notes:

Output Capacity is estimated based on two 8 hour shifts, 240 days per year.

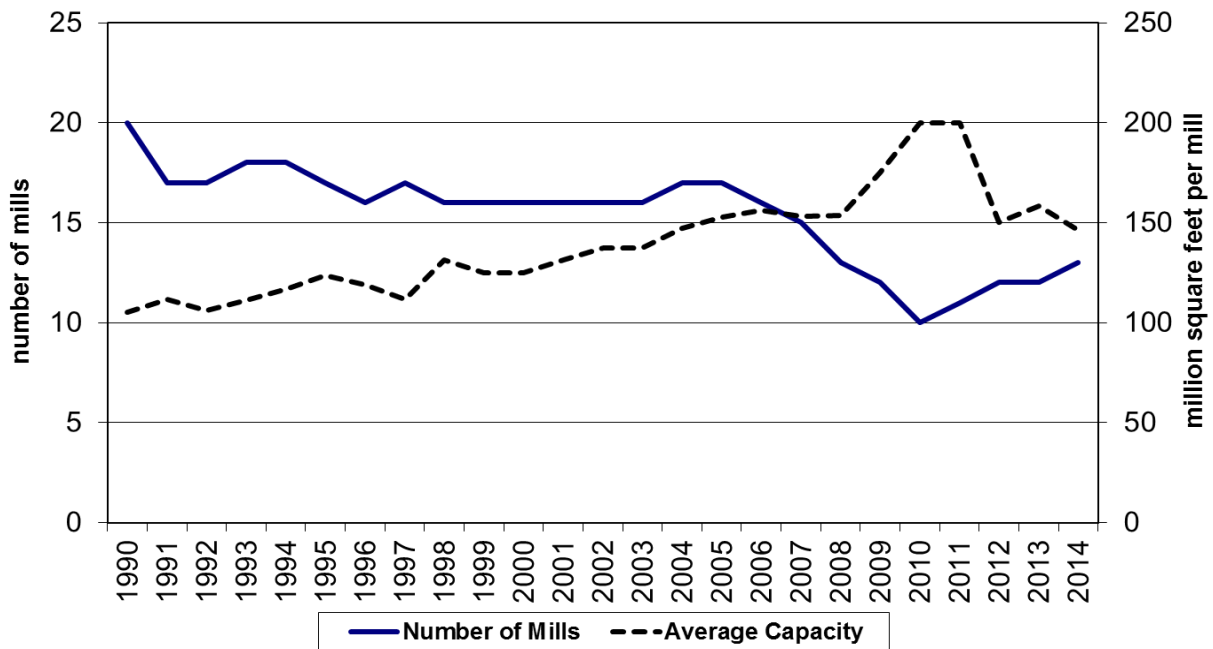
Small mills using an average of less than 25,000 cubic metres of logs per year are not included in these statistics.

**Figure 11: B.C. Veneer Mills
Capacity, Output and Log Input***



8

**Figure 12: B.C. Veneer Mills
Number of Mills and Average Capacity**



⁸ Some 2013 veneer mill data was adjusted due to revised data received in 2015. Therefore, the 2013 veneer mill data used in this report may not be consistent with the data used in the 2013 mill list report.

**Figure 13: B.C. Veneer Mills
Capacity Utilization**

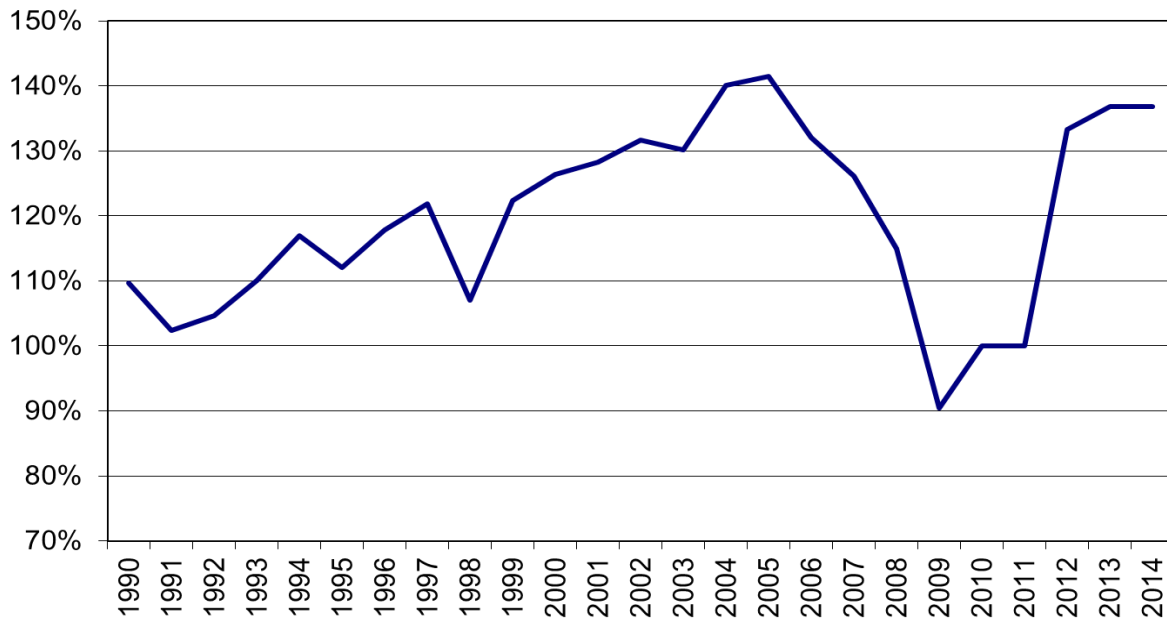
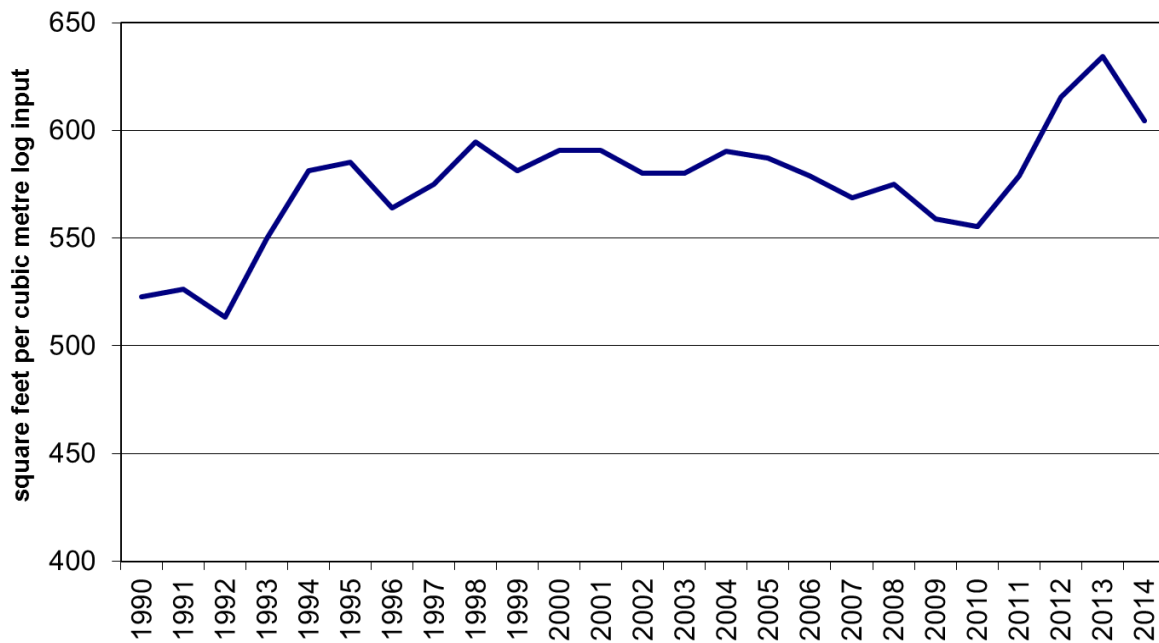


**Figure 14: B.C. Veneer Mills
Recovery Factor**



3) Pulp and Paper Mills

Pulp is used primarily as a raw material for paper and paperboard products as well as packaging. The main pulp products were bleached softwood kraft pulp and chemi-thermo-mechanical pulp (CTMP). Most of the paper produced in B.C. is newsprint.

