

# **Economic Impact Analysis of Iron Ore Mining Industry in Labrador 2011-31**

**Prepared for:**

Department of Natural Resources,  
Government of Newfoundland and Labrador

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## Executive Summary

This report estimates the economic impacts associated with the current and potential development of the iron ore industry in Labrador under four scenarios, as outlined in Table ES-1. The projects considered in the base case are IOC, Wabush, Tata's DSO and Labrador Iron Mines, while the other scenarios consists of a combination of expansions to IOC, Alderon, LabMag and Julianne Lake with variations in production and the existence of pelletizing. The purpose of the report is to generate a series of economic simulations that illustrate the significant economic impacts of iron ore mining developments in Labrador. This includes economic impacts on employment, incomes and taxation. Each of the scenarios analyzed in this report are briefly described in the Table ES-1 below:

**Table ES-1**  
**Project Scenarios**

	Base	Scenario 1	Scenario 2	Scenario 3
<b>Average annual production</b>	26.0 MT	41.0 MT	62.3 MT	81.1 MT

Each of the project scenarios were further analyzed from 2011-2031 utilizing the three commodity price cases:

**Table ES-2**  
**Iron Ore Pricing FOB Sept Iles, Quebec**

Company	Concentrate	Pellets
<b>Low</b>	\$85	\$115
<b>Base</b>	\$100	\$130
<b>High</b>	\$115	\$145

The detailed results of the analysis undertaken in this study are provided in Tables ES3 and ES4.

The analysis indicates that the forecasted capital and operating expenditures under each of the scenarios analyzed will have a significant impact on the economy of Newfoundland and Labrador. The Base Case, consisting of projects currently operating or under construction will have estimated expenditures of \$40 billion over the next twenty one years including \$7.5 billion in estimated capital expenditures and \$32 billion in operating expenditures. Under Scenarios 1, 2 and 3, projected expenditures increase significantly to \$60 billion, \$84 billion and \$123 billion, respectively. Should all projects proceed as described in Scenario 3, the iron ore industry in Newfoundland and Labrador could generate an incremental increase of \$80 billion dollars in expenditures over anticipated current levels of expenditures.

Each of the projects analyzed contain assumptions on the ability of Newfoundland and Labrador to supply labour and goods and services required during construction and operations. The assumptions used may be considered conservative and range from 60%-70% for labour during construction and 25%- 45% for materials, goods and services.

**Table ES3**  
**Capital Cost Scenario Comparison (\$M)**

Parameter	Base	Scenario 1	Scenario 2	Scenario 3
<b>Capital Cost</b>				
Capital cost (total; \$CDN)	\$7,441	\$12,408	\$20,747	\$33,523
Capital cost (avg annual; \$CDN)	\$354	\$591	\$988	\$1,596
<b>Operating Costs</b>				
Operating cost (total; \$CDN)	\$32,265	\$47,713	\$63,777	\$89,636
Operating cost (avg annual; 1 \$CDN)	\$1,536	\$2,272	\$3,037	\$4,268
<b>Total Costs</b>				
Total cost (total; \$CDN)	\$39,706	\$60,122	\$84,524	\$123,160
Total cost (avg annual; \$CDN)	\$1,891	\$2,863	\$4,025	\$5,865

The Base Case consisting of current mining projects in Labrador is already having significant impacts on employment, incomes and taxation. Using a \$100/t commodity price for concentrate and \$130/t for pellets, current mine developments and anticipated levels of production and capital expenditures in the iron ore mining industry will generate more than 157,000 person years of employment in Newfoundland and Labrador over the next twenty one years including 62,000 person years of direct employment. On an annual basis, current mining activities should grow to support 7,500 person years of employment on average including 3,000 direct person years of employment. Correspondingly, current mining operations will also generate more than \$20 billion in incomes (\$1.0 billion annual average), \$53 billion in GDP (\$2.5 billion annual average) and \$9.0 billion in Taxes (\$0.4 billion annual average).

The scenarios described in Table ES1 are based on a series of assumptions affecting the production of concentrate and pellets and capital and operating expenditures brought about through a series of expansion activities. The economic impacts resulting from expansion activities are substantial. Total employment could increase from 157,000 person years of employment in the Base Case to 237,000 (11,000 PYs on average) person years of employment under Scenario 1, 333,000 (16,000 PYs on average) person years of employment under Scenario 2 and 515,000 (24,500 PYs on average) person years of employment under Scenario 3. Investments in Scenario 3 could generate an incremental increase of approximately 358,000 person years of employment. Similarly, total Newfoundland and Labrador incomes could rise from \$20 billion under the Base Case to \$30.0 billion under Scenario 1, to \$40 billion under Scenario 2 and \$58.0 billion under Scenario 3 for an incremental increase of \$38 billion over the next twenty years.

Based on the range of iron ore prices described in Table ES2, the Base Case iron ore industry in Labrador is expected to generate an estimated \$9.1 +/-1.3 billion (\$0.4 +/- \$0.1 billion annually average) in total taxes paid to government over the next twenty years. Operating under Scenario 1 treasury impacts could increase to \$13.7 +/- \$2.4 billion (\$0.7 +/- \$0.2 billion annual average), \$24.6 +/- \$5.0 billion (\$1.2 +/- \$0.3 billion annual average) under Scenario 2 and \$25.9 +/- \$5.4 billion (\$1.2 +/- \$0.5 billion annual average) under Scenario 3.

**Table ES-4**  
**Impact Summary, All Scenarios**  
**Period Totals and Annual Averages (2011-31)**

	Total 2011-2031				Annual Average 2011-2031			
Scenario	Base	Scenario 1	Scenario 2	Scenario 3	Base	Scenario 1	Scenario 2	Scenario 3
<b>Employment (000's PY)</b>								
Direct Employment	62.0	92.1	118.8	173.1	3.0	4.4	5.7	8.2
Indirect Employment	50.4	78.3	124.8	212.1	2.4	3.7	5.9	10.1
Induced Employment	45.3	67.4	89.1	130.0	2.2	3.2	4.2	6.2
<b>Total Employment</b>	<b>157.7</b>	<b>237.8</b>	<b>332.7</b>	<b>515.2</b>	<b>7.5</b>	<b>11.3</b>	<b>15.8</b>	<b>24.5</b>
<b>Total Income (\$ Billion)</b>	<b>\$20.6</b>	<b>\$30.6</b>	<b>\$40.2</b>	<b>\$58.5</b>	<b>\$1.0</b>	<b>\$1.5</b>	<b>\$1.9</b>	<b>\$2.8</b>
<b>GDP (\$ Billion)</b>								
<b>GDP from Income</b>	<b>\$20.6</b>	<b>\$30.6</b>	<b>\$40.2</b>	<b>\$58.5</b>	<b>\$1.0</b>	<b>\$1.5</b>	<b>\$1.9</b>	<b>\$2.8</b>
<b>GDP from Production</b>								
\$85/\$115	\$24.5	\$35.8	\$63.2	\$85.8	\$1.2	\$1.7	\$3.0	\$4.1
\$100/\$130	\$32.5	\$48.4	\$82.6	\$111.1	\$1.5	\$2.3	\$3.9	\$5.3
\$115/\$145	\$40.4	\$61.1	\$101.9	\$136.4	\$1.9	\$2.9	\$4.9	\$6.5
<b>Total GDP</b>								
\$85/\$115	\$45.1	\$66.3	\$103.4	\$144.3	\$2.1	\$3.2	\$4.9	\$6.9
\$100/\$130	\$53.0	\$79.0	\$122.8	\$169.6	\$2.5	\$3.8	\$5.8	\$8.1
\$115/\$145	\$60.9	\$91.6	\$142.2	\$194.9	\$2.9	\$4.4	\$6.8	\$9.3
<b>Taxes (\$ Billion)</b>								
<b>Direct Taxes</b>								
\$85/\$115	\$5.9	\$8.3	\$15.6	\$14.5	\$0.3	\$0.4	\$0.7	\$0.7
\$100/\$130	\$7.1	\$10.7	\$20.5	\$19.7	\$0.3	\$0.5	\$1.0	\$0.9
\$115/\$145	\$8.4	\$13.1	\$25.5	\$25.2	\$0.4	\$0.6	\$1.2	\$1.2
<b>Indirect Taxes</b>	\$0.4	\$0.6	\$0.9	\$1.6	\$0.0	\$0.0	\$0.0	\$0.1
<b>Induced Taxes</b>	\$1.6	\$2.4	\$3.1	\$4.5	\$0.1	\$0.1	\$0.1	\$0.2
<b>Total Taxes</b>								
\$85/\$115	\$7.9	\$11.3	\$19.7	\$20.6	\$0.4	\$0.5	\$0.9	\$1.0
\$100/\$130	\$9.1	\$13.7	\$24.6	\$25.9	\$0.4	\$0.7	\$1.2	\$1.2
\$115/\$145	\$10.4	\$16.1	\$29.6	\$31.3	\$0.5	\$0.8	\$1.4	\$1.5
Equivalent in cents per Kwh								
Income Tax Benefits \$85/\$115	46.6	48.3	52.6	49.7				
Income Tax Benefits \$100/\$130	49.2	51.6	57.8	53.2				
Income Tax Benefits \$115/\$145	51.9	54.8	63.0	56.9				

As impressive as these estimates are, it is also worthy to highlight that iron ore industry is already one of the largest sources of employment and revenues for business in Newfoundland and Labrador. In particular, its operations represent one of the few significant sources of employment and earnings outside of the Avalon Peninsula. The development, construction and ultimate operation of the iron ore projects described in this analysis will require substantive investments in supporting human resources and capital infrastructure. Appendix A and B contain detailed industry estimates of employment and sales for Newfoundland and Labrador workers and businesses.

## 1.0 Introduction

This report has been prepared by Dr. Wade Locke and Strategic Concepts, Inc. (SCI) and on behalf of the Department of Natural Resources, Government of Newfoundland and Labrador. The purpose of the report is to generate a series of economic simulations that illustrate the significant economic impacts of iron ore mining developments in Labrador. This includes the economic impacts on employment, incomes and taxation and their equivalent value in terms of cents per Kwh. The report also analyzes the cumulative and incremental increases in key economic indicators that could potentially be generated in the province based on new projects coming on line, various expansion scenarios and alternative commodity prices.

The cash flow projections, used as a base for the economic impact model, were developed by Dr. Wade Locke and SCI for four distinct capital investment profiles/operating expenditure configurations. The projects included in these scenarios are described in Section 1.2.5.

The study estimates the impacts on Newfoundland and Labrador economies for the period from 2011 to 2031. A price sensitivity analysis was completed to illustrate total and incremental impacts commodity prices have on taxation and GDP. The range of prices used in the analysis is contained in Table 1 below

**Table 1**  
**Iron Ore Pricing FOB Sept Iles, Quebec**

Company	Concentrate	Pellets
Low	\$85	\$115
Base	\$100	\$130
High	\$115	\$145

Estimates of the economic impacts from 2011 mining operations were used as a reference year and formed the basis for developing the parameters used to estimate the economic impacts from iron ore development on a go-forward basis.

### 1.1 Study Objectives

The objective of the study is to quantify the economic impacts associated with iron ore activities in Labrador on current and expanded production levels over the next twenty years.

The economic impacts associated with current and expanded mining activities were analyzed from two perspectives:

1. The economic effects, which drew from the detailed cash flow projections by area of operation and by type of expenditure (e.g., labour, major consumables, etc.) to estimate impacts on employment, income, and GDP on the broader economy by measuring their direct, indirect and induced impacts; and
2. The provincial treasury, which measured direct, indirect and induced taxation effects felt by the Government of Newfoundland and Labrador.

## 1.2 Background

This section of the report sets the context for the results of the economic impact analysis. The scenarios analyzed are described in Table 2 below

**Table 2**  
**Project Scenarios**

	Base	Scenario 1	Scenario 2	Scenario 3
Average annual production	26.0 MT	41.0 MT	62.3 MT	81.1 MT

### *Iron Ore Company of Canada*

The Iron Ore Company of Canada (IOCC) started producing iron ore from its Carol Lake (Labrador West) project in 1962. Canada's largest iron ore pellet producer operates several open pits, a concentrator, a pellet plant at Carol Lake, port facilities in Sept-Iles, Québec, and a 420-kilometre rail line that links the mines and the port.

#### IOCC Concentrate Expansion Program

In 2008, IOCC announced a 3-phase Concentrate Expansion Program (CEP). Phase I and II of CEP are largely focused on “de-bottlenecking” the current IOCC production platform. Phase I of the expansion is currently undergoing operational testing. Phase II construction will continue through 2012 with commissioning expected by Q1, 2013. Phase III is likely to enter environmental assessment in 2012, and will involve construction of a new 6 mta concentrator.

#### IOC Labrador West Strategic Development

The Iron Ore Company of Canada is studying the feasibility of expanding concentrate production to 50 million tonnes or more annually. Plans are at an early stage, hence detailed timelines and capital cost estimates are not yet available. Construction and operational employment would be significant if it proceeds. The project would likely proceed in phases, with first production from early phase(s) if sanctioned expected by 2017. Each phase, based on limitations of concentrator throughput is likely to add 8 mta to output,

### *Wabush Mines*

Wabush Mines consists of an open pit mine producing iron ore for a concentrating plant at Wabush, and a pellet plant and shipping facilities in Point Noire, Quebec. Wabush Mines is 100 % owned and operated by Cliffs Natural Resources Inc.

Wabush Mines produced about 3.5 million tonnes of iron concentrate in 2011. Employment at the mine site is approximately 500.

### *Labrador Iron Mines Ltd.*

Labrador Iron Mines Ltd. (LIM) is the first new iron ore producer in the province since 1965. LIM mines seasonally, shutting down from November to May, and is ramping up to 2 million tonnes/ year production. LIM are mining ores amenable to direct shipping with minimal processing. Ore is shipped from the Menihek area to Sept Isles via rail.

### *Alderon Iron Ore Corp – Kami Project*



Alderon Iron Ore Corporation (Alderon) is developing the Kamistiatasset (Kami) iron ore project in Labrador West. The project is located 5 km southwest of Wabush Mines.

A 2011 preliminary economic assessment suggested that the project can economically support an operation that would produce 8 million tonnes of iron concentrate per year grading 65.5% iron and the mine would have a life of 15 years. The assessment was based on one of three separate iron ore deposits on the Kami property. Further resource statements and final feasibility studies will include one or both of the remaining two deposits and will contemplate expansion to 16 mta.

Alderon registered the project with provincial and federal environmental regulators in October, 2011 and the company is currently preparing an environmental impact statement. The company expects to complete a definitive feasibility study for the project by Q3, 2012. Mining is planned to start in Q3, 2015. Alderson announced major investment from Chinese steel maker Hebei in April 2012, suggesting that the project is well on track to become a mine.

#### ***Tata Steel Canada - Labmag Project***

This project is undergoing feasibility studies in conjunction with the adjacent Kemag project in Quebec. This is a major taconite iron ore project in the Menihek district. Early stage plans envision a mine producing 22 million tonnes annually. Pelletizing will be required and will require additional power if conducted in Labrador. The feasibility study is to be completed in Q4, 2012.

#### ***DSO New Millennium Capital (TATA Steel)***

In September 2010 New Millennium and Tata Steel announced a Joint Venture (“JV”) agreement, whereby Tata Steel would arrange funding for up to CDN \$300 million to cover capital costs associated with the DSO iron ore project in Labrador to earn its 80% share of the JV and commit to take 100% of the DSO project’s iron ore products of specified quality, at world market prices, for the life of the mining operation. It is expected that the JV will produce 4 million dry tonnes per year of iron ore products commencing in 2012.

#### ***Julienne Lake***

This is a crown owned iron ore deposit, approximately 15 kms from Labrador City and Wabush. Government has conducted geologic and economic analysis. Preliminary indications are that the deposit could support a 16 million tonne concentrate producing operation.

## 2.0 Economic Impact Results

This section of the report provides a detailed overview of the findings, including the methodology employed and the data sources used.

### 2.1 The Economic Impact Model and Approach

The model used to measure economic impacts, developed specifically for Newfoundland and Labrador-based resource projects, has been applied to the majority of large mining and oil and gas projects proposed or occurring within the province. The economic model is based on the principal of tracking expenditures through the economy and applying coefficients to determine direct, indirect and induced impacts on employment, incomes, gross domestic product, taxation and equalization. The primary sources of information used in the economic impact analysis were projected capital and operating expenditure based on information provided by the Department of Natural Resources.

### 2.2 Methodology

The economic model used in this analysis has been purposely built to analyze the mining activities from a number of perspectives:

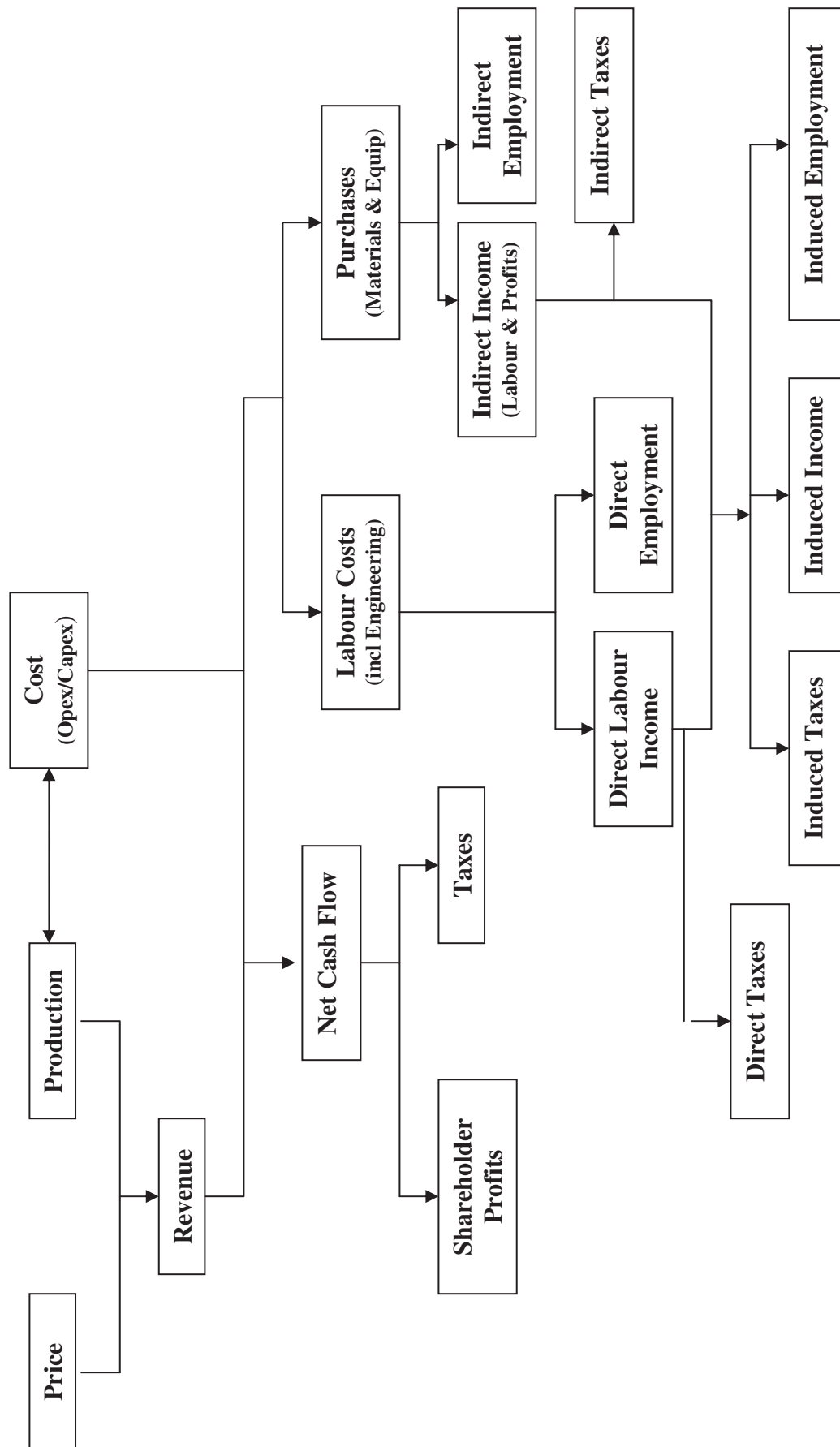
- Government of Newfoundland and Labrador
- Newfoundland and Labrador labour and businesses
- Newfoundland and Labrador economy

The working basis underlying this model is that the economic impacts that flow throughout the provincial and national economies emanate from the project expenditures associated with mining operations. In addition, the sale of final iron ore mining outputs also generates economic impacts. Furthermore, all of these impacts are magnified as incomes earned by labour and businesses associated with the mining activities are re-spent throughout the economy.

Figure 1 on the following page illustrates graphically how the economic impact model takes mining company's expenditures and flows them through the economy.

Economic Impact Models Terms and Definitions	
<b>Direct impacts</b>	stem from the direct hire of persons and include employment and labour income impacts.
<b>Indirect impacts</b>	result from the supply of goods and services and are measured on employment, labour income and profits.
<b>Induced impacts</b>	refer to impacts from the expenditure of money in the economy by those employed directly and indirectly on the project. They are calculated using <i>income multipliers</i> and are based on the total direct and indirect impacts
<b>Income multipliers</b>	measure the impact of an initial expenditure into an economy on incomes in the economy.
The size of the income multiplier is determined by three factors:	
1) How much of the income that people receive actually gets spent.	
2) How much of the income is allocated to government through taxation	
3) How much of the income spent in the community is on imported goods and services	

**Figure 1**  
**Flowsheet for Economic Impact Analysis**



### **2.2.1 Data Sources**

The input data utilized in this model incorporated estimated capital and operating expenditures over a 21-year period of mining in the Labrador Trough under four scenarios.

Publicly available corporate brochures, web sites and filing information were utilized in support of expenditure profiles to obtain a better understanding of each company's operations and production profiles. The economic impact parameters used in this analysis were gathered from a number of sources, including Statistics Canada, other similar economic impact assessments on projects in Newfoundland and Labrador, and the experience and knowledge of the consultant team.

### **2.2.2 Reporting Conventions**

Throughout this report, the following conventions are used:

- All dollar figures are in Canadian dollars unless otherwise stated.
- All employment figures are reported as person-years of employment, which corresponds to 2,000 person-hours on an annual basis
- The analysis period for the Base Case and Scenarios 1, 2 and 3 covers 21 years, extending from 2011 to 2031. Throughout the report, totals are frequently presented as cumulative totals, followed by annual averages.

## 2.3 Results

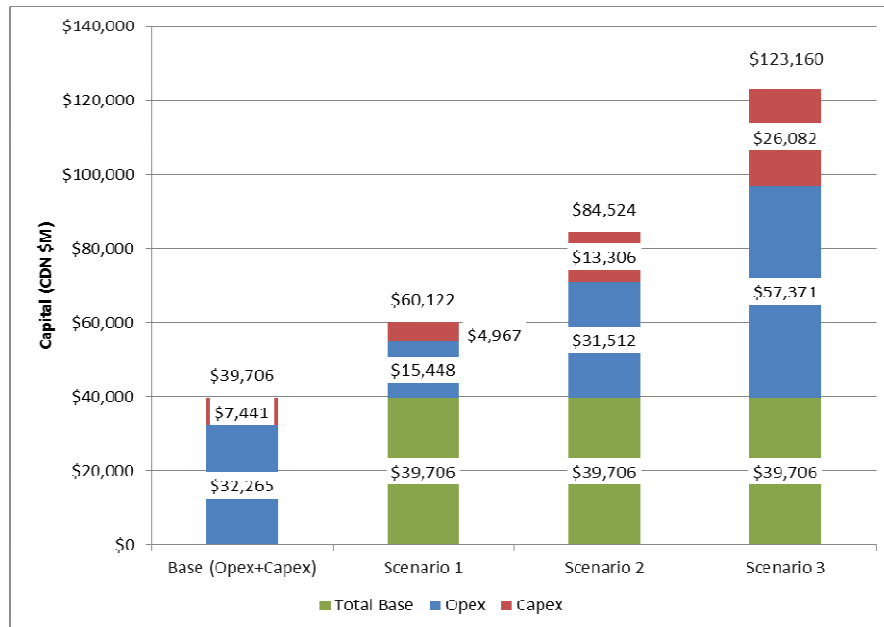
### 2.3.1 Scenarios

The four scenarios considered in this analysis were described in Section 1.2.5. Table 3 below provides a comparison of the four scenarios in terms of capital and operating costs. The Base Case reflects an extension of current known or anticipated operating and capital expenditures. Projects currently operating or under construction are expected to incur capital and operating expenditures of approximately \$40 billion over the next 21 years for an annual average expenditure of \$1.9 billion. Figure 2 shows the incremental increase in operating and capital expenditures between the four scenarios. As an illustration, Scenario 3 involves \$123 billion in capital and operating expenditures, \$85 billion higher than the base case. Scenario 3 also includes \$33.5 billion in incremental capital expenditures on new and expanded mining operations. A decomposition of capital and operating expenditures was used to generate direct, indirect and induced economic impacts on the treasury and the economy.

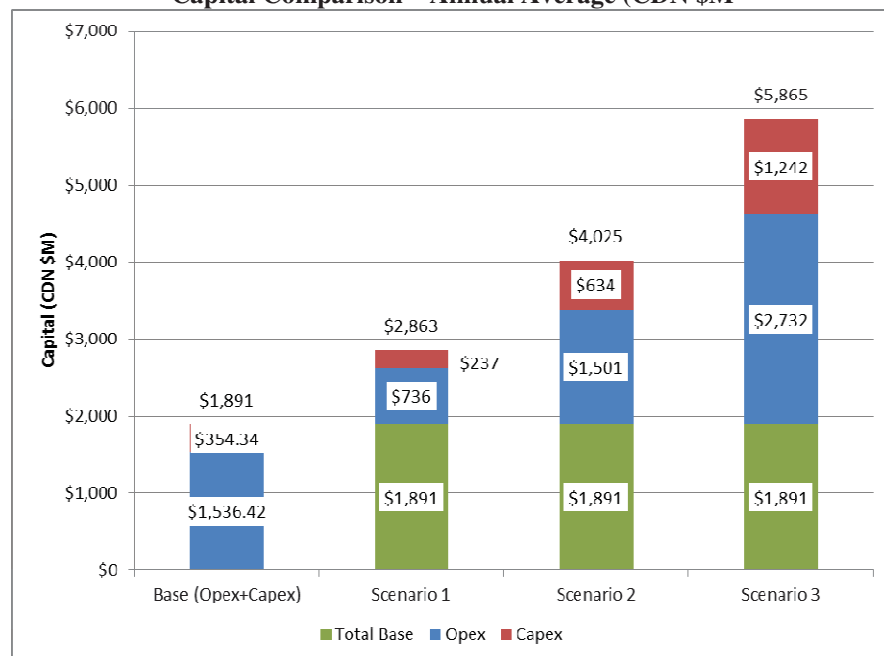
**Table 3**  
**Capital Cost Scenario Comparison**

Parameter	Base	Scenario 1	Scenario 2	Scenario 3
<b>Capital Cost</b>				
Capital cost (total; \$CDN)	\$7,441	\$12,408	\$20,747	\$33,523
Capital cost (avg annual; \$CDN)	\$354	\$591	\$988	\$1,596
<b>Operating Costs</b>				
Operating cost (total; \$CDN)	\$32,265	\$47,713	\$63,777	\$89,636
Operating cost (avg annual; \$CDN)	\$1,536	\$2,272	\$3,037	\$4,268
<b>Total Costs</b>				
Total cost (total; \$CDN)	\$39,706	\$60,122	\$84,524	\$123,160
Total cost (avg annual; \$CDN)	\$1,891	\$2,863	\$4,025	\$5,865

**Figure 2**  
**Capital Comparison - Total (CDN \$M)**



**Figure 3**  
**Capital Comparison – Annual Average (CDN \$M)**



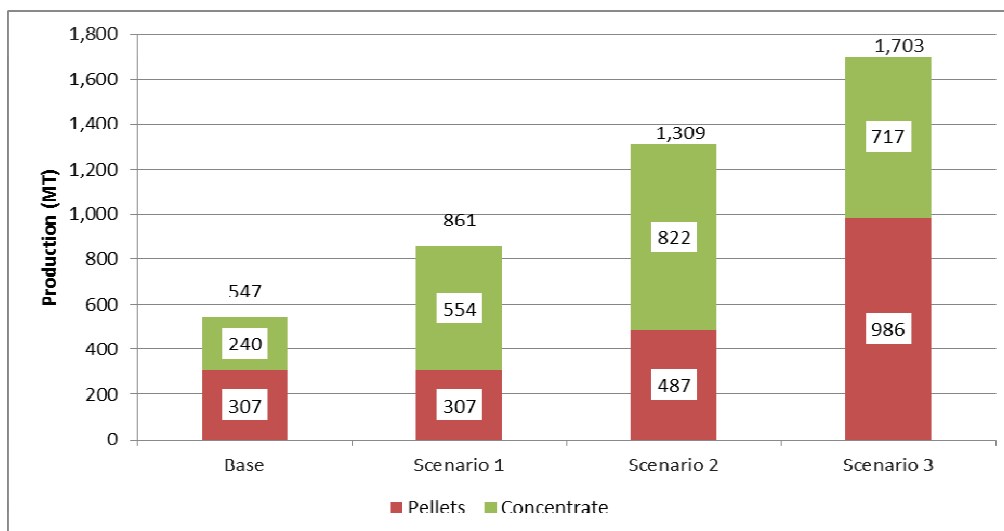
### 2.3.2 Production and Value of Production

A price sensitivity analysis was completed to determine the value of iron ore production according to the four scenarios. Tables 4 and 5 and Figures 5 to 7 below illustrate the cumulative and incremental increases in the value of production between the four scenarios. Expanding production between the Base Case and Scenario 3 should see a 200% increase in the production of iron ore in Labrador as well as the corresponding increase in key economic indicators. The level of iron ore production is anticipated to reach 547 mt in the Base Case over the twenty one years analyzed, the level of production increases to 861mt, 1,309 mt and 1,703 mt respective between Scenarios 1, 2 and 3, respectively.

