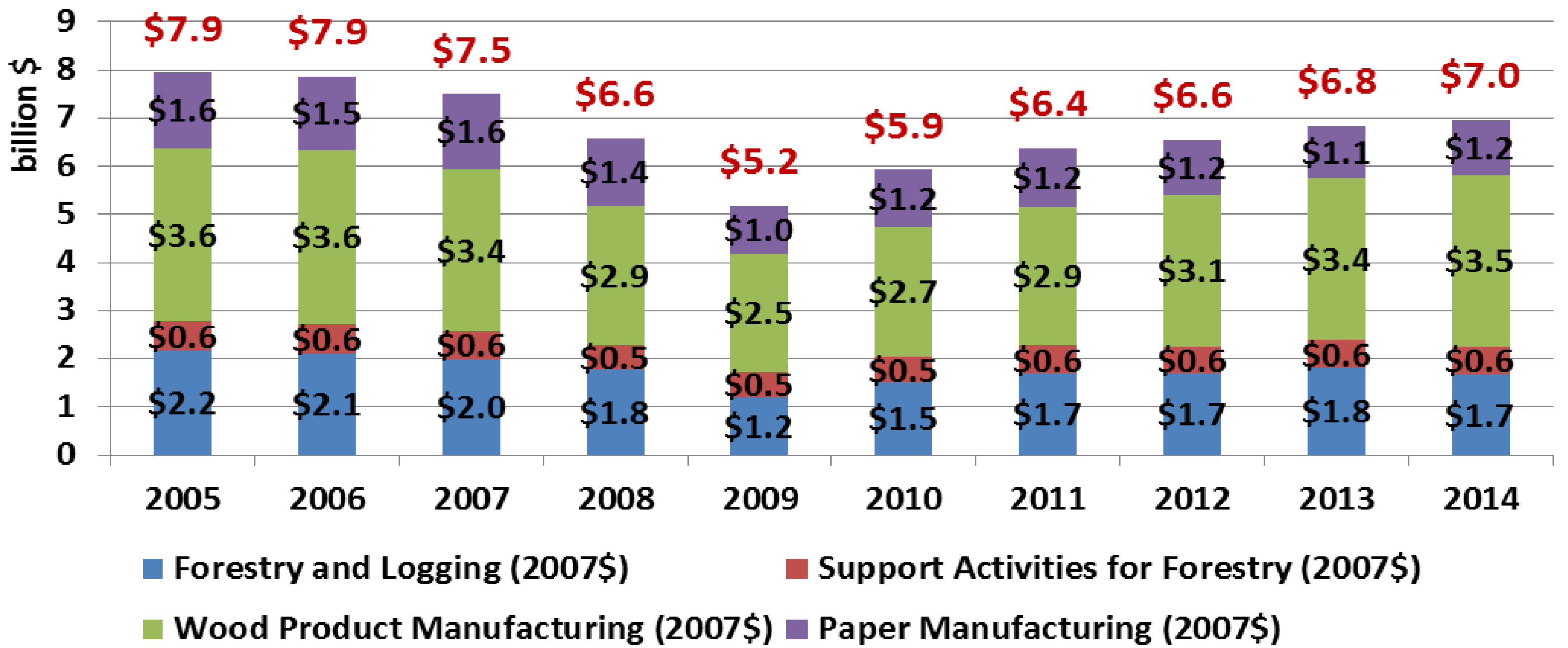
Overview of the B.C. Mill List Survey

May 2015

I. Overview of the B.C. Forest Sector

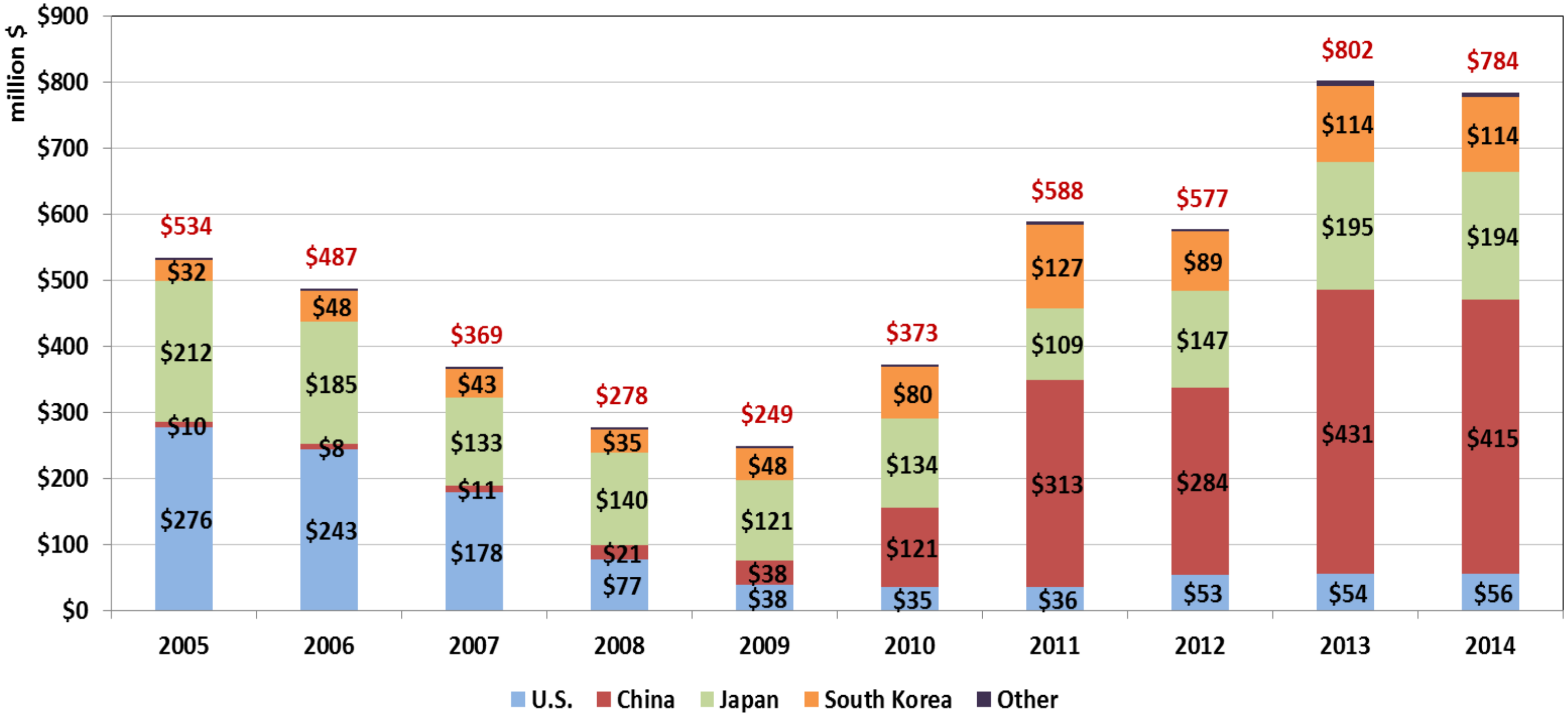
B.C. Forest Sector GDPs, in Chained Dollars ($2007)



Source: *B.C. Stats*

- B.C. forest sector is highly cyclical, with the latest downturn arising out the global recessions in 2009
- The B.C. forest Sector had a slow recovery starting from 2010; China plays the most important role in the recovery