With sawmill closures and the anticipated reductions in allowable annual cuts (AACs) due to the mountain pine beetle infestation, fibre supply for the pulp industry is likely to decline in the mid-term in the Interior. The Ministry has developed a Fibre Action Plan to help offset anticipated fibre supply shortage.

The following part provides a provincial overview of pulp and paper mill statistics from 1991 onwards:

Number of Mills:

- As shown in Table 4, 16 pulp mills and six paper mills operated in 2014, with all paper mills integrated with the pulp operations (please refer to the mill list on page 38 for details). Six of the 16 pulp mills are on the Coast and 10 are in the Interior, while five of the paper mills are on the Coast and only one in the Interior

Mill Capacity, Output, Input, Average Capacity, and Capacity Utilization:

Pulp Mills:

- Total pulp mill capacity and output in B.C. has steadily declined since 1991. The pulp sector reduced capacity by 320,000 tonnes in 2014 compared to the 2013 level. Output matched capacity as seen in Figures 15 and 16.
- Whole log chipping at pulp mills increased from 7.6% in 2013 to 8.3% in 2014. In contrast with eight pulp mills operating wood rooms in 2009, only five reported the use of whole log chipping operations in 2014.
- Average capacity for pulp mills declined by 20,000 tonnes between 2013 and 2014.
- Capacity utilization for pulp mills was up by 8% in 2014 over 2013.

Paper Mills:

- As shown in Figure 17, paper mill capacity increased by 170,000 tonnes between 2013 and 2014.
- Output slightly increased by 10,000 tonnes and average capacity raised by 29,000 tonnes in 2014 compared to 2013.
- Capacity utilization was down from 102% in 2013 to 92% in 2014.

Table 4: British Columbia Pulp and Paper Mill Summary Statistics

		1991...	1995...	2000...	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% change 1991- 2014
Number of Pulp Mills		24	24	23	22	21	21	19	19	18	18	18	16	16	-33%
Total Capacity	(million tonnes)	8.42	8.21	7.84	7.42	7.42	6.84	6.36	6.33	5.96	6.02	5.87	5.66	5.34	-37%
Total Output	(million tonnes)	6.68	7.30	7.56	7.09	7.08	6.51	5.85	5.27	5.49	5.76	5.80	5.50	5.62	-16%
Total Fibre Input	(million bone dry units)	11.76	12.75	13.44	12.36	11.79	10.96	10.12	8.87	9.27	10.13	10.27	10.35	9.18	-22%
Average Capacity	(thousand tonnes)	351	342	341	337	353	326	335	333	331	334	326	354	334	-5%
Average Fibre Input	(thousand bone dry units)	490	531	584	562	562	522	532	467	515	563	571	647	574	17%
Capacity Utilization		79%	89%	96%	96%	95%	95%	92%	83%	92%	96%	99%	97%	105%	33%
Number of Paper Mills		12	11	11	11	11	9	9	8	6	6	6	6	6	-50%
Total Capacity	(million tonnes)	3.47	3.06	3.27	2.98	3.19	2.86	2.84	2.52	1.52	1.52	1.46	1.44	1.61	-54%
Total Output	(million tonnes)	2.74	2.75	3.17	3.02	3.04	2.55	2.42	2.03	1.49	1.48	1.49	1.47	1.48	-46%
Average Capacity	(thousand tonnes)	289	278	297	271	290	318	315	315	253	253	244	239	268	-8%
Capacity Utilization		79%	90%	97%	101%	95%	89%	85%	81%	98%	98%	102%	102%	92%	17%

Source: Major Primary Timber Processing Facilities in British Columbia, ministry database, various years

Notes:

Estimated annual capacity is based on a standardized operation of 345 operating days per year, one 24-hour shift per day. Actual operations may vary from this schedule.

Pulp mills included in these statistics are those that use wood fibre input.

Total capacity and total output for some mills in 2012 and 2013 were adjusted to reflect new information collected in 2014.