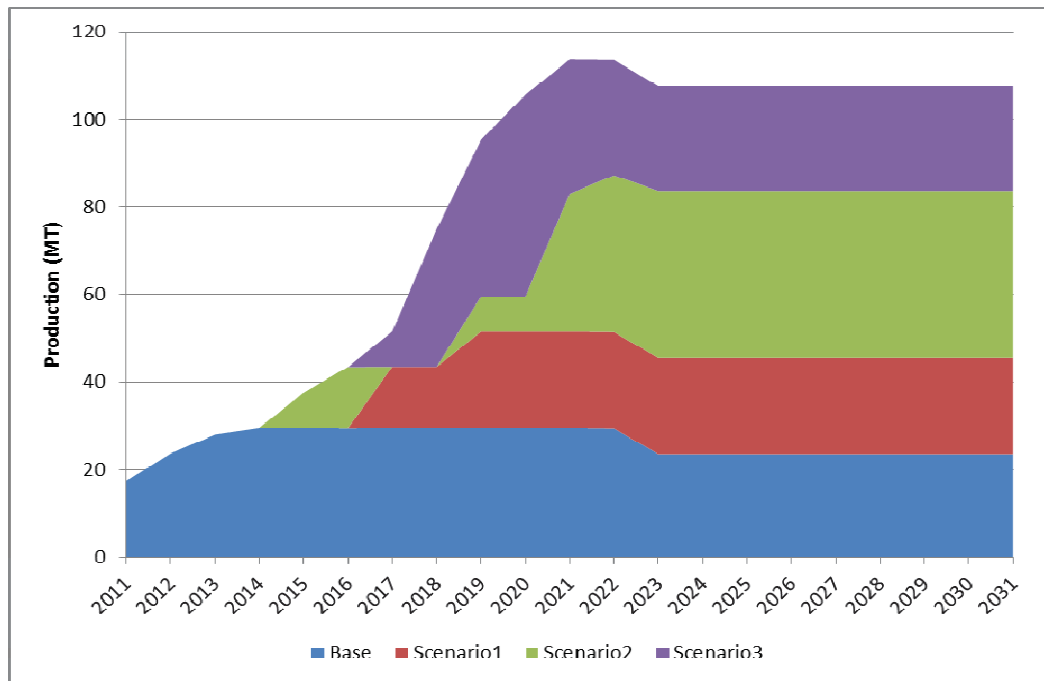
**Table 4**  
**Production Scenario Comparison – Iron Ore 2011-2031**

Parameter	Base	Scenario 1	Scenario 2	Scenario 3
<b>Iron Ore Saleable Production (2011-2031)</b>				
Pellets	307	307	487	986
Concentrate	240	554	822	717
<b>Total Saleable Production</b>	<b>547</b>	<b>861</b>	<b>1,309</b>	<b>1,703</b>

**Figure 5**  
**Production Scenario Comparison – Iron Ore 2011-2031**



**Figure 6**  
**Production Profile Scenario Comparison – Iron Ore 2011-2031**



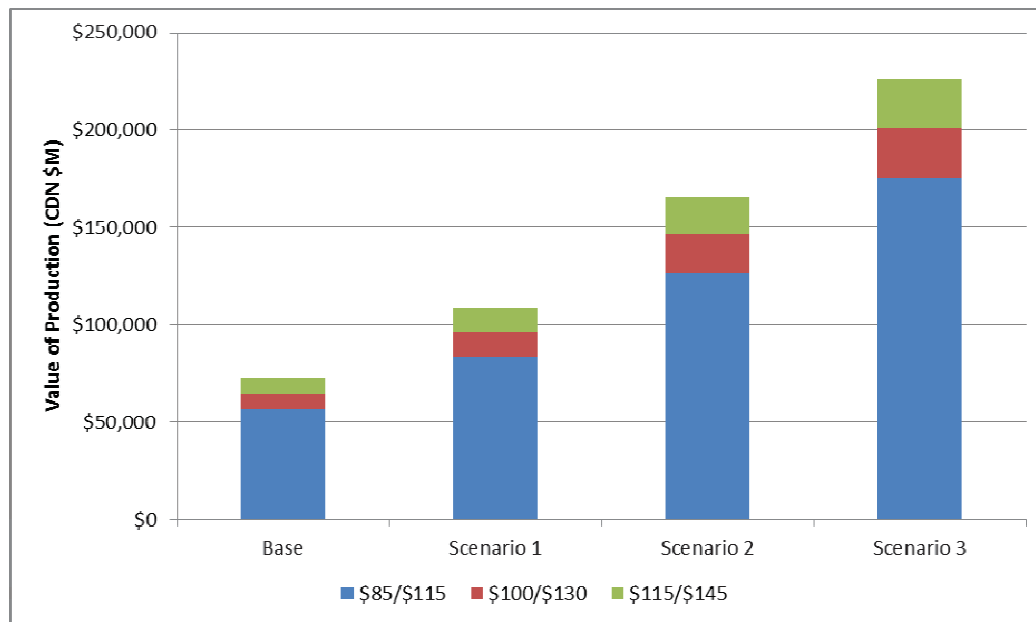
The value of concentrate and pellet production in the Base Case at \$100/t concentrate and \$130/t for pellets is estimated at approximately \$65.0 billion. Depending on price, the value of production could be +/- \$0.8 billion over the twenty one year period analyzed. The value of production increases from \$96.0 billion +/- \$12 billion under Scenario 1 to \$146.0 billion +/- \$16 billion under Scenario 2 and to \$200 billion +/- \$25.0 billion under Scenario 3. The difference in the value of production, \$55.0 billion between Scenarios 2 and 3 is attributable in part to increased pellet production in Labrador.

**Table 5**  
**Value of Production Comparison**

	Total 2011-2031			
Scenario	Base	Scenario 1	Scenario 2	Scenario 3
\$85/\$115	\$56.8	\$83.5	\$127.0	\$175.5
\$100/\$130	\$64.7	\$96.1	\$146.3	\$200.7
\$115/\$145	\$72.7	\$108.8	\$165.7	\$226.0



**Figure 7**  
**Value of Production Scenario Comparison**



### 2.3.3 Newfoundland and Labrador Economic Impacts

#### 2.3.3.1 Employment Impacts

One of the key economic indicators to be impacted through increased capital and operating expenditures in the iron ore industry is employment. Table 6 and Figures 8-13 illustrate the total and the annual average employment expected to be generated under each of the production scenarios.

**Table 6**  
**NL Employment Impacts**  
**(person years)**

Scenario	Total 2011-2031				Annual Average 2011-2031			
	Base	Scenario 1	Scenario 2	Scenario 3	Base	Scenario 1	Scenario 2	Scenario 3
<b>Employment (000's PY)</b>								
Direct Employment	62.0	92.1	118.8	173.1	3.0	4.4	5.7	8.2
Indirect Employment	50.4	78.3	124.8	212.1	2.4	3.7	5.9	10.1
Induced Employment	45.3	67.4	89.1	130.0	2.2	3.2	4.2	6.2
<b>Total Employment</b>	<b>157.7</b>	<b>237.8</b>	<b>332.7</b>	<b>515.2</b>	<b>7.5</b>	<b>11.3</b>	<b>15.8</b>	<b>24.5</b>

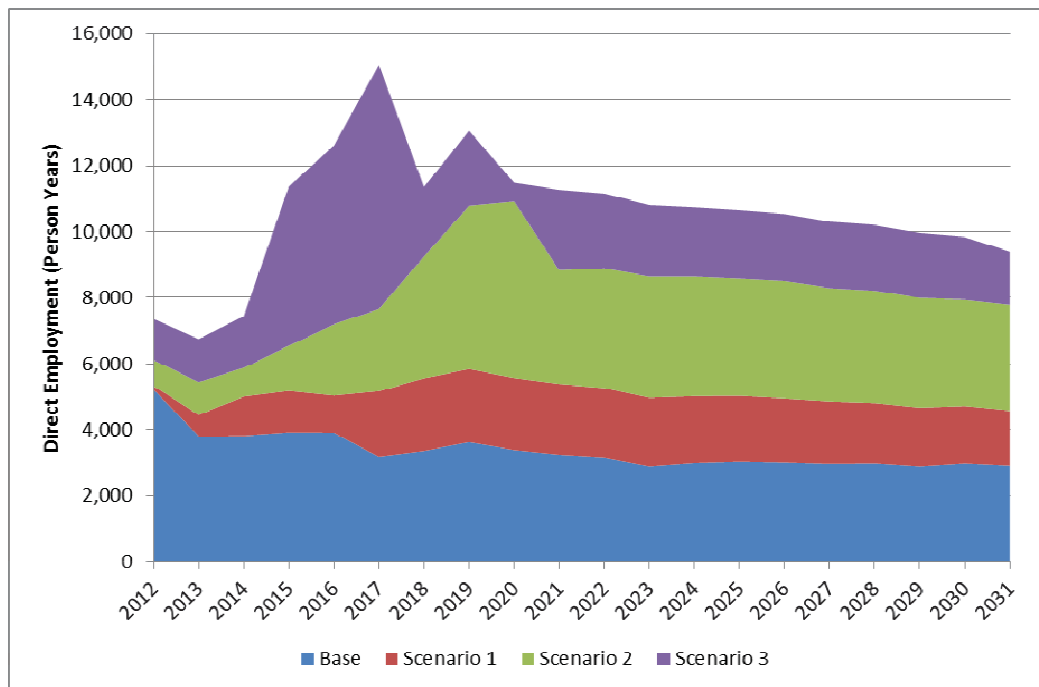
Current mine developments and anticipated levels of production and capital expenditures in the iron ore mining industry will generate more than 157,000 person years of employment in Newfoundland and Labrador over the next twenty one years including 62,000 person years of direct employment. On an annual basis, mining activities should grow to support 7,500 person years of employment on average, including 3,000 direct years of employment.

The employment impacts resulting from expansion activities are substantial. Total employment could increase from 157,000 person years of employment in the base case to 238,000 (11,000

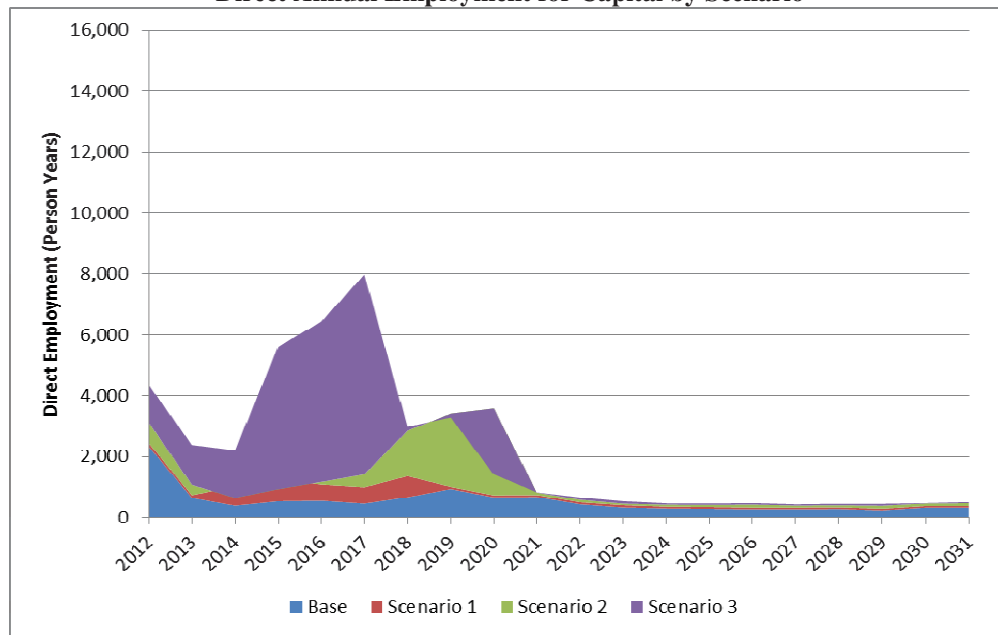
PYs on average) person years of employment under Scenario 1. This increases to 333,000 (16,000 PYs on average) person years under Scenario 2 and 515,000 (24,500 PYs on average) person years of employment under Scenario 3. Investments in Scenario 3 could generate an incremental increase of approximately 358,000 person years of employment over anticipated current levels of employment.

Under Scenario 3, labour requirements during construction are expected to peak at 8,000 direct person years of employment in 2016 – 2017, see figure 9. Total direct employment is also expected to peak during this time frame at approximately 15,000 person years of employment. Scenario 3 would support an annual Newfoundland Labrador work force of approximately 10,000 workers over the twenty one year period analyzed. In comparison, the base case would support approximately 3,500 workers in Newfoundland and Labrador annually.

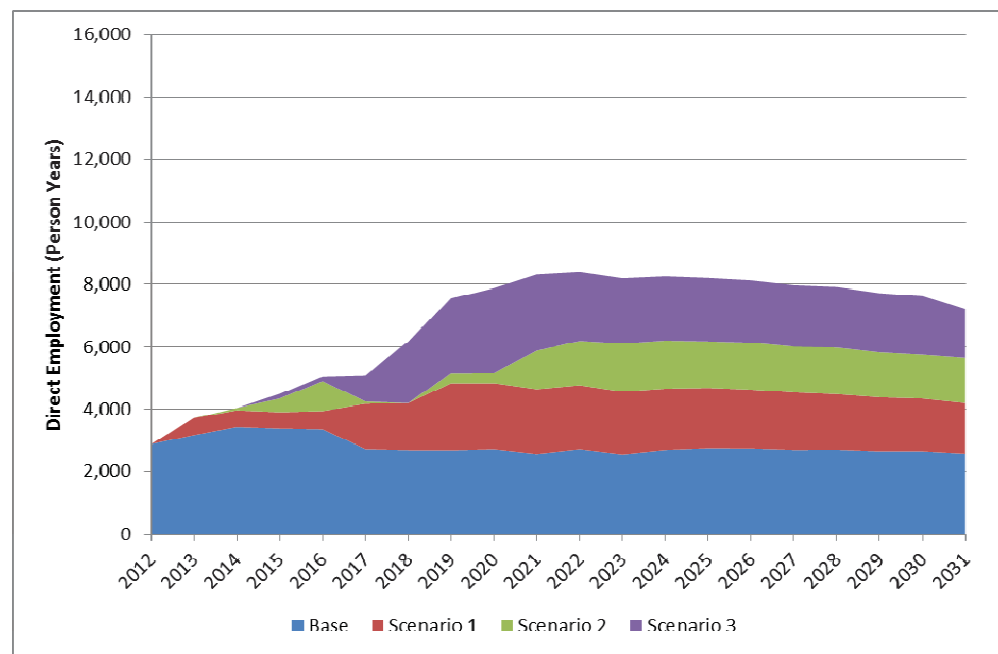
**Figure 8**  
**Direct Annual Employment for Combined Capital and Operating Expenditures by Scenario**



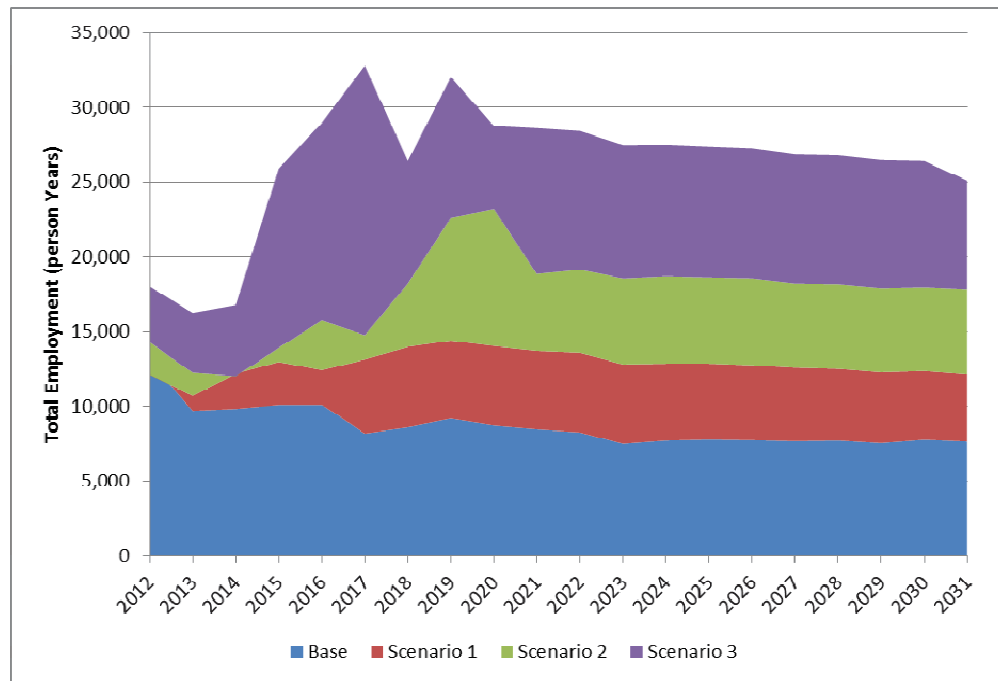
**Figure 9**  
**Direct Annual Employment for Capital by Scenario**



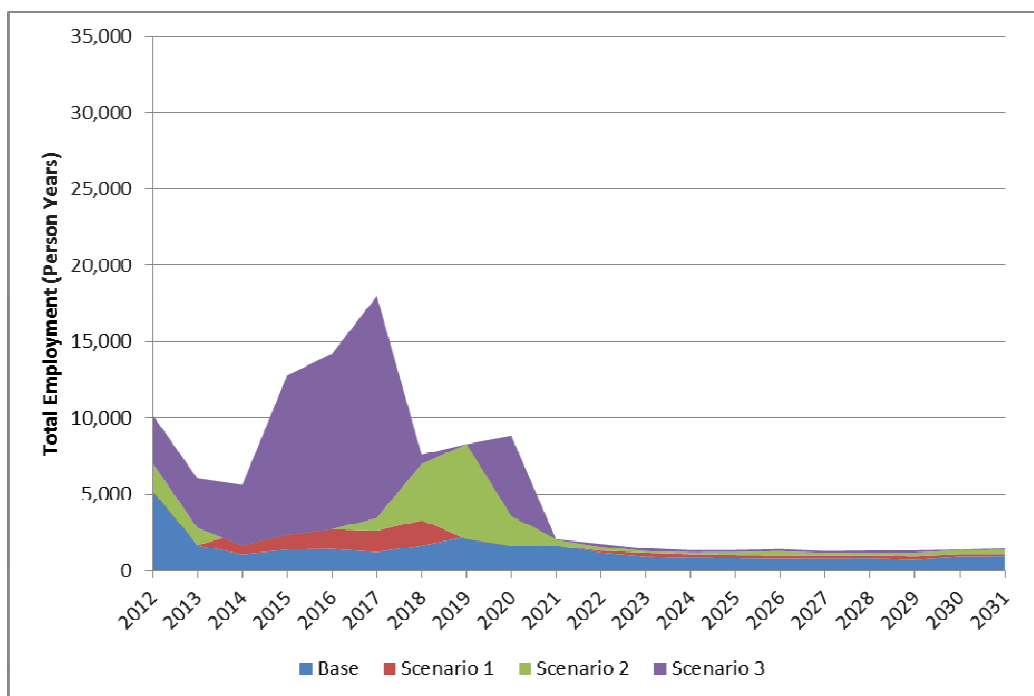
**Figure 10**  
**Direct Annual Employment for Operations by Scenario**



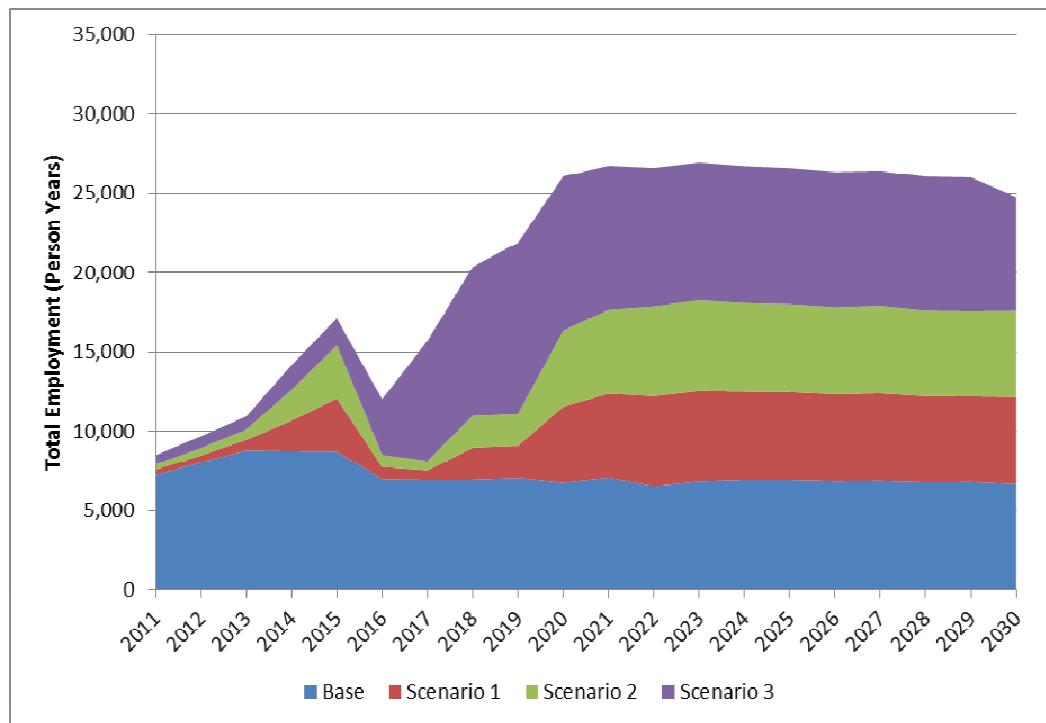
**Figure 11**  
**Total Annual Employment for Combined Capital and Operating Expenditures by Scenario**



**Figure 12**  
**Total Annual Employment for Capital by Scenario**



**Figure 13**  
**Total Annual Employment for Operations by Scenario**



### 2.3.3.2 Income

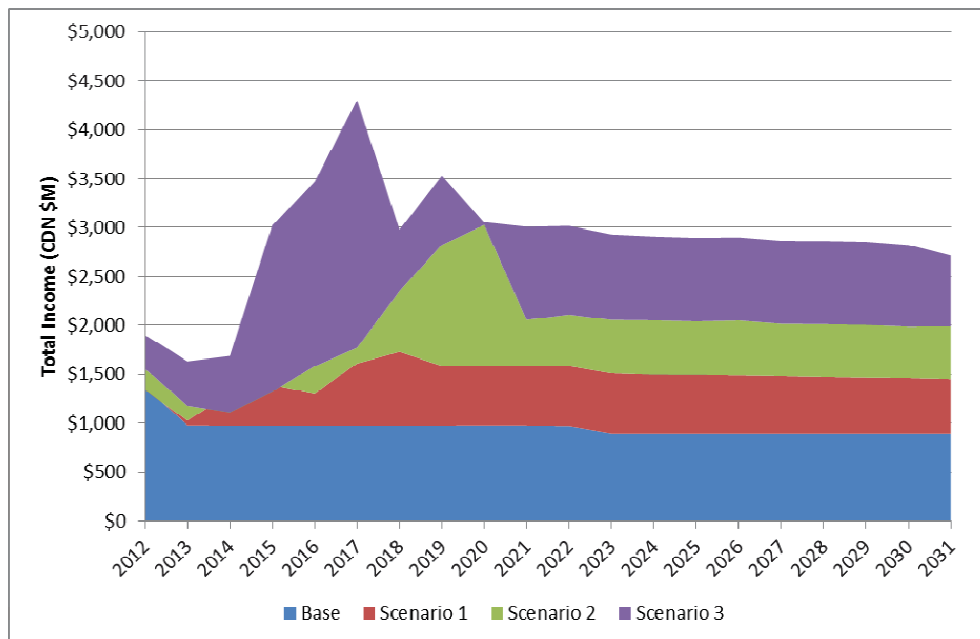
In addition to the employment generated within Newfoundland and Labrador, iron ore mining operations and capital expenditures will provide considerable income to Newfoundland and Labrador workers and businesses. Table 7 below and Figures 14 to 16 summarize the income impacts for Newfoundland and Labrador labour and business for each of the scenarios analyzed.

**Table 7**  
**NL Income (M\$ CDN)**

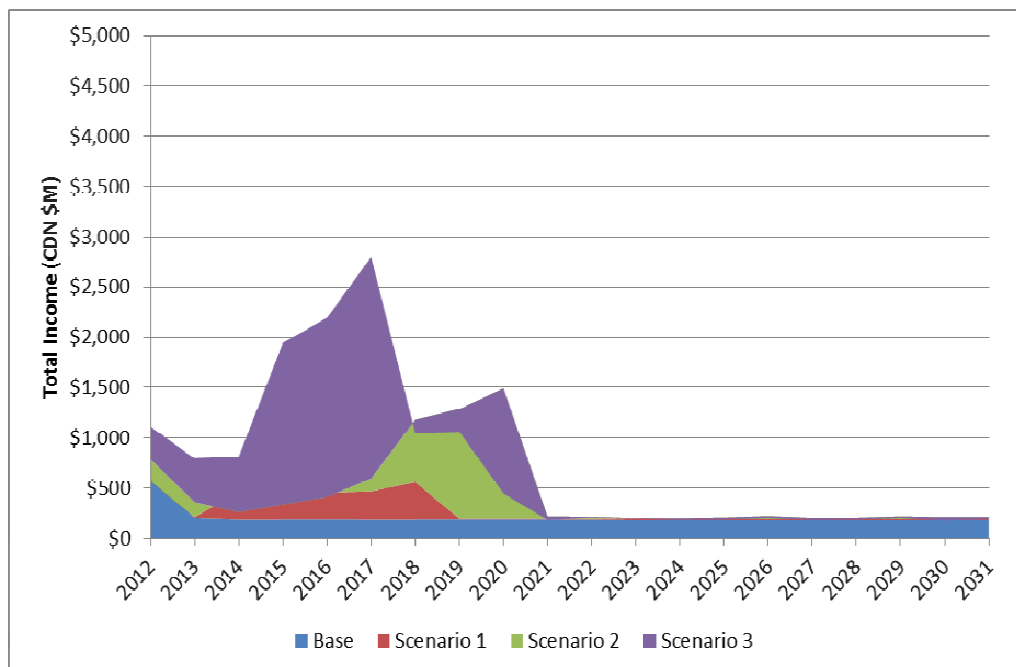
Scenario	Total 2011-2031				Annual Average 2011-2031			
	Base	Scenario 1	Scenario 2	Scenario 3	Base	Scenario A	Scenario B	Scenario C
<b>Total Income (\$ Billion)</b>								
Direct Income	\$11.6	\$17.1	\$20.7	\$27.8	\$0.6	\$0.8	\$1.0	\$1.3
Indirect Income	\$4.2	\$6.4	\$10.3	\$17.2	\$0.2	\$0.3	\$0.5	\$0.8
Induced Income	\$4.7	\$7.1	\$9.3	\$13.5	\$0.2	\$0.3	\$0.4	\$0.6
<b>Total Income (\$ Billion)</b>	<b>\$20.6</b>	<b>\$30.6</b>	<b>\$40.2</b>	<b>\$58.5</b>	<b>\$1.0</b>	<b>\$1.5</b>	<b>\$1.9</b>	<b>\$2.8</b>

Under the Base Case Scenario, incomes in Newfoundland and Labrador will be approximately \$21.0 billion (\$1.0 billion annual average.) over the next twenty one years. This figure includes approximately \$12.0 billion (\$0.6 billion annual average.) in direct incomes. Under Scenarios 1, 2 and 3, total incomes generated by Newfoundland workers and businesses would be approximately \$30.0 billion (\$1.5 billion annual average), \$40.0 billion (\$1.9 billion annual average) and \$58.0 billion (\$2.8 billion annual average) respectively.