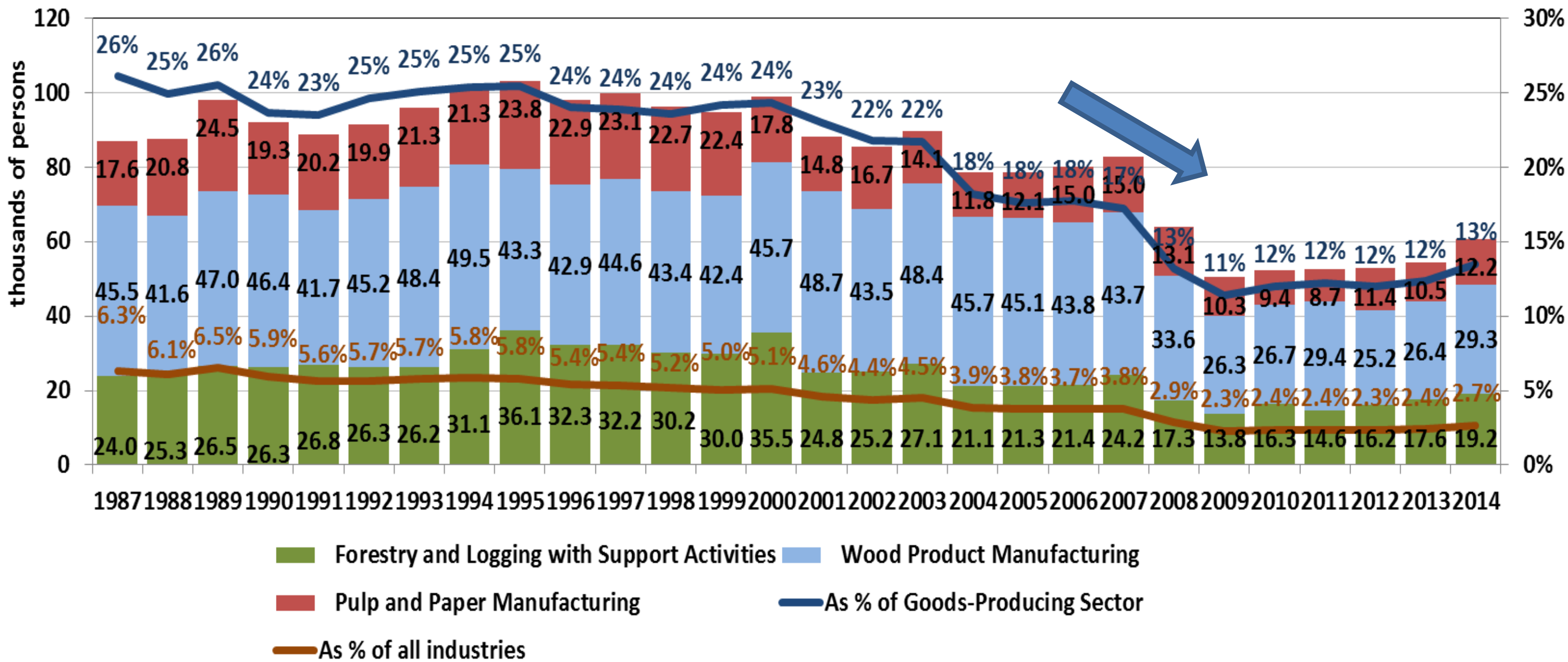
B.C. Log Exports by Market



Source: Statistics Canada.

- Diversification in product markets
- China replaced the U.S. as the main log export market
- Continued importance of the US, Japan and South Korea markets

B.C. Forest Sector Direct Employment



Source: *B.C. Stats*

- The combined impact of mechanization in harvest and milling and MPB resulted in a lower level of employment post the 2009 recession vs. the most recent boom period of 2004 - 2007

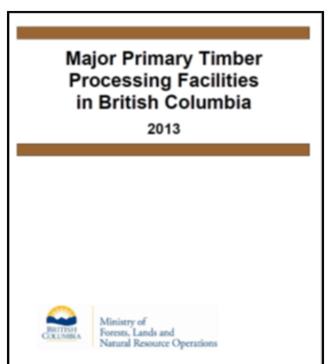
II. B.C. Mill List Survey

B.C. Mill List Survey

- Provides an overview of processing of logs, chips and sawdust in B.C. into products by primary processing mills
- Identifies quantities of capacity, products, fibre inputs, employment and operating days, etc.
- Derives mill performance measures (e.g. product recovery factors)
- Identifies trends and regional differences in these performance measures
- Applies data to support various research and policy development

B.C. Mill List Survey Development

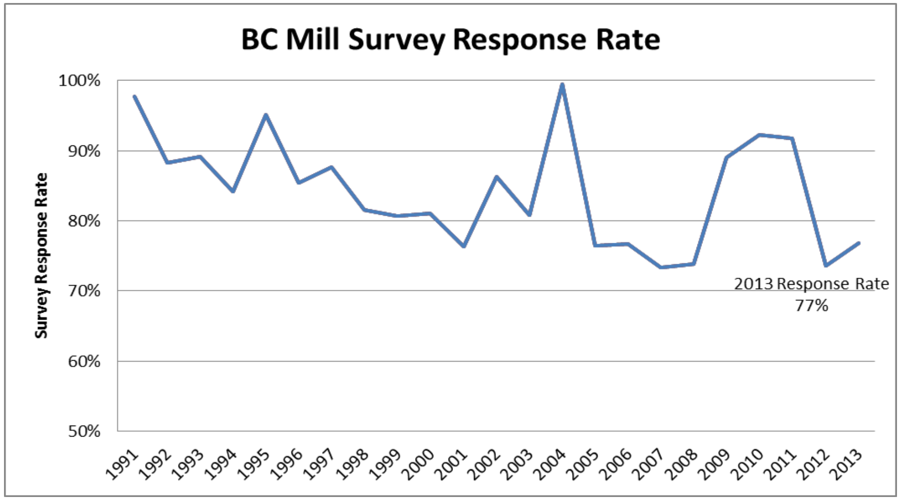
Survey Year	Data Collection Methods	Data Entry Method	Response Time	Major Report	Content and Usage
1991-2002	Mail Paper Survey Form	Manual Entry	12 -14 months	List of Mill	List of Mills for Government Internal Use
2003-2011	Email Survey Form – Excel	Manual+ Complex Data Transfer	8-10 months	B.C Mill Report	List of Mills + Economic Analysis for Public Use
2012-2013	Email Survey Form - Web	Automatic Transfer	5 months	B.C Mill Report	List of Mills + Economic Analysis for Public Use
2014	*Email Survey Form - Web*	*Automatic Transfer*	*May less than 5 months*	*B.C Mill Report*	*List of Mills + Economic + Harvest Residual Analysis for Public Use*


Major Primary Timber Processing Facilities in British Columbia
2013
BRITISH COLUMBIA
Ministry of Forests, Lands and Natural Resource Operations

Future Enhancements:

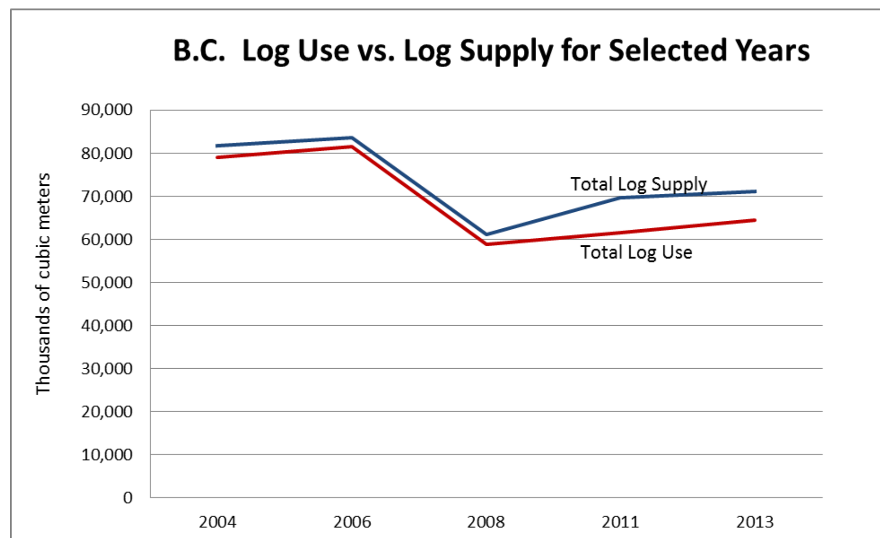
- **May connect with other database (e.g. B.C. Assessment, Stats Canada's Mill Database)**
- **May conduct a bio-energy survey and add bio-economy analysis**

Response Rate and Data Quality of Information Collected



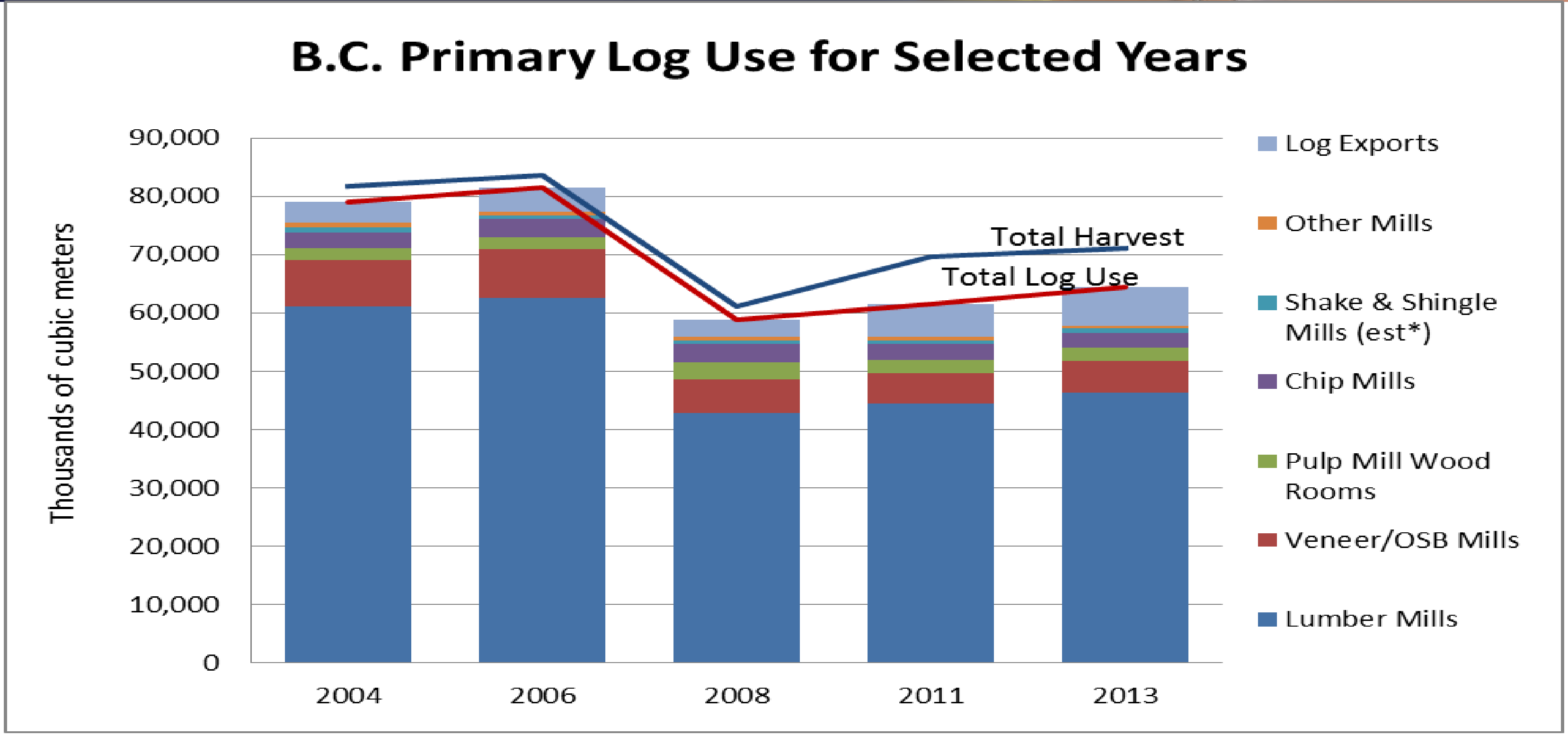
- A voluntary survey - response rate remains above 70%
- Data quality - good to moderate
- 2014 survey – expect to increase response rate and reduce response time