**Figure 15: B.C. Pulp Mills
Capacity, Output and Input**

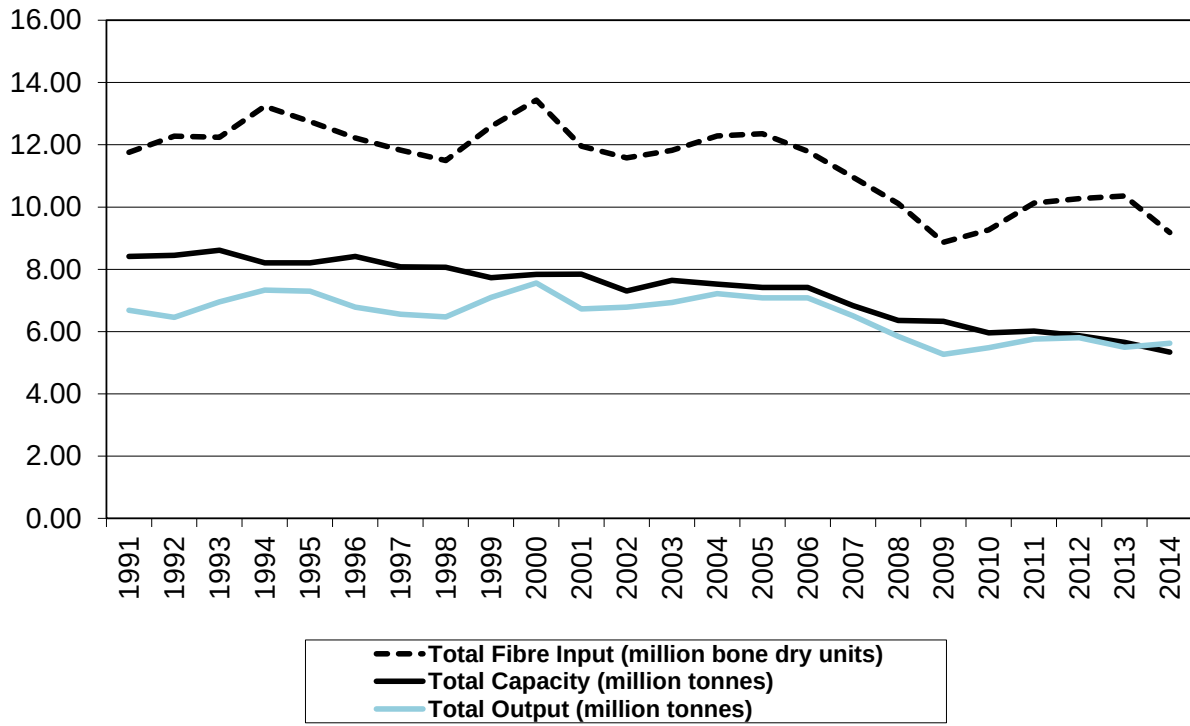


Figure 16: B.C. Pulp Mills Capacity Utilization

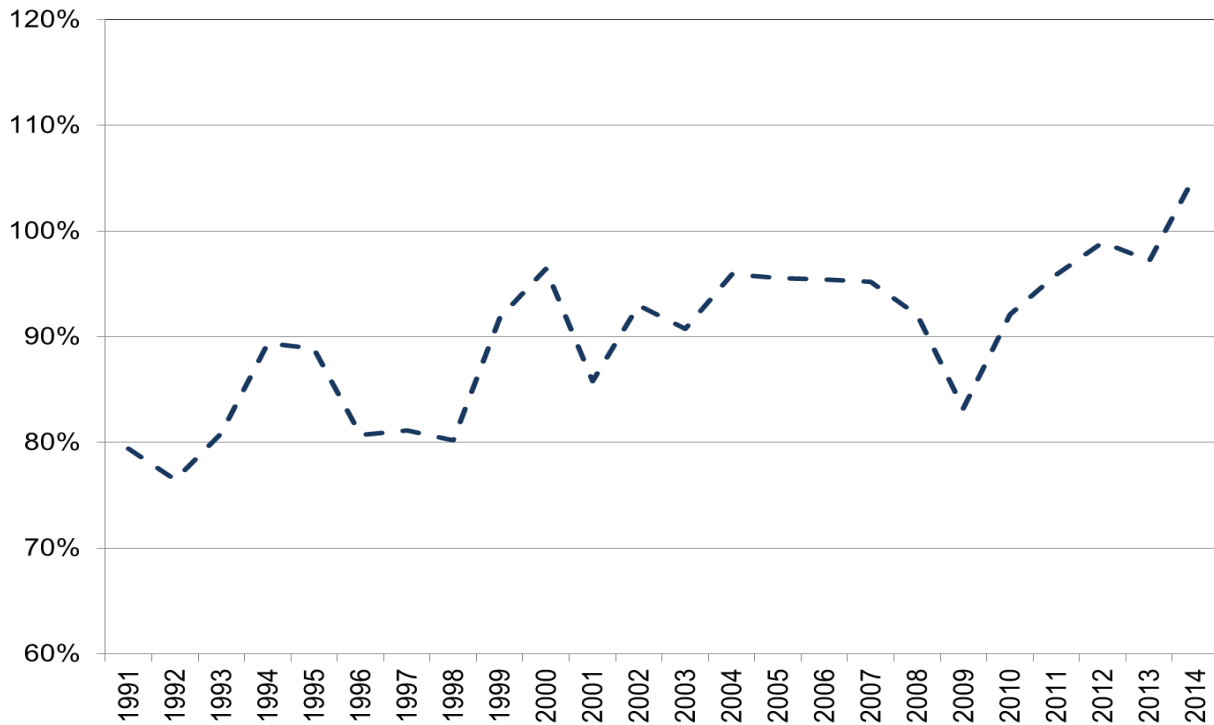


**Figure 17: B.C. Paper Mills
Capacity and Output**

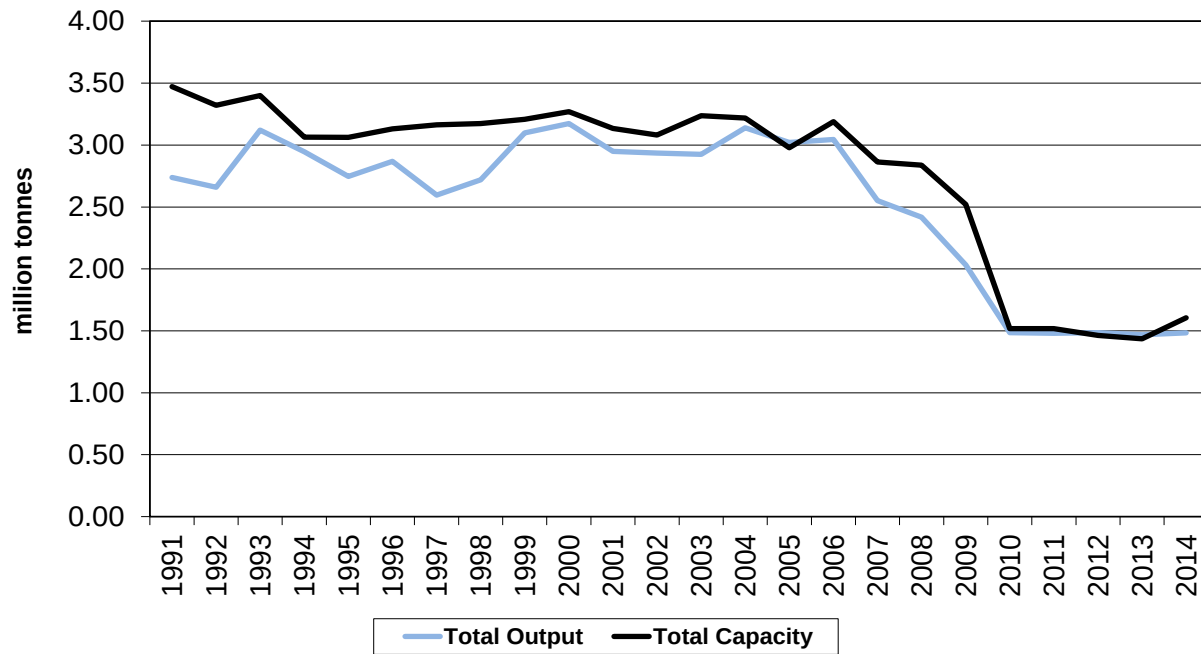
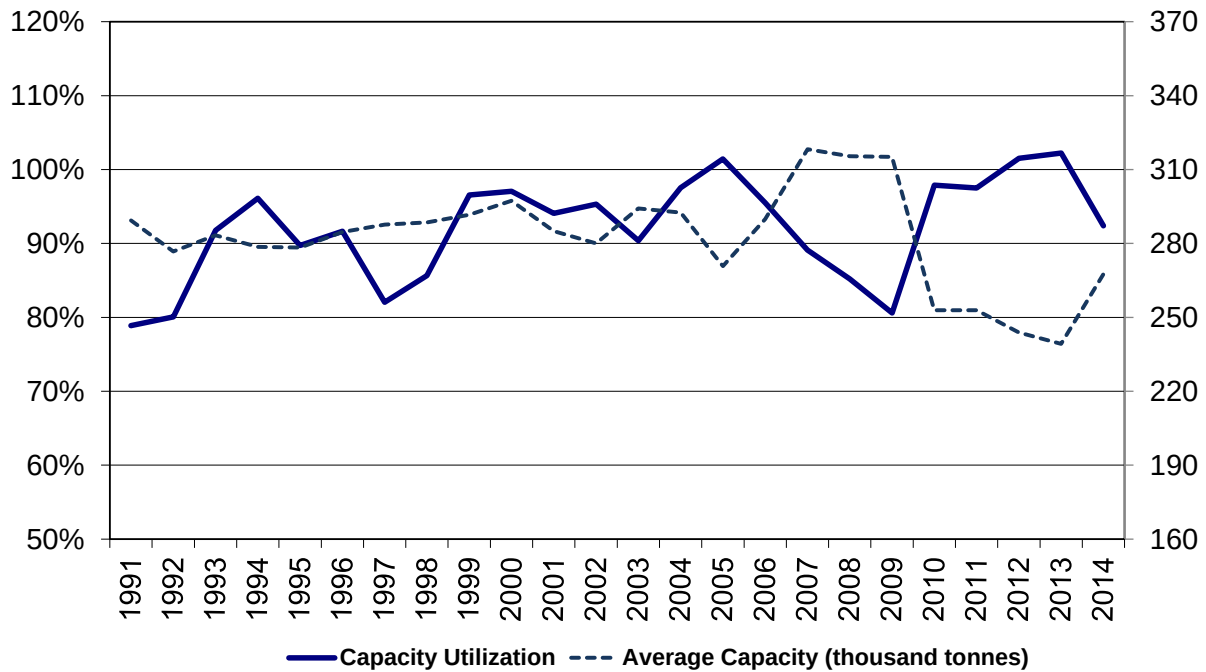


**Figure 18: B.C. Paper Mills
Capacity Utilization and Average Capacity**



4) Pellet Mills

Wood pellets are primarily used as wood fuel and are usually made from compacted sawdust. Wood pellets are predominantly produced from sawmill or wood product processing plant residues.