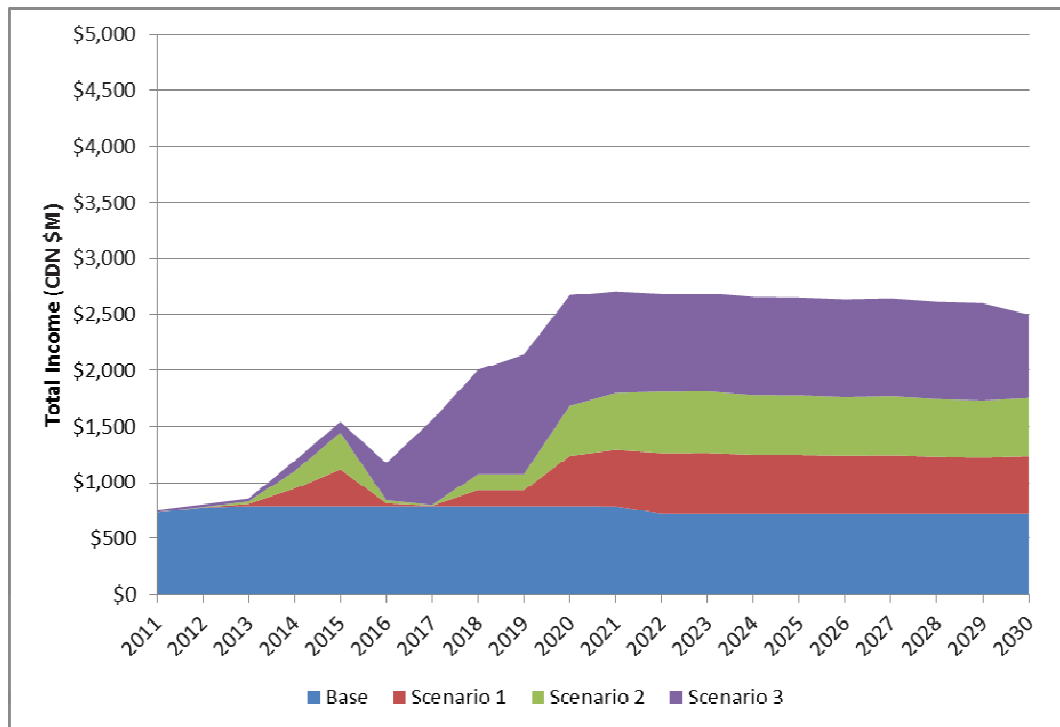
**Figure 14**  
**Total Annual Income for Combined Capital and Operating Expenditures by Scenario**



**Figure 15**  
**Total Annual Income for Capital Expenditures by Scenario**



**Figure 16**  
**Total Annual Income for Operating Expenditures by Scenario**



### 2.3.3.3 GDP

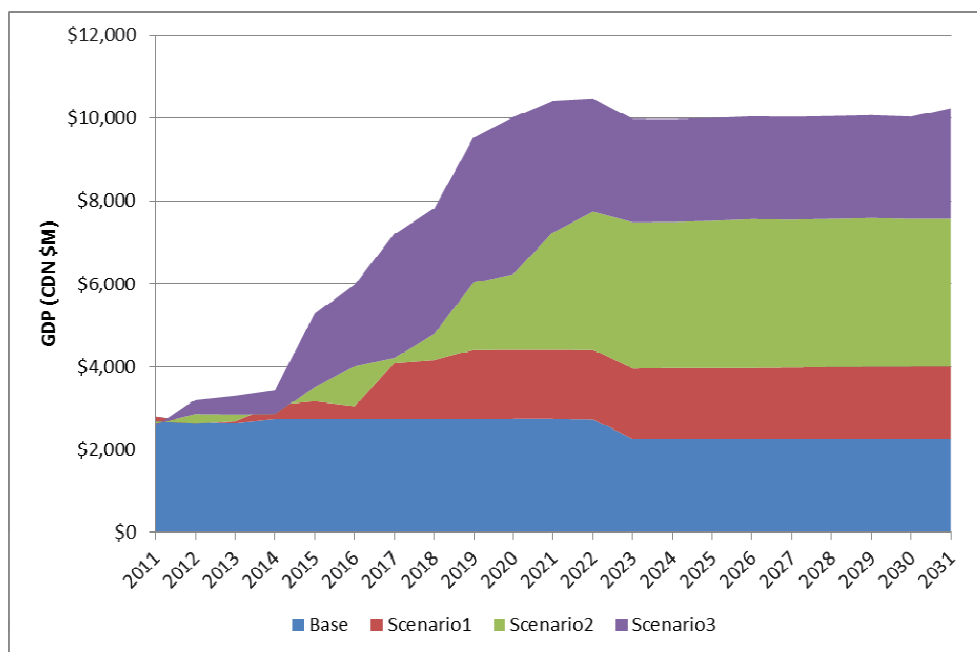
The GDP has two components. The first is the net value of production after costs have been deducted. The second component is the labour and business income that is generated in the province from those expenditures, which is then added back to the net value of production to generate the total GDP impact. Table 8 below contains estimates for Provincial GDP. Under the Base Case Scenario using \$100/t for concentrate and \$130/t for pellets, total GDP is estimated at \$53.0 billion +/- \$0.8 billion between the price sensitivities. Total GDP consists of \$20.6 billion in incomes and \$32.5 billion in the net value of production. On an annual basis the Base Case generates \$2.5 billion +/- \$0.4 billion in Total GDP. The Base Case figures increase significantly between the Scenarios. Scenarios 1, 2 and 3, generate \$79.0 billion +/- \$13.0 billion, \$123.0 billion +/- \$20.0 billion and \$170.0 billion +/- \$25.0 billion respectively. On an annual average basis Total GDP increase between Scenarios 1, 2, and 3 from \$3.8 billion +/- \$0.6 billion, \$5.6 billion +/- \$1.0 billion and \$8.1 billion +/- \$1.2 billion respectively.

**Table 8**  
**GDP From Incomes and the Value of Production**

Scenario	Total 2011-2031				Annual Average 2011-2031			
	Base	Scenario 1	Scenario 2	Scenario 3	Base	Scenario 1	Scenario 2	Scenario 3
<b>GDP (\$ Billion)</b>								
<b>GDP from Income</b>	<b>\$20.6</b>	<b>\$30.6</b>	<b>\$40.2</b>	<b>\$58.5</b>	<b>\$1.0</b>	<b>\$1.5</b>	<b>\$1.9</b>	<b>\$2.8</b>
<b>GDP from Production</b>								
\$85/\$115	\$24.5	\$35.8	\$63.2	\$85.8	\$1.2	\$1.7	\$3.0	\$4.1
\$100/\$130	\$32.5	\$48.4	\$82.6	\$111.1	\$1.5	\$2.3	\$3.9	\$5.3
\$115/\$145	\$40.4	\$61.1	\$101.9	\$136.4	\$1.9	\$2.9	\$4.9	\$6.5
<b>Total GDP</b>								
\$85/\$115	\$45.1	\$66.3	\$103.4	\$144.3	\$2.1	\$3.2	\$4.9	\$6.9
\$100/\$130	\$53.0	\$79.0	\$122.8	\$169.6	\$2.5	\$3.8	\$5.8	\$8.1
\$115/\$145	\$60.9	\$91.6	\$142.2	\$194.9	\$2.9	\$4.4	\$6.8	\$9.3

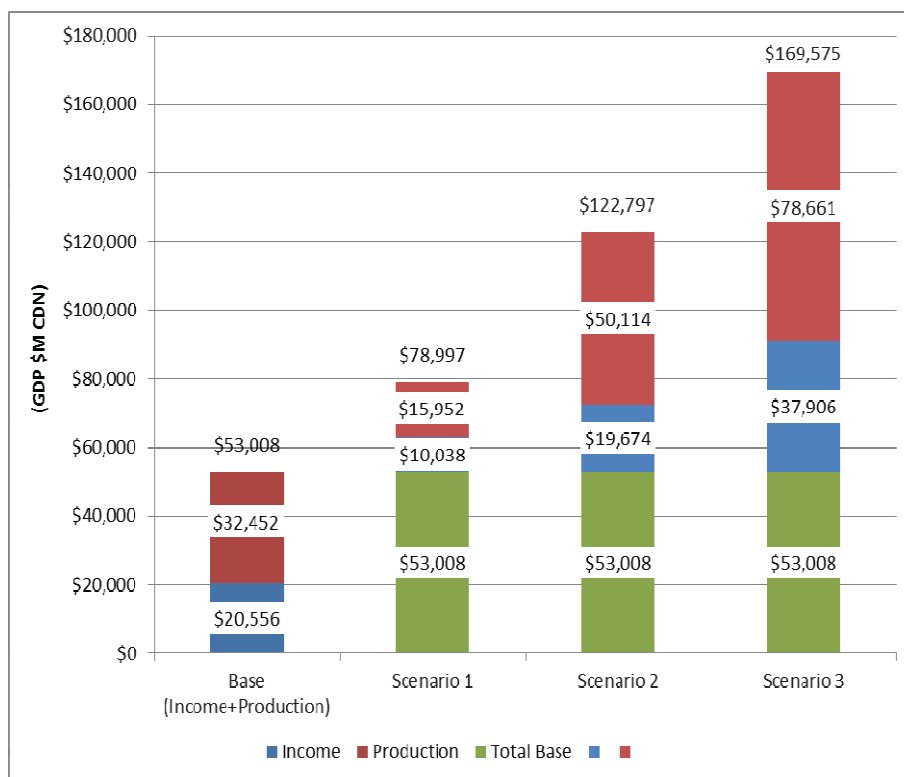
The annual income and GDP impacts for Newfoundland and Labrador are illustrated in Figures 17-19 below.

**Figure 17**  
**Gross Domestic Product – \$100/\$130 Commodity**  
**Newfoundland and Labrador GDP Profile (\$M CDN)**

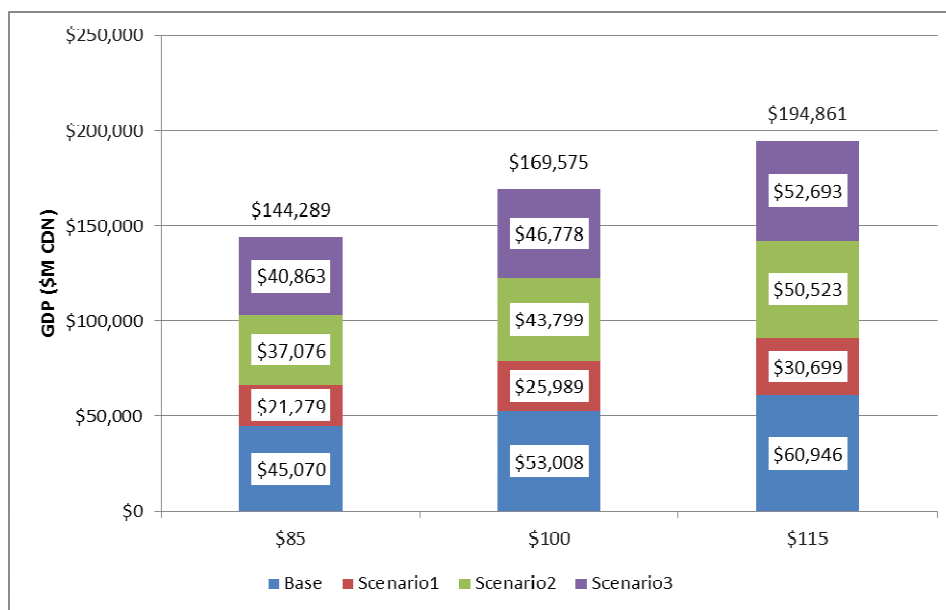




**Figure 18**  
**Gross Domestic Product – \$100/\$130 Commodity**  
**Scenario Comparison**  
**Newfoundland and Labrador (\$M CDN)**



**Figure 19**  
**Gross Domestic Product – Commodity Sensitivity**  
**Newfoundland and Labrador (\$M CDN)**



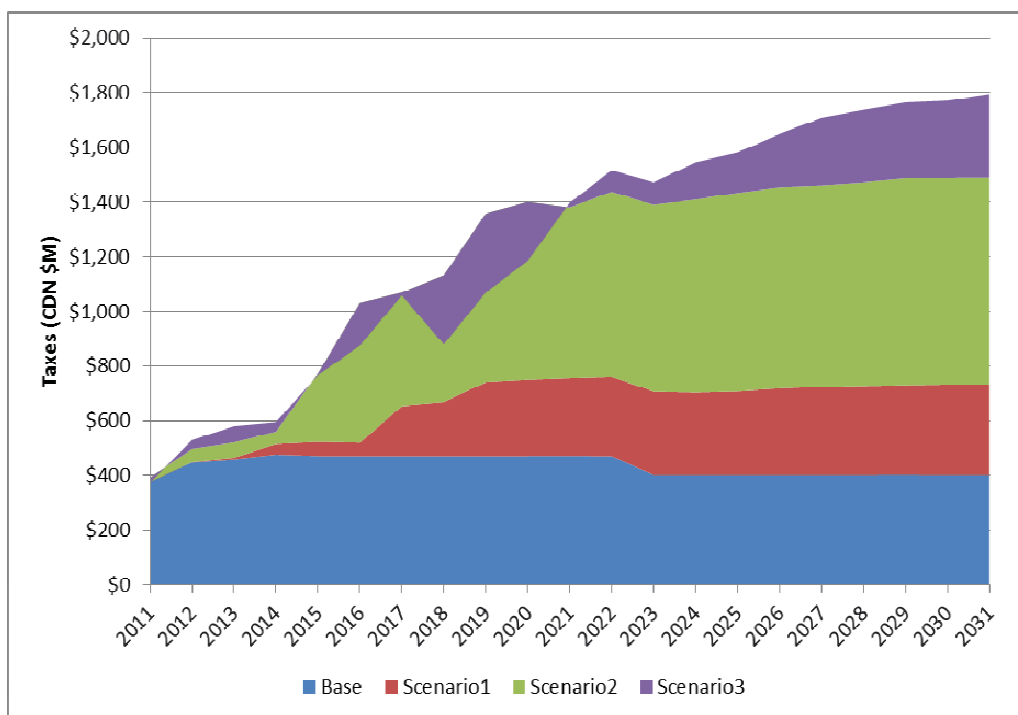
### 2.3.3.4 Treasury Impacts

The Newfoundland and Labrador treasury also benefits considerably from the iron ore industry through direct taxes paid by the mining companies and through taxes paid on the incomes earned by labour and business. Table 9 and Figures 20 and 22 illustrate the direct, indirect and induced taxes by Scenario and price sensitivity. Under the Base Case and assuming prices of \$100/t for concentrate and \$130/t for pellets, provincial government revenues are expected to be \$9.1 billion +/- \$1.3 billion over the twenty one year period. On an annual basis, the Base Case is expected to generate \$0.7 billion +/- \$0.2 billion depending on price. Provincial revenues increase substantially between the Base Case and Scenarios 1, 2 and 3, reaching \$25.9 billion +/- \$5.0 billion under Scenario 3. The increase between Scenarios 2 and 3 is marginal despite the increase in the value of production associated with moving from increased concentrate to increased pellet production. This is the result of higher capital costs and the resulting write offs against taxation. While incremental increases in employment, incomes and the value of production between the scenarios is substantial, government revenues only increase \$1.3 billion +/- \$0.3 billion between Scenarios 2 and 3.

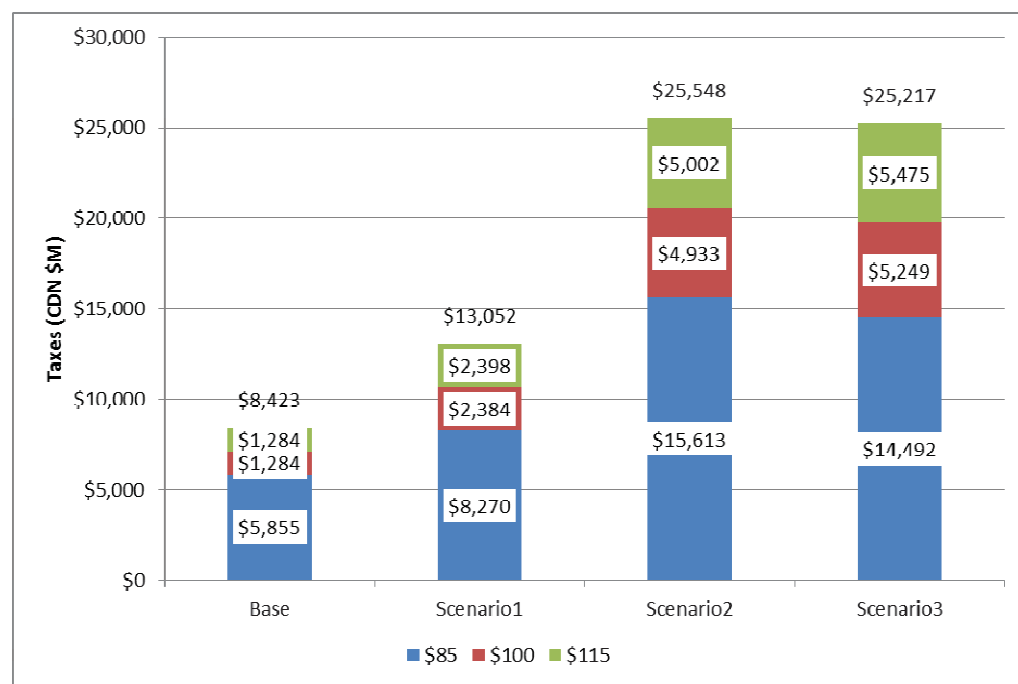
**Table 9**  
**NL Treasury Impacts (M\$ Cdn)**

Scenario	Total 2011-2031				Annual Average 2011-2031			
	Base	Scenario 1	Scenario 2	Scenario 3	Base	Scenario 1	Scenario 2	Scenario 3
<b>Taxes (\$ Billion)</b>								
<b>Direct Taxes</b>								
<b>\$85/\$115</b>	\$5.9	\$8.3	\$15.6	\$14.5	\$0.3	\$0.4	\$0.7	\$0.7
<b>\$100/\$130</b>	\$7.1	\$10.7	\$20.5	\$19.7	\$0.3	\$0.5	\$1.0	\$0.9
<b>\$115/\$145</b>	\$8.4	\$13.1	\$25.5	\$25.2	\$0.4	\$0.6	\$1.2	\$1.2
<b>Indirect Taxes</b>	\$0.4	\$0.6	\$0.9	\$1.6	\$0.0	\$0.0	\$0.0	\$0.1
<b>Induced Taxes</b>	\$1.6	\$2.4	\$3.1	\$4.5	\$0.1	\$0.1	\$0.1	\$0.2
<b>Total Taxes</b>								
<b>\$85/\$115</b>	\$7.9	\$11.3	\$19.7	\$20.6	\$0.4	\$0.5	\$0.9	\$1.0
<b>\$100/\$130</b>	\$9.1	\$13.7	\$24.6	\$25.9	\$0.4	\$0.7	\$1.2	\$1.2
<b>\$115/\$145</b>	\$10.4	\$16.1	\$29.6	\$31.3	\$0.5	\$0.8	\$1.4	\$1.5

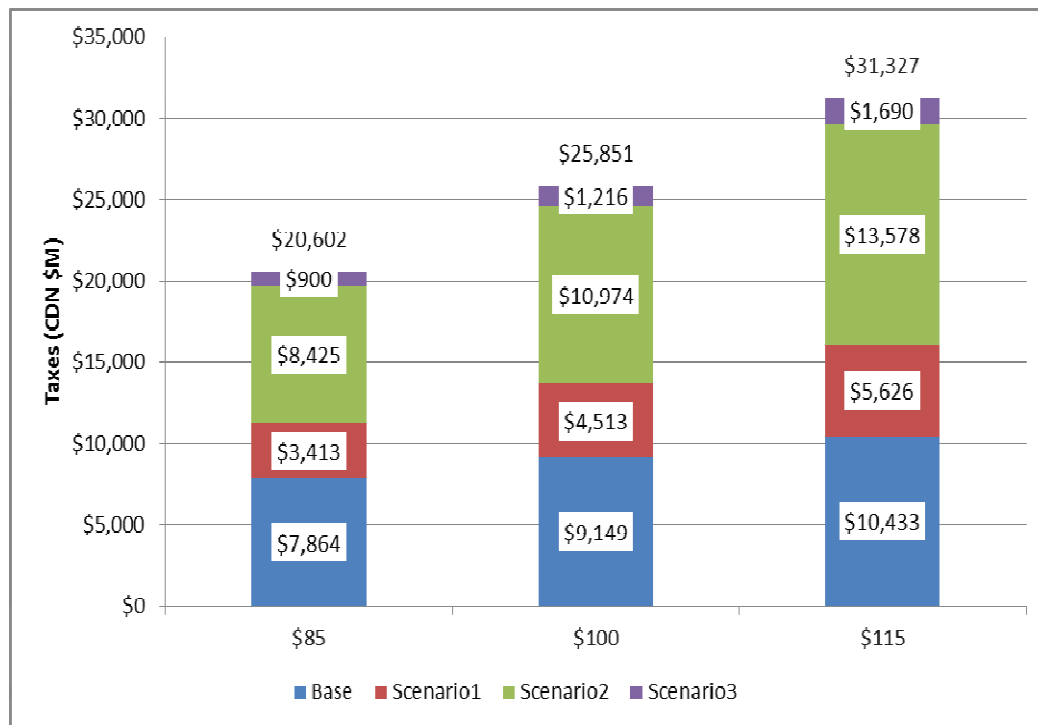
**Figure 20**  
**Direct Treasury Impacts by Scenario**  
**Newfoundland and Labrador (\$M CDN)**



**Figure 21**  
**Total Treasury Impacts by Scenario**  
**Newfoundland and Labrador (\$M CDN)**



**Figure 22**  
**Treasury Impacts by Scenario - Commodity Sensitivity**  
**Newfoundland and Labrador**  
**(\$M CDN)**



### 2.3.3.5 Economic Impact Converted to \$/Kwh Equivalent

An alternative way of presenting the economic benefits to Newfoundland and Labrador from iron ore development in Labrador is to convert the income and tax benefits for the province into an equivalent value in terms of electricity prices. This will facilitate a comparison of the total benefits received from the construction and operations of the iron ore projects with the alternative of simply exporting the power at some net back price. The numbers presented below do not include a purchase price to the iron ore developers for the use of electricity. This would have to be added to the equivalent price calculated for the Newfoundland and Labrador income and tax benefits.

In addition to this revenue generated from the purchase of power, the construction and operation of the smelter in Labrador will yield additional tax revenues to the provincial government and an increase in income benefits to Newfoundland and Labrador businesses and labour who supply goods and services to the project. The additional benefits considered in this analysis were the direct labour income benefits, which excludes associated taxes paid to the provincial and federal governments; indirect income benefits, which includes incomes earned by businesses and labour that supply goods and services to the project but excludes any associated taxes collected by the provincial and federal governments; induced income benefits, which includes incomes earned by

service sector businesses and labour but excludes any associated taxes paid to the provincial and federal governments; direct corporation income taxes and mining taxes paid by the mining proponents to the Government of Newfoundland and Labrador; other direct taxes paid to the provincial government such as personal income taxes collected from workers; indirect taxes collected by the provincial government, which includes corporation income taxes and personal income taxes; and induced taxes collected by the provincial government, include HST, personal income taxes and corporation income taxes collected in the service sector. These incremental impacts would be lost to the provincial economy if the power were not available for iron ore development in Labrador.

To compare power purchase revenue benefits to these economy-wide impacts, it is necessary to calculate the equivalent of a levelized unit energy cost. Specifically, the equivalent power price is determined by solving for “P” in the following equation that equates net present value of income and tax benefits received by Newfoundland and Labrador to the equivalent net present value of additional revenue that would have to be received over and any negotiated power purchase price.

$$\sum_{t=1}^N \frac{P * e_t}{(1+r)^t} = \sum_{t=1}^N \frac{ITB_t}{(1+r)^t} \dots Eqn.(1)$$

where  $P \equiv$  the real price of power that is equivalent to the income and tax benefits;  $e_t \equiv$  the annual amount of power consumed in year  $t$ ;  $r \equiv$  the real discount rate (assumed to be 8% real);  $ITB_t \equiv$  direct, indirect and induced income benefits net of taxes and all corresponding taxes received by Newfoundland and Labrador

Equation (1) can be rearranged to give:

$$P = \frac{\sum_{t=1}^N \frac{ITB_t}{(1+r)^t}}{\sum_{t=1}^N \frac{e_t}{(1+r)^t}} \dots Eqn.(2)$$

From equation (2), the equivalent power price of the income and tax benefits can be derived by dividing the net present value of the income and tax benefits by the net present value of the power consumption. Table 10 indicates that the additional benefit derived by Newfoundland and Labrador depends on the price and scenario chosen. This range from 47 cents per Kwh for the base case scenario and \$85 price per tonne for concentrate to 63 cent per kwh for Scenario 2 under the assume price of \$115 price per tonne for concentrate. While significant parts of these benefits accrue to local workers and businesses, a relative big impact is felt by the provincial treasury through enhanced tax revenue. Specifically, independent of the price charged by NALCOR to the mining companies, the provincial treasury stands to receive additional utax revenues between 17 cents per Kwh for the base case with a price of \$85 per tonne of concentrate to 32 cents per Kwh for scenario 2 and \$115 per tonne of concentrate.

**Table 10: Conversion of Newfoundland and Labrador Income and Tax benefits from Iron Mining into the Equivalent Cents per Kwh**

Base Case - \$85/\$115					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$13,279	\$6,754	29.7	\$632.00	28.4
CIT	\$2,961	\$1,450	6.4	\$141.00	6.3
MINE	\$1,438	\$731	3.2	\$68.00	3.1
Other Direct Taxes	\$1,456	\$660	2.9	\$69.00	3.1
Indirect Taxes	\$385	\$190	0.8	\$18.00	0.8
Induced Taxes	\$1,624	\$807	3.6	\$77.00	3.5
Total Taxes	\$7,864	\$3,838	16.9	\$373.00	16.7
Electricity Consumption	46,800	22,731		2,229.0	
<b>Income and Tax benefits</b>	<b>\$21,143</b>	<b>\$10,592</b>	<b>46.6</b>	<b>\$1,005</b>	<b>45.1</b>
Base Case - \$100/\$130					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$13,279	\$6,754	29.7	632.0	28.4
CIT	\$3,908	\$1,912	8.4	186.0	8.3
MINE	\$1,775	\$868	3.8	85.0	3.8
Other Direct Taxes	\$1,456	\$660	2.9	\$69.00	3.1
Indirect Taxes	\$385	\$190	0.8	\$18.00	0.8
Induced Taxes	\$1,624	\$807	3.6	\$77.00	3.5
Total Taxes	\$9,148	\$4,437	19.5	\$435.00	19.5
Electricity Consumption	46,800	22,731		2,229.0	
<b>Income and Tax benefits</b>	<b>\$22,427</b>	<b>\$11,191</b>	<b>49.2</b>	<b>\$1,067</b>	<b>47.9</b>
Base Case - \$115/\$145					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$13,279	\$6,754	29.7	632.0	28.4
CIT	\$4,793	\$2,325	10.2	228.0	10.2
MINE	\$2,174	\$1,055	4.6	104.0	4.7
Other Direct Taxes	\$1,456	\$660	2.9	\$69.00	3.1
Indirect Taxes	\$385	\$190	0.8	\$18.00	0.8
Induced Taxes	\$1,624	\$807	3.6	\$77.00	3.5
Total Taxes	\$10,432	\$5,037	22.2	\$496.00	22.3
Electricity Consumption	46,800	22,731		2,229.0	
<b>Income and Tax benefits</b>	<b>\$23,711</b>	<b>\$11,791</b>	<b>51.9</b>	<b>\$1,128</b>	<b>50.6</b>
Scenario 1 - \$85/\$115					

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	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$19,133	\$8,988	31.0	\$911.00	29.5
CIT	\$3,824	\$1,699	5.9	\$182.00	5.9
MINE	\$1,995	\$867	3.0	\$95.00	3.1
Other Direct Taxes	\$2,451	\$1,088	3.7	\$117.00	3.8
Indirect Taxes	\$588	\$270	0.9	\$28.00	0.9
Induced Taxes	\$2,419	\$1,120	3.9	\$115.00	3.7
Total Taxes	\$11,277	\$5,044	17.4	\$537.00	17.4
Electricity Consumption	64,750	29,024		3,083.0	
<b>Income and Tax benefits</b>	<b>\$30,410</b>	<b>\$14,032</b>	<b>48.3</b>	<b>\$1,448</b>	<b>47.0</b>
<b>Scenario 1 - \$100/\$130</b>					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$19,133	\$8,988	31.0	\$911.00	29.5
CIT	\$5,284	\$2,306	7.9	\$252.00	8.2
MINE	\$2,795	\$1,197	4.1	\$133.00	4.3
Other Direct Taxes	\$2,451	\$1,088	3.7	\$117.00	3.8
Indirect Taxes	\$588	\$270	0.9	\$28.00	0.9
Induced Taxes	\$2,419	\$1,120	3.9	\$115.00	3.7
Total Taxes	\$13,537	\$5,981	20.6	\$645.00	20.9
Electricity Consumption	64,750	29,024		3,083.0	
<b>Income and Tax benefits</b>	<b>\$32,670</b>	<b>\$14,969</b>	<b>51.6</b>	<b>\$1,556</b>	<b>50.5</b>
<b>Scenario 1 - \$115/\$145</b>					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$19,133	\$8,988	31.0	\$911.00	29.5
CIT	\$6,743	\$2,912	10.0	\$321.00	10.4
MINE	\$3,608	\$1,536	5.3	\$172.00	5.6
Other Direct Taxes	\$2,451	\$1,088	3.7	\$117.00	3.8
Indirect Taxes	\$588	\$270	0.9	\$28.00	0.9
Induced Taxes	\$2,419	\$1,120	3.9	\$115.00	3.7
Total Taxes	\$15,809	\$6,926	23.9	\$753.00	24.4
Electricity Consumption	64,750	29,024		3,083.0	
<b>Income and Tax benefits</b>	<b>\$34,942</b>	<b>\$15,914</b>	<b>54.8</b>	<b>\$1,664</b>	<b>54.0</b>
<b>Scenario 2 - \$85/\$115</b>					
	2011-2-31 Total	PV @ 8%	Discounted @ 8% Equivalents Cents per Kwh	Annual Average	Annual Average Equivalents Cents per Kwh
Income Benefits - Net of Taxes	\$25,557	\$11,353	30.6	\$1,217.00	28.0
CIT	\$7,024	\$2,857	7.7	\$334.00	7.7

MINE	\$5,691	\$2,181	5.9	\$271.00	6.2
Other Direct Taxes	\$2,899	\$1,309	3.5	\$138.00	3.2
Indirect Taxes	\$940	\$409	1.1	\$45.00	1.0
Induced Taxes	\$3,149	\$1,399	3.8	\$150.00	3.4
Total Taxes	\$19,703	\$8,155	22.0	\$938.00	21.6
Electricity Consumption	91,400	37,059		4,352.0	
<b>Income and Tax benefits</b>	<b>\$45,260</b>	<b>\$19,508</b>	<b>52.6</b>	<b>\$2,155</b>	<b>49.5</b>
<b>Scenario 2 - \$100/\$130</b>					
	<b>2011-2-31 Total</b>	<b>PV @ 8%</b>	<b>Discounted @ 8%</b>	<b>Annual Average</b>	<b>Annual Average</b>
			<b>Equivalents Cents per Kwh</b>		<b>Equivalents Cents per Kwh</b>
Income Benefits - Net of Taxes	\$25,557	\$11,353	30.6	\$1,217.00	28.0
CIT	\$9,709	\$3,932	10.6	\$462.00	10.6
MINE	\$7,813	\$3,005	8.1	\$372.00	8.5
Other Direct Taxes	\$2,899	\$1,309	3.5	\$138.00	3.2
Indirect Taxes	\$940	\$409	1.1	\$45.00	1.0
Induced Taxes	\$3,149	\$1,399	3.8	\$150.00	3.4
Total Taxes	\$24,510	\$10,054	27.1	\$1,167.00	26.8
Electricity Consumption	91,400	37,059		4,352.0	
<b>Income and Tax benefits</b>	<b>\$50,067</b>	<b>\$21,407</b>	<b>57.8</b>	<b>\$2,384</b>	<b>54.8</b>
<b>Scenario 2 - \$115/\$145</b>					
	<b>2011-2-31 Total</b>	<b>PV @ 8%</b>	<b>Discounted @ 8%</b>	<b>Annual Average</b>	<b>Annual Average</b>
			<b>Equivalents Cents per Kwh</b>		<b>Equivalents Cents per Kwh</b>
Income Benefits - Net of Taxes	\$25,557	\$11,353	30.6	\$1,217.00	28.0
CIT	\$12,395	\$5,010	13.5	\$590.00	13.6
MINE	\$1,003	\$3,869	10.4	\$476.00	10.9
Other Direct Taxes	\$2,899	\$1,309	3.5	\$138.00	3.2
Indirect Taxes	\$940	\$409	1.1	\$45.00	1.0
Induced Taxes	\$3,149	\$1,399	3.8	\$150.00	3.4
Total Taxes	\$20,386	\$11,996	32.4	\$1,399.00	32.1
Electricity Consumption	91,400	37,059		4,352.0	
<b>Income and Tax benefits</b>	<b>\$45,943</b>	<b>\$23,349</b>	<b>63.0</b>	<b>\$2,616</b>	<b>60.1</b>
<b>Scenario 3 - \$85/\$115</b>					
	<b>2011-2-31 Total</b>	<b>PV @ 8%</b>	<b>Discounted @ 8%</b>	<b>Annual Average</b>	<b>Annual Average</b>
			<b>Equivalents Cents per Kwh</b>		<b>Equivalents Cents per Kwh</b>
Income Benefits - Net of Taxes	\$37,504	\$17,031	33.3	\$1,786.00	28.1
CIT	\$6,478	\$2,477	4.8	\$308.00	4.8
MINE	\$4,144	\$1,476	2.9	\$197.00	3.1
Other Direct Taxes	\$3,870	\$1,702	3.3	\$184.00	2.9
Indirect Taxes	\$1,571	\$684	1.3	\$75.00	1.2
Induced Taxes	\$4,539	\$2,040	4.0	\$216.00	3.4

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Total Taxes	\$20,602	\$8,379	16.4	\$980.00	15.4
Electricity Consumption	133,400	51,161		6352.0	
<b>Income and Tax benefits</b>	<b>\$58,106</b>	<b>\$25,410</b>	<b>49.7</b>	<b>\$2,766</b>	<b>43.5</b>
<b>Scenario 3 - \$100/\$130</b>					
	<b>2011-2-31 Total</b>	<b>PV @ 8%</b>	<b>Discounted @ 8%</b>	<b>Annual Average</b>	<b>Annual Average</b>
Income Benefits - Net of Taxes	\$37,504	\$17,031	33.3	\$1,786.00	28.1
CIT	\$9,554	\$3,575	7.0	\$455.00	7.2
MINE	\$6,147	\$2,170	4.2	\$293.00	4.6
Other Direct Taxes	\$3,870	\$1,702	3.3	\$184.00	2.9
Indirect Taxes	\$1,571	\$684	1.3	\$75.00	1.2
Induced Taxes	\$4,539	\$2,040	4.0	\$216.00	3.4
Total Taxes	\$25,681	\$10,171	19.9	\$1,223.00	19.3
Electricity Consumption	133,400	51,161		6352.0	
<b>Income and Tax benefits</b>	<b>\$63,185</b>	<b>\$27,202</b>	<b>53.2</b>	<b>\$3,009</b>	<b>47.4</b>
<b>Scenario 3 - \$115/\$145</b>					
	<b>2011-2-31 Total</b>	<b>PV @ 8%</b>	<b>Discounted @ 8%</b>	<b>Annual Average</b>	<b>Annual Average</b>
Income Benefits - Net of Taxes	\$37,504	\$17,031	33.3	\$1,786.00	28.1
CIT	\$12,647	\$4,702	9.2	\$602.00	9.5
MINE	\$8,360	\$2,946	5.8	\$398.00	6.3
Other Direct Taxes	\$3,870	\$1,702	3.3	\$184.00	2.9
Indirect Taxes	\$1,571	\$684	1.3	\$75.00	1.2
Induced Taxes	\$4,539	\$2,040	4.0	\$216.00	3.4
Total Taxes	\$30,987	\$12,074	23.6	\$1,475.00	23.2
Electricity Consumption	133,400	51,161		6352.0	
<b>Income and Tax benefits</b>	<b>\$68,491</b>	<b>\$29,105</b>	<b>56.9</b>	<b>\$3,261</b>	<b>51.3</b>

## **2.4 Concluding Observations**

This analysis demonstrates the significant economic impacts the iron ore mining industry is having on the economy and treasury of Newfoundland and Labrador. The already impressive economic impacts could increase by a factor of three if all anticipated increases in production perceived in this analysis proceed. This analysis assumes that the availability power and labour will not pose any constraints on development.