The total log use volume collected through the B.C. Mill List Survey represents an average of 94% of the total log supply in B.C. over the past 10 years



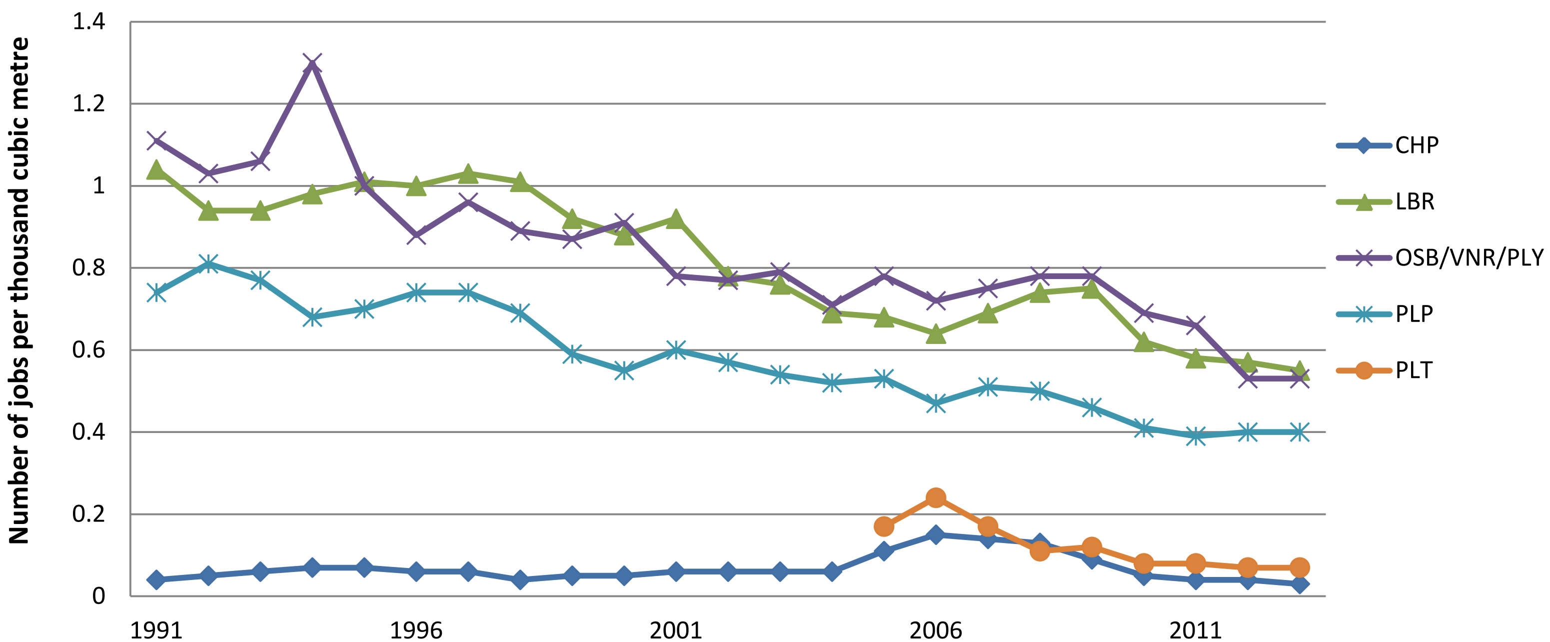
Source: *B.C. Mill List Database*

III. Key Findings from B.C. Mill List Survey



- The harvest and log use dipped in the recession and bounced back to lower levels compared to pre-recession period
- Large and medium sawmills consume most of the whole log inputs
- Log consumption for veneer and OSB mills decreases
- Log export share almost doubled between 2008 and 2013 due to market diversification; this is mainly a coastal phenomenon

