The main objective of the study is to estimate the economic impact arising from the operations of all aspects of the industry. This will include the direct impact of operations, indirect impacts arising from the supply of goods and services that support operations, and the induced impact arising from the spending of incomes earned in direct and indirect activities.

The competitive analysis will identify and assess an array of variables that impact the competitive position of the industry compared with other jurisdictions.
For the purposes of this study, the Nova Scotia forest industry is comprised of the following sectors:

- **Forestry and logging** - firms in this area are responsible for field operations and harvesting of timber, including felling and hauling it to the mill. In 2013, this sector accounted for 20% of the forest sector’s contribution to the Canadian economy.

- **Pulp and paper product manufacturing** - companies in this area produce a wide range of products, covering everything from newsprint and household tissues to dissolving pulp for rayon production. This subsector accounted for approximately 36% of the contribution of the forest sector to the Canadian economy in 2013.

- **Wood product manufacturing** - firms in this area engage in both primary (such as softwood lumber and structural panels) and secondary (such as millwork and engineered wood products) manufacturing for domestic consumption and export. This subsector accounted for approximately 44% of the forest sector’s contribution to the Canadian economy (as measured by real GDP) in 2013.

- **Specialty products** – maple syrup, Christmas trees?
Background

Cumberland County produced the largest percentage of total wood harvested in the province (15%), followed by Halifax County (11%).
Background

Sawmills: 93
Pulp and paper mills: 2
Energy generating facilities: 2

The greatest concentration of operations in Lunenburg and Pictou Counties.
Methodology
Methodology

Our approach to completing this work included the following elements:

• Meetings with Forest Nova Scotia to obtain background information required for the work.

• Select meetings / interviews with participants in the industry to assess competitive factors.

• Assembling data required from Statistics Canada, the Registry of Buyers, and other sources.

• Using the Input-Output Model of the Canadian economy to estimate economic impact of all forest industry operations.

• Using key economic indicators (GDP, income, employment and taxes) to quantify the direct, indirect and induced economic impact.

• Defining metrics that can be used for competitiveness analysis.

• Reporting impacts at the provincial and national levels.

• Preparing a report outlining impact results and key findings.
The Statistics Canada input-output model is the basis for all economic impact calculations. Economic impacts within each province are produced from the Statistics Canada model. Impacts are quantified using conventional economic indicators consistent with the national income accounting framework. Economic impact is measured with four main indicators.
Output

Economic impact arises as industry expenditures work their way through the economy. Forest companies spend on inputs that become the revenue of many other companies, which they in turn will spend on inputs for the goods and services they produce, and so on.

Gross value of output, then, is the cumulative sum of these sales and purchases of intermediate and final goods and services. These transactions occur in the province, and also spill over to other provinces where supply and service industries may be located.
**Methodology**

**Economic impact analysis**

**GDP**
GDP captures the value of final goods and services produced in the economy, providing a measure of the value-added or income generated (wages and earnings for labour and returns to and of capital in the form of profit and depreciation).

**Income**
Total earnings of employees, consisting of wages and salaries.

**Jobs**
The number of jobs created by the economic activity of the industry.
Methodology

Economic impact analysis

Result from forest industry expenditures – labour, materials, supplies, capital.

These 2nd round impacts result from forest industry suppliers purchasing goods and services and hiring workers to meet demand.

Refers to the demand created in the broader economy through consumer spending of incomes earned by those employed in direct and indirect activities.

Direct + indirect + induced impacts are commonly referred to as “spinoffs”.

TOTAL ECONOMIC IMPACT
Economic impact results
Economic impact results

The Nova Scotia forest industry generated over $2 billion in economic impact in 2015.

**Direct Impact**
- $1.2 billion direct output
- $410 million direct GDP
- $275 million direct income
- 6,100 direct jobs

**Spinoff**
- $923 million spinoff output
- $390 million spinoff GDP
- $226 million spinoff income
- 5,400 spinoff jobs

Source: Gardner Pinfold, Statistics Canada
In 2015, the Nova Scotia forest products industry:

- Produced $2.1 billion in total economic impact.
  → $1.2 billion direct impact and $923 million spinoff.
- Contributed $800 million to provincial GDP.
  → $410 million direct GDP, $390 million spinoff.
- Generated 11,500 jobs.
  → 6,100 direct, 5,400 spinoff
- Created $500 million in income.