The pellet industry is growing quickly in the Province due to the increasing demand in Japan, Korea and Europe. According to the Ministry's internal records, large forest companies invested over \$157 million into this industry in 2014.

Sawlog harvest in the Interior is declining due to the mountain pine beetle infestation, with a corresponding reduction in the amount of sawdust available for pellet mills. The Fibre Action Plan provides specific opportunities to support the reliable access to residuals by pellet producers and other secondary manufacturers.

The following section provides an overview of pellet mill statistics for 2005-2014:

Number of Mills:

- As noted in Table 5, there were 12 pellet mills in 2014.
- Diacarbon reopened a previously closed wood pellet plant in Merritt in fall 2014.

Mill Capacity, Input, Output, and Capacity Utilization:

- As seen in Figure 17, the total capacity for these pellet mills increased from 1.69 million tonnes per year to 1.77 million tonnes per year due to the reopening of the Merritt pellet plant mentioned above.
- Total input declined by 200,000 bone dry units between 2013 and 2014, largely in the form of sawdust.
- Figure 19 demonstrates that pellet production slightly declined by 30,000 tonnes in 2014 over 2013.
- Figure 20 illustrates that capacity utilization for pellet mills was highly variable because new or reopened mills brought additional capacity.

Table 5: British Columbia Pellet Mill Summary Statistics

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% change 2005- 2014
Number of Mills		5	8	8	9	9	11	11	11	11	12	140%
Total Capacity	(million tonnes)	0.36	0.81	0.99	1.07	0.96	1.31	1.99	1.67	1.69	1.77	392%
Total Output	(million tonnes)	0.36	0.39	0.41	0.79	0.76	1.11	1.36	1.64	1.68	1.65	358%
Total Input	(million bone dry units)	0.41	0.44	0.47	0.81	0.68	1.13	1.28	1.37	1.58	1.38	237%
Average Capacity	(000s tonnes)	72	101	124	119	107	119	181	152	154	148	105%
Average Fibre Input	(thousand bone dry units per mill)	82	55	59	90	76	103	116	125	144	115	40%
Capacity Utilization	(output divided by capacity)	100%	48%	41%	74%	79%	85%	68%	98%	99%	93%	-7%
Recovery Factor	(Tonnes of output per tonne of bone dry input)	0.88	0.89	0.87	0.98	1.12	0.98	1.06	1.20	1.06	1.20	36%

Source: Major Primary Timber Processing Facilities in British Columbia, ministry database, various years

Notes:

Output Capacity is estimated based on three 8 hour shifts, 345 days per year.

**Figure 19: B.C. Pellet Mills
Capacity and Output**

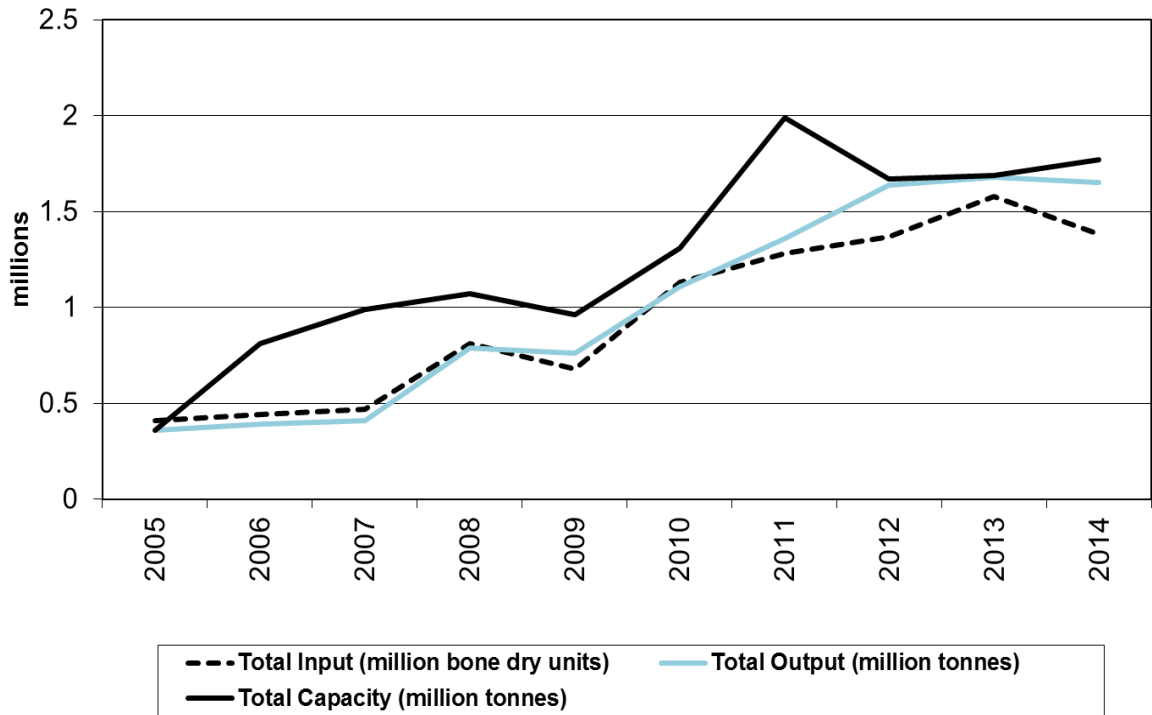
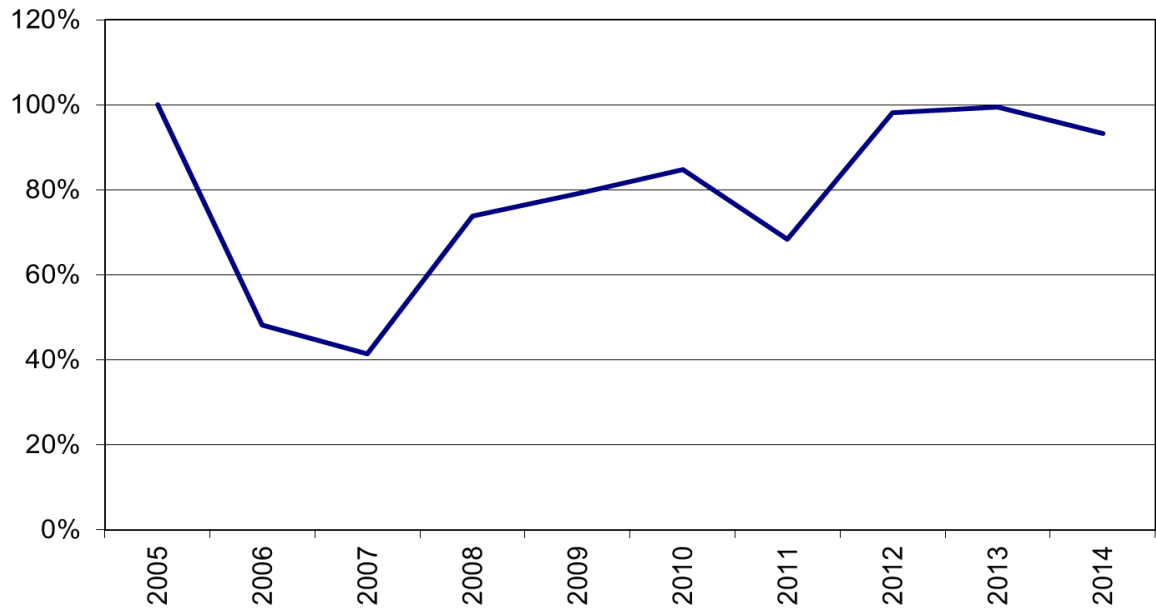