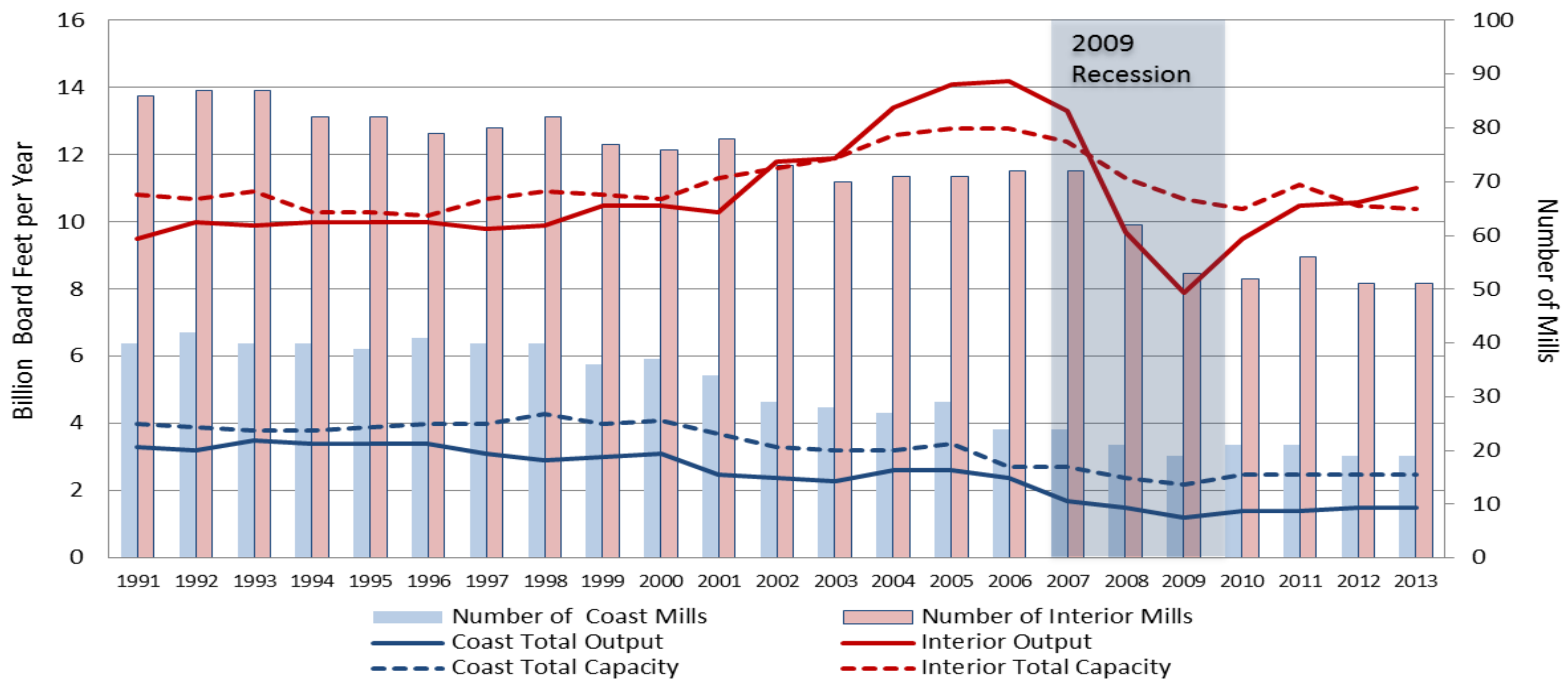
Employment per Thousand Cubic Meters of Production



Source: *B.C. Mill List Database*

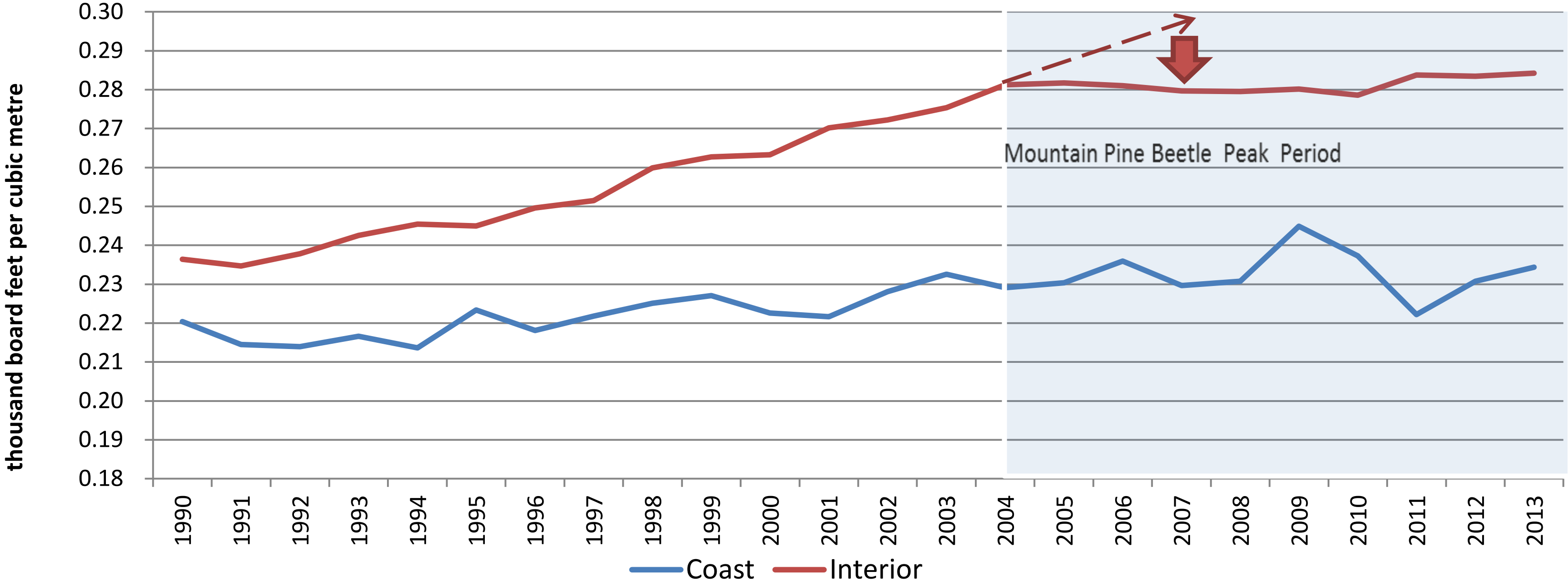
- Labor productivity have increased substantially over the past decade
- The productivity for lumber mills was adjusted slightly from 2007 to 2009
- Chip and pellet mills required the fewest jobs in production

