#### **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. When Canada's oil and gas sector is healthy (or even in "slump" years such as 2016 when oil and gas prices were relatively depressed), the economies of all the provinces, including those of Ontario, Quebec, British Columbia, and in Atlantic Canada, also benefit.

The impact of the oil and gas sector on GDP, jobs, output and exports on provinces outside Western Canada and key economic sectors in those provinces is not well-known, but is 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 had 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 2016 in isolation (the latest year for which this data is available), as well as the period 2012-2016 in total. We also show how significant role 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 2016 the oil and gas sector:

- Was responsible for adding nearly \$6.3 billion in nominal GDP to the economies of the provinces in Atlantic Canada;
- Generated nearly \$15 billion in outputs,<sup>2</sup> consisting primarily of the value of goods and services produced by sectors in Atlantic Canada;
- Supported nearly 27,000 jobs directly and indirectly in Atlantic Canada; and
- Paid over \$1.6 billion in wages and salaries to workers in the four Atlantic provinces.

The oil and gas sector's impact on Atlantic Canada's economy 2016			
	Output	GDP	Jobs
	\$ billions		#
Direct impact	11.3	4.5	10,411
Indirect impact	3.8	1.8	16,754
Total impact	15.0	6.3	27,165

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

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>2</sup> For a discussion of Statistics Canada's use of Input/Output models and also equilibrium models, see the addendum in <u>Fact Sheet #17</u>. The latest available year for the customized data from Statistics Canada is 2016.

# The oil and gas impact alone in 2016: \$ 7.5 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 2016, the oil and gas sector purchased nearly \$7.45 billion worth of goods and services from other industries in Atlantic Canada (see Table 2). That \$7.45 billion included:

- \$500 million from the finance and insurance sector
- \$600 million from the professional, scientific, and technical services sector; and
- Over \$5.4 billion from the manufacturing sector.

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

Sector	\$, millions
Manufacturing	5,487
Professional, scientific and technical services	618
Finance and insurance	544
Administrative and support, waste management and remediation services	187
Real estate and rental and leasing	116
Utilities	102
Transportation and warehousing	101
Management of companies and enterprises	98
Information and cultural industries	59
Other services (except public administration)	57
Accommodation and food services	27
Wholesale and retail trade	24
Construction	19
Educational services	13
Total	7,451

Source: Authors' calculation derived from Supply and Use Tables, Statistics Canada catalogue 15-602-x\_2016.

# Analysis Two: Alberta's share of Atlantic Canada's interprovincial trade flows in 2016: \$1.7 billion

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.

Albertans spent a substantial amount on Atlantic Canadian goods and services in 2016, from relatively small amounts (\$56 million in accommodation and food services) to more substantial trade such as \$534 million on manufactured goods. In total, in just 2016, interprovincial exports from Atlantic Canada to Alberta were worth \$1.7 billion (see Table 3).

Table 3	Atlantic Canada's provincial
	exports to Alberta
	2016

Sector	\$, millions
Manufacturing	534
Administrative, head office, waste management, other	331
Professional services	124
Mining, quarrying, and oil and gas extraction	123
Transportation and warehousing	121
Wholesale and retail trade	103
Finance and insurance	102
Information and cultural	77
Real estate and rental and leasing	63
Accommodation and food services	56
Agriculture, forestry, fishing and hunting	28
Management of companies	27
Education services	16
Health and social assistance services	10
Arts, entertainment and recreation services	10
Other	5
Total	1,731

Source: Authors' calculation derived from Supply and Use Tables, Statistics Canada catalogue 15-602-x\_2016.

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

Atlantic's interprovincial trade with Alberta in 2016 (see Table 4) was behind only the region's trade with the United States (nearly \$19.3 billion), Ontario (\$6.7 billion), Quebec (\$6.3 billion) and ahead of international markets such as China (\$1.1 billion), the United Kingdom (\$900 million) and Japan (\$400 million).

Markets for Atlantic Canada's international exports and interprovincial trade 2016	
	\$, billions
United States	19.3
Ontario	6.7
Quebec	6.3
Alberta	1.7
China	1.1
United Kingdom	0.9
Japan	0.4
Netherlands	0.3
Belgium	0.3
Spain	0.3
Italy (incl. Vatican City State)	0.2
France (incl. Monaco, French Antilles)	0.2
India	0.2

Source: Government of Canada, trade data online and authors' calculation derived from Supply and Use Tables, Statistics Canada catalogue 15-602-X.

