

# NEARLY 22,000 JOBS AND \$8.6 BILLION: THE IMPACT OF OIL AND GAS (AND ALBERTA) ON ATLANTIC CANADA'S ECONOMY

## Overview

Canada's oil and natural gas sector has a positive impact on many aspects of the Canadian economy, not only in Alberta and Saskatchewan where the industry is a relatively large proportion of the economy, but across the country. Canada's oil and gas sector benefits the economies of all the provinces, including those of Ontario, Quebec, British Columbia, and Atlantic Canada, not only when the sector is healthy, but also in "slump" years, such as 2018, when oil and gas prices were relatively depressed.

The impact of the oil and gas sector on GDP, jobs, output, and exports on provinces outside Western Canada and on key economic sectors in those provinces is not well-known, but highly relevant to current discussions about the role of oil and gas in Canada's future.<sup>1</sup>

In this CEC Fact Sheet, we examine the impact that the oil and gas sector has on Atlantic Canada's economy.

- First, the analysis presented here includes not only the direct impact of Canada's oil and gas sector on Atlantic Canada's economy in terms of nominal GDP, output, jobs, and exports, but also the indirect impact that such activities have on other sectors in Atlantic Canada.
- Second, given that the largest proportion of oil and gas activity in Canada occurs in Alberta, we also profile the impact of purchases from Alberta on various sectors in Atlantic Canada's economy. Here, we look at the period from 2007-2018. We also show the significant role that Alberta plays in Atlantic Canada's interprovincial and international trade flows.

## Analysis One: The impact of the oil and gas sector on Atlantic Canada

Using customized data from Statistics Canada (see Table 1), in 2018, the oil and gas sector:

- Was responsible for adding over \$8.6 billion in nominal GDP to the economies of the provinces in Atlantic Canada;
- Generated over \$13.9 billion in outputs,<sup>2</sup> consisting primarily of the value of goods and services produced by sectors in Atlantic Canada;
- Supported nearly 22,000 jobs directly and indirectly in Atlantic Canada; and
- Paid over \$1.43 billion in wages and salaries to workers in the four Atlantic provinces.

Table 1

### The oil and gas sector's impact on Atlantic Canada's economy

2018

	Output (in \$ millions)	GDP (in \$ millions)	Number of jobs
Direct impact	10,405.7	6,885.8	7,249
Indirect impact	3,507.8	1,728.4	14,536
<b>Total impact</b>	<b>13,913.5</b>	<b>8,614.2</b>	<b>21,785</b>

**Source:** Derived from Statistics Canada, Supply and Use Tables, Custom Tabulation. Totals may not add exactly due to rounding.

<sup>1</sup> Atlantic Canada has a long history of involvement in the oil and natural gas sector, though in recent years, the main involvement has been via Newfoundland & Labrador. For more on natural gas and oil development and revenues in the Atlantic provinces, see CEC Research Brief Five: Missed Maple Leaf Opportunities: A Synopsis of Natural Gas Industries in Central and Eastern Canada and Key US States.

<sup>2</sup> For a discussion of Statistics Canada's use of both input/output models and equilibrium models, see the addendum in [Fact Sheet #17](#). The latest available year for the customized data from Statistics Canada is 2018.

## The oil and gas impact alone in 2018: Over \$4.1 billion on key sectors in Atlantic Canada

To examine the impact of oil and gas development on the Atlantic economy in more detail, consider that, in 2018, the oil and gas sector purchased over \$4.1 billion worth of goods and services from other industries in Atlantic Canada (see Table 2). That over \$4.1 billion included:

- \$642 million from the professional, scientific, and technical services sector; and
- Over \$2.2 billion from the manufacturing sector.

### Analysis Two: Alberta's interprovincial trade with the Atlantic Provinces:

Given that the largest proportion of oil and gas activity in Canada occurs in Alberta, we have expanded the analysis to include all purchases of Atlantic Canadian goods and services by Alberta's consumers, businesses, and governments—that is, we measure the value of Alberta's interprovincial trade with Atlantic Canada.