## **Appendix A**

### **Inter-Industry Sales by Scenario and Industry**

## Appendix A1: Inter-Industry Sales – Base Case

Industry	Base Case Direct Sales by Industry in NL From Capex & Opex	Base Case Indirect Sales by Industry in NL From Capex & Opex	Base Case Induced Sales by Industry in NL From Capex & Opex	Base Case Total Sales by Industry in NL From Capex & Opex
001 Crop and Animal Production	\$0	\$6,434,269	\$17,985,785	\$24,420,054
002 Forestry and Logging	\$0	\$11,719,790	\$12,592,644	\$24,312,434
003 Fishing, Hunting and Trapping	\$0	\$356,198	\$3,675,590	\$4,031,788
004 Support Activities for Agriculture and Forestry	\$0	\$1,196,029	\$2,203,805	\$3,399,834
005 Oil and Gas Extraction	\$0	\$21,979,086	\$2,451,955	\$24,431,041
006 Coal Mining	\$0	\$3,370,424	\$371,786	\$3,742,209
007 Metal Ore Mining	\$14,992,000,000	\$21,676,226	\$1,104,310	\$15,014,780,535
008 Non-Metallic Mineral Mining and Quarrying	\$0	\$341,100,482	\$1,375,057	\$342,475,538
009 Support Activities for Mining and Oil and Gas Extraction	\$0	\$657,232,314	\$760,288	\$657,992,603
010 Electric Power Generation, Transmission and Distribution	\$0	\$1,018,965,387	\$121,087,079	\$1,140,052,466
011 Natural Gas Distribution, Water, Sewage and Other Systems	\$0	\$3,113,156	\$2,656,870	\$5,770,026
012 Residential Building Construction	\$0	\$458	\$337	\$795
013 Non-residential Building Construction	\$0	\$458	\$337	\$795
014 Transportation Engineering Construction	\$0	\$458	\$337	\$795
015 Oil and Gas Engineering Construction	\$0	\$458	\$337	\$795
016 Electric Power Engineering Construction	\$0	\$458	\$337	\$795
017 Communication Engineering Construction	\$0	\$458	\$337	\$795
018 Other Engineering Construction	\$3,227,000,000	\$458	\$337	\$3,227,000,795
019 Repair Construction	\$0	\$505,776,957	\$71,952,299	\$577,729,256
020 Other Activities of the Construction Industry	\$0	\$60,302,812	\$2,301,844	\$62,604,655
021 Animal Food Manufacturing	\$0	\$2,560,372	\$1,924,086	\$4,484,458
022 Sugar and Confectionery Product Manufacturing	\$0	\$1,031,211	\$636,388	\$1,667,598
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	\$0	\$3,502,915	\$2,631,526	\$6,134,441
024 Dairy Product Manufacturing	\$0	\$5,071,111	\$10,743,827	\$15,814,939
025 Meat Product Manufacturing	\$0	\$5,907,600	\$14,568,111	\$20,475,711
026 Seafood Product Preparation and Packaging	\$0	\$1,055,363	\$6,961,468	\$8,016,831
027 Miscellaneous Food Manufacturing	\$0	\$16,421,146	\$14,993,942	\$31,415,088

Industry	Base Case Direct Sales by Industry in NL From Capex & Opex	Base Case Indirect Sales by Industry in NL From Capex & Opex	Base Case Induced Sales by Industry in NL From Capex & Opex	Base Case Total Sales by Industry in NL From Capex & Opex
028 Beverage Manufacturing	\$0	\$8,083,346	\$32,137,823	\$40,221,169
029 Tobacco Manufacturing	\$0	\$3,403,438	\$296,111	\$3,699,549
030 Textile and Textile Product Mills	\$0	\$5,300,578	\$331,241	\$5,631,820
031 Clothing Manufacturing	\$0	\$975,632	\$197,511	\$1,173,143
032 Leather and Allied Product Manufacturing	\$0	\$421,804	\$383,327	\$805,132
033 Sawmills	\$0	\$13,229,355	\$2,054,126	\$15,283,481
034 Plywood	\$0	\$4,887,545	\$769,138	\$5,656,682
035 Doors&Windows	\$0	\$2,526,137	\$326,721	\$2,852,859
036 Other Wood Product Manufacturing	\$0	\$7,650,115	\$1,156,220	\$8,806,334
037 Pulp, Paper and Paperboard Mills	\$0	\$10,530,395	\$1,423,356	\$11,953,751
038 Converted Paper Product Manufacturing	\$0	\$13,916,650	\$2,828,305	\$16,744,955
039 Printing and Related Support Activities	\$0	\$10,662,857	\$3,818,696	\$14,481,552
040 Petroleum and Coal Products Manufacturing	\$0	\$9,807,015	\$1,070,196	\$10,877,212
041 Basic Chemical Manufacturing	\$0	\$10,115,272	\$553,623	\$10,668,895
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	\$0	\$3,152,817	\$339,671	\$3,492,487
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$0	\$32,528,093	\$773,881	\$33,301,974
044 Pharmaceutical and Medicine Manufacturing	\$0	\$7,358,306	\$990,125	\$8,348,431
045 Miscellaneous Chemical Product Manufacturing	\$0	\$36,785,259	\$2,182,660	\$38,967,918
046 Plastic Product Manufacturing	\$0	\$175,688,936	\$3,410,199	\$179,099,135
047 Rubber Product Manufacturing	\$0	\$27,983,793	\$495,815	\$28,479,608
048 Cement and Concrete Product Manufacturing	\$0	\$74,870,911	\$2,618,512	\$77,489,424
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	\$0	\$42,215,967	\$985,933	\$43,201,901
050 Primary Metal Manufacturing	\$0	\$43,714,682	\$2,053,882	\$45,768,564
051 Fabricated Metal Product Manufacturing	\$0	\$180,330,730	\$4,509,296	\$184,840,025
052 Machinery Manufacturing	\$0	\$103,221,018	\$3,705,651	\$106,926,669
053 Computer and Peripheral Equipment Manufacturing	\$0	\$687,047	\$52,592	\$739,639
054 Electronic Product Manufacturing	\$0	\$13,226,138	\$1,862,134	\$15,088,272
055 Household Appliance Manufacturing	\$0	\$543,986	\$169,356	\$713,342

Industry	Base Case Direct Sales by Industry in NL From Capex & Opex	Base Case Indirect Sales by Industry in NL From Capex & Opex	Base Case Induced Sales by Industry in NL From Capex & Opex	Base Case Total Sales by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	\$0	\$5,515,369	\$605,920	\$6,121,289
057 Motor Vehicle Manufacturing	\$0	\$70,139,554	\$2,725,207	\$72,864,761
058 Motor Vehicle Body and Trailer Manufacturing	\$0	\$38,288,670	\$727,623	\$39,016,293
059 Motor Vehicle Parts Manufacturing	\$0	\$937,276,971	\$11,623,447	\$948,900,418
060 Aerospace Product and Parts Manufacturing	\$0	\$5,852,634	\$603,342	\$6,455,976
061 Railroad Rolling Stock Manufacturing	\$0	\$588,030	\$46,991	\$635,021
062 Ship and Boat Building	\$0	\$952,405	\$2,284,759	\$3,237,164
063 Other Transportation Equipment Manufacturing	\$0	\$7,992,628	\$4,243,533	\$12,236,161
064 Furniture and Related Product Manufacturing	\$0	\$5,554,701	\$1,331,132	\$6,885,833
065 Miscellaneous Manufacturing	\$0	\$4,680,365	\$1,107,572	\$5,787,936
066 Wholesale Trade	\$0	\$300,657,216	\$66,278,788	\$366,936,004
067 Retail Trade	\$0	\$355,655,983	\$476,609,932	\$832,265,915
068 Air Transportation	\$0	\$10,231,410	\$10,361,478	\$20,592,888
069 Rail Transportation	\$0	\$6,235,597	\$2,080,951	\$8,316,548
070 Water Transportation	\$0	\$1,284,800	\$943,494	\$2,228,295
071 Truck Transportation	\$0	\$87,157,499	\$24,645,967	\$111,803,466
072 Transit and Ground Passenger Transportation	\$0	\$5,862,034	\$13,959,365	\$19,821,399
073 Pipeline Transportation	\$0	\$970,845	\$301,956	\$1,272,800
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	\$0	\$46,105,719	\$9,432,848	\$55,538,567
075 Postal Service and Couriers and Messengers	\$0	\$35,578,901	\$22,245,327	\$57,824,228
076 Warehousing and Storage	\$0	\$3,358,618	\$1,235,032	\$4,593,650
077 Publishing Industries, Information Services and Data Processing Services	\$0	\$38,473,729	\$16,439,586	\$54,913,315
078 Motion Picture and Sound Recording Industries	\$0	\$7,696,983	\$9,646,991	\$17,343,973
079 Radio and Television Broadcasting	\$0	\$5,995,633	\$12,815,324	\$18,810,957
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	\$0	\$102,697,029	\$118,430,445	\$221,127,473
081 Monetary Authorities and Depository Credit Intermediation	\$0	\$39,485,935	\$39,729,252	\$79,215,187
082 Insurance Carriers	\$0	\$33,203,543	\$89,594,512	\$122,798,055
083 Lessors of Real Estate	\$0	\$88,942,448	\$169,798,704	\$258,741,152

Industry	Base Case Direct Sales by Industry in NL From Capex & Opex	Base Case Indirect Sales by Industry in NL From Capex & Opex	Base Case Induced Sales by Industry in NL From Capex & Opex	Base Case Total Sales by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	\$0	\$458	\$498,183,560	\$498,184,019
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets (except Copyrighted Works)	\$0	\$27,934,075	\$13,885,830	\$41,819,904
086 Other Finance, Insurance and Real Estate and Management of Companies and Enterprises	\$0	\$117,695,596	\$131,305,586	\$249,001,182
087 Legal, Accounting and Architectural, Engineering and Related Services	\$0	\$783,790,942	\$35,847,074	\$819,638,016
088 Advertising and Related Services	\$0	\$12,234,383	\$7,019,717	\$19,254,100
089 Computer Systems Design and Other Professional, Scientific and Technical Services	\$0	\$350,429,855	\$40,687,680	\$391,117,536
090 Administrative and Support Services	\$0	\$439,547,668	\$56,198,230	\$495,745,898
091 Waste Management and Remediation Services	\$0	\$6,636,676	\$13,871,494	\$20,508,170
092 Educational Services (except Universities)	\$0	\$2,230,927	\$9,922,112	\$12,153,040
093 Health Care Services (except Hospitals) and Social Assistance	\$0	\$6,917,095	\$73,450,625	\$80,367,720
094 Arts, Entertainment and Recreation	\$0	\$10,734,811	\$44,202,733	\$54,937,543
095 Outfitters, accommodation and food services (NAICS 7200)	\$0	\$50,368,674	\$176,840,133	\$227,208,807
096 Repair and Maintenance	\$0	\$106,945,543	\$40,763,146	\$147,708,689
097 Personal and Laundry Services and Private Households	\$0	\$2,289,586	\$33,312,506	\$35,602,092
098 Grant-Making, Civic, and Professional and Similar Organizations	\$0	\$4,380,580	\$5,597,140	\$9,977,720
099 Operating Supplies	\$0	\$1,655,139,012	\$33,949,494	\$1,689,088,505
100 Office Supplies	\$0	\$46,818,207	\$12,281,615	\$59,099,822
101 Cafeteria Supplies	\$0	\$4,238,103	\$4,037,227	\$8,275,330
102 Laboratory Supplies	\$0	\$13,783,850	\$2,482,181	\$16,266,031
103 Travel and Entertainment	\$0	\$112,091,945	\$38,586,250	\$150,678,196
104 Advertising and Promotion	\$0	\$77,052,755	\$40,184,206	\$117,236,961
105 Transportation Margins	\$0	\$72,999,592	\$17,612,333	\$90,611,925
106 Religious & Welfare Organizations	\$0	\$5,724	\$40,712,864	\$40,718,588
107 Non-Profit Sports and Recreation Clubs	\$0	\$202,459	\$7,485,454	\$7,687,912
108 Non-Profit Education Institutions	\$0	\$953,020	\$8,936,363	\$9,889,383
109 Other Non-Profit Institutions Serving Households	\$0	\$3,681,605	\$36,377,799	\$40,059,404
110 Hospitals	\$0	\$10,009,255	\$9,743,664	\$19,752,919
111 Government Residential Care Facilities	\$0	\$268,643	\$2,947,386	\$3,216,029

Industry	Base Case Direct Sales by Industry in NL From Capex & Opex	Base Case Indirect Sales by Industry in NL From Capex & Opex	Base Case Induced Sales by Industry in NL From Capex & Opex	Base Case Total Sales by Industry in NL From Capex & Opex
112 Universities	\$0	\$14,549,249	\$17,174,583	\$31,723,832
113 Government Education Services	\$0	\$6,447,951	\$9,666,604	\$16,114,555
114 Other Municipal Government Services	\$0	\$21,682,792	\$32,114,707	\$53,797,499
115 Other Provincial and Territorial Government Services	\$0	\$31,784,872	\$13,233,485	\$45,018,357
116 Other Federal Government Services	\$0	\$30,124,969	\$11,963,330	\$42,088,298
117 Households	\$0	\$0	\$5,412,096,294	\$5,412,096,294
Total	\$18,219,000,000	\$9,803,000,000	\$8,407,000,000	\$36,429,000,000



## Appendix A2: Inter-Industry Sales – Scenario 1

Industry	Scenario 1 Direct Sales by Industry in NL From Capex & Opex	Scenario 1 Indirect Sales by Industry in NL From Capex & Opex	Scenario 1 Induced Sales by Industry in NL From Capex & Opex	Scenario 1 Total Sales by Industry in NL From Capex & Opex
001 Crop and Animal Production	\$0	\$10,316,409	\$27,291,915	\$37,608,324
002 Forestry and Logging	\$0	\$18,430,563	\$19,083,765	\$37,514,327
003 Fishing, Hunting and Trapping	\$0	\$585,597	\$5,631,945	\$6,217,542
004 Support Activities for Agriculture and Forestry	\$0	\$1,839,729	\$3,344,131	\$5,183,860
005 Oil and Gas Extraction	\$0	\$36,034,130	\$3,772,760	\$39,806,890
006 Coal Mining	\$0	\$4,937,109	\$563,966	\$5,501,075
007 Metal Ore Mining	\$22,122,000,000	\$33,261,828	\$1,699,283	\$22,156,961,111
008 Non-Metallic Mineral Mining and Quarrying	\$0	\$474,695,709	\$2,089,634	\$476,785,343
009 Support Activities for Mining and Oil and Gas Extraction	\$0	\$1,094,125,425	\$1,153,324	\$1,095,278,749
010 Electric Power Generation, Transmission and Distribution	\$0	\$1,493,181,607	\$183,659,704	\$1,676,841,312
011 Natural Gas Distribution, Water, Sewage and Other Systems	\$0	\$5,009,042	\$4,025,074	\$9,034,116
012 Residential Building Construction	\$0	\$716	\$512	\$1,228
013 Non-residential Building Construction	\$0	\$716	\$512	\$1,228
014 Transportation Engineering Construction	\$0	\$716	\$512	\$1,228
015 Oil and Gas Engineering Construction	\$0	\$716	\$512	\$1,228
016 Electric Power Engineering Construction	\$0	\$716	\$512	\$1,228
017 Communication Engineering Construction	\$0	\$716	\$512	\$1,228
018 Other Engineering Construction	\$5,262,000,000	\$716	\$512	\$5,262,001,228
019 Repair Construction	\$0	\$690,765,662	\$109,023,039	\$799,788,701
020 Other Activities of the Construction Industry	\$0	\$86,039,978	\$3,488,229	\$89,528,207
021 Animal Food Manufacturing	\$0	\$4,045,992	\$2,923,162	\$6,969,154
022 Sugar and Confectionery Product Manufacturing	\$0	\$1,670,667	\$964,118	\$2,634,785
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	\$0	\$5,750,574	\$3,992,000	\$9,742,575
024 Dairy Product Manufacturing	\$0	\$8,341,579	\$16,300,718	\$24,642,296
025 Meat Product Manufacturing	\$0	\$9,614,860	\$22,086,091	\$31,700,952
026 Seafood Product Preparation and Packaging	\$0	\$1,734,662	\$10,626,210	\$12,360,872
027 Miscellaneous Food Manufacturing	\$0	\$27,185,384	\$22,717,481	\$49,902,865

Industry	Scenario 1 Direct Sales by Industry in NL From Capex & Opex	Scenario 1 Indirect Sales by Industry in NL From Capex & Opex	Scenario 1 Induced Sales by Industry in NL From Capex & Opex	Scenario 1 Total Sales by Industry in NL From Capex & Opex
028 Beverage Manufacturing	\$0	\$13,168,694	\$48,722,982	\$61,891,676
029 Tobacco Manufacturing	\$0	\$5,668,772	\$448,497	\$6,117,269
030 Textile and Textile Product Mills	\$0	\$7,797,501	\$501,833	\$8,299,334
031 Clothing Manufacturing	\$0	\$1,504,480	\$299,328	\$1,803,808
032 Leather and Allied Product Manufacturing	\$0	\$678,026	\$594,396	\$1,272,421
033 Sawmills	\$0	\$20,498,815	\$3,115,516	\$23,614,331
034 Plywood	\$0	\$7,192,753	\$1,164,922	\$8,357,675
035 Doors&Windows	\$0	\$3,689,803	\$495,035	\$4,184,837
036 Other Wood Product Manufacturing	\$0	\$11,176,912	\$1,752,424	\$12,929,336
037 Pulp, Paper and Paperboard Mills	\$0	\$17,165,904	\$2,177,758	\$19,343,662
038 Converted Paper Product Manufacturing	\$0	\$21,150,258	\$4,287,094	\$25,437,351
039 Printing and Related Support Activities	\$0	\$17,184,688	\$5,786,010	\$22,970,699
040 Petroleum and Coal Products Manufacturing	\$0	\$15,854,889	\$1,622,192	\$17,477,081
041 Basic Chemical Manufacturing	\$0	\$16,361,992	\$839,040	\$17,201,032
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	\$0	\$4,931,366	\$514,744	\$5,446,111
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$0	\$45,810,361	\$1,173,137	\$46,983,498
044 Pharmaceutical and Medicine Manufacturing	\$0	\$11,991,762	\$1,500,156	\$13,491,918
045 Miscellaneous Chemical Product Manufacturing	\$0	\$50,319,661	\$3,308,490	\$53,628,151
046 Plastic Product Manufacturing	\$0	\$246,612,973	\$5,166,479	\$251,779,452
047 Rubber Product Manufacturing	\$0	\$39,460,356	\$750,922	\$40,211,278
048 Cement and Concrete Product Manufacturing	\$0	\$105,914,261	\$3,967,296	\$109,881,557
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	\$0	\$59,179,718	\$1,497,359	\$60,677,077
050 Primary Metal Manufacturing	\$0	\$61,466,534	\$3,113,821	\$64,580,355
051 Fabricated Metal Product Manufacturing	\$0	\$251,352,090	\$6,831,594	\$258,183,684
052 Machinery Manufacturing	\$0	\$156,825,048	\$5,613,698	\$162,438,746
053 Computer and Peripheral Equipment Manufacturing	\$0	\$1,107,350	\$79,675	\$1,187,025
054 Electronic Product Manufacturing	\$0	\$21,395,856	\$2,823,757	\$24,219,613
055 Household Appliance Manufacturing	\$0	\$844,570	\$256,585	\$1,101,155

Industry	Scenario 1 Direct Sales by Industry in NL From Capex & Opex	Scenario 1 Indirect Sales by Industry in NL From Capex & Opex	Scenario 1 Induced Sales by Industry in NL From Capex & Opex	Scenario 1 Total Sales by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	\$0	\$8,923,680	\$918,216	\$9,841,895
057 Motor Vehicle Manufacturing	\$0	\$103,354,339	\$4,127,638	\$107,481,977
058 Motor Vehicle Body and Trailer Manufacturing	\$0	\$53,767,848	\$1,102,030	\$54,869,878
059 Motor Vehicle Parts Manufacturing	\$0	\$1,308,062,114	\$17,602,357	\$1,325,664,471
060 Aerospace Product and Parts Manufacturing	\$0	\$9,748,825	\$914,475	\$10,663,301
061 Railroad Rolling Stock Manufacturing	\$0	\$839,169	\$71,169	\$910,339
062 Ship and Boat Building	\$0	\$1,552,350	\$3,465,728	\$5,018,078
063 Other Transportation Equipment Manufacturing	\$0	\$11,362,198	\$6,429,533	\$17,791,731
064 Furniture and Related Product Manufacturing	\$0	\$8,212,902	\$2,016,811	\$10,229,713
065 Miscellaneous Manufacturing	\$0	\$7,191,532	\$1,678,908	\$8,870,440
066 Wholesale Trade	\$0	\$451,680,018	\$100,461,776	\$552,141,794
067 Retail Trade	\$0	\$546,948,381	\$722,008,774	\$1,268,957,156
068 Air Transportation	\$0	\$16,439,349	\$15,896,358	\$32,335,708
069 Rail Transportation	\$0	\$9,489,231	\$3,174,086	\$12,663,316
070 Water Transportation	\$0	\$2,003,543	\$1,433,751	\$3,437,294
071 Truck Transportation	\$0	\$129,613,461	\$37,411,708	\$167,025,169
072 Transit and Ground Passenger Transportation	\$0	\$9,218,597	\$21,151,855	\$30,370,452
073 Pipeline Transportation	\$0	\$1,582,909	\$457,494	\$2,040,403
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	\$0	\$76,486,073	\$14,334,590	\$90,820,663
075 Postal Service and Couriers and Messengers	\$0	\$56,127,259	\$33,706,511	\$89,833,770
076 Warehousing and Storage	\$0	\$5,286,364	\$1,872,527	\$7,158,892
077 Publishing Industries, Information Services and Data Processing Services	\$0	\$61,798,249	\$24,912,072	\$86,710,321
078 Motion Picture and Sound Recording Industries	\$0	\$12,057,538	\$14,615,922	\$26,673,461
079 Radio and Television Broadcasting	\$0	\$9,408,303	\$19,425,442	\$28,833,745
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	\$0	\$165,132,009	\$179,491,918	\$344,623,927
081 Monetary Authorities and Depository Credit Intermediation	\$0	\$60,006,013	\$60,205,775	\$120,211,788
082 Insurance Carriers	\$0	\$50,607,865	\$135,750,443	\$186,358,308
083 Lessors of Real Estate	\$0	\$140,823,819	\$257,278,839	\$398,102,658

Industry	Scenario 1 Direct Sales by Industry in NL From Capex & Opex	Scenario 1 Indirect Sales by Industry in NL From Capex & Opex	Scenario 1 Induced Sales by Industry in NL From Capex & Opex	Scenario 1 Total Sales by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	\$0	\$716	\$754,659,078	\$754,659,794
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	\$0	\$43,055,951	\$21,043,711	\$64,099,662
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	\$0	\$179,478,792	\$198,949,242	\$378,428,033
087 Legal, Accounting and Architectural, Engineering and Related Services	\$0	\$1,262,845,325	\$54,294,001	\$1,317,139,326
088 Advertising and Related Services	\$0	\$19,006,148	\$10,636,164	\$29,642,313
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	\$0	\$582,231,894	\$61,644,942	\$643,876,837
090 Administrative and Support Services	\$0	\$727,545,705	\$85,128,205	\$812,673,910
091 Waste Management and Remediation Services	\$0	\$10,035,325	\$21,015,284	\$31,050,609
092 Educational Services (except Universities)	\$0	\$3,575,514	\$15,027,677	\$18,603,191
093 Health Care Services (except Hospitals) and Social Assistance	\$0	\$10,926,249	\$111,280,117	\$122,206,366
094 Arts, Entertainment and Recreation	\$0	\$17,195,993	\$66,964,569	\$84,160,562
095 Outfitters, accommodation and food services (NAICS 7200)	\$0	\$79,434,014	\$267,944,768	\$347,378,783
096 Repair and Maintenance	\$0	\$176,395,735	\$61,756,299	\$238,152,034
097 Personal and Laundry Services and Private Households	\$0	\$3,565,923	\$50,464,327	\$54,030,250
098 Grant-Making, Civic, and Professional and Similar Organizations	\$0	\$7,008,309	\$8,487,217	\$15,495,526
099 Operating Supplies	\$0	\$2,645,471,237	\$51,454,549	\$2,696,925,786
100 Office Supplies	\$0	\$74,131,710	\$18,610,288	\$92,741,998
101 Cafeteria Supplies	\$0	\$6,662,260	\$6,116,601	\$12,778,861
102 Laboratory Supplies	\$0	\$21,894,409	\$3,761,040	\$25,655,448
103 Travel and Entertainment	\$0	\$175,398,840	\$58,466,866	\$233,865,706
104 Advertising and Promotion	\$0	\$119,084,568	\$60,888,521	\$179,973,089
105 Transportation Margins	\$0	\$107,055,666	\$26,755,392	\$133,811,059
106 Religious & Welfare Organizations	\$0	\$9,438	\$61,672,719	\$61,682,157
107 Non-Profit Sports and Recreation Clubs	\$0	\$318,050	\$11,339,561	\$11,657,610
108 Non-Profit Education Institutions	\$0	\$1,500,937	\$13,535,923	\$15,036,860
109 Other Non-Profit Institutions Serving Households	\$0	\$5,808,315	\$55,114,865	\$60,923,180
110 Hospitals	\$0	\$16,648,337	\$14,760,984	\$31,409,321
111 Government Residential Care Facilities	\$0	\$423,654	\$4,465,316	\$4,888,970

Industry	Scenario 1 Direct Sales by Industry in NL From Capex & Opex	Scenario 1 Indirect Sales by Industry in NL From Capex & Opex	Scenario 1 Induced Sales by Industry in NL From Capex & Opex	Scenario 1 Total Sales by Industry in NL From Capex & Opex
112 Universities	\$0	\$23,322,875	\$26,013,626	\$49,336,502
113 Government Education Services	\$0	\$10,489,649	\$14,641,468	\$25,131,117
114 Other Municipal Government Services	\$0	\$32,807,682	\$48,656,846	\$81,464,528
115 Other Provincial and Territorial Government Services	\$0	\$49,947,402	\$20,057,220	\$70,004,622
116 Other Federal Government Services	\$0	\$48,122,530	\$18,132,829	\$66,255,358
117 Households	\$0	\$0	\$8,177,498,199	\$8,177,498,199
Total	\$27,384,000,000	\$15,003,000,000	\$12,716,000,000	\$55,103,000,000

