Economic impact of the Terra Nova Asset Life Extension project

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Introduction

The proposed Terra Nova Asset Life Extension is expected to extend the production life of Terra Nova by approximately 10 years and provide nearly 80 million barrels of additional oil resource. The project is expected to require $500-$600 million in capital investment, of which $350 million will be spent in Newfoundland and Labrador with $175 million in support from the government.

Terra Nova Asset Life Extension is strategically important for Newfoundland and Labrador for several reasons. First, it will continue a significant annual economic impact for the province sustaining several thousand jobs and hundreds of millions of dollars in taxes and royalties over a 10-year period.

Secondly, the Terra Nova Asset Life Extension ensures the province is on the global map for oil and gas investment moving forward. There are many good reasons why Newfoundland and Labrador offshore oil and gas should continue to be an important supplier to meet a small share of global demand moving forward. The Terra Nova Asset Life Extension will be an important step for the province as it looks to secure a share of the oil and gas investment that will be made over the next decade and beyond.

Economic impact of the initial capital investment

According to the 2019 Terra Nova Asset Life Extension Environmental Assessment Validation Report[1] the capital investment falls mainly into two areas: a Life Extension Turnaround and a subsea program. There will also be capital investment related to the drilling program extension. For the purposes of this analysis, it was assumed that $350 million of the required capital investment would be spent in Newfoundland and Labrador.

Using Statistics Canada's provincial economic multipliers for the oil and gas engineering construction sector, this $350 million in capital spending is expected to boost provincial GDP by $227 million over the ALE period. It will support 1,758 full time equivalent person years of employment (spread over 2021 and 2022) and labour income of $138 million. Total taxes induced from the spending associated with the capital investment will boost provincial and municipal taxes by an estimated $33.7 million.

Table 1: Economic impact of the Terra Nova ALE: Initial capital investment (2021-2022)
Direct, indirect and induced effects combined

Initial capital investment	$350,000,000
Provincial GDP	$226,800,000
Labour income	$137,900,000
Employment (FTE, person years)	1,758
Taxes (induced from spending) - provincial and municipal government only	$33,738,000

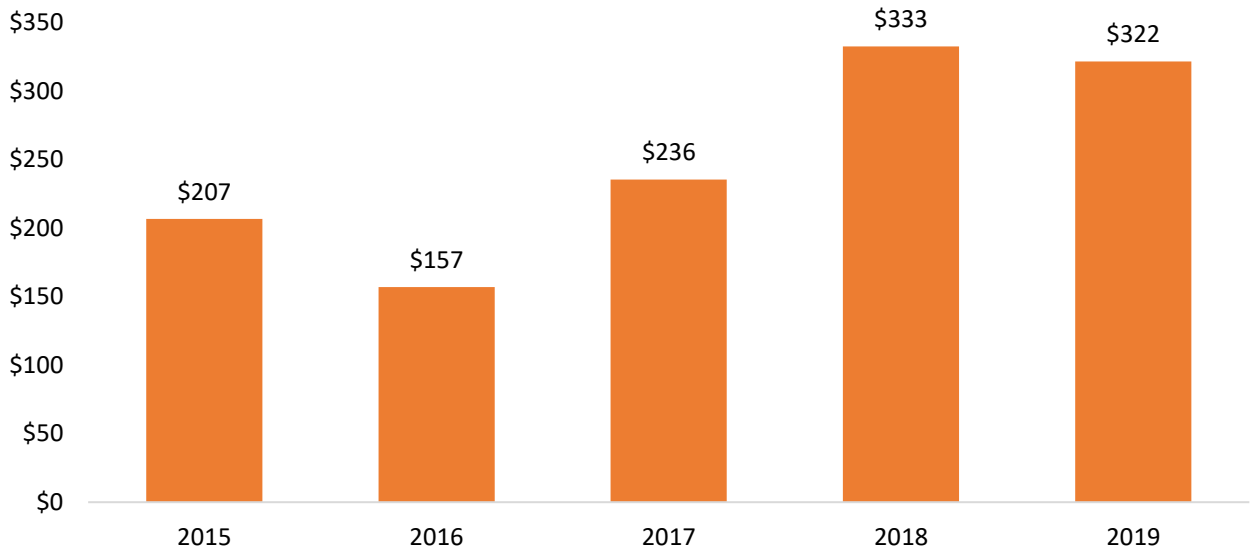
[1] https://www.cnlopb.ca/wp-content/uploads/tneavalrep.pdf