Between 2007 and 2018, Alberta imported nearly \$20.3 billion worth of goods and services from the Atlantic provinces, ranging from the relatively small \$130 million in arts, entertainment and recreation to over \$7.7 billion in manufacturing (see Table 3 and Table 4).

Table 2

### Purchases in Atlantic Canada by the oil and natural gas sector from other industries

2018

Sector	Value of purchases (in \$ millions)
Manufacturing	2,218
Professional, scientific and technical services	642
Finance and insurance	92
Administrative and support, waste management and remediation services	173
Real estate and rental and leasing	134
Transportation and warehousing	107
Utilities	98
Management of companies and enterprises	91
Other services (except public administration)	62
Information and cultural industries	52
Accommodation and food services	32
Construction	31
Wholesale and retail trade	26
Educational services	15
<b>Total</b>	<b>4,172</b>

Source: Authors' calculation derived from Supply and Use Tables, Statistics Canada catalogue 15-602-x\_2017.

Table 3

**Atlantic Canada's interprovincial trade with Alberta**

2007-2018\*

Sector	In \$ millions
Arts, entertainment and recreation	130
Educational services	162
Agriculture, forestry, fishing and hunting	248
Accommodation and food services	764
Information and Telecommunications	1,009
Professional, scientific and technical services	1,149
Transportation and related services	1,455
Finance, insurance and Real Estate	1,717
Mining and oil and gas support services	2,527
Administrative and support, waste management and remediation services	3,383
Manufacturing	7,745
<b>Total</b>	<b>20,289</b>

Note: \*Selected Industries

Source: Authors' calculations derived from Supply and Use Tables, Statistics Canada (various years).

**Alberta is one of Atlantic Canada's largest markets for interprovincial trade and exports**

Atlantic Canada's interprovincial trade with Alberta in 2018 (see Table 5) was behind the region's trade with the United States (\$22.5 billion), Ontario (\$7.8 billion), Quebec (\$6.7 billion), but ahead of trade with international markets such as China (\$1.7 billion), and the Netherlands (\$1 billion).

Table 4

**Alberta's interprovincial trade imports from Atlantic Canada's manufacturers**

2007-2018

Atlantic Canada's manufacturing sub-sectors	In \$ millions
Motor vehicle parts	6
Printed products and services	11
Furniture and related products	18
Electrical equipment, appliances and components	34
Computers and electronic products	58
Non-metallic mineral products	81
Other manufactured products and custom work	82
Primary metallic products	114
Textile products, clothing, and products of leather and similar materials	149
Industrial machinery	195
Transportation equipment	215
Chemical products	254
Wood pulp, paper and paper products and paper stock	278
Wood products	311
Fabricated metallic products	404
Alcoholic beverages and tobacco products	556
Plastic and rubber products	708
Refined petroleum products (except petrochemicals)	2,110
Food and non-alcoholic beverages	2,162
<b>Total</b>	<b>7,745</b>

Source: Authors' calculations derived from Supply and Use Tables, Statistics Canada (various years).

Table 5

**Markets for Atlantic Canada's international exports and interprovincial trade**

2018

Sector	Value of trade and exports (in \$ billions)
United States	22.5
Ontario	7.8
Quebec	6.7
United Kingdom	1.8
Alberta	1.8
China	1.7
Netherlands	1.0
Spain	0.6
Italy (incl. Vatican City State)	0.6
Japan	0.5
Belgium	0.4
France (incl. Monaco, French Antilles)	0.3
Trinidad and Tobago	0.3

Source: Government of Canada, trade data online, and authors' calculation derived from Statistic Canada Table 12-10-0088-01.

**Conclusion**

The oil and gas sector in Canada has a significant direct and indirect impact on Atlantic Canada's export sectors, as does the purchase of goods and services in Atlantic Canada by citizens, businesses, and governments in Alberta, the province where the oil and gas sector is concentrated.

The oil and gas sector also provides substantial economic benefits to the Atlantic provinces in GDP, jobs, output, wages and salaries. More specifically, those benefits include \$8.6 billion in nominal GDP, \$13.9 billion in outputs, nearly 22,000 jobs, and over \$1.4 billion in wages and salaries.