## Appendix A3: Inter-Industry Sales – Scenario 2

Industry	Scenario 2 Direct Sales by Industry in NL From Capex & Opex	Scenario 2 Indirect Sales by Industry in NL From Capex & Opex	Scenario 2 Induced Sales by Industry in NL From Capex & Opex	Scenario 2 Total Sales by Industry in NL From Capex & Opex
001 Crop and Animal Production	\$0	\$15,775,070	\$41,419,852	\$57,194,922
002 Forestry and Logging	\$0	\$27,298,304	\$28,937,359	\$56,235,663
003 Fishing, Hunting and Trapping	\$0	\$889,437	\$8,604,392	\$9,493,829
004 Support Activities for Agriculture and Forestry	\$0	\$2,911,675	\$5,078,026	\$7,989,701
005 Oil and Gas Extraction	\$0	\$53,989,213	\$5,776,443	\$59,765,656
006 Coal Mining	\$0	\$7,018,050	\$855,561	\$7,873,611
007 Metal Ore Mining	\$30,751,000,000	\$50,819,261	\$2,603,074	\$30,804,422,335
008 Non-Metallic Mineral Mining and Quarrying	\$0	\$1,008,939,670	\$3,173,999	\$1,012,113,669
009 Support Activities for Mining and Oil and Gas Extraction	\$0	\$1,681,508,149	\$1,750,376	\$1,683,258,525
010 Electric Power Generation, Transmission and Distribution	\$0	\$2,124,028,276	\$278,602,440	\$2,402,630,715
011 Natural Gas Distribution, Water, Sewage and Other Systems	\$0	\$7,904,834	\$6,101,443	\$14,006,276
012 Residential Building Construction	\$0	\$1,231	\$778	\$2,009
013 Non-residential Building Construction	\$0	\$1,231	\$778	\$2,009
014 Transportation Engineering Construction	\$0	\$1,231	\$778	\$2,009
015 Oil and Gas Engineering Construction	\$0	\$1,231	\$778	\$2,009
016 Electric Power Engineering Construction	\$0	\$1,231	\$778	\$2,009
017 Communication Engineering Construction	\$0	\$1,231	\$778	\$2,009
018 Other Engineering Construction	\$9,120,000,000	\$1,231	\$778	\$9,120,002,009
019 Repair Construction	\$0	\$840,735,197	\$165,277,207	\$1,006,012,405
020 Other Activities of the Construction Industry	\$0	\$172,606,218	\$5,288,881	\$177,895,099
021 Animal Food Manufacturing	\$0	\$6,111,658	\$4,439,927	\$10,551,585
022 Sugar and Confectionery Product Manufacturing	\$0	\$2,518,237	\$1,461,503	\$3,979,740
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	\$0	\$8,703,128	\$6,062,139	\$14,765,267
024 Dairy Product Manufacturing	\$0	\$12,711,590	\$24,732,512	\$37,444,102
025 Meat Product Manufacturing	\$0	\$14,719,949	\$33,495,436	\$48,215,385
026 Seafood Product Preparation and Packaging	\$0	\$2,651,489	\$16,208,807	\$18,860,297
027 Miscellaneous Food Manufacturing	\$0	\$41,435,312	\$34,440,881	\$75,876,192

Industry	Scenario 2			Scenario 2			Scenario 2		
	Direct Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Scenario 2 Total Sales by Industry in NL From Capex & Opex			
028 Beverage Manufacturing	\$0	\$20,177,838	\$0	\$73,926,131	\$73,926,131	\$94,103,969			
029 Tobacco Manufacturing	\$0	\$8,662,863	\$0	\$679,850	\$679,850	\$9,342,713			
030 Textile and Textile Product Mills	\$0	\$14,644,715	\$0	\$760,804	\$760,804	\$15,405,519			
031 Clothing Manufacturing	\$0	\$2,225,887	\$0	\$453,919	\$453,919	\$2,679,806			
032 Leather and Allied Product Manufacturing	\$0	\$975,540	\$0	\$914,757	\$914,757	\$1,890,297			
033 Sawmills	\$0	\$29,530,055	\$0	\$4,726,998	\$4,726,998	\$34,257,053			
034 Plywood	\$0	\$9,940,430	\$0	\$1,765,714	\$1,765,714	\$11,706,144			
035 Doors&Windows	\$0	\$4,967,829	\$0	\$750,482	\$750,482	\$5,718,311			
036 Other Wood Product Manufacturing	\$0	\$15,645,031	\$0	\$2,657,504	\$2,657,504	\$18,302,535			
037 Pulp, Paper and Paperboard Mills	\$0	\$25,930,828	\$0	\$3,324,477	\$3,324,477	\$29,255,304			
038 Converted Paper Product Manufacturing	\$0	\$35,948,061	\$0	\$6,502,195	\$6,502,195	\$42,450,256			
039 Printing and Related Support Activities	\$0	\$26,742,803	\$0	\$8,772,051	\$8,772,051	\$35,514,855			
040 Petroleum and Coal Products Manufacturing	\$0	\$24,389,920	\$0	\$2,460,265	\$2,460,265	\$26,850,185			
041 Basic Chemical Manufacturing	\$0	\$25,816,063	\$0	\$1,272,364	\$1,272,364	\$27,088,427			
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	\$0	\$7,103,470	\$0	\$780,639	\$780,639	\$7,884,109			
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$0	\$94,066,131	\$0	\$1,779,202	\$1,779,202	\$95,845,333			
044 Pharmaceutical and Medicine Manufacturing	\$0	\$18,143,213	\$0	\$2,274,512	\$2,274,512	\$20,417,725			
045 Miscellaneous Chemical Product Manufacturing	\$0	\$63,556,003	\$0	\$5,018,583	\$5,018,583	\$68,574,586			
046 Plastic Product Manufacturing	\$0	\$509,327,758	\$0	\$7,832,753	\$7,832,753	\$517,160,511			
047 Rubber Product Manufacturing	\$0	\$81,340,973	\$0	\$1,138,179	\$1,138,179	\$82,479,152			
048 Cement and Concrete Product Manufacturing	\$0	\$238,807,328	\$0	\$6,014,326	\$6,014,326	\$244,821,654			
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	\$0	\$120,518,008	\$0	\$2,274,438	\$2,274,438	\$122,792,446			
050 Primary Metal Manufacturing	\$0	\$93,912,692	\$0	\$4,722,563	\$4,722,563	\$98,635,254			
051 Fabricated Metal Product Manufacturing	\$0	\$495,841,710	\$0	\$10,356,891	\$10,356,891	\$506,198,601			
052 Machinery Manufacturing	\$0	\$255,230,891	\$0	\$8,510,218	\$8,510,218	\$263,741,109			
053 Computer and Peripheral Equipment Manufacturing	\$0	\$1,773,452	\$0	\$120,794	\$120,794	\$1,894,245			
054 Electronic Product Manufacturing	\$0	\$32,850,543	\$0	\$4,283,519	\$4,283,519	\$37,134,063			
055 Household Appliance Manufacturing	\$0	\$1,356,305	\$0	\$388,981	\$388,981	\$1,745,286			

Industry	Scenario 2 Direct Sales by Industry in NL From Capex & Opex	Scenario 2 Indirect Sales by Industry in NL From Capex & Opex	Scenario 2 Induced Sales by Industry in NL From Capex & Opex	Scenario 2 Total Sales by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	\$0	\$13,656,696	\$1,392,324	\$15,049,021
057 Motor Vehicle Manufacturing	\$0	\$197,701,633	\$6,256,605	\$203,958,238
058 Motor Vehicle Body and Trailer Manufacturing	\$0	\$111,653,006	\$1,670,317	\$113,323,323
059 Motor Vehicle Parts Manufacturing	\$0	\$2,745,737,264	\$26,677,800	\$2,772,415,064
060 Aerospace Product and Parts Manufacturing	\$0	\$14,861,791	\$1,386,953	\$16,248,744
061 Railroad Rolling Stock Manufacturing	\$0	\$1,497,358	\$107,875	\$1,605,233
062 Ship and Boat Building	\$0	\$2,450,884	\$5,258,467	\$7,709,351
063 Other Transportation Equipment Manufacturing	\$0	\$22,780,857	\$9,746,742	\$32,527,598
064 Furniture and Related Product Manufacturing	\$0	\$11,408,053	\$3,057,507	\$14,465,560
065 Miscellaneous Manufacturing	\$0	\$11,215,312	\$2,546,193	\$13,761,504
066 Wholesale Trade	\$0	\$664,142,618	\$152,370,474	\$816,513,092
067 Retail Trade	\$0	\$845,216,910	\$1,094,409,128	\$1,939,626,038
068 Air Transportation	\$0	\$25,455,806	\$24,348,016	\$49,803,821
069 Rail Transportation	\$0	\$16,252,877	\$4,836,883	\$21,089,759
070 Water Transportation	\$0	\$3,446,464	\$2,179,585	\$5,626,048
071 Truck Transportation	\$0	\$218,234,131	\$56,828,167	\$275,062,298
072 Transit and Ground Passenger Transportation	\$0	\$14,393,148	\$32,070,880	\$46,464,027
073 Pipeline Transportation	\$0	\$2,431,687	\$693,566	\$3,125,253
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	\$0	\$117,741,811	\$21,787,230	\$139,529,042
075 Postal Service and Couriers and Messengers	\$0	\$86,785,862	\$51,100,240	\$137,886,101
076 Warehousing and Storage	\$0	\$8,247,038	\$2,840,443	\$11,087,481
077 Publishing Industries, Information Services and Data Processing Services	\$0	\$95,461,859	\$37,773,762	\$133,235,621
078 Motion Picture and Sound Recording Industries	\$0	\$18,724,701	\$22,156,630	\$40,881,332
079 Radio and Television Broadcasting	\$0	\$14,653,205	\$29,456,332	\$44,109,537
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	\$0	\$255,698,685	\$272,175,375	\$527,874,060
081 Monetary Authorities and Depository Credit Intermediation	\$0	\$97,443,767	\$91,280,425	\$188,724,192
082 Insurance Carriers	\$0	\$78,621,296	\$205,790,086	\$284,411,382
083 Lessors of Real Estate	\$0	\$218,317,327	\$390,028,198	\$608,345,526



Industry	Scenario 2			Scenario 2			Scenario 2		
	Direct Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	\$0	\$1,231	\$1,143,840,030	\$0	\$1,143,840,030	\$1,143,841,261	\$0	\$1,143,840,030	\$1,143,841,261
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	\$0	\$68,552,267	\$31,908,668	\$0	\$31,908,668	\$100,460,936	\$0	\$31,908,668	\$100,460,936
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	\$0	\$288,876,948	\$301,601,100	\$0	\$301,601,100	\$590,478,047	\$0	\$301,601,100	\$590,478,047
087 Legal, Accounting and Architectural, Engineering and Related Services	\$0	\$1,970,263,216	\$82,299,262	\$0	\$82,299,262	\$2,052,562,478	\$0	\$82,299,262	\$2,052,562,478
088 Advertising and Related Services	\$0	\$29,680,757	\$16,124,953	\$0	\$16,124,953	\$45,805,710	\$0	\$16,124,953	\$45,805,710
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	\$0	\$890,344,170	\$93,466,725	\$0	\$93,466,725	\$983,810,895	\$0	\$93,466,725	\$983,810,895
090 Administrative and Support Services	\$0	\$1,100,957,585	\$129,042,915	\$0	\$129,042,915	\$1,230,000,500	\$0	\$129,042,915	\$1,230,000,500
091 Waste Management and Remediation Services	\$0	\$17,026,313	\$31,856,116	\$0	\$31,856,116	\$48,882,429	\$0	\$31,856,116	\$48,882,429
092 Educational Services (except Universities)	\$0	\$5,401,186	\$22,776,098	\$0	\$22,776,098	\$28,177,284	\$0	\$22,776,098	\$28,177,284
093 Health Care Services (except Hospitals) and Social Assistance	\$0	\$16,410,206	\$168,697,769	\$0	\$168,697,769	\$185,107,975	\$0	\$168,697,769	\$185,107,975
094 Arts, Entertainment and Recreation	\$0	\$26,640,432	\$101,506,569	\$0	\$101,506,569	\$128,147,001	\$0	\$101,506,569	\$128,147,001
095 Outfitters, accommodation and food services (NAICS 7200)	\$0	\$123,619,743	\$406,212,718	\$0	\$406,212,718	\$529,832,461	\$0	\$406,212,718	\$529,832,461
096 Repair and Maintenance	\$0	\$274,204,352	\$93,615,846	\$0	\$93,615,846	\$367,820,198	\$0	\$93,615,846	\$367,820,198
097 Personal and Laundry Services and Private Households	\$0	\$5,639,489	\$76,491,803	\$0	\$76,491,803	\$82,131,292	\$0	\$76,491,803	\$82,131,292
098 Grant-Making, Civic, and Professional and Similar Organizations	\$0	\$10,858,446	\$12,872,705	\$0	\$12,872,705	\$23,731,151	\$0	\$12,872,705	\$23,731,151
099 Operating Supplies	\$0	\$3,385,061,184	\$78,025,542	\$0	\$78,025,542	\$3,463,086,726	\$0	\$78,025,542	\$3,463,086,726
100 Office Supplies	\$0	\$118,827,778	\$28,215,836	\$0	\$28,215,836	\$147,043,615	\$0	\$28,215,836	\$147,043,615
101 Cafeteria Supplies	\$0	\$10,312,829	\$9,272,313	\$0	\$9,272,313	\$19,585,142	\$0	\$9,272,313	\$19,585,142
102 Laboratory Supplies	\$0	\$35,502,891	\$5,702,400	\$0	\$5,702,400	\$41,205,291	\$0	\$5,702,400	\$41,205,291
103 Travel and Entertainment	\$0	\$273,938,436	\$88,640,460	\$0	\$88,640,460	\$362,578,896	\$0	\$88,640,460	\$362,578,896
104 Advertising and Promotion	\$0	\$186,508,974	\$92,312,676	\$0	\$92,312,676	\$278,821,651	\$0	\$92,312,676	\$278,821,651
105 Transportation Margins	\$0	\$187,989,794	\$40,678,289	\$0	\$40,678,289	\$228,668,083	\$0	\$40,678,289	\$228,668,083
106 Religious & Welfare Organizations	\$0	\$14,624	\$93,477,614	\$0	\$93,477,614	\$93,492,238	\$0	\$93,477,614	\$93,492,238
107 Non-Profit Sports and Recreation Clubs	\$0	\$496,647	\$17,188,280	\$0	\$17,188,280	\$17,684,927	\$0	\$17,188,280	\$17,684,927
108 Non-Profit Education Institutions	\$0	\$2,277,056	\$20,515,899	\$0	\$20,515,899	\$22,792,955	\$0	\$20,515,899	\$22,792,955
109 Other Non-Profit Institutions Serving Households	\$0	\$8,984,711	\$83,548,230	\$0	\$83,548,230	\$92,532,941	\$0	\$83,548,230	\$92,532,941
110 Hospitals	\$0	\$25,375,410	\$22,375,178	\$0	\$22,375,178	\$47,750,588	\$0	\$22,375,178	\$47,750,588
111 Government Residential Care Facilities	\$0	\$635,984	\$6,769,204	\$0	\$6,769,204	\$7,405,188	\$0	\$6,769,204	\$7,405,188

Industry	Scenario 2			
	Direct Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex
112 Universities	\$0	\$35,967,662	\$39,428,231	\$75,395,892
113 Government Education Services	\$0	\$16,012,037	\$22,191,609	\$38,203,647
114 Other Municipal Government Services	\$0	\$55,094,972	\$73,762,310	\$128,857,282
115 Other Provincial and Territorial Government Services	\$0	\$74,333,599	\$30,418,841	\$104,752,440
116 Other Federal Government Services	\$0	\$72,247,352	\$27,501,211	\$99,748,563
117 Households	\$0	\$0	\$12,151,657,581	\$12,151,657,581
Total	\$39,871,000,000	\$23,575,000,000	\$19,033,000,000	\$82,479,000,000

## Appendix A4: Inter-Industry Sales – Scenario 3

Industry	Scenario 3 Direct Sales by Industry in NL From Capex & Opex	Scenario 3 Indirect Sales by Industry in NL From Capex & Opex	Scenario 3 Induced Sales by Industry in NL From Capex & Opex	Scenario 3 Total Sales by Industry in NL From Capex & Opex
001 Crop and Animal Production	\$0	\$26,700,361	\$66,403,137	\$93,103,498
002 Forestry and Logging	\$0	\$45,550,589	\$46,419,979	\$91,970,568
003 Fishing, Hunting and Trapping	\$0	\$1,499,063	\$13,733,445	\$15,232,509
004 Support Activities for Agriculture and Forestry	\$0	\$4,823,976	\$8,142,604	\$12,966,580
005 Oil and Gas Extraction	\$0	\$91,648,647	\$9,200,914	\$100,849,561
006 Coal Mining	\$0	\$10,409,794	\$1,371,675	\$11,781,468
007 Metal Ore Mining	\$46,418,000,000	\$82,954,755	\$4,164,355	\$46,505,119,110
008 Non-Metallic Mineral Mining and Quarrying	\$0	\$1,723,091,084	\$5,084,799	\$1,728,175,883
009 Support Activities for Mining and Oil and Gas Extraction	\$0	\$2,999,109,721	\$2,806,680	\$3,001,916,401
010 Electric Power Generation, Transmission and Distribution	\$0	\$3,152,527,018	\$446,691,388	\$3,599,218,406
011 Natural Gas Distribution, Water, Sewage and Other Systems	\$0	\$13,611,543	\$9,788,594	\$23,400,137
012 Residential Building Construction	\$0	\$2,016	\$1,249	\$3,265
013 Non-residential Building Construction	\$0	\$2,016	\$1,249	\$3,265
014 Transportation Engineering Construction	\$0	\$2,016	\$1,249	\$3,265
015 Oil and Gas Engineering Construction	\$0	\$2,016	\$1,249	\$3,265
016 Electric Power Engineering Construction	\$0	\$2,016	\$1,249	\$3,265
017 Communication Engineering Construction	\$0	\$2,016	\$1,249	\$3,265
018 Other Engineering Construction	\$15,583,000,000	\$2,016	\$1,249	\$15,583,003,265
019 Repair Construction	\$0	\$1,147,453,967	\$265,139,090	\$1,412,593,058
020 Other Activities of the Construction Industry	\$0	\$294,217,302	\$8,483,697	\$302,700,999
021 Animal Food Manufacturing	\$0	\$10,327,145	\$7,116,012	\$17,443,157
022 Sugar and Confectionery Product Manufacturing	\$0	\$4,323,131	\$2,344,633	\$6,667,764
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	\$0	\$15,092,451	\$9,723,173	\$24,815,623
024 Dairy Product Manufacturing	\$0	\$22,132,780	\$39,649,373	\$61,782,153
025 Meat Product Manufacturing	\$0	\$25,546,748	\$53,720,027	\$79,266,775
026 Seafood Product Preparation and Packaging	\$0	\$4,559,340	\$25,936,071	\$30,495,410
027 Miscellaneous Food Manufacturing	\$0	\$72,602,500	\$55,251,926	\$127,854,426

Industry	Scenario 3 Direct Sales by Industry in NL From Capex & Opex	Scenario 3 Indirect Sales by Industry in NL From Capex & Opex	Scenario 3 Induced Sales by Industry in NL From Capex & Opex	Scenario 3 Total Sales by Industry in NL From Capex & Opex
028 Beverage Manufacturing	\$0	\$34,915,038	\$118,568,590	\$153,483,628
029 Tobacco Manufacturing	\$0	\$15,285,550	\$1,090,731	\$16,376,281
030 Textile and Textile Product Mills	\$0	\$24,586,174	\$1,220,512	\$25,806,686
031 Clothing Manufacturing	\$0	\$3,650,642	\$728,122	\$4,378,764
032 Leather and Allied Product Manufacturing	\$0	\$1,512,829	\$1,466,975	\$2,979,804
033 Sawmills	\$0	\$48,524,085	\$7,581,794	\$56,105,879
034 Plywood	\$0	\$15,467,699	\$2,832,853	\$18,300,552
035 Doors&Windows	\$0	\$7,622,858	\$1,203,936	\$8,826,794
036 Other Wood Product Manufacturing	\$0	\$24,364,301	\$4,262,942	\$28,627,242
037 Pulp, Paper and Paperboard Mills	\$0	\$44,429,404	\$5,334,424	\$49,763,828
038 Converted Paper Product Manufacturing	\$0	\$61,940,799	\$10,429,505	\$72,370,304
039 Printing and Related Support Activities	\$0	\$46,271,226	\$14,072,180	\$60,343,406
040 Petroleum and Coal Products Manufacturing	\$0	\$42,312,460	\$3,945,855	\$46,258,315
041 Basic Chemical Manufacturing	\$0	\$42,359,413	\$2,041,215	\$44,400,628
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	\$0	\$11,566,023	\$1,252,209	\$12,818,232
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$0	\$157,178,452	\$2,853,483	\$160,031,935
044 Pharmaceutical and Medicine Manufacturing	\$0	\$31,296,486	\$3,648,775	\$34,945,261
045 Miscellaneous Chemical Product Manufacturing	\$0	\$90,204,951	\$8,049,418	\$98,254,369
046 Plastic Product Manufacturing	\$0	\$846,510,544	\$12,565,291	\$859,075,835
047 Rubber Product Manufacturing	\$0	\$135,781,488	\$1,826,055	\$137,607,543
048 Cement and Concrete Product Manufacturing	\$0	\$574,424,254	\$9,648,389	\$584,072,643
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	\$0	\$207,217,083	\$3,644,526	\$210,861,608
050 Primary Metal Manufacturing	\$0	\$150,101,896	\$7,573,680	\$157,675,575
051 Fabricated Metal Product Manufacturing	\$0	\$891,395,987	\$16,614,835	\$908,010,822
052 Machinery Manufacturing	\$0	\$451,672,339	\$13,652,638	\$465,324,977
053 Computer and Peripheral Equipment Manufacturing	\$0	\$3,167,602	\$193,787	\$3,361,389
054 Electronic Product Manufacturing	\$0	\$57,086,840	\$6,871,184	\$63,958,024
055 Household Appliance Manufacturing	\$0	\$2,284,293	\$624,018	\$2,908,311

Industry	Scenario 3			Scenario 3			Scenario 3		
	Direct Sales by Industry in NL From Capex & Opex	Indirect Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Induced Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex	Total Sales by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	\$0	\$23,810,906	\$26,044,256		\$2,233,350	\$26,044,256		\$26,044,256	\$26,044,256
057 Motor Vehicle Manufacturing	\$0	\$334,114,057	\$344,151,919		\$10,037,862	\$344,151,919		\$344,151,919	\$344,151,919
058 Motor Vehicle Body and Trailer Manufacturing	\$0	\$186,253,978	\$188,933,781		\$2,679,803	\$188,933,781		\$188,933,781	\$188,933,781
059 Motor Vehicle Parts Manufacturing	\$0	\$4,571,493,675	\$4,614,295,049		\$42,801,373	\$4,614,295,049		\$4,614,295,049	\$4,614,295,049
060 Aerospace Product and Parts Manufacturing	\$0	\$26,189,209	\$28,413,982		\$2,224,773	\$28,413,982		\$28,413,982	\$28,413,982
061 Railroad Rolling Stock Manufacturing	\$0	\$2,973,642	\$3,146,713		\$173,072	\$3,146,713		\$3,146,713	\$3,146,713
062 Ship and Boat Building	\$0	\$4,272,140	\$12,703,482		\$8,431,342	\$12,703,482		\$12,703,482	\$12,703,482
063 Other Transportation Equipment Manufacturing	\$0	\$37,942,988	\$53,578,496		\$15,635,509	\$53,578,496		\$53,578,496	\$53,578,496
064 Furniture and Related Product Manufacturing	\$0	\$17,936,023	\$22,840,984		\$4,904,961	\$22,840,984		\$22,840,984	\$22,840,984
065 Miscellaneous Manufacturing	\$0	\$18,814,100	\$22,897,881		\$4,083,781	\$22,897,881		\$22,897,881	\$22,897,881
066 Wholesale Trade	\$0	\$1,051,754,554	\$1,296,155,278		\$244,400,724	\$1,296,155,278		\$1,296,155,278	\$1,296,155,278
067 Retail Trade	\$0	\$1,340,346,079	\$3,096,126,816		\$1,755,780,737	\$3,096,126,816		\$3,096,126,816	\$3,096,126,816
068 Air Transportation	\$0	\$42,675,719	\$81,621,400		\$38,945,680	\$81,621,400		\$81,621,400	\$81,621,400
069 Rail Transportation	\$0	\$26,608,519	\$34,370,052		\$7,761,533	\$34,370,052		\$34,370,052	\$34,370,052
070 Water Transportation	\$0	\$5,641,293	\$9,133,772		\$3,492,479	\$9,133,772		\$9,133,772	\$9,133,772
071 Truck Transportation	\$0	\$358,434,325	\$449,585,949		\$91,151,624	\$449,585,949		\$449,585,949	\$449,585,949
072 Transit and Ground Passenger Transportation	\$0	\$24,418,615	\$75,868,045		\$51,449,430	\$75,868,045		\$75,868,045	\$75,868,045
073 Pipeline Transportation	\$0	\$4,219,565	\$5,332,206		\$1,112,641	\$5,332,206		\$5,332,206	\$5,332,206
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	\$0	\$206,361,653	\$241,289,198		\$34,927,545	\$241,289,198		\$241,289,198	\$241,289,198
075 Postal Service and Couriers and Messengers	\$0	\$146,519,732	\$228,494,241		\$81,974,509	\$228,494,241		\$228,494,241	\$228,494,241
076 Warehousing and Storage	\$0	\$13,877,152	\$18,432,931		\$4,555,779	\$18,432,931		\$18,432,931	\$18,432,931
077 Publishing Industries, Information Services and Data Processing Services	\$0	\$163,313,272	\$223,908,839		\$60,595,567	\$223,908,839		\$223,908,839	\$223,908,839
078 Motion Picture and Sound Recording Industries	\$0	\$31,117,621	\$66,663,216		\$35,545,595	\$66,663,216		\$66,663,216	\$66,663,216
079 Radio and Television Broadcasting	\$0	\$24,659,848	\$71,916,722		\$47,256,874	\$71,916,722		\$71,916,722	\$71,916,722
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	\$0	\$439,800,444	\$876,397,087		\$436,596,643	\$876,397,087		\$876,397,087	\$876,397,087
081 Monetary Authorities and Depository Credit Intermediation	\$0	\$160,772,901	\$307,194,838		\$146,421,936	\$307,194,838		\$307,194,838	\$307,194,838
082 Insurance Carriers	\$0	\$128,933,577	\$459,058,308		\$330,124,731	\$459,058,308		\$459,058,308	\$459,058,308
083 Lessors of Real Estate	\$0	\$371,542,261	\$997,288,555		\$625,746,294	\$997,288,555		\$997,288,555	\$997,288,555

Industry	Scenario 3 Direct Sales by Industry in NL From Capex & Opex	Scenario 3 Indirect Sales by Industry in NL From Capex & Opex	Scenario 3 Induced Sales by Industry in NL From Capex & Opex	Scenario 3 Total Sales by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	\$0	\$2,016	\$1,835,115,148	\$1,835,117,164
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	\$0	\$114,658,169	\$51,186,486	\$165,844,654
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	\$0	\$477,749,433	\$483,831,010	\$961,580,444
087 Legal, Accounting and Architectural, Engineering and Related Services	\$0	\$3,494,501,045	\$132,039,538	\$3,626,540,583
088 Advertising and Related Services	\$0	\$49,471,402	\$25,867,964	\$75,339,366
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	\$0	\$1,569,003,499	\$149,943,875	\$1,718,947,374
090 Administrative and Support Services	\$0	\$1,925,957,397	\$207,029,226	\$2,132,986,622
091 Waste Management and Remediation Services	\$0	\$28,668,497	\$51,106,854	\$79,775,351
092 Educational Services (except Universities)	\$0	\$9,162,352	\$36,541,387	\$45,703,739
093 Health Care Services (except Hospitals) and Social Assistance	\$0	\$27,610,841	\$270,636,871	\$298,247,713
094 Arts, Entertainment and Recreation	\$0	\$45,490,873	\$162,846,172	\$208,337,045
095 Outfitters, accommodation and food services (NAICS 7200)	\$0	\$209,463,446	\$651,637,204	\$861,100,651
096 Repair and Maintenance	\$0	\$481,180,792	\$150,186,872	\$631,367,664
097 Personal and Laundry Services and Private Households	\$0	\$9,366,066	\$122,717,920	\$132,083,985
098 Grant-Making, Civic, and Professional and Similar Organizations	\$0	\$18,600,794	\$20,642,250	\$39,243,044
099 Operating Supplies	\$0	\$4,840,795,945	\$125,156,806	\$4,965,952,751
100 Office Supplies	\$0	\$205,522,603	\$45,263,008	\$250,785,611
101 Cafeteria Supplies	\$0	\$17,262,722	\$14,875,155	\$32,137,877
102 Laboratory Supplies	\$0	\$62,160,967	\$9,147,909	\$71,308,876
103 Travel and Entertainment	\$0	\$463,584,549	\$142,197,706	\$605,782,255
104 Advertising and Promotion	\$0	\$310,569,298	\$148,087,493	\$458,656,791
105 Transportation Margins	\$0	\$304,851,501	\$65,216,038	\$370,067,539
106 Religious & Welfare Organizations	\$0	\$25,382	\$149,970,430	\$149,995,812
107 Non-Profit Sports and Recreation Clubs	\$0	\$841,544	\$27,575,483	\$28,417,027
108 Non-Profit Education Institutions	\$0	\$3,814,057	\$32,914,835	\$36,728,892
109 Other Non-Profit Institutions Serving Households	\$0	\$15,220,541	\$134,030,165	\$149,250,706
110 Hospitals	\$0	\$44,573,607	\$35,896,648	\$80,470,255
111 Government Residential Care Facilities	\$0	\$1,068,732	\$10,859,670	\$11,928,402

Industry	Scenario 3 Direct Sales by Industry in NL From Capex & Opex	Scenario 3 Indirect Sales by Industry in NL From Capex & Opex	Scenario 3 Induced Sales by Industry in NL From Capex & Opex	Scenario 3 Total Sales by Industry in NL From Capex & Opex
112 Universities	\$0	\$62,325,996	\$63,256,768	\$125,582,764
113 Government Education Services	\$0	\$27,548,631	\$35,603,252	\$63,151,883
114 Other Municipal Government Services	\$0	\$92,652,651	\$118,336,018	\$210,988,669
115 Other Provincial and Territorial Government Services	\$0	\$124,292,203	\$48,795,249	\$173,087,452
116 Other Federal Government Services	\$0	\$122,877,856	\$44,115,614	\$166,993,470
117 Households	\$0	\$0	\$19,171,348,596	\$19,171,348,596
Total	\$62,001,000,000	\$38,697,000,000	\$30,210,000,000	\$130,908,000,000