**Figure 20: B.C. Pellet Mills
Capacity Utilization**



Related References

Industry Canada, Canadian Industry Statistics, www.ic.gc.ca/eic/site/cis-sic.nsf/eng/home

Nielson, R.W.; Dobie, J.; Wright, D.M. 1985. **Conversion factors for the forest products industry in Western Canada**. Forintek Canada Corporation, Vancouver, British Columbia, Special Publication SP-24R.
http://www.fpinnovations.ca/contact_e.htm

Pulp and Paper Product Council, www.pppc.org

Resource Information Systems Inc. (RISI), www.risiinfo.com

Spelter, Henry, David McKeever, and Daniel Toth, "Profile 2009: Softwood Sawmills in the United States and Canada", 2009, Research Paper FPL-RP-659. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory,
www.treesearch.fs.fed.us/pubs/34525

Random Lengths, Daily WoodWire, www.randomlengths.com/WoodWire/Index/

Wood Pellet Association of Canada, <http://www.pellet.org/>

Appendix: List of Mills

Figure 21 Administrative Areas and Natural Resource District Boundaries in 2014



Lumber Mills

(Listed Alphabetically By Company)

Mills producing lumber provided in separate tables, one for those with estimated annual capacity above 40 million board feet of lumber and those below.

Notes:

1. Measurement units are in millions of board feet.
2. Estimated annual capacity is based on a standardized operation of 240 days per year, two 8-hour shifts per day. Actual mill operations may vary from this schedule.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Lumber Mills is available as an Excel spreadsheet online at:
<https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

LUMBER MILLS WITH CAPACITY GREATER THAN 40 MILLION BOARD FEET OF LUMBER IN 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity (millions of board feet)
8	Andersen Pacific Forest Products Ltd	Ruskin	Coast	Chilliwack	65
137	Apollo Forest Products Ltd.	Fort St James	North	Fort St. James	157
498	Aspen Planers Ltd.	Merritt	South	Cascades	192
130	Canadian Forest Products Ltd.	Mackenzie	North	Mackenzie	260
79	Canadian Forest Products Ltd.	Canal Flats	South	Rocky Mountain	112
90	Canadian Forest Products Ltd.	Radium Hot Sprgs	South	Rocky Mountain	221
82	Canadian Forest Products Ltd.	Elko	South	Rocky Mountain	214
193	Canadian Forest Products Ltd.	Houston	North	Nadina	528
64	Canadian Forest Products Ltd.	Vavenby	South	Thompson Rivers	197
160	Canadian Forest Products Ltd.	Bear Lake	North	Prince George	186
166	Canadian Forest Products Ltd.	Prince George	North	Prince George	326
135	Canadian Forest Products Ltd.	Isle Pierre	North	Prince George	218
110	Canadian Forest Products Ltd.	Quesnel	South	Quesnel	154
140	Canadian Forest Products Ltd.	Engen	North	Vanderhoof	465
127	Canadian Forest Products Ltd.	Chetwynd	North	Peace	200
122	Canadian Forest Products Ltd.	Fort St John	North	Peace	234
150	Carrier Lumber Ltd.	Prince George	North	Prince George	177
133	Conifex Timber Inc.	Fort St James	North	Fort St. James	310
129	Conifex Timber Inc.	Mackenzie	North	Mackenzie	228
326	Delta Cedar Products Ltd.	Delta	Coast	Chilliwack	53
45	Downie Timber Ltd.	Revelstoke	South	Selkirk	116
158	Dunkley Lumber Ltd.	Strathnaver	North	Prince George	480
86	Galloway Lumber Co. Ltd.	Galloway	South	Rocky Mountain	63
66	Gilbert Smith For Prod Ltd.	Barriere	South	Thompson Rivers	57
537	Goldwood Industries Ltd.	Richmond	Coast	Chilliwack	53
14	Gorman Bros Lumber Ltd.	Westbank	South	Okanagan Shuswap	113
1016	Graham Farms Ltd	Revelstoke	South	Selkirk	93
1005	Halo Sawmill	Pitt Meadows	Coast	Chilliwack	53
181	Hampton Affiliates Ltd.	Burns Lake	North	Nadina	90
62	International Forest Products Ltd.	Castlegar	South	Selkirk	185
70	International Forest Products Ltd.	Adams Lake	South	Thompson Rivers	362
30	International Forest Products Ltd.	Grand Forks	South	Selkirk	147
297	International Forest Products Ltd.	Hammond	Coast	Chilliwack	156
283	International Forest Products Ltd.	Delta	Coast	Chilliwack	123
88	J H Huscroft Ltd.	Erickson	South	Selkirk	46
100	J.S. Jones	Surrey	Coast	Chilliwack	192
50	Kalesnikoff Lumber Co. Ltd.	Thrums	South	Selkirk	103
144	L & M Lumber Ltd.	Vanderhoof	North	Vanderhoof	240
618	North Enderby Timber Ltd.	Enderby	South	Okanagan Shuswap	63
1010	Pacific Timber	Burns Lake	North	Nadina	123

LUMBER MILLS WITH CAPACITY GREATER THAN 40 MILLION BOARD FEET OF LUMBER IN 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity (millions of board feet)
626	Porcupine Wood Products Ltd.	Salmo	South	Selkirk	53
183	ROC Holdings	Terrace	North	Coast Mountain	168
454	S & R Sawmills Ltd.	Surrey	Coast	Chilliwack	320
750	Sigurdson Forest Products	Williams Lake	South	Cariboo Chilcotin	72
539	Stag Timber Ltd.	Surrey	Coast	Chilliwack	86
540	Terminal Forest Products Ltd.	Richmond	Coast	Chilliwack	288
396	Terminal Forest Products Ltd.	Vancouver	Coast	Chilliwack	58
20	Tolko Industries Ltd.	Lavinton	South	Okanagan Shuswap	215
98	Tolko Industries Ltd.	Quesnel	South	Quesnel	192
25	Tolko Industries Ltd.	Merritt	South	Cascades	217
107	Tolko Industries Ltd.	Williams Lake	South	Cariboo Chilcotin	199
67	Tolko Industries Ltd.	Kelowna	South	Okanagan Shuswap	170
68	Tolko Industries Ltd.	Armstrong	South	Okanagan Shuswap	204
103	Tolko Industries Ltd.	Williams Lake	South	Cariboo Chilcotin	274
453	Twin Rivers Cedar Products Ltd.	Ruskin	Coast	Chilliwack	58
31	Vaagen Fibre Canada	Midway	South	Selkirk	53
532	West Fraser Mills Ltd.	LeJac	North	Vanderhoof	272
113	West Fraser Mills Ltd.	Quesnel	South	Quesnel	389
552	West Fraser Mills Ltd.	Chetwynd	North	Peace	305
214	West Fraser Mills Ltd.	Clinton	South	100 Mile House	240
191	West Fraser Mills Ltd.	Smithers	North	Skeena Stikine	252
114	West Fraser Mills Ltd.	Williams Lake	South	Cariboo Chilcotin	165
530	West Fraser Mills Ltd.	Houston	North	Nadina	250
95	West Fraser Mills Ltd.	100 Mile House	South	100 Mile House	122
531	Western Forest Products	Nanaimo	Coast	South Island	98
393	Western Forest Products	Chemainus	Coast	South Island	219
442	Western Forest Products	Ladysmith	Coast	South Island	168
376	Western Forest Products	Ladysmith	Coast	South Island	176
392	Western Forest Products	Port Alberni	Coast	South Island	72
528	Western Forest Products	Port Alberni	Coast	South Island	149
320	Western Forest Products	Cowichan Bay	Coast	South Island	163
29	Weyerhaeuser Company Ltd.	Princeton	South	Cascades	202
93	Wynndel Box & Lumber Co. Ltd.	Wynndel	South	Selkirk	77