Economic impact of the ongoing operational and capital spending

Based on the Terra Nova Development Canada-Newfoundland and Labrador Industrial Benefits reports, the annual operating and capital costs associated with the Terra Nova operations have been rising in recent years. In 2019, the total operating and capital spending amounted to $552 million. In 2018, the amount was $573 million. This included both spending in the province and across Canada. In the three previous years, average annual costs were $357 million per year. Spending in the province averaged $200 million per year between 2015-2017 before rising to $333 million in 2018 and $322 million in 2019 (Table 2).

Similarly, average quarterly employment was considerably higher in the past two years with an average quarterly employment of 784 in Newfoundland and Labrador between 2015-2017 up to 920 in 2018 and 930 in 2019.

Figure 1: Terra Nova operational and capital spending by year, NL spending only ($millions)



Source: Terra Nova Development Canada-Newfoundland and Labrador Industrial Benefits reports.

For the purposes of this economic impact report, it was assumed that average annual operations and capital spending in the province would be an average of $182 million (in 2020 dollars). This is less than the average between 2015 and 2017 but accounts for the fact that average annual production will be dropping from around 11.5 million barrels per year to an estimated eight million barrels per year (on average) through the 10-year forecast period.

Model assumptions:

- Statistics Canada provincial multipliers were used for the oil and gas extraction sector and the support activities for oil and gas extraction sector.
- Direct and supply chain labour income based on average compensation per hour data published by Statistics Canada for these two sectors. Total compensation includes both wages/salaries and non-wage employment benefits/costs.

- Tax estimates derived using multiple sources including Statistics Canada household expenditure survey (PIT and property taxes from household income), Government of Newfoundland and Labrador main estimates for 2020 to derive HST estimates and indirect tax multipliers from Statistics Canada.

Table 2 shows the expected annual economic impact from the operations and capital spending of Terra Nova during the 10-year extension phase. The $182 million annual spending in the province is expected to boost provincial GDP by $173 million. It will support 1,256 direct, indirect and induced jobs and more than $139 million in labour income annually. Because these jobs pay well above average wages[2], the tax impacts for government are significant. Combining personal income tax, HST, property taxes and other indirect taxes, the annual operations and capital spending should boost provincial taxes by over $26 million per year.

Table 2: Economic impact of the Terra Nova ALE: Annual operations and capital spending
Direct, indirect and induced effects combined

	Terra Nova operations
Annual NL spending	$182,000,000
Provincial GDP	$173,402,000
Labour income	$139,072,000
Employment (FTE)	1,256
Taxes (induced from spending) - provincial and municipal government only	$26,115,000

Estimated taxes and royalties associated with the Terra Nova ALE

The provincial government is expecting to generate offshore oil and gas royalties equivalent to $11.00 per barrel of oil produced during the fiscal year 2021-2022[3]. The government assumes an average oil price of $64.00/barrel (USD). As of June 9th, the spot price for Brent oil is $70.33 and most analysts believe it will stay at this level or rise even further in the coming months.

The long-term price forecasts are more volatile. Arguably the most reputable source, the United States Energy Information Administration (USEIA) is forecasting the price to rise modestly in the coming years. The USEIA publishes its forecasts in 2020 dollars (no accounting for inflation) and is estimating the average price per barrel between 2023 and 2033 will be around $68.00/barrel, in 2020 dollars. The assumptions of this economic impact report use $64.00/ barrel (USD) as per the recent provincial government budget.