### Total 2015 economic impact – direct and spinoff

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Spinoff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>$1.2 billion</td>
<td>$923 million</td>
<td>$2.1 billion</td>
</tr>
<tr>
<td>GDP</td>
<td>$410 million</td>
<td>$390 million</td>
<td>$800 million</td>
</tr>
<tr>
<td>Jobs</td>
<td>6,100</td>
<td>5,400</td>
<td>11,500</td>
</tr>
<tr>
<td>Income</td>
<td>$275 million</td>
<td>$226 million</td>
<td>$500 million</td>
</tr>
</tbody>
</table>

Source: Gardner Pinfold, Statistics Canada
## Economic impact results

### Total 2015 economic impact – taxes

<table>
<thead>
<tr>
<th>Taxes on goods and services purchased</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial</td>
<td>$16 million</td>
</tr>
<tr>
<td>Federal</td>
<td>$33 million</td>
</tr>
<tr>
<td><strong>Income taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Provincial</td>
<td>$17 million</td>
</tr>
<tr>
<td>Federal</td>
<td>$13 million</td>
</tr>
</tbody>
</table>

In 2015, the Nova Scotia forest products industry generated a total of:

- $49 million in taxes on goods and services purchased.
- $30 million in provincial and federal income taxes.

Source: Gardner Pinfold, Statistics Canada
Economic impact results

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>$1.5 billion</td>
<td>$2.1 billion</td>
</tr>
<tr>
<td>GDP</td>
<td>$575 million</td>
<td>$800 million</td>
</tr>
<tr>
<td>Jobs</td>
<td>10,200</td>
<td>11,500</td>
</tr>
</tbody>
</table>

- Total economic output from the Nova Scotia forest products increased from $1.5 billion in 2012 to $2.1 billion.
- Contribution to provincial GDP rose $225 million.
- Number of jobs created by industry increased by 1,300.

Source: Gardner Pinfoold, Statistics Canada
The services and goods supplied to the forest products industry account for a significant share of the indirect economic impacts. Key industries include:

- Forestry support and technical services
- Transportation
- Utilities
- Technical services
- Business services
- Construction services
Nova Scotia forest products industry statistics
Industry statistics

Forest industry direct employment

• Employment in the Nova Scotia forest industry increased 4% overall from 2012 to 2014.

• Forestry and logging: ↓33%

• Pulp and paper: ↑50%

• Wood products: ↑10%

• Support activities: ↑9%
Forest industry commodity prices since 2012:

- Lumber: ↑26%
- Pulp: ↑41%
- Newsprint: ↑13%

Forest Industry Commodity Prices 2012–2016 YTD
Industry statistics

Wood harvest

- Softwood lumber accounted for 81% of total wood harvested from 2012 to 2015.
- Total wood harvested in the province increased 9% over the same period.
  - Softwood: ↑6%
  - Hardwood: ↑23%
Industry statistics

Forest products exports

- 2006 to 2015 - total exports peaked in 2008 at $938 million.
- Industry contracted in 2012 as a result of the global financial crisis which led to the closure of three major pulp and paper facilities.
- Other parts of the industry were adversely affected as well.
- Since 2012, industry has started to recover with exports reaching $683 million in 2015.
- Exports of Nova Scotia forest products increased 78% from 2012 to 2015.
  - Wood products: ↑41%
  - Pulp and paper: ↑89%
Industry statistics

(millions of dollars)

Nova Scotia forest products industry ranks 5th among goods producing sectors in terms of contribution to GDP.
Industry statistics

Nova Scotia forest products industry ranks 2nd among goods producing sectors in terms of employment.
Industry statistics

Nova Scotia Goods Producing Sector Merchandise Exports, 2015 (thousands of dollars)

Nova Scotia forest products industry ranks 3rd among goods producing sectors in terms of exports.