### Alberta's 2012-2016 totals: Nearly \$10 billion

Between 2012 and 2016, Alberta imported close to \$10 billion worth of goods and services from the Atlantic provinces. They ranged from the relatively smaller \$20 million in electronics equipment to nearly \$1 billion in food and non-alcoholic beverages purchases and \$3.2 billion in manufacturing (see Table 5 and Addendum).

e <b>5</b>	Atlantic Canada's		
	interprovincial trade with Alberta		
	2012-2016		

Sector	\$, millions
Manufacturing	3,159
Administrative and support, head office, waste management and remediation services	1,779
Mineral support services	1,320
Transportation and warehousing	655
Finance and insurance	564
Professional, scientific and technical services	502
Wholesale and retail trade	492
Information and cultural industries	491
Accommodation and food services	299
Real estate and rental and leasing	241
Agriculture, forestry, fishing and hunting	147
Education services	70
Arts, entertainment and recreation services	47
Health and social assistance services	39
Software	28
Other services	24
Research and development	3
Total	9,860

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

### The takeaway

Table

The oil and gas sector in Canada has a significant impact on Atlantic Canada's export sectors directly and indirectly, 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 terms of GDP, jobs, output, wages and salaries, including \$6.3 billion in nominal GDP, \$15 billion in outputs, 27,000 jobs and over \$1.6 billion in wages and salaries.

2012-2016 total (\$, millio	Alberta's interprovincial trade with Atlantic Canada's manufacturers
Atlantic Canada's manufacturing sub-sectors	\$ millions
Food and non-alcoholic beverages	907
Refined petroleum products (except petrochemicals)	715
Plastic and rubber products	368
Alcoholic beverages and tobacco products	267
Fabricated metallic products	199
Wood products	104
Chemical products	100
Industrial machinery	96
Transportation equipment	9
Wood pulp, paper and paper products and paper stock	73
Textile products, clothing, and products of leather and similar materials	59
Primary metallic products	58
Non-metallic mineral products	47
Other manufactured products and custom work	34
Electrical equipment, appliances and components	2
Furniture and related products	9
Computers and electronic products	-
Motor vehicle parts	
Printed products and services	

Source: Authors' calculation derived from Supply and Use Tables, Statistics Canada (Various Years)

**Notes:** This CEC Fact Sheet was compiled by Ven Venkatachalam and Mark Milke at the Canadian Energy Centre (<a href="www.canadianenergycentre.ca">www.canadianenergycentre.ca</a>). 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 this Fact Sheet. Image credits: "Petty Harbour, NL, Canada" by <a href="www.canadianenergycentre.ca">Gurpreet Singh</a> from Unsplash.com

**Sources:** (Links live as of November 5, 2020) American Petroleum Institute (July 2017). Impact of the Natural Gas and Oil Industry on the US Economy in 2015. <a href="https://bit.ly/2EKrJTT">https://bit.ly/2EKrJTT</a>; Government of Canada, Trade Data Online(July 2020); <a href="https://bit.ly/2EMswnj">https://bit.ly/2EMswnj</a>; Statistics Canada (2019). Supply and Use Tables, 2016, 15-602-X-2016. <a href="https://bit.ly/3mJdGiB">https://bit.ly/3mJdGiB</a>; Statistics Canada (2019). Supply and Use Tables, Custom Tabulation.

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 include capital expenditures on construction, machinery and equipment and exploration by the oil and gas extraction industry. GDP, 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 are the effects directly attributed to the industry's production. The direct impact of the oil and gas investment is the deliveries by domestic industries to satisfy capital expenditures by the oil and gas extraction industry. The 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 up in the production process) to the directly impacted industries. The indirect impact is measured in terms of GDP, output, and jobs through the supply chain of the oil and gas sector, including other key sectors of Atlantic Canada's economy. We use the American Petroleum Institute definition of the oil and natural gas sector to quantify the and good & 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; 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; 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 and 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 c products; industrial machinery; computers and electronic products; electrical equipment, appliances and components; transportation equipment; motor vehicle parts; furniture and related products; other manufactured products.

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