LUMBER MILLS WITH CAPACITY LESS THAN 40 MILLION BOARD FEET OF LUMBER IN 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity (millions of board feet)
715	100 Mile Wood Products	100 Mile House	South	100 Mile House	3.8
9	A.J. Forest Products Ltd.	Brackendale	Coast	Sea to Sky	24.0
5	Abfam Enterprises Ltd.	Port Clements	Coast	Haida Gwaii	10.8
990	Alan Hyde Sawmill	Sicamous	South	Okanagan Shuswap	1.0
10	BC Custom Timber Products Ltd.	Vanderhoof	North	Vanderhoof	14.4
643	Bear Lumber Ltd.	Cranbrook	South	Rocky Mountain	3.8
905	Blacktail Enterprises	Black Creek	Coast	Campbell River	0.5
986	Brasier Mill	Masset	Coast	Haida Gwaii	0.5
255	Buff Lumber Ltd.	Westwold	South	Okanagan Shuswap	12.0
252	C & C Wood Products Ltd.	Quesnel	South	Quesnel	36.4
987	Cambie Cedar Products Ltd.	Sicamous	South	Okanagan Shuswap	10.1
1014	Clarence Palumbo Sawmill	Golden	South	Selkirk	N/A
983	Colborne	Clearwater	South	Thompson Rivers	0.8
117	Continental Pole Ltd.	Pemberton	Coast	Sea to Sky	1.9
377	Coulson Manufacturing Ltd	Port Alberni	Coast	South Island	30.3
989	Deacoff Bros. Enterprises Ltd.	Kelowna	South	Okanagan Shuswap	N/A
741	Dove Creek Timber Corp.	Courtenay	Coast	Campbell River	11.2
1003	Duz Cho Logging	Mackenzie	North	Mackenzie	20.2
717	Edgegrain	Woss	Coast	North Island - Central Coast	1.2
301	Errington Cedar Products Ltd.	Errington	Coast	South Island	25.2
714	Franklin Forest Products Ltd.	Port Alberni	Coast	South Island	19.2
1004	Fu So Enterprises Ltd.	Kamloops	South	Thompson Rivers	N/A
679	G.C. Williams Milling	Malcolm Island	Coast	North Island - Central Coast	1.9
32	Gibbs Custom Sawmill	McBride	North	Prince George	1.2
957	Gold Island Forest Products Ltd.	Slocan	South	Selkirk	16.8
567	Green Forest Products Ltd.	Merville	Coast	Campbell River	0.7
955	Gudeit Bros. Cont. Ltd	Lumby	South	Okanagan Shuswap	1.4
975	Harold Turner	Pritchard	South	Thompson Rivers	0.8
1006	Harrop-Proctor Forest Products	Horrop	South	Selkirk	N/A
172	Hauer Bros. Lumber Ltd.	Tete Jaune Cache	North	Prince George	16.8
512	Jemico Enterprises Ltd.	Chemainus	Coast	South Island	10.6
47	Joe Kozek Sawmills Ltd.	Revelstoke	South	Selkirk	14.4
743	John Salo	Sointula	Coast	North Island - Central Coast	1.0
184	Kitwanga Mills Ltd.	Kitwanga	North	Skeena Stikine	28.8
1007	Lake Drive Lumber	Terrace	North	Coast Mountain	N/A
149	Lakeland Mills Ltd	Prince George	North	Prince George	9.6
597	Lakeside Timber (2007) Ltd.	Tappen	South	Okanagan Shuswap	24.0

LUMBER MILLS WITH CAPACITY LESS THAN 40 MILLION BOARD FEET OF LUMBER IN 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity (millions of board feet)
998	Les Saverella Contracting	McBride	North	Prince George	0.1
702	Linde Bros Lumber Ltd.	Williams Lake	South	Cariboo Chilcotin	N/A
399	Lois Lumber Ltd	Lang Bay	Coast	Sunshine Coast	5.8
712	Long Hoh Enterprises Canada Ltd	Qualicum Beach	Coast	South Island	35.0
1043	longhouse Trading Co Ltd.	Qualicum Beach	Coast	South Island	N/A
197	McDonald Ranch & Lumber Ltd.	Grasmere	South	Rocky Mountain	2.9
985	Moonlight Milling	Sandspit	Coast	Haida Gwaii	0.3
974	Murray Kane Site 6LW	Clinton	South	100 Mile House	0.5
408	Nagaard Sawmills Ltd.	Port Alberni	Coast	South Island	12.0
199	North Star Hardware and Building Supplies	Athalmer	South	Rocky Mountain	3.8
988	Northern Log & Timber	Winfield	South	Okanagan Shuswap	1.0
732	PG Sort Yard	Prince George	North	Prince George	22.6
582	Quadra Island Forest Products Ltd.	Quadra Island	Coast	Campbell River	2.9
271	Rouck Brothers Sawmill Ltd.	Lumby	South	Okanagan Shuswap	4.8
23	Shannon Lumber	Mission	Coast	Chilliwack	8.4
917	Sheraton Holdings Ltd.	Burns Lake	North	Nadina	12.0
654	Spike Top Cedar Ltd.	Port Hardy	Coast	North Island - Central Coast	1.0
24	Suncoast Lumber and Milling	Sechelt	Coast	Sunshine Coast	10.3
991	T & N Custom Sawmill	Enderby	South	Okanagan Shuswap	1.4
602	T.L. Timber Ltd.	Cawston	South	Okanagan Shuswap	12.0
1023	Take to heart Specialty Wood Product	Revelstoke	South	Selkirk	0.5
96	Thomson Bros. Lumber Co. Ltd.	Courtenay	Coast	Campbell River	1.4
993	Treeco Timber Corporation	Prince George	North	Prince George	1.0
99	Ukass Logging Ltd.	Wilmer Creek	South	Rocky Mountain	2.9
229	Wadlegger Log & Constr. Co.	Raft River	South	Thompson Rivers	3.4
546	Western Forest Products	Duke Point	Coast	South Island	27.8
979	Woodco Management Ltd	Barriere	South	Thompson Rivers	17.3
1025	Woodpecker sawmill	Golden	South	Selkirk	N/A

Pulp and Paper Mills

(Listed Alphabetically By Product)

Mills producing pulp and paper are listed in this section. For integrated mills, pulp capacity includes pulp that is used internally to produce paper, and pulp that is shipped from the mill site as market pulp.