Table 3 shows the potential royalties and corporate income taxes associated with the Terra Nova ALE under three scenarios. The first is based on the actual expected royalties and corporate income taxes

[2] The average total compensation (wages/salaries and non-wage benefits/costs such as EI, CPP, insurance, etc.) for the direct and supply chain jobs is $128,000/year (based on Statistics Canada Table 36-10-0480-01). Induced jobs have an annual employment income of $51,000 because these jobs are mostly in service industries (retail, food services, personal services, etc.). Induced income levels come from Statistics Canada multipliers for the oil and gas extraction sector.

[3] $1.087 billion in offshore royalties forecasted and 98.8 million barrels of oil produced = $11.00 per barrel.

per barrel put forward by the government for fiscal 2021-2022 (the base case), $11.00/barrel in royalties and $1.50/barrel in corporate income tax. Assuming those levels hold throughout the 10-year period, it would yield $880 million in royalties and $120 million in corporate income taxes paid (shown in 2020$). A second scenario assumes the royalties and corporate income taxes will be just 50 percent of the expected per barrel levels in 2021-2022 for the industry overall. In this scenario the 80 billion barrels of oil extracted would result in $440 million in royalties and $60 million in corporate income taxes.

A third scenario, where the price of oil continues to rise, would see an increase in royalties and corporate income taxes paid. Assuming an increase in offshore royalties and corporate income taxes paid of 25 percent from the base case, that would boost royalty payments to $1.1 billion over the 10 years and corporate income tax payments to $150 million.

Any of these three scenarios would result in significant revenue for the provincial government. In the base case, it would be $100 million per year, in the sharply reduced case it would still generate $50 million per year and in the expanded royalties/taxes case it would rise to $125 million per year.

Table 3: Economic impact of the Terra Nova ALE: Estimated royalties and corporate income taxes

	Base case	50% of base	125% of base
Offshore royalties per barrel	$11.00	$5.50	$13.75
Corporate income taxes from offshore activity (per barrel)	$1.50	$0.75	$1.88
Royalties and taxes per barrel	$12.50	$6.25	$15.63
Total barrels	80,000,000	80,000,000	80,000,000
10-year royalties	$880,000,000	$440,000,000	$1,100,000,000
10-year corporate income taxes	$120,000,000	$60,000,000	$150,000,000
10-year total royalties and taxes	$1,000,000,000	$500,000,000	$1,250,000,000
Average annual royalties and taxes by scenario	*$100,000,000*	*$50,000,000*	*$125,000,000*

Economic impact of spending the royalties and corporate income taxes on public services

In addition to the Terra Nova operations, it is important to show how the royalties and corporate income taxes paid support the provincial economy. Because of the financial situation of the provincial government, it was assumed the royalties and corporate income taxes would be used to support public services.

Table 4 shows the economic impact assuming that 100% of royalties were spent on public services. In the base case, the $100 million royalties and corporate income taxes paid would support over 2,100 jobs across the province in the public sector. This spending alone would generate another $19 million in taxes for provincial and local governments.

Even in the reduced royalties/taxes scenario, the Terra Nova ALE royalties and corporate income taxes would support nearly 1,100 public sector jobs.

In the expanded royalties/taxes scenario, the Terra Nova ALE royalties and corporate income taxes would support nearly 2,700 public sector jobs.

Table 4: Economic impact of the Terra Nova ALE: Royalty and corporate income tax spending on public services

Direct, indirect and induced effects combined

	Base case ($11/barrel royalties, $1.50/barrel corp. income tax)	Royalties/corp. inc. tax 50% below the base case	Royalties/corp. inc. tax 125% of the base case
Annual NL spending	$100,000,000	$50,000,000	$125,000,000
Provincial GDP	$102,950,000	$51,475,000	$128,687,500
Labour income	$74,250,000	$37,125,000	$92,812,500
Employment (FTE)	2,133	1,067	2,666
Taxes (induced from spending) - provincial and municipal gov. only	$19,016,437	$9,508,219	$23,770,546

Combined, summary impacts over the life of the project

Job creation in the province:

- The capital investment phase of the project is expected to support 1,758 full time equivalent person years of employment during the 2021-2022 timeframe.
- The annual operations of Terra Nova after ALE is expected to support 1,256 jobs at well above average wages (direct, indirect and induced effects) (see Note 2 above).
- The annual royalties and corporate income taxes paid will support another 2,133 jobs (in the base case scenario), 1,067 jobs (in the reduced royalties scenario) or 2,666 jobs (in the expanded royalties scenario).