BC Lumber Mills (at least 40 million board feet) Coast and Interior Log Outputs, Total Capacity and Number of Mills



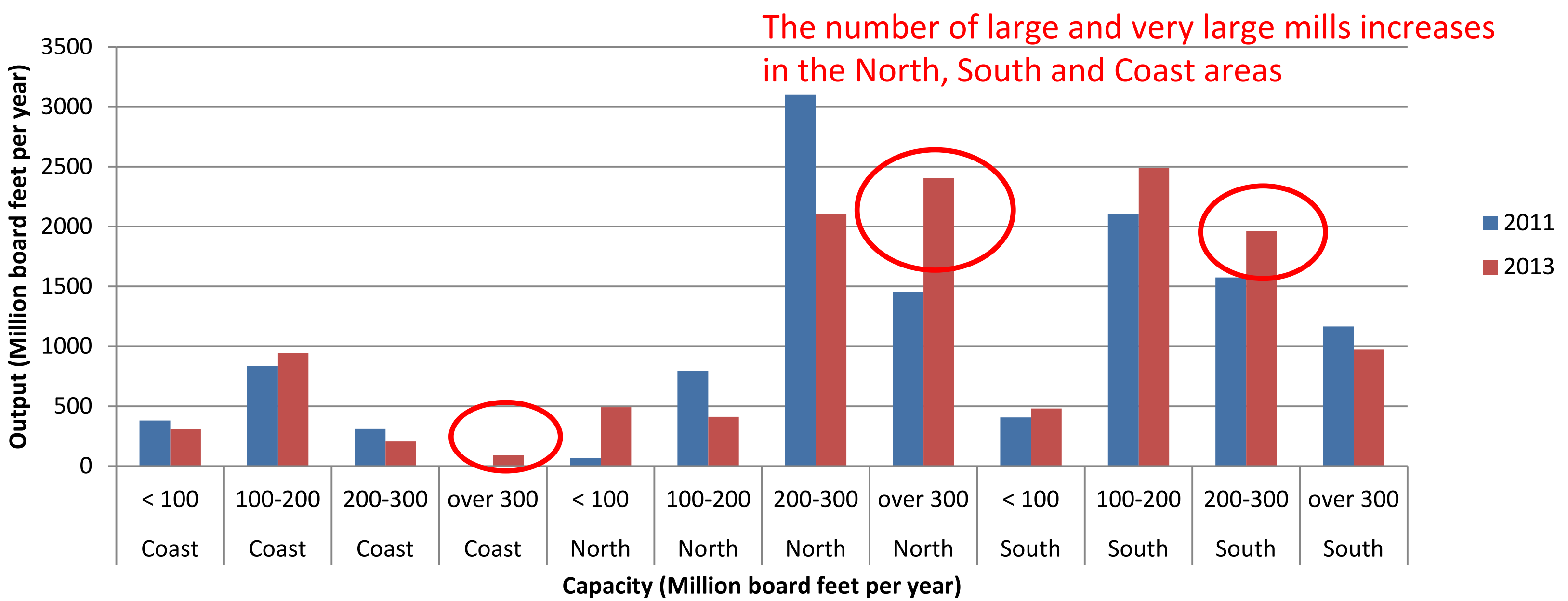
- The total number of operating sawmills in B.C. was in a long-term decline. The economic recession resulted in reduced shifts and closure of some primary sawmills in the B.C. Interior
- Most of the large and medium sawmills that were idled after the 2009 recession are back in production now