Notes:

1. Measurement units are in thousands of tonnes.
2. Estimated annual capacity is based on a standardized operation of 345 operating days per year, 24 hours per day. Actual operations may vary from this schedule.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Pulp and Paper Mills is available as an Excel spreadsheet online at: <https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

PULP AND PAPER MILLS - 2014

Mill Number	Company	Location of Mill	Product	Administrative Area	Natural Resource District	Estimated Annual Capacity (000s of tonnes)
500	Canadian Forest Products Ltd.	Prince George	PLP	North	Prince George	322
503	Canadian Forest Products Ltd.	Prince George	PLP	North	Prince George	560
335	Canadian Forest Products Ltd.	Taylor	PLP	North	Peace	211
960	Canadian Forest Products Ltd.	Prince George	PLP	North	Prince George	308
497	Cariboo Pulp & Paper Co. Ltd.	Quesnel	PLP	South	Quesnel	335
486	Catalyst Paper	Powell River	PLP	Coast	Sunshine Coast	342
483	Catalyst Paper	Crofton	PLP	Coast	South Island	372
487	Catalyst Paper	Port Alberni	PLP	Coast	South Island	182
2	Domtar	Kamloops	PLP	South	Thompson Rivers	313
484	Howe Sound Pulp & Paper Ltd.	Port Mellon	PLP	Coast	Sunshine Coast	600
488	Nanaimo Forest Products	Cedar	PLP	Coast	South Island	348
489	Neucel Specialty Cellulose	Port Alice	PLP	Coast	North Island - Central Coast	150
505	Paper Excellence BV.	Mackenzie	PLP	North	Mackenzie	242
553	Quesnel River Pulp Company	Quesnel	PLP	South	Quesnel	372
1	Skookumchuk Pulp Ltd.	Skookumchuk	PLP	South	Rocky Mountain	257
501	Zellstoff Celgar Limited Partnership	Castlegar	PLP	South	Selkirk	428
500	Canadian Forest Products Ltd.	Prince George	PPR	North	Prince George	174
483	Catalyst Paper	Crofton	PPR	Coast	South Island	460
487	Catalyst Paper	Port Alberni	PPR	Coast	South Island	320
486	Catalyst Paper	Powell River	PPR	Coast	Sunshine Coast	389
484	Howe Sound Pulp & Paper Corporation	Port Mellon	PPR	Coast	Sunshine Coast	207
491	Kruger Products Ltd.	New Westminster	PPR	Coast	Chilliwack	55

Veneer, Plywood, OSB and Other Panel Mills

(Listed Alphabetically by Product)

Mills producing veneer, plywood and other types of panel are listed in this section. For mills that produce both market veneer and plywood, veneer capacity includes market veneer and the veneer that is used within the mill to manufacture plywood. Panel mills that use wood residuals to produce panels or that do not have log-processing capability are also listed in this report.

Notes:

1. Measurement units are in millions of square feet, 3/8" basis (mill. sq. ft., 3/8").
2. Estimated annual capacity for veneer mills is based on a standardized operation of 240 days per year, two 8-hour shifts per day. For plywood mills, estimated annual capacity is based on a standardized operation of 240 days per year, three 8 hour shifts per day. For OSB and other panel mills, estimated annual capacity is based on a standardized operation of 345 days per year, three 8-hour shifts per day. Actual operations may vary from these schedules.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Veneer, Plywood, OSB and Other Panel Mills is available as an Excel spreadsheet online at: <https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

VENEER, PLYWOOD, OSB AND OTHER PANEL MILLS - 2014*

Mill Number	Company	Location of Mill	Product	Administrative Area	Natural Resource District	Estimated Annual Capacity (million sq. ft. 3/8" basis)
411	Ainsworth Lumber Co. Ltd.	100 Mile House	OSB	South	100 Mile House	601
942	Peace Valley OSB	Fort St John	OSB	North	Peace	797
650	Louisiana Pacific Canada Ltd.	Dawson Creek	OSB	North	Peace	373
84	Louisiana Pacific Canada Ltd.	Golden	PLY	South	Selkirk	118
112	West Fraser Mills Ltd.	Quesnel	PLY	South	Quesnel	206
109	Aspen Planers Ltd.	Savona	PLY	South	Thompson Rivers	121
1042	Thompson River Veneer Products Ltd.	Kamloops	PLY	South	Thompson Rivers	108
478	Richmond Plywood Corp. Ltd.	Richmond	PLY	Coast	Chilliwack	190
12	Canoe Forest Products Ltd.	Canoe	PLY	South	Okanagan Shuswap	128
68	Tolko Industries Ltd.	Armstrong	PLY	South	Okanagan Shuswap	284
394	Tolko Industries Ltd.	Heffley Creek	PLY	South	Thompson Rivers	189
113	West Fraser Mills Ltd.	Quesnel	PNL	South	Quesnel	190
115	Aspen Planers Ltd.	Lillooet	VNR	South	Cascades	134
12	Canoe Forest Products Ltd.	Canoe	VNR	South	Okanagan Shuswap	123
105	West Fraser Mills Ltd.	Williams Lake	VNR	South	Cariboo Chilcotin	125
394	Tolko Industries Ltd.	Heffley Creek	VNR	South	Thompson Rivers	143
34	B C Veneer Products Ltd	Surrey	VNR	Coast	Chilliwack	2
1044	Hardwood Lumber	Maple Ridge	VNR	Coast	Chilliwack	7
508	CIPA Lumber Co. Ltd.	Annacis Island	VNR	Coast	Chilliwack	216
112	West Fraser Mills Ltd.	Quesnel	VNR	South	Quesnel	141
478	Richmond Plywood Corp. Ltd.	Richmond	VNR	Coast	Chilliwack	134
84	Louisiana Pacific Canada Ltd.	Golden	VNR	South	Selkirk	114
51	Atco Wood Products	Fruitvale	VNR	South	Selkirk	118
68	Tolko Industries Ltd.	Armstrong	VNR	South	Okanagan Shuswap	196
244	Coastland Wood Industries Ltd.	Nanaimo	VNR	Coast	South Island	228
35	Tolko Industries Ltd.	Lumby	VNR	South	Okanagan Shuswap	190

*Note: Small mills using less than 25,000 cubic metres of logs per year were also included in the above list.

Chip Mills

(Listed Alphabetically By Company)

Only mills that produce wood chips as a primary product are listed in this section.

Notes:

1. Measurement units are in thousands of bone dry units (000 BDUs).
2. Estimated annual capacity is based on a standardized operation of 240 days per year, two 8 hour shifts per day. Actual operations may vary from this schedule.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Chip Mills is available as an Excel spreadsheet online at:
<https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

CHIP MILLS - 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity (000s of BDUs)
1002	BC Ecochips Ltd	Okanagan Falls	South	Okanagan Shuswap	127
446	Campbell River Fibre Ltd.	Campbell River	Coast	Campbell River	89
1	Canadian Forest Products Ltd.	Pritchard	South	Thompson Rivers	101
166	Canadian Forest Products Ltd.	Prince George	North	Prince George	496
924	Chips Ahoy Fibre Supply	Mission	Coast	Chilliwack	101
345	DCT Chambers Trucking Ltd.	Chemainus	Coast	South Island	449
356	East Fraser Fibre Co Ltd.	Mackenzie	North	Mackenzie	186
409	Howe Sound Pulp & Paper Ltd.	Vancouver	Coast	Chilliwack	276
1013	Karlite Manufacturing Ltd.	Lake Cowichan	Coast	South Island	96
1000	Ledcor	Chilliwack	Coast	Chilliwack	119
1021	Pacific Bioenergy	Quesnel	South	Quesnel	88
937	Pacific Fibre	Port Mellon	Coast	Sunshine Coast	N/A
952	River City Fibre	Kamloops	South	Thompson Rivers	553
18	Terminal Forest Products Ltd.	Langdale Dryland Sort	Coast	Sunshine Coast	11
394	Tolko Industries Ltd.	Heffley Creek	South	Thompson Rivers	77
68	Tolko Industries Ltd.	Armstrong	South	Okanagan Shuswap	32
107	Tolko Industries Ltd.	Williams Lake	South	Cariboo Chilcotin	71
1024	Trace Resources	Merritt	South	Cascades	142
1001	Valiant Log Sort Ltd.	Port Coquitlam	Coast	Chilliwack	N/A
113	West Fraser Mills Ltd.	Quesnel	South	Quesnel	282

Pellet Mills

(Listed Alphabetically By Company)

Mills producing wood pellets for bio-energy are listed in this section.