Annual taxes and royalties for provincial and local government:

- The capital investment phase of the project is expected to contribute $33.7 million in tax revenue for provincial and local governments.
- The annual operations of Terra Nova after ALE is expected to contribute $26.1 million in tax revenue for provincial and local governments (direct, indirect and induced effects) each year.
- The annual royalties and corporate income taxes paid are expected to be $100 million/year in the base case, $50 million/year in the reduced royalties case and $125 million/year in the expanded royalties case.

Table 5 provides the summary 10-year economic impacts for the base case and discounted royalties scenarios. The data is expressed in 2020 dollars.

Table 5: Total 10-Year Economic Impact Profile, Terra Nova ALE program ($2020)

	Spending:	GDP:	Jobs:	Taxes:
Initial ALE capital investment	$350M	$226.8M	1,758 (person years)	$33.7M
10-Year ongoing operations and capital spending	$1.82B	$1.73B	1,256 (annual)	$261M
Spending of 10-Year royalties and corp. income tax on public services*	$1.0B	$1.03B	2,133 (annual)	$190M
Totals	$3.17B	$2.99B	3,389 (annual)**	$485M

**Assumes base case royalties and corporate income taxes.*
***excludes the initial jobs associated ALE capital investment.*

Total 10-year royalties and taxes	Base case ($11/barrel royalties, $1.50/barrel corp. income tax)	Royalties/corp. inc. tax 50% below the base case
Royalty payments (base case)	$880M	$440M
Corporate income taxes (base case)	$120M	$60M
Provincial and municipal taxes from with the initial $350M ALE capital investment	$33.7M	$33.7M
Provincial and municipal taxes from the 10-Year ongoing operations and capital spending	$261M	$261M
Provincial taxes from the spending of royalty payments and corporate income taxes on public services	$190M	$95M
Total 10-year royalties and taxes	**$1.49B**	**$890M**

References:

Economic impacts associated with the $350 million ALE capital spending derived using Statistics Canada multipliers for the oil and gas engineering construction sector [BS23C200]. Includes direct, indirect and induced impacts. In-province only.

Forecasted Government of Newfoundland and Labrador royalty revenue for 2021-2022, the price of oil/currency exchange rate and total expected production taken from budget documents: https://www.gov.nl.ca/budget/2021/.

Direct and supply chain spending/employment derived using Terra Nova Benefits Reports. Because annual production moving forward will be moderately lower than previous levels, spending and employment levels were reduced. Terra Nova Benefits Reports: https://www.suncor.com/en-ca/about-us/exploration-and-production/east-coast-canada/terra-nova/benefits-reports.

Historical Terra Nova production data found at: Natural Resources Canada, Geological Survey of Canada, Geoscience Data Repository, BASIN Database, https://basin.gdr.nrcan.gc.ca/index_e.php.

Induced economic impacts derived using Statistics Canada Input-output multipliers for the oil and gas extraction sector [BS211110]. Excludes national impacts. Source: Statistics Canada Table: 36-10-0595-01.

Average total compensation per hour (used to derive the labour income) using in the economic impact model taken from Statistics Canada Table: 36-10-0480-01.

The forecasted price of oil taken from the U.S. Energy Information Administration, Annual Energy Outlook, https://www.eia.gov/outlooks/aeo/. Reflects the reference case for real Petroleum Prices Crude Oil Brent Spot ($2020).

Personal income tax and property taxes (household) multipliers derived using several sources including Statistics Canada's Survey of Household Spending and income tax tables.

The implied provincial HST rate on employment income was derived using provincial government revenue collected from HST relative to total household income in the province. Sources: Government of Newfoundland and Labrador budget documents and Statistics Canada Table 11-10-0007-01.

Other indirect taxes derived using Statistics Canada Input-output multipliers for the oil and gas extraction sector [BS211110]. These indirect taxes include commercial property tax, fuel tax, etc. Source: Statistics Canada Table: 36-10-0595-01.