B.C. Lumber Mills (at least 40 million board feet)
Lumber Recovery Factor

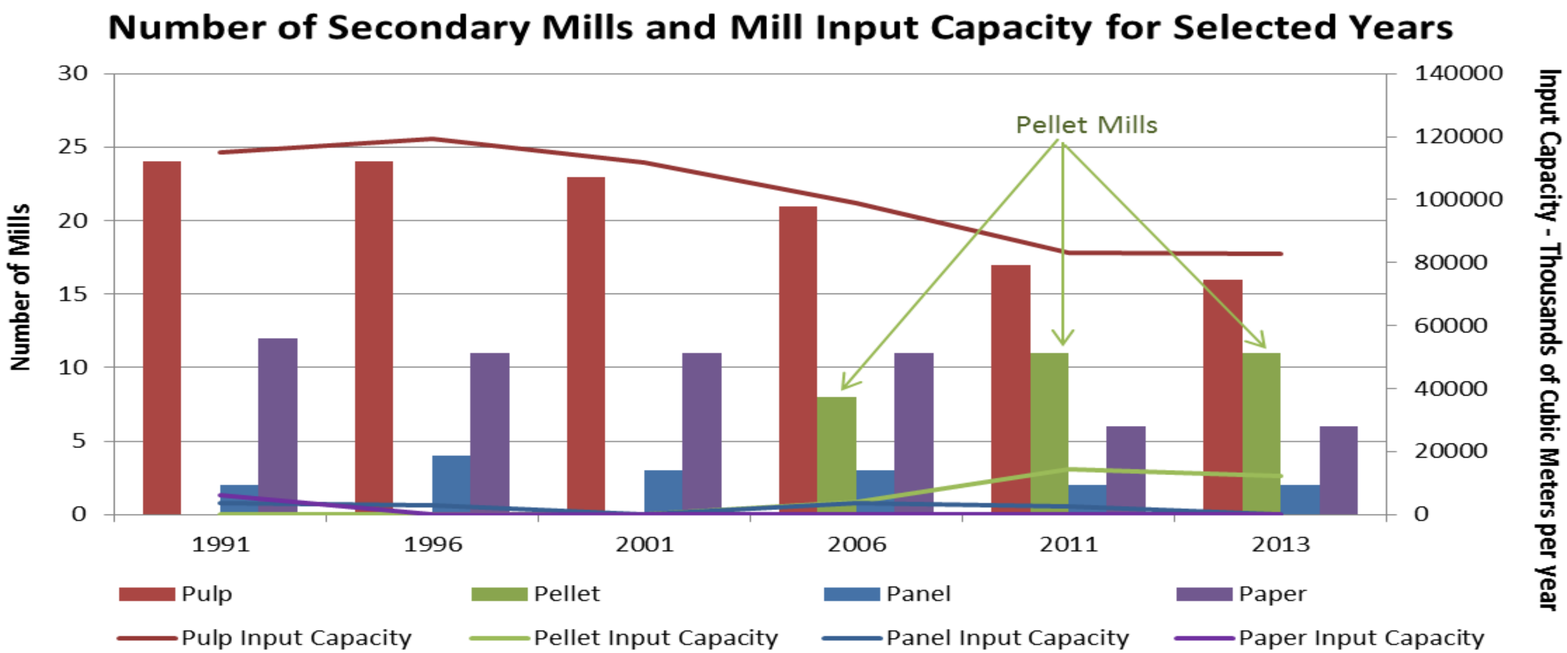


- BC Interior LRFs had steadily increased from 1990 to 2003, then were stable over 2004-2013 , while mountain pine beetle (MPB) infestation reached its peak.
- Although sawmill-optimization technology adapted to maximize recovery from beetle-killed logs, sawmills in MPB-infected regions increasingly processing beetle-killed timber had put downward pressure on the interior LRFs

Output of B.C. Lumber Mills by Size and Area - 2011 & 2013



- In the northern Interior, the output of very large mills significantly increased by 65% in 2013, which indicated that some large forest companies had realigned their production configurations
- In the southern interior, the production of medium and large mills was up by 18% and 25% in 2013
- One very large sawmill appeared in the coast in 2013



- Pellet industry grows fast due to the rising demand in Europe, Japan and Korea
- Pulp mill capacity has declined steadily over 2006-2013
- With sawmill closures and reduction of AACs, residual supply shortage appears
- Pulp and pellet mills are likely to compete for residual supply in the long term and process is underway to begin gaining access to harvest residuals

Conclusions

- **B.C. forest sector showed improvement after the 2009 recession**
- **More diversified global demand would support further improvement in the B.C. forest sector**
- **The Annual B.C. Mill List Survey monitors important manufacturing information and has been progressively improved**
- **B.C. forest sector continued mill rationalization activities to make the sector more competitive**
- **Increasing investments in pulp and pellet mills would promote sustainability of the forest industry**

Contacts

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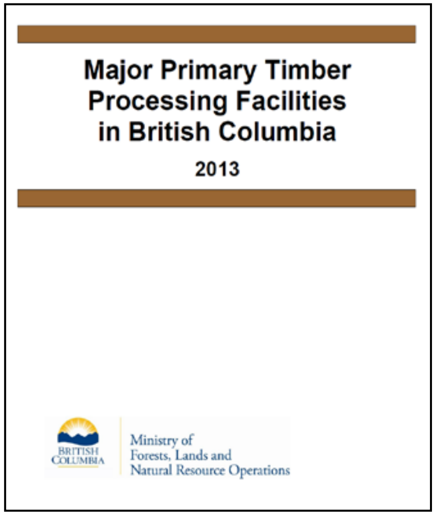
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<u>Economic State of B.C. Forest Sector</u>
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Ministry of Forests, Lands and Natural Resource Operations

2013 Economic State of the B.C. Forest Sector

August 2014
Prepared by Alex Barnes
Competitiveness and Innovation Branch