Notes:

1. Measurement units are in thousands of tonnes.
2. Estimated annual capacity for pellet mills is based on a standardized operation of 345 days per year, three 8-hour shifts per day. Actual operations may vary from these schedules.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Pellet Mills is available as an Excel spreadsheet online at:
<https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

PELLET MILLS - 2014

Mill Number	Company	Location of Mill	Administrative Area	Natural Resource District	Estimated Annual Capacity ('000s of tonnes)
1015	Diacarbon Energy	Merritt	South	Cascades	93
935	Okanagan Pellet Company	Westbank	South	Okanagan Shuswap	66
930	Pacific BioEnergy	Prince George	North	Prince George	300
929	Pinnacle Renewable Energy Group	Armstrong	South	Okanagan Shuswap	62
947	Pinnacle Renewable Energy Group	Houston	North	Nadina	195
980	Pinnacle Renewable Energy Group	Burns Lake	North	Nadina	273
976	Pinnacle Renewable Energy Group	Strathnaver	North	Prince George	160
931	Pinnacle Renewable Energy Group	Quesnel	South	Quesnel	84
948	Pinnacle Renewable Energy Group	Williams Lake	South	Cariboo Chilcotin	181
932	Premium Pellet Ltd.	Vanderhoof	North	Vanderhoof	207
933	Princeton Co-Generation Corp changed	Princeton	South	Cascades	93
995	Vanderhoof Specialty Wood Products	Vanderhoof	North	Vanderhoof	52

Pole and Post Mills

(Listed Alphabetically by Product)

Mills producing Pole and Post are listed in this section.

Notes:

1. Measurement units are in thousands of pieces ('000 pcs).
2. Estimated annual capacity is based on a standardized operation of 240 days per year, one 8-hour shift per day, although actual mill operations may vary from this schedule.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Pole and Post Mills is available as an Excel spreadsheet online at:
<https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

TYPES OF POLE MILLS - 2014

Mill Number	Company	Location of Mill	Product	Administrative Area	Natural Resource District	Estimated Annual Capacity ('000s of pieces)
498	Aspen Planers Ltd.	Merritt	PLE	South	Cascades	960
117	Continental Pole Ltd.	Pemberton	PLE	Coast	Sea to Sky	12
390	Box Lake Lumber Prod Ltd	Nakusp	PST	South	Selkirk	360
250	Nicola Post and Rail Ltd.	Merritt	PST	South	Cascades	720
279	Palmer Bar Holdings Inc.	Lumberton	PST	South	Rocky Mountain	864
739	Panhandle Forest Products	Lumberton	PST	South	Rocky Mountain	N/A
232	Princeton Wood Preservers Ltd	Princeton	PST	South	Cascades	612
659	Brisco Wood Preservers Ltd.	Brisco	UTI	South	Rocky Mountain	32
556	Chinook Forest Products Ltd.	Courtenay	UTI	Coast	Campbell River	20
40	Gorman Bros Lumber Ltd.	Lumby	UTI	South	Okanagan Shuswap	27
181	Hampton Affiliates Ltd.	Burns Lake	UTI	North	Nadina	15
724	Integrated Pole	100 Mile House	UTI	South	100 Mile House	N/A
999	Otter Point Timber Ltd.	Ladysmith	UTI	Coast	South Island	14
677	Pacific Inland Pole & Piling Ltd.	Nakusp	UTI	South	Selkirk	29
188	Paterson Pole Ltd.	Rossland	UTI	South	Selkirk	6
48	Stella Jones Canada Inc.	Revelstoke	UTI	South	Selkirk	54
648	STELLA-JONES CANADA INC.	Galloway	UTI	South	Rocky Mountain	24
637	Stella-Jones Inc.	Prince George	UTI	North	Prince George	30
222	Stella-Jones Inc.	Haney	UTI	Coast	Chilliwack	22

Shake and Shingle Mills

(Listed Alphabetically By Company)

Mills producing shake and shingle are listed in this section.

Notes:

1. Measurement units are in thousands of roofing squares (000s of squares). A roofing square is approximately 100 square feet.
2. Estimated annual capacity is based on a standardized operation of 240 days per year, two 8-hour shifts per day. Actual mill operations may vary from this schedule.
3. Administrative areas and natural resource districts were applied (see Figure 21 for details).
4. The List of Shake and Shingle Mills is available as an Excel spreadsheet online at: <https://www.for.gov.bc.ca/het/fibre.htm#major-facilities>

SHAKE AND SHINGLE MILLS - 2014

Mill Number	Company	Location of Mill	Administrative Areas	Natural Resource District	Estimated Annual Capacity (000s of squares)
673	Anbrook Industries Ltd.	Maple Ridge	Coast	Chilliwack	78
688	Best Quality Cedar Products Ltd	Youbou	Coast	South Island	19
706	Bill Little Contracting Ltd	Ruskin	Coast	Chilliwack	N/A
583	Coast Mountain Cedar Products	Revelstoke	South	Selkirk	N/A
315	Comox Valley Shakes Ltd.	Zeballos	Coast	Campbell River	12
638	Confederate Shake & Shingle Ltd.	Gateway	South	100 Mile House	14
587	G & R Cedar Ltd.	Port Hardy	Coast	North Island - Central Coast	29
399	Goat Lake Forest Products	Powell River	Coast	Sunshine Coast	58
1030	Golden Ears Shingle	Mission	Coast	Chilliwack	103
671	Graham Island Forest Products Ltd.	Campbell River	Coast	Campbell River	3
1034	Pacific Chalet Ltd.	Mission	Coast	Chilliwack	7
711	Port Hardy Merchandising Ltd.	Pitt Meadows	Coast	Chilliwack	96
266	Premium Cedar Products Ltd.	Campbell River	Coast	Campbell River	55
591	Serpentine Cedar Ltd.	Port McNeill	Coast	North Island - Central Coast	155
612	Silver Creek Premium Products	Port McNeill	Coast	North Island - Central Coast	12
1039	Stave Lake Cedar Mills (1992) Inc.	Surrey	Coast	Chilliwack	N/A
902	Taylor Contracting Ltd.	Mission	Coast	Chilliwack	94
106	Teal Cedar Prod (1977) Ltd.	Port Coquitlam	Coast	Chilliwack	18
585	Teal cedar products	Masset	Coast	Haida Gwaii	38
722	Teal-Jones Group - Titan Ridge Operation	Fort Langley	Coast	Chilliwack	58
1040	Titan Cedar Products Ltd.	Malakwa	South	Okanagan Shuswap	N/A
1041	Twin River Lumber	Maple Ridge	Coast	Chilliwack	139
723	Vancouver Island Shake and Shingle	Matsqui	Coast	Chilliwack	51
691	W. Boyes Shake and Shingle Ltd.	Ruskin	Coast	Chilliwack	120
464	Waldun Forest Products Ltd.	Powell River	Coast	Sunshine Coast	2