## Notes

This CEC Fact Sheet was compiled by Ven Venkatachalam and Lennie Kaplan at the Canadian Energy Centre ([www.canadianenergycentre.ca](http://www.canadianenergycentre.ca)). All percentages in this report are calculated from the original data, which can run to multiple decimal points. They are not calculated using the rounded figures that may appear in charts and in the text, which are more reader friendly. Thus, calculations made from the rounded figures (and not the more precise source data) will differ from the more statistically precise percentages we arrive at using source data. The authors and the Canadian Energy Centre would like to thank and acknowledge the assistance of Philip Cross in reviewing the data and research for the initial edition of this Fact Sheet. Image credits: [Jeff Smith](#)

## References (all links live as of October 24, 2022)

Statistics Canada (2022a), Supply and Use Tables, custom tabulation; Statistics Canada (2022b), Statistics Canada (2022b), Table 12-10-0088-01: Interprovincial and international trade flows, basic prices, summary level <<https://bit.ly/3EN0aTR>>; Statistics Canada (2021), Supply and Use Tables, 2018: 15-602-X\_2017 <<https://bit.ly/2XHbDUe>> The American Petroleum Institute (July 2017), *Impact of the Natural Gas and Oil Industry on the US Economy in 2015* <<https://bit.ly/2EKrJTT>>; Government of Canada, Trade Data Online (June 2022) <<https://bit.ly/2EMswnj>>.

## Definitions

The **oil and gas sector** is defined as the sum of oil and gas extraction and oil and gas investment. Oil and gas extraction is defined by NAICS subsector 211. It comprises establishments primarily engaged in operating oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This subsector includes the production of oil, the mining and extraction of oil from oil shale and oil sands, and the production of gas and hydrocarbon liquids through gasification. Oil and gas investment includes capital expenditures on construction, machinery and equipment, and exploration by the oil and gas extraction industry. **GDP**, or Gross Domestic Product, also referred to as gross value added at basic prices, is the sum of the market values, or prices, of all final goods and services produced in an economy. **Output** consists primarily of the value of goods and services produced by an industry. Jobs include employee jobs (full-time, part-time, and seasonal) and self-employed jobs. The **direct impact** of oil and gas extraction is the effects directly attributed to the industry's production. The direct impact of oil and gas investment is the deliveries by domestic industries to satisfy capital expenditures by the oil and gas extraction industry. Direct impact is measured in terms of GDP, output, and jobs within the oil and gas sector. The **indirect impact** covers upstream economic activities associated with supplying intermediate inputs (the current expenditures on goods and services used in the production process) to the directly affected industries. The indirect impact is measured in terms of GDP, output, and jobs through the oil and gas sector supply chain, including other key sectors of an economy—in the case of this paper, Atlantic Canada's economy. We use the American Petroleum Institute definition of the oil and natural gas sector to quantify the goods and services purchased by the sector and the wages paid by the sector. The sector includes conventional oil and gas extraction and non-conventional oil extraction. Support activities for oil and gas extraction include oil and gas engineering construction, petroleum refineries, petroleum and coal product manufacturing (except petroleum refineries); petroleum product wholesaler-distributors, gasoline stations, crude oil and other pipeline transportation, and pipeline transportation of natural gas. The **manufacturing** sector includes food and non-alcoholic beverages; alcoholic beverages and tobacco products; textile products, clothing, and products of leather and similar materials; wood products; wood pulp, paper, paper products, and paper stock; printed products and services; refined petroleum products (except petrochemicals); chemical products; plastic and rubber products; non-metal mineral products; primary metal products; fabricated metal products; industrial machinery; computers and electronic products; electrical equipment, appliances, and components; transportation equipment; motor vehicle parts; furniture and related products; and other manufactured products.

## Creative Commons Copyright

Research and data from the Canadian Energy Centre (CEC) is available for public usage under creative commons copyright terms with attribution to the CEC. Attribution and specific restrictions on usage including non-commercial use only and no changes to material should follow guidelines enunciated by Creative Commons here: [Attribution-NonCommercial-NoDerivs CC BY-NC-ND](#).