## **Appendix B**

### **Inter-Industry Employment by Scenario and Industry**



## Appendix A1: Inter-Industry Employment – Base Case

Industry	Base Case Direct Employment by Industry in NL From Capex & Opex	Base Case Indirect Employment by Industry in NL From Capex & Opex	Base Case Induced Employment by Industry in NL From Capex & Opex	Base Case Total Employment by Industry in NL From Capex & Opex
001 Crop and Animal Production	0	49	272	321
002 Forestry and Logging	0	39	83	122
003 Fishing, Hunting and Trapping	0	1	24	25
004 Support Activities for Agriculture and Forestry	0	6	23	29
005 Oil and Gas Extraction	0	15	3	18
006 Coal Mining	0	7	1	8
007 Metal Ore Mining	54,979	20	2	55,001
008 Non-Metallic Mineral Mining and Quarrying	0	2,037	16	2,053
009 Support Activities for Mining and Oil and Gas Extraction	0	4,234	10	4,244
010 Electric Power Generation, Transmission and Distribution	0	1,996	472	2,468
011 Natural Gas Distribution, Water, Sewage and Other Systems	0	8	14	22
012 Residential Building Construction	0	0	0	0
013 Non-residential Building Construction	0	0	0	0
014 Transportation Engineering Construction	0	0	0	0
015 Oil and Gas Engineering Construction	0	0	0	0
016 Electric Power Engineering Construction	0	0	0	0
017 Communication Engineering Construction	0	0	0	0
018 Other Engineering Construction	7,008	0	0	7,008
019 Repair Construction	0	2,575	729	3,304
020 Other Activities of the Construction Industry	0	135	10	146
021 Animal Food Manufacturing	0	4	6	10
022 Sugar and Confectionery Product Manufacturing	0	2	2	3
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	0	12	18	31
024 Dairy Product Manufacturing	0	8	36	44
025 Meat Product Manufacturing	0	15	74	89
026 Seafood Product Preparation and Packaging	0	6	79	85
027 Miscellaneous Food Manufacturing	0	179	325	503

Industry	Base Case Direct Employment by Industry in NL From Capex & Opex	Base Case Indirect Employment by Industry in NL From Capex & Opex	Base Case Induced Employment by Industry in NL From Capex & Opex	Base Case Total Employment by Industry in NL From Capex & Opex
028 Beverage Manufacturing	0	22	173	195
029 Tobacco Manufacturing	0	7	1	9
030 Textile and Textile Product Mills	0	35	4	39
031 Clothing Manufacturing	0	3	1	4
032 Leather and Allied Product Manufacturing	0	0	1	1
033 Sawmills	0	142	44	186
034 Plywood	0	47	15	61
035 Doors&Windows	0	30	8	38
036 Other Wood Product Manufacturing	0	50	15	65
037 Pulp, Paper and Paperboard Mills	0	29	8	37
038 Converted Paper Product Manufacturing	0	59	24	83
039 Printing and Related Support Activities	0	67	48	115
040 Petroleum and Coal Products Manufacturing	0	4	1	4
041 Basic Chemical Manufacturing	0	10	1	11
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	0	4	1	5
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	0	74	4	78
044 Pharmaceutical and Medicine Manufacturing	0	25	7	31
045 Miscellaneous Chemical Product Manufacturing	0	209	25	233
046 Plastic Product Manufacturing	0	786	30	817
047 Rubber Product Manufacturing	0	124	4	129
048 Cement and Concrete Product Manufacturing	0	332	23	355
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	0	196	9	205
050 Primary Metal Manufacturing	0	54	5	59
051 Fabricated Metal Product Manufacturing	0	909	45	954
052 Machinery Manufacturing	0	701	50	751
053 Computer and Peripheral Equipment Manufacturing	0	2	0	2
054 Electronic Product Manufacturing	0	55	15	70
055 Household Appliance Manufacturing	0	2	1	3

Industry	Base Case Direct Employment by Industry in NL From Capex & Opex	Base Case Indirect Employment by Industry in NL From Capex & Opex	Base Case Induced Employment by Industry in NL From Capex & Opex	Base Case Total Employment by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	0	22	5	27
057 Motor Vehicle Manufacturing	0	50	4	54
058 Motor Vehicle Body and Trailer Manufacturing	0	140	5	145
059 Motor Vehicle Parts Manufacturing	0	2,517	62	2,579
060 Aerospace Product and Parts Manufacturing	0	15	3	18
061 Railroad Rolling Stock Manufacturing	0	1	0	1
062 Ship and Boat Building	0	6	28	34
063 Other Transportation Equipment Manufacturing	0	20	21	41
064 Furniture and Related Product Manufacturing	0	45	21	66
065 Miscellaneous Manufacturing	0	31	14	45
066 Wholesale Trade	0	1,983	869	2,853
067 Retail Trade	0	5,713	15,226	20,939
068 Air Transportation	0	26	52	78
069 Rail Transportation	0	27	18	45
070 Water Transportation	0	4	6	11
071 Truck Transportation	0	733	412	1,144
072 Transit and Ground Passenger Transportation	0	76	359	435
073 Pipeline Transportation	0	1	1	2
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	0	283	115	399
075 Postal Service and Couriers and Messengers	0	519	645	1,164
076 Warehousing and Storage	0	36	27	63
077 Publishing Industries, Information Services and Data Processing Services	0	206	175	381
078 Motion Picture and Sound Recording Industries	0	36	89	125
079 Radio and Television Broadcasting	0	30	126	156
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	0	550	1,262	1,812
081 Monetary Authorities and Depository Credit Intermediation	0	104	208	312
082 Insurance Carriers	0	47	253	300
083 Lessors of Real Estate	0	141	536	677

Industry	Base Case Direct Employment by Industry in NL From Capex & Opex	Base Case Indirect Employment by Industry in NL From Capex & Opex	Base Case Induced Employment by Industry in NL From Capex & Opex	Base Case Total Employment by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	0	0	0	0
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	0	187	184	371
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	0	589	1,306	1,894
087 Legal, Accounting and Architectural, Engineering and Related Services	0	7,063	642	7,705
088 Advertising and Related Services	0	116	133	249
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	0	3,109	718	3,827
090 Administrative and Support Services	0	6,181	1,572	7,752
091 Waste Management and Remediation Services	0	64	265	329
092 Educational Services (except Universities)	0	40	358	398
093 Health Care Services (except Hospitals) and Social Assistance	0	114	2,410	2,525
094 Arts, Entertainment and Recreation	0	100	815	915
095 Outfitters, accommodation and food services (NAICS 7200)	0	772	5,394	6,166
096 Repair and Maintenance	0	2,319	1,758	4,078
097 Personal and Laundry Services and Private Households	0	62	1,788	1,850
098 Grant-Making, Civic, and Professional and Similar Organizations	0	61	155	215
099 Operating Supplies	0	0	0	0
100 Office Supplies	0	0	0	0
101 Cafeteria Supplies	0	0	0	0
102 Laboratory Supplies	0	0	0	0
103 Travel and Entertainment	0	0	0	0
104 Advertising and Promotion	0	0	0	0
105 Transportation Margins	0	0	0	0
106 Religious & Welfare Organizations	0	0	1,432	1,432
107 Non-Profit Sports and Recreation Clubs	0	2	182	184
108 Non-Profit Education Institutions	0	10	190	200
109 Other Non-Profit Institutions Serving Households	0	57	1,125	1,182
110 Hospitals	0	95	185	280
111 Government Residential Care Facilities	0	4	77	80

Industry	Base Case Direct Employment by Industry in NL From Capex & Opex	Base Case Indirect Employment by Industry in NL From Capex & Opex	Base Case Induced Employment by Industry in NL From Capex & Opex	Base Case Total Employment by Industry in NL From Capex & Opex
112 Universities	0	121	284	405
113 Government Education Services	0	73	217	289
114 Other Municipal Government Services	0	187	552	739
115 Other Provincial and Territorial Government Services	0	159	132	290
116 Other Federal Government Services	0	178	141	319
117 Households	0	0	0	0
Total	61,987	50,355	45,320	157,662

## Appendix B2: Inter-Industry Employment – Scenario 1

Industry	Scenario 1 Direct Employment by Industry in NL From Capex & Opex	Scenario 1 Indirect Employment by Industry in NL From Capex & Opex	Scenario 1 Induced Employment by Industry in NL From Capex & Opex	Scenario 1 Total Employment by Industry in NL From Capex & Opex
001 Crop and Animal Production	0	78	405	484
002 Forestry and Logging	0	61	124	185
003 Fishing, Hunting and Trapping	0	2	36	38
004 Support Activities for Agriculture and Forestry	0	10	34	43
005 Oil and Gas Extraction	0	25	5	30
006 Coal Mining	0	10	2	12
007 Metal Ore Mining	80,415	31	3	80,449
008 Non-Metallic Mineral Mining and Quarrying	0	2,835	24	2,859
009 Support Activities for Mining and Oil and Gas Extraction	0	7,049	15	7,063
010 Electric Power Generation, Transmission and Distribution	0	2,925	703	3,628
011 Natural Gas Distribution, Water, Sewage and Other Systems	0	13	21	34
012 Residential Building Construction	0	0	0	0
013 Non-residential Building Construction	0	0	0	0
014 Transportation Engineering Construction	0	0	0	0
015 Oil and Gas Engineering Construction	0	0	0	0
016 Electric Power Engineering Construction	0	0	0	0
017 Communication Engineering Construction	0	0	0	0
018 Other Engineering Construction	11,689	0	0	11,689
019 Repair Construction	0	3,517	1,084	4,601
020 Other Activities of the Construction Industry	0	193	15	208
021 Animal Food Manufacturing	0	6	9	15
022 Sugar and Confectionery Product Manufacturing	0	2	3	5
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	0	20	28	48
024 Dairy Product Manufacturing	0	14	53	67
025 Meat Product Manufacturing	0	25	111	135
026 Seafood Product Preparation and Packaging	0	10	119	129
027 Miscellaneous Food Manufacturing	0	296	483	779

Industry	Scenario 1 Direct Employment by Industry in NL From Capex & Opex	Scenario 1 Indirect Employment by Industry in NL From Capex & Opex	Scenario 1 Induced Employment by Industry in NL From Capex & Opex	Scenario 1 Total Employment by Industry in NL From Capex & Opex
028 Beverage Manufacturing	0	36	258	293
029 Tobacco Manufacturing	0	12	2	14
030 Textile and Textile Product Mills	0	51	6	58
031 Clothing Manufacturing	0	5	2	7
032 Leather and Allied Product Manufacturing	0	1	1	2
033 Sawmills	0	221	65	286
034 Plywood	0	69	22	90
035 Doors&Windows	0	44	11	55
036 Other Wood Product Manufacturing	0	74	23	96
037 Pulp, Paper and Paperboard Mills	0	47	12	59
038 Converted Paper Product Manufacturing	0	90	36	125
039 Printing and Related Support Activities	0	108	71	179
040 Petroleum and Coal Products Manufacturing	0	6	1	7
041 Basic Chemical Manufacturing	0	16	2	18
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	0	6	1	7
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	0	104	5	110
044 Pharmaceutical and Medicine Manufacturing	0	40	10	50
045 Miscellaneous Chemical Product Manufacturing	0	286	37	322
046 Plastic Product Manufacturing	0	1,104	45	1,149
047 Rubber Product Manufacturing	0	175	7	182
048 Cement and Concrete Product Manufacturing	0	470	34	504
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	0	275	14	288
050 Primary Metal Manufacturing	0	76	8	84
051 Fabricated Metal Product Manufacturing	0	1,267	67	1,334
052 Machinery Manufacturing	0	1,065	74	1,139
053 Computer and Peripheral Equipment Manufacturing	0	3	0	4
054 Electronic Product Manufacturing	0	89	23	112
055 Household Appliance Manufacturing	0	3	2	5

Industry	Scenario 1 Direct Employment by Industry in NL From Capex & Opex	Scenario 1 Indirect Employment by Industry in NL From Capex & Opex	Scenario 1 Induced Employment by Industry in NL From Capex & Opex	Scenario 1 Total Employment by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	0	36	7	43
057 Motor Vehicle Manufacturing	0	73	6	79
058 Motor Vehicle Body and Trailer Manufacturing	0	196	8	204
059 Motor Vehicle Parts Manufacturing	0	3,512	92	3,605
060 Aerospace Product and Parts Manufacturing	0	25	5	30
061 Railroad Rolling Stock Manufacturing	0	2	0	2
062 Ship and Boat Building	0	10	42	51
063 Other Transportation Equipment Manufacturing	0	28	31	60
064 Furniture and Related Product Manufacturing	0	66	32	98
065 Miscellaneous Manufacturing	0	47	21	68
066 Wholesale Trade	0	2,979	1,294	4,273
067 Retail Trade	0	8,785	22,646	31,432
068 Air Transportation	0	42	79	120
069 Rail Transportation	0	42	27	69
070 Water Transportation	0	7	10	16
071 Truck Transportation	0	1,089	614	1,703
072 Transit and Ground Passenger Transportation	0	119	534	653
073 Pipeline Transportation	0	2	1	3
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	0	470	172	642
075 Postal Service and Couriers and Messengers	0	819	960	1,778
076 Warehousing and Storage	0	57	40	97
077 Publishing Industries, Information Services and Data Processing Services	0	331	261	592
078 Motion Picture and Sound Recording Industries	0	56	133	189
079 Radio and Television Broadcasting	0	47	188	235
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	0	885	1,878	2,762
081 Monetary Authorities and Depository Credit Intermediation	0	158	309	467
082 Insurance Carriers	0	72	376	448
083 Lessors of Real Estate	0	223	797	1,021



Industry	Scenario 1 Direct Employment by Industry in NL From Capex & Opex	Scenario 1 Indirect Employment by Industry in NL From Capex & Opex	Scenario 1 Induced Employment by Industry in NL From Capex & Opex	Scenario 1 Total Employment by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	0	0	0	0
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	0	287	274	562
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	0	897	1,943	2,840
087 Legal, Accounting and Architectural, Engineering and Related Services	0	11,379	955	12,334
088 Advertising and Related Services	0	181	197	378
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	0	5,166	1,068	6,234
090 Administrative and Support Services	0	10,230	2,337	12,567
091 Waste Management and Remediation Services	0	96	394	491
092 Educational Services (except Universities)	0	65	532	597
093 Health Care Services (except Hospitals) and Social Assistance	0	180	3,585	3,766
094 Arts, Entertainment and Recreation	0	159	1,213	1,372
095 Outfitters, accommodation and food services (NAICS 7200)	0	1,218	8,024	9,242
096 Repair and Maintenance	0	3,825	2,615	6,441
097 Personal and Laundry Services and Private Households	0	96	2,660	2,756
098 Grant-Making, Civic, and Professional and Similar Organizations	0	97	230	327
099 Operating Supplies	0	0	0	0
100 Office Supplies	0	0	0	0
101 Cafeteria Supplies	0	0	0	0
102 Laboratory Supplies	0	0	0	0
103 Travel and Entertainment	0	0	0	0
104 Advertising and Promotion	0	0	0	0
105 Transportation Margins	0	0	0	0
106 Religious & Welfare Organizations	0	0	2,130	2,130
107 Non-Profit Sports and Recreation Clubs	0	4	270	274
108 Non-Profit Education Institutions	0	16	283	299
109 Other Non-Profit Institutions Serving Households	0	90	1,673	1,763
110 Hospitals	0	159	275	434
111 Government Residential Care Facilities	0	6	114	120

<b>Industry</b>	<b>Scenario 1 Direct Employment by Industry in NL From Capex &amp; Opex</b>	<b>Scenario 1 Indirect Employment by Industry in NL From Capex &amp; Opex</b>	<b>Scenario 1 Induced Employment by Industry in NL From Capex &amp; Opex</b>	<b>Scenario 1 Total Employment by Industry in NL From Capex &amp; Opex</b>
112 Universities	0	194	422	616
113 Government Education Services	0	118	322	440
114 Other Municipal Government Services	0	284	821	1,105
115 Other Provincial and Territorial Government Services	0	250	196	445
116 Other Federal Government Services	0	285	210	495
117 Households	0	0	0	0
<b>Total</b>	<b>92,104</b>	<b>78,325</b>	<b>67,419</b>	<b>237,848</b>

## Appendix B3: Inter-Industry Employment – Scenario 2

Industry	Scenario 2 Direct Employment by Industry in NL From Capex & Opex	Scenario 2 Indirect Employment by Industry in NL From Capex & Opex	Scenario 2 Induced Employment by Industry in NL From Capex & Opex	Scenario 2 Total Employment by Industry in NL From Capex & Opex
001 Crop and Animal Production	0	120	536	656
002 Forestry and Logging	0	91	164	255
003 Fishing, Hunting and Trapping	0	3	48	51
004 Support Activities for Agriculture and Forestry	0	15	45	60
005 Oil and Gas Extraction	0	37	7	44
006 Coal Mining	0	14	3	17
007 Metal Ore Mining	98,648	48	4	98,700
008 Non-Metallic Mineral Mining and Quarrying	0	6,025	32	6,058
009 Support Activities for Mining and Oil and Gas Extraction	0	10,833	19	10,852
010 Electric Power Generation, Transmission and Distribution	0	4,161	929	5,091
011 Natural Gas Distribution, Water, Sewage and Other Systems	0	21	28	49
012 Residential Building Construction	0	0	0	0
013 Non-residential Building Construction	0	0	0	0
014 Transportation Engineering Construction	0	0	0	0
015 Oil and Gas Engineering Construction	0	0	0	0
016 Electric Power Engineering Construction	0	0	0	0
017 Communication Engineering Construction	0	0	0	0
018 Other Engineering Construction	20,114	0	0	20,114
019 Repair Construction	0	4,281	1,433	5,714
020 Other Activities of the Construction Industry	0	387	20	407
021 Animal Food Manufacturing	0	10	12	22
022 Sugar and Confectionery Product Manufacturing	0	4	4	7
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	0	31	36	67
024 Dairy Product Manufacturing	0	21	71	92
025 Meat Product Manufacturing	0	38	146	184
026 Seafood Product Preparation and Packaging	0	15	158	173
027 Miscellaneous Food Manufacturing	0	451	638	1,089

Industry	Scenario 2 Direct Employment by Industry in NL From Capex & Opex	Scenario 2 Indirect Employment by Industry in NL From Capex & Opex	Scenario 2 Induced Employment by Industry in NL From Capex & Opex	Scenario 2 Total Employment by Industry in NL From Capex & Opex
028 Beverage Manufacturing	0	55	341	395
029 Tobacco Manufacturing	0	19	3	21
030 Textile and Textile Product Mills	0	96	9	105
031 Clothing Manufacturing	0	7	2	9
032 Leather and Allied Product Manufacturing	0	1	1	2
033 Sawmills	0	318	87	404
034 Plywood	0	95	29	124
035 Doors&Windows	0	59	15	74
036 Other Wood Product Manufacturing	0	103	30	133
037 Pulp, Paper and Paperboard Mills	0	72	16	87
038 Converted Paper Product Manufacturing	0	153	47	200
039 Printing and Related Support Activities	0	168	94	262
040 Petroleum and Coal Products Manufacturing	0	9	2	10
041 Basic Chemical Manufacturing	0	26	2	28
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	0	8	2	10
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	0	214	7	221
044 Pharmaceutical and Medicine Manufacturing	0	61	13	74
045 Miscellaneous Chemical Product Manufacturing	0	361	48	409
046 Plastic Product Manufacturing	0	2,279	60	2,339
047 Rubber Product Manufacturing	0	361	9	370
048 Cement and Concrete Product Manufacturing	0	1,059	45	1,105
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	0	559	18	577
050 Primary Metal Manufacturing	0	116	10	126
051 Fabricated Metal Product Manufacturing	0	2,500	89	2,588
052 Machinery Manufacturing	0	1,733	98	1,831
053 Computer and Peripheral Equipment Manufacturing	0	6	1	6
054 Electronic Product Manufacturing	0	136	30	167
055 Household Appliance Manufacturing	0	5	2	7

Industry	Scenario 2 Direct Employment by Industry in NL From Capex & Opex	Scenario 2 Indirect Employment by Industry in NL From Capex & Opex	Scenario 2 Induced Employment by Industry in NL From Capex & Opex	Scenario 2 Total Employment by Industry in NL From Capex & Opex
056 Electrical Equipment and Component Manufacturing	0	55	10	64
057 Motor Vehicle Manufacturing	0	140	8	148
058 Motor Vehicle Body and Trailer Manufacturing	0	408	10	418
059 Motor Vehicle Parts Manufacturing	0	7,373	122	7,495
060 Aerospace Product and Parts Manufacturing	0	39	6	45
061 Railroad Rolling Stock Manufacturing	0	3	0	3
062 Ship and Boat Building	0	15	55	70
063 Other Transportation Equipment Manufacturing	0	57	41	98
064 Furniture and Related Product Manufacturing	0	92	42	134
065 Miscellaneous Manufacturing	0	73	28	102
066 Wholesale Trade	0	4,381	1,711	6,092
067 Retail Trade	0	13,577	29,927	43,504
068 Air Transportation	0	65	105	170
069 Rail Transportation	0	71	36	107
070 Water Transportation	0	12	13	25
071 Truck Transportation	0	1,834	813	2,647
072 Transit and Ground Passenger Transportation	0	186	706	892
073 Pipeline Transportation	0	2	1	4
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	0	723	228	951
075 Postal Service and Couriers and Messengers	0	1,266	1,269	2,534
076 Warehousing and Storage	0	89	52	142
077 Publishing Industries, Information Services and Data Processing Services	0	511	344	856
078 Motion Picture and Sound Recording Industries	0	87	176	263
079 Radio and Television Broadcasting	0	73	249	321
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	0	1,370	2,482	3,852
081 Monetary Authorities and Depository Credit Intermediation	0	256	409	665
082 Insurance Carriers	0	111	497	608
083 Lessors of Real Estate	0	346	1,054	1,400

Industry	Scenario 2 Direct Employment by Industry in NL From Capex & Opex	Scenario 2 Indirect Employment by Industry in NL From Capex & Opex	Scenario 2 Induced Employment by Industry in NL From Capex & Opex	Scenario 2 Total Employment by Industry in NL From Capex & Opex
084 Owner-Occupied Dwellings	0	0	0	0
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets <i>(Lowest Contributed Model)</i>	0	458	363	820
086 Other Finance, Insurance and Real Estate and Management of Companies <i>and Enterprises</i>	0	1,444	2,567	4,012
087 Legal, Accounting and Architectural, Engineering and Related Services	0	17,753	1,262	19,016
088 Advertising and Related Services	0	282	261	543
089 Computer Systems Design and Other Professional, Scientific and Technical <i>Services</i>	0	7,900	1,412	9,312
090 Administrative and Support Services	0	15,480	3,089	18,569
091 Waste Management and Remediation Services	0	164	521	685
092 Educational Services (except Universities)	0	98	703	801
093 Health Care Services (except Hospitals) and Social Assistance	0	271	4,739	5,010
094 Arts, Entertainment and Recreation	0	247	1,603	1,850
095 Outfitters, accommodation and food services (NAICS 7200)	0	1,896	10,605	12,501
096 Repair and Maintenance	0	5,946	3,456	9,403
097 Personal and Laundry Services and Private Households	0	152	3,515	3,667
098 Grant-Making, Civic, and Professional and Similar Organizations	0	151	304	455
099 Operating Supplies	0	0	0	0
100 Office Supplies	0	0	0	0
101 Cafeteria Supplies	0	0	0	0
102 Laboratory Supplies	0	0	0	0
103 Travel and Entertainment	0	0	0	0
104 Advertising and Promotion	0	0	0	0
105 Transportation Margins	0	0	0	0
106 Religious & Welfare Organizations	0	0	2,814	2,814
107 Non-Profit Sports and Recreation Clubs	0	6	357	363
108 Non-Profit Education Institutions	0	24	374	398
109 Other Non-Profit Institutions Serving Households	0	140	2,211	2,351
110 Hospitals	0	242	363	605
111 Government Residential Care Facilities	0	8	151	159

Industry	Scenario 2 Direct Employment by Industry in NL From Capex & Opex	Scenario 2 Indirect Employment by Industry in NL From Capex & Opex	Scenario 2 Induced Employment by Industry in NL From Capex & Opex	Scenario 2 Total Employment by Industry in NL From Capex & Opex
112 Universities	0	299	558	856
113 Government Education Services	0	180	426	606
114 Other Municipal Government Services	0	476	1,085	1,562
115 Other Provincial and Territorial Government Services	0	372	259	630
116 Other Federal Government Services	0	428	277	705
117 Households	0	0	0	0
Total	118,762	124,818	89,110	332,690

## Appendix B4: Inter-Industry Employment – Scenario 3

Industry	Scenario 3 Direct Employment by Industry in NL From Capex & Opex	Scenario 3 Indirect Employment by Industry in NL From Capex & Opex	Scenario 3 Induced Employment by Industry in NL From Capex & Opex	Scenario 3 Total Employment by Industry in NL From Capex & Opex
001 Crop and Animal Production	0	203	782	985
002 Forestry and Logging	0	152	239	391
003 Fishing, Hunting and Trapping	0	5	69	74
004 Support Activities for Agriculture and Forestry	0	25	65	90
005 Oil and Gas Extraction	0	63	10	73
006 Coal Mining	0	21	4	25
007 Metal Ore Mining	133,651	78	6	133,735
008 Non-Metallic Mineral Mining and Quarrying	0	10,290	47	10,337
009 Support Activities for Mining and Oil and Gas Extraction	0	19,322	28	19,350
010 Electric Power Generation, Transmission and Distribution	0	6,177	1,355	7,532
011 Natural Gas Distribution, Water, Sewage and Other Systems	0	36	40	77
012 Residential Building Construction	0	0	0	0
013 Non-residential Building Construction	0	0	0	0
014 Transportation Engineering Construction	0	0	0	0
015 Oil and Gas Engineering Construction	0	0	0	0
016 Electric Power Engineering Construction	0	0	0	0
017 Communication Engineering Construction	0	0	0	0
018 Other Engineering Construction	39,445	0	0	39,445
019 Repair Construction	0	5,843	2,091	7,934
020 Other Activities of the Construction Industry	0	660	29	689
021 Animal Food Manufacturing	0	16	17	34
022 Sugar and Confectionery Product Manufacturing	0	6	5	12
023 Fruit and Vegetable Preserving and Specialty Food Manufacturing	0	53	53	106
024 Dairy Product Manufacturing	0	37	103	140
025 Meat Product Manufacturing	0	66	213	279
026 Seafood Product Preparation and Packaging	0	26	230	256



Industry	Scenario 3			Scenario 3			Scenario 3		
	Direct Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry From Capex & Opex	Total Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry From Capex & Opex	Induced Employment by Industry in NL From Capex & Opex	Total Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry From Capex & Opex	Induced Employment by Industry in NL From Capex & Opex	Total Employment by Industry in NL From Capex & Opex
027 Miscellaneous Food Manufacturing	0	790	790	931	1,722	1,722	931	1,722	1,722
028 Beverage Manufacturing	0	95	95	497	592	592	497	592	592
029 Tobacco Manufacturing	0	33	33	4	37	37	4	37	37
030 Textile and Textile Product Mills	0	161	161	12	174	174	12	174	174
031 Clothing Manufacturing	0	11	11	4	15	15	4	15	15
032 Leather and Allied Product Manufacturing	0	1	1	2	4	4	2	4	4
033 Sawmills	0	522	522	126	649	649	126	649	649
034 Plywood	0	148	148	42	189	189	42	189	189
035 Doors&Windows	0	90	90	22	112	112	22	112	112
036 Other Wood Product Manufacturing	0	160	160	43	204	204	43	204	204
037 Pulp, Paper and Paperboard Mills	0	123	123	23	146	146	23	146	146
038 Converted Paper Product Manufacturing	0	263	263	69	332	332	69	332	332
039 Printing and Related Support Activities	0	291	291	137	428	428	137	428	428
040 Petroleum and Coal Products Manufacturing	0	15	15	2	17	17	2	17	17
041 Basic Chemical Manufacturing	0	42	42	3	45	45	3	45	45
042 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	0	14	14	2	16	16	2	16	16
043 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	0	358	358	10	368	368	10	368	368
044 Pharmaceutical and Medicine Manufacturing	0	105	105	19	124	124	19	124	124
045 Miscellaneous Chemical Product Manufacturing	0	512	512	71	583	583	71	583	583
046 Plastic Product Manufacturing	0	3,788	3,788	87	3,875	3,875	87	3,875	3,875
047 Rubber Product Manufacturing	0	603	603	13	616	616	13	616	616
048 Cement and Concrete Product Manufacturing	0	2,548	2,548	66	2,615	2,615	66	2,615	2,615
049 Miscellaneous Non-Metallic Mineral Product Manufacturing	0	962	962	26	988	988	26	988	988
050 Primary Metal Manufacturing	0	186	186	15	200	200	15	200	200
051 Fabricated Metal Product Manufacturing	0	4,494	4,494	130	4,623	4,623	130	4,623	4,623
052 Machinery Manufacturing	0	3,067	3,067	144	3,211	3,211	144	3,211	3,211
053 Computer and Peripheral Equipment Manufacturing	0	10	10	1	11	11	1	11	11

Industry	Scenario 3			Scenario 3			Scenario 3		
	Direct Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry From Capex & Opex	Total Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry in NL From Capex & Opex	Induced Employment by Industry in NL From Capex & Opex	Total Employment by Industry in NL From Capex & Opex	Indirect Employment by Industry in NL From Capex & Opex	Induced Employment by Industry in NL From Capex & Opex	Total Employment by Industry in NL From Capex & Opex
054 Electronic Product Manufacturing	0	237	237	44	281	281	44	281	281
055 Household Appliance Manufacturing	0	8	8	3	11	11	3	11	11
056 Electrical Equipment and Component Manufacturing	0	96	96	14	109	109	14	109	109
057 Motor Vehicle Manufacturing	0	237	237	11	248	248	11	248	248
058 Motor Vehicle Body and Trailer Manufacturing	0	681	681	15	696	696	15	696	696
059 Motor Vehicle Parts Manufacturing	0	12,276	12,276	178	12,454	12,454	178	12,454	12,454
060 Aerospace Product and Parts Manufacturing	0	68	68	9	77	77	9	77	77
061 Railroad Rolling Stock Manufacturing	0	5	5	0	6	6	0	6	6
062 Ship and Boat Building	0	26	26	80	107	107	80	107	107
063 Other Transportation Equipment Manufacturing	0	95	95	60	155	155	60	155	155
064 Furniture and Related Product Manufacturing	0	145	145	61	206	206	61	206	206
065 Miscellaneous Manufacturing	0	123	123	41	164	164	41	164	164
066 Wholesale Trade	0	6,937	6,937	2,496	9,434	9,434	2,496	9,434	9,434
067 Retail Trade	0	21,530	21,530	43,675	65,205	65,205	43,675	65,205	65,205
068 Air Transportation	0	108	108	153	261	261	153	261	261
069 Rail Transportation	0	116	116	53	169	169	53	169	169
070 Water Transportation	0	19	19	19	38	38	19	38	38
071 Truck Transportation	0	3,012	3,012	1,186	4,199	4,199	1,186	4,199	4,199
072 Transit and Ground Passenger Transportation	0	316	316	1,031	1,346	1,346	1,031	1,346	1,346
073 Pipeline Transportation	0	4	4	2	6	6	2	6	6
074 Scenic and Sightseeing Transportation and Support Activities for Transportation	0	1,268	1,268	332	1,600	1,600	332	1,600	1,600
075 Postal Service and Couriers and Messengers	0	2,137	2,137	1,851	3,988	3,988	1,851	3,988	3,988
076 Warehousing and Storage	0	150	150	76	227	227	76	227	227
077 Publishing Industries, Information Services and Data Processing Services	0	875	875	503	1,378	1,378	503	1,378	1,378
078 Motion Picture and Sound Recording Industries	0	145	145	256	401	401	256	401	401
079 Radio and Television Broadcasting	0	122	122	363	485	485	363	485	485
080 Pay TV, Specialty TV and Program Distribution and Telecommunications	0	2,356	2,356	3,622	5,978	5,978	3,622	5,978	5,978

Industry	Scenario 3 Direct Employment by Industry in NL From Capex & Opex	Scenario 3 Indirect Employment by Industry in NL From Capex & Opex	Scenario 3 Induced Employment by Industry in NL From Capex & Opex	Scenario 3 Total Employment by Industry in NL From Capex & Opex
081 Monetary Authorities and Depository Credit Intermediation	0	423	596	1,019
082 Insurance Carriers	0	183	725	908
083 Lessors of Real Estate	0	590	1,538	2,127
084 Owner-Occupied Dwellings	0	0	0	0
085 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets	0	766	529	1,295
086 Other Finance, Insurance and Real Estate and Management of Companies and Enterprises	0	2,389	3,747	6,136
087 Legal, Accounting and Architectural, Engineering and Related Services	0	31,489	1,842	33,331
088 Advertising and Related Services	0	470	381	851
089 Computer Systems Design and Other Professional, Scientific and Technical Services	0	13,922	2,060	15,982
090 Administrative and Support Services	0	27,081	4,508	31,589
091 Waste Management and Remediation Services	0	276	761	1,036
092 Educational Services (except Universities)	0	166	1,026	1,192
093 Health Care Services (except Hospitals) and Social Assistance	0	456	6,916	7,371
094 Arts, Entertainment and Recreation	0	422	2,339	2,761
095 Outfitters, accommodation and food services (NAICS 7200)	0	3,212	15,475	18,687
096 Repair and Maintenance	0	10,435	5,044	15,479
097 Personal and Laundry Services and Private Households	0	253	5,129	5,382
098 Grant-Making, Civic, and Professional and Similar Organizations	0	258	444	702
099 Operating Supplies	0	0	0	0
100 Office Supplies	0	0	0	0
101 Cafeteria Supplies	0	0	0	0
102 Laboratory Supplies	0	0	0	0
103 Travel and Entertainment	0	0	0	0
104 Advertising and Promotion	0	0	0	0
105 Transportation Margins	0	0	0	0
106 Religious & Welfare Organizations	0	0	4,107	4,107
107 Non-Profit Sports and Recreation Clubs	0	10	521	531

Industry	Scenario 3 Direct Employment by Industry in NL From Capex & Opex	Scenario 3 Indirect Employment by Industry in NL From Capex & Opex	Scenario 3 Induced Employment by Industry in NL From Capex & Opex	Scenario 3 Total Employment by Industry in NL From Capex & Opex
108 Non-Profit Education Institutions	0	41	545	586
109 Other Non-Profit Institutions Serving Households	0	237	3,227	3,463
110 Hospitals	0	425	530	955
111 Government Residential Care Facilities	0	14	220	234
112 Universities	0	518	814	1,332
113 Government Education Services	0	310	621	931
114 Other Municipal Government Services	0	801	1,584	2,385
115 Other Provincial and Territorial Government Services	0	621	378	999
116 Other Federal Government Services	0	728	405	1,132
117 Households	0	0	0	0
Total	173,096	212,062	130,036	515,194

## **Appendix C**

### **Annual Summary**

### Appendix C1: Base Case

Table C1.1 – Annual Capital Expenditure Profile: Canada and Newfoundland

Capital																				
<b>Canada</b>																				
Year																				
Total Opex																				
Total Capex																				
<b>Total</b>																				
<b>Newfoundland</b>																				
Year																				
Total Opex																				
Total Capex																				
<b>Total</b>																				

Capital																				
<b>Canada</b>																				
Year																				
Total Opex																				
Total Capex																				
<b>Total</b>																				
<b>Newfoundland</b>																				
Year																				
Total Opex																				
Total Capex																				
<b>Total</b>																				

Table C1.2 – Annual Production and Revenue (\$85/\$115, \$100/\$130, \$115/\$145)

Production (MT)																				
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021									
Pellets	8.7	13.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Concentrate	8.7	10.7	13.0	14.5	14.6	14.5	14.6	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.6
<b>Total</b>	<b>17.4</b>	<b>23.7</b>	<b>28.0</b>	<b>29.5</b>	<b>29.6</b>	<b>29.5</b>	<b>29.6</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.6</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.5</b>	<b>29.6</b>

Total Revenue	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$2,963	\$2,957	\$2,963	\$2,960	\$2,960	\$2,961	\$2,963
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$3,407	\$3,400	\$3,406	\$3,403	\$3,404	\$3,404	\$3,406
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$3,850	\$3,842	\$3,850	\$3,846	\$3,847	\$3,847	\$3,850

Production (MT)																			
Year		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average						
Pellets		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	306.7	14.6						
Concentrate		14.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	239.9	11.4						
Total		29.4	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	546.6	26.0						

Total Revenue	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
\$85/\$115	\$2,951	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$56,779	\$2,704
\$100/\$130	\$3,392	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$64,716	\$3,082
\$115/\$145	\$3,834	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$72,654	\$3,460

Table C1.3 – Annual Employment (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Employment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year											
Direct Opex	2,138	2,583	2,720	2,747	2,748	2,746	2,748	2,747	2,747	2,747	2,748
Indirect Opex	1,770	1,928	2,098	2,162	2,163	2,160	2,163	2,161	2,162	2,162	2,163
Induced Opex	1,370	1,606	1,708	1,735	1,735	1,733	1,735	1,734	1,735	1,735	1,735
<b>Total Opex</b>	<b>5,279</b>	<b>6,117</b>	<b>6,526</b>	<b>6,644</b>	<b>6,647</b>	<b>6,639</b>	<b>6,646</b>	<b>6,643</b>	<b>6,643</b>	<b>6,644</b>	<b>6,646</b>
Direct Capex	982	955	291	269	270	272	270	270	271	274	271
Indirect Capex	962	987	355	320	321	324	320	321	322	327	323
Induced Capex	1,475	1,448	455	419	421	423	419	420	422	426	422
<b>Total Capex</b>	<b>3,419</b>	<b>3,390</b>	<b>1,101</b>	<b>1,008</b>	<b>1,012</b>	<b>1,019</b>	<b>1,009</b>	<b>1,012</b>	<b>1,015</b>	<b>1,026</b>	<b>1,016</b>
Total Direct	3,120	3,538	3,012	3,017	3,019	3,018	3,018	3,017	3,018	3,021	3,019
Total Indirect	2,733	2,915	2,453	2,481	2,484	2,484	2,483	2,482	2,484	2,488	2,485
Total Induced	2,846	3,054	2,163	2,154	2,156	2,157	2,155	2,155	2,156	2,161	2,157
<b>Total</b>	<b>8,698</b>	<b>9,506</b>	<b>7,627</b>	<b>7,652</b>	<b>7,659</b>	<b>7,658</b>	<b>7,655</b>	<b>7,655</b>	<b>7,658</b>	<b>7,670</b>	<b>7,662</b>

Employment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
Year												
Direct Opex	2,743	2,535	2,535	2,535	2,535	2,535	2,535	2,535	2,535	2,535	54,979	2,618
Indirect Opex	2,157	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	42,405	2,019
Induced Opex	1,732	1,580	1,580	1,580	1,580	1,580	1,580	1,580	1,580	1,580	34,511	1,643
<b>Total Opex</b>	<b>6,632</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>6,021</b>	<b>131,896</b>	<b>6,281</b>
Direct Capex	268	261	261	261	261	261	261	261	261	261	7,008	334
Indirect Capex	318	306	306	306	306	306	306	306	306	306	7,950	379
Induced Capex	417	405	405	405	405	405	405	405	405	405	10,809	515
<b>Total Capex</b>	<b>1,003</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>971</b>	<b>25,767</b>	<b>1,227</b>
Total Direct	3,012	2,796	2,796	2,796	2,796	2,796	2,796	2,796	2,796	2,796	61,987	2,952
Total Indirect	2,475	2,212	2,212	2,212	2,212	2,212	2,212	2,212	2,212	2,212	50,355	2,398
Total Induced	2,149	1,984	1,984	1,984	1,984	1,984	1,984	1,984	1,984	1,984	45,320	2,158
<b>Total</b>	<b>7,635</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>6,992</b>	<b>157,663</b>	<b>7,508</b>



Table C1.4 – Annual Income (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Income	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Year</b>											
Direct Opex	\$335	\$405	\$426	\$430	\$431	\$430	\$431	\$430	\$430	\$430	\$431
Indirect Opex	\$146	\$159	\$173	\$178	\$178	\$178	\$178	\$178	\$178	\$178	\$178
Induced Opex	\$144	\$169	\$180	\$183	\$183	\$183	\$183	\$183	\$183	\$183	\$183
<b>Total Opex</b>	<b>\$625</b>	<b>\$733</b>	<b>\$779</b>	<b>\$792</b>	<b>\$792</b>	<b>\$791</b>	<b>\$792</b>	<b>\$791</b>	<b>\$791</b>	<b>\$791</b>	<b>\$792</b>
Direct Capex	\$419	\$408	\$124	\$115	\$115	\$116	\$115	\$115	\$116	\$117	\$116
Indirect Capex	\$85	\$88	\$31	\$28	\$29	\$29	\$28	\$29	\$29	\$29	\$29
Induced Capex	\$151	\$149	\$47	\$43	\$43	\$43	\$43	\$43	\$43	\$44	\$43
<b>Total Capex</b>	<b>\$656</b>	<b>\$644</b>	<b>\$203</b>	<b>\$186</b>	<b>\$187</b>	<b>\$188</b>	<b>\$187</b>	<b>\$187</b>	<b>\$188</b>	<b>\$190</b>	<b>\$188</b>
Total Direct	\$754	\$813	\$551	\$545	\$546	\$546	\$546	\$546	\$546	\$547	\$546
Total Indirect	\$232	\$247	\$205	\$207	\$207	\$207	\$207	\$207	\$207	\$207	\$207
Total Induced	\$296	\$318	\$227	\$226	\$226	\$226	\$226	\$226	\$226	\$226	\$226
<b>Total</b>	<b>\$1,282</b>	<b>\$1,377</b>	<b>\$982</b>	<b>\$978</b>	<b>\$979</b>	<b>\$979</b>	<b>\$978</b>	<b>\$978</b>	<b>\$979</b>	<b>\$981</b>	<b>\$980</b>

Income	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
<b>Year</b>												
Direct Opex	\$430	\$397	\$397	\$397	\$397	\$397	\$397	\$397	\$397	\$397	\$8,614	\$410
Indirect Opex	\$178	\$157	\$157	\$157	\$157	\$157	\$157	\$157	\$157	\$157	\$3,499	\$167
Induced Opex	\$182	\$166	\$166	\$166	\$166	\$166	\$166	\$166	\$166	\$166	\$3,634	\$173
<b>Total Opex</b>	<b>\$790</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$721</b>	<b>\$15,747</b>	<b>\$750</b>
Direct Capex	\$115	\$111	\$111	\$111	\$111	\$111	\$111	\$111	\$111	\$111	\$2,994	\$143
Indirect Capex	\$28	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$706	\$34
Induced Capex	\$43	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$1,110	\$53
<b>Total Capex</b>	<b>\$186</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$180</b>	<b>\$4,809</b>	<b>\$229</b>
Total Direct	\$544	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$11,607	\$553
Total Indirect	\$206	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$4,205	\$200
Total Induced	\$225	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$4,744	\$226
<b>Total</b>	<b>\$976</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$20,556</b>	<b>\$979</b>

Table C1.5 – Annual GDP Newfoundland Income and Production (\$85/\$115,\$100/\$130,\$115/\$145)

<b>GDP</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Year</b>											
<b>GDP from Income</b>											
Direct GDP	\$754	\$813	\$551	\$545	\$546	\$546	\$546	\$546	\$546	\$547	\$546
Indirect GDP	\$232	\$247	\$205	\$207	\$207	\$207	\$207	\$207	\$207	\$207	\$207
Induced GDP	\$296	\$318	\$227	\$226	\$226	\$226	\$226	\$226	\$226	\$226	\$226
GDP from Income	\$1,282	\$1,377	\$982	\$978	\$979	\$979	\$978	\$978	\$979	\$981	\$980
<b>GDP from Production</b>											
Revenue											
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$2,963	\$2,957	\$2,963	\$2,960	\$2,960	\$2,961	\$2,963
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$3,407	\$3,400	\$3,406	\$3,403	\$3,404	\$3,404	\$3,406
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$3,850	\$3,842	\$3,850	\$3,846	\$3,847	\$3,847	\$3,850
OP Costs	\$1,510	\$1,046	\$1,478	\$1,602	\$1,604	\$1,599	\$1,604	\$1,601	\$1,602	\$1,602	\$1,604
<b>GDP from Production</b>											
\$85/\$115	\$1,347	\$1,356	\$1,355	\$1,359	\$1,359	\$1,359	\$1,359	\$1,359	\$1,359	\$1,359	\$1,359
\$100/\$130	\$1,347	\$1,711	\$1,776	\$1,802	\$1,802	\$1,801	\$1,802	\$1,802	\$1,802	\$1,802	\$1,802
\$115/\$145	\$1,347	\$2,067	\$2,196	\$2,245	\$2,246	\$2,243	\$2,246	\$2,245	\$2,245	\$2,245	\$2,246
<b>GDP</b>											
\$85/\$115	\$2,629	\$2,733	\$2,337	\$2,337	\$2,338	\$2,338	\$2,337	\$2,337	\$2,338	\$2,340	\$2,338
\$100/\$130	\$2,629	\$3,088	\$2,757	\$2,780	\$2,781	\$2,780	\$2,781	\$2,780	\$2,781	\$2,783	\$2,782
\$115/\$145	\$2,629	\$3,444	\$3,178	\$3,223	\$3,225	\$3,223	\$3,224	\$3,223	\$3,224	\$3,226	\$3,225

<b>GDP</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>Total</b>	<b>Average</b>
<b>Year</b>												
<b>GDP from Income</b>												
Direct GDP	\$544	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$508	\$11,607	\$553
Indirect GDP	\$206	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$184	\$4,205	\$200
Induced GDP	\$225	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$208	\$4,744	\$226
<b>GDP from Income</b>	<b>\$976</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$901</b>	<b>\$20,556</b>	<b>\$979</b>
<b>GDP from Production</b>												
Revenue												
\$85/\$115	\$2,951	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$2,450	\$56,779	\$2,704
\$100/\$130	\$3,392	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$2,803	\$64,716	\$3,082
\$115/\$145	\$3,834	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$3,155	\$72,654	\$3,460
OP Costs	\$1,593	\$1,105	\$1,105	\$1,105	\$1,105	\$1,105	\$1,105	\$1,105	\$1,105	\$1,105	\$28,390	\$1,352
<b>GDP from Production</b>												
\$85/\$115	\$1,358	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345	\$1,345	\$28,389	\$1,352
\$100/\$130	\$1,800	\$1,698	\$1,698	\$1,698	\$1,698	\$1,698	\$1,698	\$1,698	\$1,698	\$1,698	\$36,327	\$1,730
\$115/\$145	\$2,241	\$2,051	\$2,051	\$2,051	\$2,051	\$2,051	\$2,051	\$2,051	\$2,051	\$2,051	\$44,265	\$2,108
<b>GDP</b>												
\$85/\$115	\$2,334	\$2,246	\$2,246	\$2,246	\$2,246	\$2,246	\$2,246	\$2,246	\$2,246	\$2,246	\$48,945	\$2,331
\$100/\$130	\$2,775	\$2,598	\$2,598	\$2,598	\$2,598	\$2,598	\$2,598	\$2,598	\$2,598	\$2,598	\$56,883	\$2,709
\$115/\$145	\$3,217	\$2,951	\$2,951	\$2,951	\$2,951	\$2,951	\$2,951	\$2,951	\$2,951	\$2,951	\$64,821	\$3,087

Table C1.6 – Annual Taxes Direct (\$85/\$115, \$100/\$130,\$115/\$145), Indirect, Induced Newfoundland

Total Taxes	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year											
Total Direct											
\$85/\$115	\$264	\$259	\$293	\$307	\$303	\$303	\$303	\$303	\$303	\$303	\$304
\$100/\$130	\$264	\$317	\$361	\$380	\$374	\$374	\$374	\$374	\$374	\$374	\$375
\$115/\$145	\$264	\$374	\$430	\$452	\$446	\$445	\$445	\$445	\$445	\$445	\$446
Total Indirect	\$21	\$23	\$19	\$19	\$19	\$19	\$19	\$19	\$19	\$19	\$19
Total Induced	\$100	\$108	\$78	\$77	\$78	\$78	\$77	\$77	\$78	\$78	\$78
Total Taxes											
\$85/\$115	\$385	\$389	\$389	\$404	\$400	\$399	\$400	\$399	\$399	\$400	\$400
\$100/\$130	\$385	\$447	\$458	\$476	\$471	\$470	\$471	\$470	\$470	\$471	\$472
\$115/\$145	\$385	\$505	\$526	\$549	\$542	\$541	\$542	\$541	\$541	\$542	\$543

Total Taxes	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
Year												
Total Direct												
\$85/\$115	\$303	\$256	\$256	\$256	\$256	\$256	\$257	\$257	\$256	\$256	\$5,855	\$279
\$100/\$130	\$374	\$314	\$313	\$313	\$314	\$314	\$314	\$315	\$313	\$314	\$7,139	\$340
\$115/\$145	\$445	\$371	\$371	\$371	\$371	\$371	\$372	\$372	\$371	\$371	\$8,423	\$401
Total Indirect	\$19	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$17	\$385	\$18
Total Induced	\$77	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$71	\$1,624	\$77
Total Taxes												
\$85/\$115	\$399	\$344	\$344	\$344	\$345	\$345	\$345	\$346	\$344	\$344	\$7,864	\$374
\$100/\$130	\$470	\$402	\$402	\$402	\$402	\$402	\$402	\$403	\$402	\$402	\$9,149	\$436
\$115/\$145	\$541	\$459	\$459	\$459	\$460	\$460	\$460	\$461	\$459	\$459	\$10,433	\$497

## Appendix C2: Scenario 1

### Table C2.1 – Annual Capital Expenditure Profile: Canada and Newfoundland

[illegible]

<b>Capital</b>																				
<b>Canada</b>																				
Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031									Total	Average
Total Opex	\$2,777	\$2,555	\$2,530	\$2,528	\$2,521	\$2,502	\$2,482	\$2,470	\$2,461	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,444	\$2,272
Total Capex	\$419	\$448	\$425	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$406	\$591
<b>Total</b>	<b>\$3,196</b>	<b>\$3,003</b>	<b>\$2,955</b>	<b>\$2,935</b>	<b>\$2,927</b>	<b>\$2,909</b>	<b>\$2,888</b>	<b>\$2,876</b>	<b>\$2,867</b>	<b>\$2,851</b>									<b>\$60,122</b>	<b>\$2,863</b>
<b>Newfoundland</b>																				
Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031									Total	Average
Total Opex	\$1,285	\$1,187	\$1,176	\$1,175	\$1,171	\$1,162	\$1,152	\$1,146	\$1,141	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,132	\$1,053
Total Capex	\$172	\$182	\$171	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$165	\$251
<b>Total</b>	<b>\$1,457</b>	<b>\$1,369</b>	<b>\$1,347</b>	<b>\$1,340</b>	<b>\$1,336</b>	<b>\$1,327</b>	<b>\$1,317</b>	<b>\$1,311</b>	<b>\$1,306</b>	<b>\$1,297</b>									<b>\$27,384</b>	<b>\$1,304</b>

Production (MT)																				
Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021								
Pellets		8.7	13.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0								
Concentrate		8.7	10.7	13.0	14.5	14.6	14.5	28.6	28.5	36.5	36.5	36.6								
Total		17.4	23.7	28.0	29.5	29.6	29.5	43.6	43.5	51.5	51.5	51.6								

Total Revenue	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$2,963	\$2,957	\$4,153	\$4,150	\$4,830	\$4,831	\$4,833
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$3,407	\$3,400	\$4,806	\$4,803	\$5,604	\$5,604	\$5,606
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$3,850	\$3,842	\$5,460	\$5,456	\$6,377	\$6,377	\$6,380

[illegible][illegible]

Table C2.3 – Annual Employment (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Employment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year											
Direct Opex	2,138	2,583	2,720	2,747	2,748	2,818	3,754	3,821	4,594	4,595	4,587
Indirect Opex	1,867	2,033	2,213	2,280	2,281	2,306	3,241	3,297	3,866	3,864	3,860
Induced Opex	1,441	1,689	1,795	1,824	1,825	1,863	2,521	2,566	3,062	3,062	3,057
<b>Total Opex</b>	<b>5,446</b>	<b>6,305</b>	<b>6,728</b>	<b>6,851</b>	<b>6,854</b>	<b>6,987</b>	<b>9,517</b>	<b>9,684</b>	<b>11,522</b>	<b>11,522</b>	<b>11,505</b>
Direct Capex	982	1,070	382	916	1,030	855	874	1,064	353	356	354
Indirect Capex	885	1,062	429	735	1,105	814	865	985	414	418	414
Induced Capex	1,156	1,285	471	1,056	1,257	1,018	1,048	1,259	440	444	440
<b>Total Capex</b>	<b>3,022</b>	<b>3,417</b>	<b>1,281</b>	<b>2,707</b>	<b>3,392</b>	<b>2,688</b>	<b>2,786</b>	<b>3,308</b>	<b>1,207</b>	<b>1,218</b>	<b>1,208</b>
Total Direct	3,120	3,653	3,102	3,664	3,778	3,673	4,628	4,885	4,948	4,951	4,941
Total Indirect	2,752	3,095	2,642	3,015	3,386	3,120	4,106	4,282	4,280	4,282	4,274
Total Induced	2,597	2,973	2,266	2,880	3,081	2,881	3,569	3,825	3,502	3,506	3,498
<b>Total</b>	<b>8,468</b>	<b>9,721</b>	<b>8,009</b>	<b>9,558</b>	<b>10,246</b>	<b>9,675</b>	<b>12,303</b>	<b>12,992</b>	<b>12,729</b>	<b>12,740</b>	<b>12,713</b>

Employment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
Year												
Direct Opex	4,589	4,369	4,354	4,354	4,336	4,314	4,283	4,259	4,246	4,205	80,415	3,829
Indirect Opex	3,850	3,542	3,507	3,505	3,494	3,469	3,441	3,424	3,411	3,389	66,140	3,150
Induced Opex	3,056	2,881	2,866	2,865	2,854	2,838	2,817	2,802	2,792	2,768	53,243	2,535
<b>Total Opex</b>	<b>11,494</b>	<b>10,792</b>	<b>10,727</b>	<b>10,724</b>	<b>10,684</b>	<b>10,621</b>	<b>10,540</b>	<b>10,485</b>	<b>10,449</b>	<b>10,361</b>	<b>199,799</b>	<b>9,514</b>
Direct Capex	351	357	343	343	343	343	343	343	343	343	11,689	557
Indirect Capex	411	440	417	399	399	399	399	399	399	399	12,185	580
Induced Capex	437	450	431	427	427	427	427	427	427	427	14,176	675
<b>Total Capex</b>	<b>1,199</b>	<b>1,247</b>	<b>1,191</b>	<b>1,169</b>	<b>1,168</b>	<b>1,168</b>	<b>1,168</b>	<b>1,168</b>	<b>1,168</b>	<b>1,168</b>	<b>38,051</b>	<b>1,812</b>
Total Direct	4,939	4,726	4,697	4,697	4,679	4,658	4,626	4,602	4,589	4,548	92,104	4,386
Total Indirect	4,261	3,982	3,924	3,904	3,893	3,868	3,840	3,823	3,810	3,787	78,326	3,730
Total Induced	3,493	3,331	3,297	3,292	3,281	3,265	3,243	3,228	3,219	3,194	67,419	3,210
<b>Total</b>	<b>12,693</b>	<b>12,039</b>	<b>11,918</b>	<b>11,893</b>	<b>11,853</b>	<b>11,790</b>	<b>11,709</b>	<b>11,654</b>	<b>11,617</b>	<b>11,529</b>	<b>237,849</b>	<b>11,326</b>

Table C2.4 – Annual Income (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Income	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Year</b>											
Direct Opex	\$353	\$427	\$449	\$454	\$454	\$466	\$620	\$631	\$759	\$759	\$758
Indirect Opex	\$152	\$166	\$180	\$186	\$186	\$188	\$264	\$269	\$315	\$315	\$314
Induced Opex	\$152	\$178	\$189	\$192	\$192	\$196	\$265	\$270	\$322	\$322	\$322
<b>Total Opex</b>	<b>\$657</b>	<b>\$770</b>	<b>\$819</b>	<b>\$832</b>	<b>\$832</b>	<b>\$849</b>	<b>\$1,150</b>	<b>\$1,170</b>	<b>\$1,396</b>	<b>\$1,396</b>	<b>\$1,394</b>
Direct Capex	\$320	\$349	\$124	\$298	\$335	\$279	\$285	\$347	\$115	\$116	\$115
Indirect Capex	\$76	\$92	\$37	\$63	\$95	\$70	\$75	\$85	\$36	\$36	\$36
Induced Capex	\$119	\$132	\$48	\$109	\$129	\$105	\$108	\$129	\$45	\$46	\$45
<b>Total Capex</b>	<b>\$515</b>	<b>\$572</b>	<b>\$210</b>	<b>\$470</b>	<b>\$560</b>	<b>\$454</b>	<b>\$467</b>	<b>\$561</b>	<b>\$196</b>	<b>\$198</b>	<b>\$196</b>
Total Direct	\$673	\$775	\$574	\$752	\$790	\$744	\$905	\$978	\$874	\$875	\$873
Total Indirect	\$228	\$257	\$217	\$249	\$281	\$258	\$339	\$354	\$351	\$351	\$350
Total Induced	\$270	\$310	\$237	\$300	\$321	\$301	\$373	\$399	\$367	\$368	\$367
<b>Total</b>	<b>\$1,172</b>	<b>\$1,343</b>	<b>\$1,028</b>	<b>\$1,302</b>	<b>\$1,392</b>	<b>\$1,303</b>	<b>\$1,617</b>	<b>\$1,731</b>	<b>\$1,592</b>	<b>\$1,594</b>	<b>\$1,590</b>

Income	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
<b>Year</b>												
Direct Opex	\$758	\$722	\$719	\$719	\$716	\$713	\$708	\$704	\$701	\$695	\$13,287	\$633
Indirect Opex	\$314	\$289	\$286	\$285	\$285	\$283	\$280	\$279	\$278	\$276	\$5,388	\$257
Induced Opex	\$322	\$303	\$302	\$301	\$300	\$299	\$296	\$295	\$294	\$291	\$5,602	\$267
<b>Total Opex</b>	<b>\$1,393</b>	<b>\$1,313</b>	<b>\$1,307</b>	<b>\$1,306</b>	<b>\$1,301</b>	<b>\$1,294</b>	<b>\$1,284</b>	<b>\$1,277</b>	<b>\$1,273</b>	<b>\$1,262</b>	<b>\$24,276</b>	<b>\$1,156</b>
Direct Capex	\$114	\$116	\$112	\$112	\$112	\$112	\$112	\$112	\$112	\$112	\$3,808	\$181
Indirect Capex	\$35	\$38	\$36	\$34	\$34	\$34	\$34	\$34	\$34	\$34	\$1,052	\$50
Induced Capex	\$45	\$46	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$1,458	\$69
<b>Total Capex</b>	<b>\$195</b>	<b>\$201</b>	<b>\$192</b>	<b>\$190</b>	<b>\$190</b>	<b>\$190</b>	<b>\$190</b>	<b>\$190</b>	<b>\$190</b>	<b>\$190</b>	<b>\$6,318</b>	<b>\$301</b>
Total Direct	\$872	\$838	\$831	\$831	\$828	\$825	\$819	\$815	\$813	\$806	\$17,094	\$814
Total Indirect	\$349	\$326	\$322	\$320	\$319	\$317	\$315	\$313	\$312	\$310	\$6,440	\$307
Total Induced	\$366	\$349	\$346	\$345	\$344	\$342	\$340	\$339	\$338	\$335	\$7,060	\$336
<b>Total</b>	<b>\$1,588</b>	<b>\$1,514</b>	<b>\$1,499</b>	<b>\$1,496</b>	<b>\$1,491</b>	<b>\$1,484</b>	<b>\$1,474</b>	<b>\$1,468</b>	<b>\$1,463</b>	<b>\$1,452</b>	<b>\$30,594</b>	<b>\$1,457</b>



Table C2.5 – Annual GDP Newfoundland Income and Production (\$85/\$115,\$100/\$130,\$115/\$145)

<b>GDP</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Year</b>											
<b>GDP from Income</b>											
Direct GDP	\$673	\$775	\$574	\$752	\$790	\$744	\$905	\$978	\$874	\$875	\$873
Indirect GDP	\$228	\$257	\$217	\$249	\$281	\$258	\$339	\$354	\$351	\$351	\$350
Induced GDP	\$270	\$310	\$237	\$300	\$321	\$301	\$373	\$399	\$367	\$368	\$367
GDP from Income	\$1,172	\$1,343	\$1,028	\$1,302	\$1,392	\$1,303	\$1,617	\$1,731	\$1,592	\$1,594	\$1,590
<b>GDP from Production</b>											
Revenue											
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$2,963	\$2,957	\$4,153	\$4,150	\$4,830	\$4,831	\$4,833
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$3,407	\$3,400	\$4,806	\$4,803	\$5,604	\$5,604	\$5,606
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$3,850	\$3,842	\$5,460	\$5,456	\$6,377	\$6,377	\$6,380
OP Costs	\$1,347	\$1,467	\$1,596	\$1,645	\$1,646	\$1,664	\$2,338	\$2,378	\$2,789	\$2,788	\$2,784
<b>GDP from Production</b>											
\$85/\$115	\$1,510	\$936	\$1,237	\$1,316	\$1,317	\$1,294	\$1,815	\$1,772	\$2,042	\$2,043	\$2,048
\$100/\$130	\$1,510	\$1,291	\$1,657	\$1,759	\$1,761	\$1,736	\$2,468	\$2,425	\$2,815	\$2,816	\$2,822
\$115/\$145	\$1,510	\$1,646	\$2,078	\$2,202	\$2,204	\$2,178	\$3,122	\$3,078	\$3,588	\$3,589	\$3,595
<b>GDP</b>											
\$85/\$115	\$2,682	\$2,279	\$2,265	\$2,618	\$2,709	\$2,597	\$3,431	\$3,503	\$3,634	\$3,637	\$3,639
\$100/\$130	\$2,682	\$2,634	\$2,685	\$3,061	\$3,153	\$3,039	\$4,085	\$4,156	\$4,407	\$4,410	\$4,412
\$115/\$145	\$2,682	\$2,989	\$3,106	\$3,504	\$3,596	\$3,482	\$4,738	\$4,809	\$5,180	\$5,183	\$5,185

<b>GDP</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>Total</b>	<b>Average</b>
<b>Year</b>												
<b>GDP from Income</b>												
Direct GDP	\$872	\$838	\$831	\$831	\$828	\$825	\$819	\$815	\$813	\$806	\$17,094	\$814
Indirect GDP	\$349	\$326	\$322	\$320	\$319	\$317	\$315	\$313	\$312	\$310	\$6,440	\$307
Induced GDP	\$366	\$349	\$346	\$345	\$344	\$342	\$340	\$339	\$338	\$335	\$7,060	\$336
<b>GDP from Income</b>	<b>\$1,588</b>	<b>\$1,514</b>	<b>\$1,499</b>	<b>\$1,496</b>	<b>\$1,491</b>	<b>\$1,484</b>	<b>\$1,474</b>	<b>\$1,468</b>	<b>\$1,463</b>	<b>\$1,452</b>	<b>\$30,594</b>	<b>\$1,457</b>
<b>GDP from Production</b>												
Revenue												
\$85/\$115	\$4,821	\$4,320	\$4,320	\$4,320	\$4,320	\$4,320	\$4,320	\$4,320	\$4,320	\$4,320	\$83,469	\$3,975
\$100/\$130	\$5,592	\$5,003	\$5,003	\$5,003	\$5,003	\$5,003	\$5,003	\$5,003	\$5,003	\$5,003	\$96,116	\$4,577
\$115/\$145	\$6,364	\$5,685	\$5,685	\$5,685	\$5,685	\$5,685	\$5,685	\$5,685	\$5,685	\$5,685	\$108,764	\$5,179
OP Costs	\$2,777	\$2,555	\$2,530	\$2,528	\$2,521	\$2,502	\$2,482	\$2,470	\$2,461	\$2,444	\$47,713	\$2,272
<b>GDP from Production</b>												
\$85/\$115	\$2,044	\$1,764	\$1,790	\$1,791	\$1,799	\$1,817	\$1,837	\$1,849	\$1,859	\$1,875	\$35,755	\$1,703
\$100/\$130	\$2,815	\$2,447	\$2,473	\$2,474	\$2,482	\$2,500	\$2,520	\$2,532	\$2,542	\$2,558	\$48,403	\$2,305
\$115/\$145	\$3,587	\$3,130	\$3,155	\$3,157	\$3,165	\$3,183	\$3,203	\$3,215	\$3,225	\$3,241	\$61,051	\$2,907
<b>GDP</b>												
\$85/\$115	\$3,632	\$3,278	\$3,288	\$3,288	\$3,290	\$3,301	\$3,312	\$3,317	\$3,322	\$3,327	\$66,349	\$3,159
\$100/\$130	\$4,403	\$3,961	\$3,971	\$3,971	\$3,973	\$3,984	\$3,995	\$4,000	\$4,005	\$4,010	\$78,997	\$3,762
\$115/\$145	\$5,174	\$4,644	\$4,654	\$4,654	\$4,656	\$4,667	\$4,678	\$4,683	\$4,688	\$4,693	\$91,645	\$4,364

Table C2.6 – Annual Taxes Direct (\$85/\$115,\$100/\$130,\$115/\$145), Indirect, Induced Newfoundland

Total Taxes		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year												
Total Direct												
\$85/\$115		\$264	\$262	\$295	\$317	\$317	\$317	\$368	\$374	\$434	\$444	\$451
\$100/\$130		\$264	\$319	\$363	\$390	\$388	\$394	\$495	\$500	\$583	\$592	\$599
\$115/\$145		\$264	\$377	\$432	\$462	\$459	\$483	\$622	\$626	\$731	\$740	\$746
Total Indirect		\$21	\$24	\$20	\$23	\$26	\$24	\$31	\$32	\$32	\$32	\$32
Total Induced		\$92	\$105	\$81	\$102	\$109	\$102	\$127	\$136	\$126	\$126	\$126
Total Taxes												
\$85/\$115		\$377	\$391	\$396	\$442	\$452	\$444	\$527	\$543	\$593	\$603	\$609
\$100/\$130		\$377	\$448	\$464	\$515	\$523	\$520	\$653	\$669	\$741	\$751	\$757
\$115/\$145		\$377	\$506	\$533	\$587	\$594	\$609	\$781	\$795	\$889	\$898	\$904

Total Taxes		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
Year													
Total Direct													
\$85/\$115		\$457	\$423	\$422	\$427	\$438	\$444	\$449	\$453	\$456	\$457	\$8,270	\$394
\$100/\$130		\$604	\$557	\$555	\$560	\$571	\$577	\$582	\$586	\$589	\$590	\$10,654	\$507
\$115/\$145		\$751	\$690	\$688	\$693	\$703	\$710	\$714	\$718	\$721	\$722	\$13,052	\$622
Total Indirect		\$32	\$30	\$29	\$29	\$29	\$29	\$29	\$29	\$28	\$28	\$588	\$28
Total Induced		\$126	\$120	\$119	\$119	\$118	\$118	\$117	\$116	\$116	\$115	\$2,419	\$115
Total Taxes													
\$85/\$115		\$615	\$573	\$570	\$575	\$585	\$591	\$595	\$598	\$601	\$600	\$11,277	\$537
\$100/\$130		\$761	\$707	\$703	\$708	\$718	\$724	\$727	\$730	\$733	\$733	\$13,661	\$651
\$115/\$145		\$908	\$840	\$836	\$841	\$851	\$857	\$860	\$863	\$866	\$866	\$16,059	\$765

## Table C3.1 – Annual Capital Expenditure Profile: Canada and Newfoundland

[illegible]

Table C3.2 – Annual Production and Revenue (\$85/\$115, \$100/\$130, \$115/\$145)

Total Revenue	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
\$85/\$115	\$8,322	\$8,069	\$8,069	\$8,071	\$8,068	\$8,068	\$8,068	\$8,069	\$8,069	\$8,069	\$126,972	\$6,046
\$100/\$130	\$9,631	\$9,324	\$9,323	\$9,326	\$9,323	\$9,323	\$9,323	\$9,323	\$9,323	\$9,323	\$146,343	\$6,969
\$115/\$145	\$10,939	\$10,578	\$10,578	\$10,580	\$10,577	\$10,577	\$10,577	\$10,578	\$10,578	\$10,578	\$165,714	\$7,891

Table C3.3 – Annual Employment (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Employment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year											
Direct Opex	2,138	2,583	2,720	2,820	3,174	3,820	3,822	3,822	4,921	4,921	5,819
Indirect Opex	2,189	2,384	2,594	2,706	3,296	3,864	3,861	3,858	5,198	5,189	6,361
Induced Opex	1,458	1,701	1,811	1,881	2,176	2,595	2,595	2,594	3,394	3,392	4,063
<b>Total Opex</b>	<b>5,786</b>	<b>6,668</b>	<b>7,126</b>	<b>7,407</b>	<b>8,646</b>	<b>10,279</b>	<b>10,279</b>	<b>10,274</b>	<b>13,512</b>	<b>13,502</b>	<b>16,243</b>
Direct Capex	999	1,746	726	542	700	911	1,303	2,553	2,757	3,202	435
Indirect Capex	922	1,556	928	613	801	813	1,226	2,496	2,834	3,238	548
Induced Capex	1,020	1,768	808	582	754	922	1,336	2,642	2,889	3,341	481
<b>Total Capex</b>	<b>2,941</b>	<b>5,070</b>	<b>2,462</b>	<b>1,737</b>	<b>2,255</b>	<b>2,646</b>	<b>3,866</b>	<b>7,691</b>	<b>8,480</b>	<b>9,781</b>	<b>1,464</b>
Total Direct	3,137	4,329	3,447	3,361	3,874	4,731	5,125	6,375	7,677	8,123	6,254
Total Indirect	3,112	3,940	3,522	3,319	4,097	4,677	5,088	6,354	8,032	8,427	6,908
Total Induced	2,478	3,469	2,619	2,464	2,930	3,517	3,931	5,236	6,282	6,733	4,545
<b>Total</b>	<b>8,727</b>	<b>11,738</b>	<b>9,588</b>	<b>9,144</b>	<b>10,901</b>	<b>12,925</b>	<b>14,144</b>	<b>17,964</b>	<b>21,992</b>	<b>23,283</b>	<b>17,707</b>

Employment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
Year												
Direct Opex	6,013	5,916	5,898	5,846	5,845	5,789	5,780	5,702	5,650	5,650	98,648	4,698
Indirect Opex	6,516	6,328	6,309	6,250	6,200	6,161	6,130	6,089	6,089	6,089	103,661	4,936
Induced Opex	4,185	4,098	4,086	4,049	4,037	4,003	3,992	3,948	3,925	3,925	67,910	3,234
<b>Total Opex</b>	<b>16,714</b>	<b>16,342</b>	<b>16,293</b>	<b>16,145</b>	<b>16,081</b>	<b>15,953</b>	<b>15,902</b>	<b>15,740</b>	<b>15,665</b>	<b>15,665</b>	<b>270,220</b>	<b>12,868</b>
Direct Capex	433	406	408	415	445	412	416	444	428	434	20,114	958
Indirect Capex	547	489	492	520	560	496	500	536	516	523	21,157	1,007
Induced Capex	480	444	446	459	493	451	454	486	468	475	21,200	1,010
<b>Total Capex</b>	<b>1,459</b>	<b>1,339</b>	<b>1,346</b>	<b>1,395</b>	<b>1,498</b>	<b>1,359</b>	<b>1,370</b>	<b>1,465</b>	<b>1,413</b>	<b>1,432</b>	<b>62,471</b>	<b>2,975</b>
Total Direct	6,445	6,322	6,306	6,261	6,290	6,201	6,195	6,146	6,079	6,084	118,762	5,655
Total Indirect	7,063	6,816	6,801	6,770	6,760	6,657	6,630	6,625	6,606	6,613	124,818	5,944
Total Induced	4,665	4,543	4,532	4,508	4,530	4,454	4,446	4,434	4,393	4,400	89,110	4,243
<b>Total</b>	<b>18,173</b>	<b>17,681</b>	<b>17,639</b>	<b>17,539</b>	<b>17,579</b>	<b>17,312</b>	<b>17,272</b>	<b>17,205</b>	<b>17,078</b>	<b>17,097</b>	<b>332,690</b>	<b>15,842</b>

Table C3.4 – Annual Income (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Income	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Direct Opex	\$331	\$400	\$421	\$437	\$492	\$592	\$592	\$592	\$762	\$762	\$902
Indirect Opex	\$177	\$193	\$210	\$219	\$267	\$313	\$313	\$312	\$421	\$420	\$515
Induced Opex	\$153	\$178	\$189	\$197	\$228	\$271	\$271	\$271	\$355	\$355	\$425
<b>Total Opex</b>	<b>\$661</b>	<b>\$771</b>	<b>\$821</b>	<b>\$853</b>	<b>\$986</b>	<b>\$1,176</b>	<b>\$1,176</b>	<b>\$1,176</b>	<b>\$1,538</b>	<b>\$1,537</b>	<b>\$1,842</b>
Direct Capex	\$268	\$468	\$195	\$145	\$187	\$244	\$349	\$684	\$739	\$858	\$116
Indirect Capex	\$82	\$138	\$83	\$55	\$71	\$72	\$109	\$222	\$252	\$288	\$49
Induced Capex	\$105	\$182	\$83	\$60	\$78	\$95	\$137	\$272	\$297	\$344	\$50
<b>Total Capex</b>	<b>\$455</b>	<b>\$788</b>	<b>\$360</b>	<b>\$260</b>	<b>\$336</b>	<b>\$411</b>	<b>\$596</b>	<b>\$1,178</b>	<b>\$1,288</b>	<b>\$1,489</b>	<b>\$215</b>
Total Direct	\$599	\$868	\$616	\$582	\$679	\$836	\$941	\$1,276	\$1,501	\$1,620	\$1,018
Total Indirect	\$259	\$331	\$293	\$274	\$338	\$385	\$422	\$534	\$673	\$708	\$564
Total Induced	\$257	\$360	\$273	\$257	\$305	\$366	\$409	\$543	\$652	\$698	\$475
<b>Total</b>	<b>\$1,116</b>	<b>\$1,559</b>	<b>\$1,181</b>	<b>\$1,112</b>	<b>\$1,323</b>	<b>\$1,587</b>	<b>\$1,772</b>	<b>\$2,353</b>	<b>\$2,826</b>	<b>\$3,027</b>	<b>\$2,056</b>

Income	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>Total</b>	<b>Average</b>
Direct Opex	\$932	\$917	\$914	\$906	\$905	\$897	\$895	\$883	\$875	\$875	\$15,283	\$728
Indirect Opex	\$528	\$512	\$511	\$506	\$502	\$499	\$496	\$493	\$493	\$493	\$8,394	\$400
Induced Opex	\$438	\$429	\$427	\$424	\$422	\$419	\$418	\$413	\$411	\$411	\$7,103	\$338
<b>Total Opex</b>	<b>\$1,897</b>	<b>\$1,858</b>	<b>\$1,852</b>	<b>\$1,835</b>	<b>\$1,830</b>	<b>\$1,814</b>	<b>\$1,809</b>	<b>\$1,789</b>	<b>\$1,779</b>	<b>\$1,779</b>	<b>\$30,780</b>	<b>\$1,466</b>
Direct Capex	\$116	\$109	\$109	\$111	\$119	\$110	\$111	\$119	\$115	\$116	\$5,388	\$257
Indirect Capex	\$49	\$43	\$44	\$46	\$50	\$44	\$44	\$48	\$46	\$47	\$1,881	\$90
Induced Capex	\$49	\$46	\$46	\$47	\$51	\$46	\$47	\$50	\$48	\$49	\$2,181	\$104
<b>Total Capex</b>	<b>\$214</b>	<b>\$198</b>	<b>\$199</b>	<b>\$205</b>	<b>\$220</b>	<b>\$201</b>	<b>\$203</b>	<b>\$216</b>	<b>\$209</b>	<b>\$212</b>	<b>\$9,451</b>	<b>\$450</b>
Total Direct	\$1,047	\$1,025	\$1,023	\$1,017	\$1,025	\$1,007	\$1,007	\$1,002	\$990	\$992	\$20,672	\$984
Total Indirect	\$576	\$556	\$555	\$552	\$552	\$543	\$541	\$541	\$539	\$540	\$10,275	\$489
Total Induced	\$487	\$474	\$473	\$471	\$473	\$465	\$464	\$463	\$459	\$459	\$9,284	\$442
<b>Total</b>	<b>\$2,111</b>	<b>\$2,056</b>	<b>\$2,051</b>	<b>\$2,040</b>	<b>\$2,049</b>	<b>\$2,015</b>	<b>\$2,012</b>	<b>\$2,006</b>	<b>\$1,988</b>	<b>\$1,991</b>	<b>\$40,231</b>	<b>\$1,916</b>

Table C3.5 – Annual GDP Newfoundland Income and Production (\$85/\$115,\$100/\$130,\$115/\$145)

<b>GDP</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Year</b>											
<b>GDP from Income</b>											
Direct GDP	\$599	\$868	\$616	\$582	\$679	\$836	\$941	\$1,276	\$1,501	\$1,620	\$1,018
Indirect GDP	\$259	\$331	\$293	\$274	\$338	\$385	\$422	\$534	\$673	\$708	\$564
Induced GDP	\$257	\$360	\$273	\$257	\$305	\$366	\$409	\$543	\$652	\$698	\$475
GDP from Income	\$1,116	\$1,559	\$1,181	\$1,112	\$1,323	\$1,587	\$1,772	\$2,353	\$2,826	\$3,027	\$2,056
<b>GDP from Production</b>											
Revenue											
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$3,643	\$4,147	\$4,153	\$4,150	\$5,510	\$5,511	\$7,861
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$4,207	\$4,800	\$4,806	\$4,803	\$6,404	\$6,404	\$9,106
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$4,770	\$5,452	\$5,460	\$5,456	\$7,297	\$7,297	\$10,351
OP Costs	\$1,347	\$1,467	\$1,596	\$1,665	\$2,028	\$2,377	\$2,376	\$2,374	\$3,198	\$3,193	\$3,913
<b>GDP from Production</b>											
\$85/\$115	\$1,510	\$936	\$1,237	\$1,296	\$1,615	\$1,770	\$1,777	\$1,777	\$2,313	\$2,318	\$3,948
\$100/\$130	\$1,510	\$1,291	\$1,657	\$1,739	\$2,179	\$2,422	\$2,431	\$2,430	\$3,206	\$3,211	\$5,193
\$115/\$145	\$1,510	\$1,646	\$2,078	\$2,182	\$2,742	\$3,075	\$3,084	\$3,082	\$4,099	\$4,104	\$6,438
<b>GDP</b>											
\$85/\$115	\$2,626	\$2,495	\$2,418	\$2,408	\$2,938	\$3,357	\$3,549	\$4,130	\$5,138	\$5,345	\$6,004
\$100/\$130	\$2,626	\$2,851	\$2,838	\$2,851	\$3,501	\$4,010	\$4,203	\$4,783	\$6,031	\$6,238	\$7,249
\$115/\$145	\$2,626	\$3,206	\$3,259	\$3,295	\$4,065	\$4,662	\$4,856	\$5,436	\$6,925	\$7,131	\$8,494



<b>GDP</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>Total</b>	<b>Average</b>
<b>Year</b>												
<b>GDP from Income</b>												
Direct GDP	\$1,047	\$1,025	\$1,023	\$1,017	\$1,025	\$1,007	\$1,007	\$1,002	\$990	\$992	\$20,672	\$984
Indirect GDP	\$576	\$556	\$555	\$552	\$552	\$543	\$541	\$541	\$539	\$540	\$10,275	\$489
Induced GDP	\$487	\$474	\$473	\$471	\$473	\$465	\$464	\$463	\$459	\$459	\$9,284	\$442
GDP from Income	\$2,111	\$2,056	\$2,051	\$2,040	\$2,049	\$2,015	\$2,012	\$2,006	\$1,988	\$1,991	\$40,231	\$1,916
<b>GDP from Production</b>												
Revenue												
\$85/\$115	\$8,322	\$8,069	\$8,069	\$8,071	\$8,068	\$8,068	\$8,068	\$8,069	\$8,069	\$8,069	\$126,972	\$6,046
\$100/\$130	\$9,631	\$9,324	\$9,323	\$9,326	\$9,323	\$9,323	\$9,323	\$9,323	\$9,323	\$9,323	\$146,343	\$6,969
\$115/\$145	\$10,939	\$10,578	\$10,578	\$10,580	\$10,577	\$10,577	\$10,577	\$10,578	\$10,578	\$10,578	\$165,714	\$7,891
OP Costs	\$4,009	\$3,893	\$3,881	\$3,845	\$3,814	\$3,790	\$3,771	\$3,746	\$3,746	\$3,746	\$63,777	\$3,037
<b>GDP from Production</b>												
\$85/\$115	\$4,313	\$4,176	\$4,187	\$4,226	\$4,254	\$4,278	\$4,297	\$4,322	\$4,322	\$4,322	\$63,195	\$3,009
\$100/\$130	\$5,622	\$5,431	\$5,442	\$5,480	\$5,508	\$5,532	\$5,551	\$5,577	\$5,577	\$5,577	\$82,566	\$3,932
\$115/\$145	\$6,930	\$6,685	\$6,696	\$6,735	\$6,763	\$6,787	\$6,806	\$6,831	\$6,831	\$6,831	\$101,937	\$4,854
<b>GDP</b>												
\$85/\$115	\$6,424	\$6,232	\$6,238	\$6,266	\$6,304	\$6,293	\$6,309	\$6,328	\$6,310	\$6,313	\$103,426	\$4,925
\$100/\$130	\$7,733	\$7,486	\$7,493	\$7,520	\$7,558	\$7,548	\$7,563	\$7,583	\$7,565	\$7,567	\$122,797	\$5,847
\$115/\$145	\$9,041	\$8,741	\$8,747	\$8,775	\$8,812	\$8,802	\$8,818	\$8,837	\$8,819	\$8,822	\$142,168	\$6,770

Table C3.6 – Annual Taxes Direct (\$85/\$115, \$100/\$130, \$115/\$145), Indirect, Induced Newfoundland

<b>Total Taxes</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Year</b>											
Total Direct											
\$85/\$115	\$281	\$288	\$333	\$345	\$443	\$657	\$689	\$705	\$797	\$817	\$841
\$100/\$130	\$281	\$345	\$401	\$448	\$638	\$872	\$892	\$900	\$1,077	\$1,100	\$1,167
\$115/\$145	\$281	\$403	\$470	\$551	\$846	\$1,093	\$1,113	\$1,116	\$1,369	\$1,418	\$1,482
Total Indirect	\$24	\$31	\$27	\$25	\$31	\$35	\$39	\$50	\$62	\$66	\$51
Total Induced	\$87	\$121	\$92	\$87	\$103	\$124	\$138	\$183	\$220	\$235	\$162
<b>Total Taxes</b>											
\$85/\$115	\$392	\$439	\$452	\$457	\$577	\$816	\$866	\$937	\$1,079	\$1,117	\$1,054
\$100/\$130	\$392	\$497	\$521	\$560	\$772	\$1,031	\$1,069	\$1,132	\$1,358	\$1,401	\$1,380
\$115/\$145	\$392	\$554	\$589	\$663	\$980	\$1,253	\$1,290	\$1,349	\$1,651	\$1,719	\$1,695

<b>Total Taxes</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>Total</b>	<b>Average</b>
<b>Year</b>												
Total Direct												
\$85/\$115	\$896	\$868	\$901	\$926	\$946	\$956	\$968	\$984	\$986	\$987	\$15,613	\$743
\$100/\$130	\$1,220	\$1,177	\$1,198	\$1,223	\$1,243	\$1,253	\$1,265	\$1,281	\$1,282	\$1,283	\$20,546	\$978
\$115/\$145	\$1,530	\$1,474	\$1,495	\$1,520	\$1,539	\$1,550	\$1,561	\$1,577	\$1,579	\$1,580	\$25,548	\$1,217
Total Indirect	\$52	\$50	\$50	\$50	\$50	\$49	\$49	\$49	\$49	\$49	\$940	\$45
Total Induced	\$166	\$162	\$161	\$160	\$161	\$158	\$158	\$158	\$156	\$156	\$3,149	\$150
<b>Total Taxes</b>												
\$85/\$115	\$1,115	\$1,080	\$1,113	\$1,136	\$1,157	\$1,164	\$1,175	\$1,191	\$1,191	\$1,192	\$19,702	\$938
\$100/\$130	\$1,438	\$1,390	\$1,410	\$1,434	\$1,454	\$1,461	\$1,472	\$1,487	\$1,488	\$1,489	\$24,635	\$1,173
\$115/\$145	\$1,748	\$1,687	\$1,707	\$1,730	\$1,751	\$1,757	\$1,769	\$1,784	\$1,784	\$1,786	\$29,637	\$1,411

## Table C4.1 – Annual Capital Expenditure Profile: Canada and Newfoundland

[illegible]

Table C4.2 – Annual Production and Revenue (\$85/\$115, \$100/\$130, \$115/\$145)

Production (MT)																			
Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021							
Pellets		8.7	13.0	15.0	15.0	23.0	23.0	23.0	42.9	54.2	64.0	64.0							
Concentrate		8.7	10.7	13.0	14.5	14.6	20.5	28.6	32.1	41.1	41.6	49.7							
Total		17.4	23.7	28.0	29.5	37.6	43.5	51.6	75.0	95.3	105.6	113.7							

Total Revenue	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
\$85/\$115	\$2,857	\$2,403	\$2,833	\$2,961	\$3,883	\$4,387	\$5,073	\$7,658	\$9,732	\$10,900	\$11,582
\$100/\$130	\$2,857	\$2,758	\$3,253	\$3,404	\$4,447	\$5,040	\$5,846	\$8,783	\$11,162	\$12,485	\$13,287
\$115/\$145	\$2,857	\$3,113	\$3,674	\$3,847	\$5,010	\$5,692	\$6,620	\$9,907	\$12,592	\$14,070	\$14,992

[illegible]

Total Revenue	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Average
\$85/\$115	\$11,572	\$11,068	\$11,068	\$11,068	\$11,069	\$11,069	\$11,069	\$11,070	\$11,070	\$11,070	\$175,462	\$8,355
\$100/\$130	\$13,276	\$12,683	\$12,683	\$12,683	\$12,683	\$12,683	\$12,683	\$12,684	\$12,684	\$12,684	\$200,749	\$9,559
\$115/\$145	\$14,979	\$14,297	\$14,297	\$14,297	\$14,298	\$14,298	\$14,298	\$14,299	\$14,299	\$14,299	\$226,035	\$10,764

Table C4.3 – Annual Employment (Opex, Capex, Direct, Indirect, Induced)

Employment																			
Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021							
Direct Opex		2,138	2,583	2,720	2,820	3,323	3,969	4,744	5,900	7,431	7,769	8,530							
Indirect Opex		2,637	2,871	3,124	3,259	4,282	4,966	5,773	7,737	10,083	10,806	11,503							
Induced Opex		1,514	1,757	1,874	1,947	2,396	2,828	3,342	4,285	5,475	5,785	6,268							
Total Opex		6,289	7,210	7,718	8,025	10,001	11,762	13,860	17,922	22,989	24,361	26,301							
Direct Capex		999	2,980	2,040	2,114	5,419	6,247	7,870	2,713	2,717	1,161	442							
Indirect Capex		988	2,796	2,197	2,195	4,379	4,637	6,158	2,855	2,960	1,212	565							
Induced Capex		849	2,495	1,780	1,824	4,358	4,919	6,277	2,349	2,379	1,003	408							
Total Capex		2,836	8,271	6,017	6,133	14,156	15,804	20,305	7,917	8,056	3,376	1,415							
Total Direct		3,137	5,563	4,761	4,934	8,742	10,216	12,614	8,613	10,149	8,930	8,972							
Total Indirect		3,625	5,667	5,321	5,454	8,661	9,604	11,932	10,592	13,043	12,018	12,068							
Total Induced		2,363	4,252	3,653	3,770	6,754	7,747	9,620	6,635	7,854	6,788	6,677							
Total		9,125	15,482	13,735	14,159	24,157	27,567	34,165	25,839	31,046	27,736	27,716							

[illegible]

Table C4.4 – Annual Income (Opex, Capex, Direct, Indirect, Induced) Newfoundland

Income																				
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021									
Direct Opex	\$314	\$380	\$400	\$414	\$488	\$583	\$697	\$867	\$1,092	\$1,142	\$1,254									
Indirect Opex	\$211	\$230	\$250	\$261	\$343	\$397	\$462	\$619	\$806	\$864	\$920									
Induced Opex	\$158	\$183	\$195	\$203	\$249	\$294	\$348	\$446	\$570	\$602	\$652									
Total Opex	\$683	\$792	\$845	\$878	\$1,080	\$1,275	\$1,507	\$1,932	\$2,468	\$2,608	\$2,826									
Direct Capex	\$205	\$613	\$419	\$435	\$1,114	\$1,284	\$1,617	\$558	\$558	\$239	\$91									
Indirect Capex	\$86	\$243	\$191	\$191	\$381	\$404	\$536	\$248	\$258	\$105	\$49									
Induced Capex	\$87	\$257	\$183	\$188	\$448	\$506	\$646	\$242	\$245	\$103	\$42									
Total Capex	\$379	\$1,113	\$794	\$813	\$1,943	\$2,194	\$2,799	\$1,048	\$1,061	\$447	\$182									
Total Direct	\$520	\$992	\$819	\$849	\$1,602	\$1,867	\$2,315	\$1,425	\$1,651	\$1,380	\$1,345									
Total Indirect	\$297	\$473	\$441	\$452	\$724	\$801	\$998	\$867	\$1,064	\$970	\$969									
Total Induced	\$245	\$440	\$378	\$390	\$698	\$800	\$994	\$688	\$814	\$705	\$694									
Total	\$1,061	\$1,905	\$1,638	\$1,691	\$3,024	\$3,469	\$4,306	\$2,980	\$3,529	\$3,055	\$3,008									