

# \$193 BILLION AND 71,000 JOBS: THE IMPACT OF OIL AND GAS (AND ALBERTA) ON ONTARIO'S ECONOMY

## Overview

Canada's oil and gas industry has a positive impact on many sectors of the Canadian economy, not only in Alberta but across the country. In this CEC Fact Sheet, we examine the direct and indirect impact that the oil and gas sector has on Ontario's economy.<sup>1</sup> 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 specific Ontario sectors.

## Impact of the oil and gas sector on Ontario

Using customized data from Statistics Canada<sup>2</sup> (see Table 1), in 2017<sup>3</sup> the oil and gas sector:

- Was responsible for adding \$7.7 billion in nominal GDP to Ontario's economy;
- Generated \$15.3 billion in outputs, consisting primarily of the value of goods and services produced by oil and gas sector in the Ontario economy;
- Supported over 71,000 direct and indirect jobs in Ontario's economy; and
- Paid over \$2.1 billion in wages and salaries to workers in Ontario.

Table 1

### The oil and gas sector's impact on Ontario's economy

2017

	Output (in \$ billions)	GDP (in \$ billions)	Number of Jobs
Direct impact	1.3	0.3	1,686
Indirect impact	14.0	7.4	69,389
Total impact	15.3	7.7	71,076

Source: Derived from Statistics Canada, Supply and Use Tables, custom tabulation.

## Quantifying the contribution of the oil and gas sector to Ontario's economy

To examine the impact of the oil and gas sector on Ontario's economy in more detail, consider that in 2017 (the most recent year of data available for this breakdown), the oil and gas sector purchased \$7.3 billion worth of goods and services from other industries in Ontario. That \$7.3 billion included:

- Over \$4.3 billion from the manufacturing sector;
- \$700 million from the finance and insurance sector;
- \$600 million from the professional, scientific, and technical services sector;
- \$400 from administrative support; and
- \$300 million from the transportation and warehousing sector.

<sup>1</sup> The direct impact is measured in terms of GDP, output, and jobs within the oil and gas sector. 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 the Ontario economy. See the end of this Fact Sheet for entities included in the definition of the oil and gas sector.

<sup>2</sup> For a discussion of Statistics Canada's use of input/output models and equilibrium models, see the addendum in [Fact Sheet #17](#).

<sup>3</sup> The latest year for which there is available data.

## Alberta: Ontario's second-largest destination for interprovincial trade

Alberta is second only to Quebec as a critical market for Ontario's interprovincial exports (see Table 2 and Addendum 2). Ontario's trade with Alberta was worth \$32.5 billion in 2017, or 23.9% of all Ontario interprovincial trade, second only to Quebec at \$44.7 billion or 32.9%.

Table 2

**Ontario's interprovincial trade by province or territory**  
2017 (total goods and services)

	\$ billions	%
Quebec	44.7	32.9%
Alberta	32.5	23.9%
British Columbia	25.5	18.7%
Manitoba	8.1	6.0%
Saskatchewan	7.8	5.7%
Nova Scotia	6.4	4.7%
New Brunswick	4.8	3.5%
Newfoundland and Labrador	3.6	2.6%
Prince Edward Island	1.0	0.7%
Northwest Territories	0.7	0.5%
Nunavut	0.6	0.4%
Yukon	0.3	0.2%

Source: Statistics Canada, Table 12-10-0088-01.

## Analyzing Alberta's purchasing impact on Ontario manufacturers: \$7.0 billion or almost 21% of Ontario's manufacturing exports to all provinces

In 2017, purchases from Ontario's manufacturing sector by Alberta businesses (21% of total Ontario manufacturing exports), were significantly higher than Alberta's proportion of Canada's population at 11.6% (see Figure 1).

In dollar terms, Albertans made substantial purchases from Ontario in 2017, from \$9 million in computers and electronics to over \$2 billion in food and non-alcoholic beverages. As a proportion of Ontario's manufacturing sub-sectors, Alberta's purchases ranged from 7% for wood, pulp, and paper, to 19% for furniture, to 27% for refined petroleum products. Alberta-based consumers, businesses, and governments made an average of nearly 24% of purchases from all sectors in Ontario.

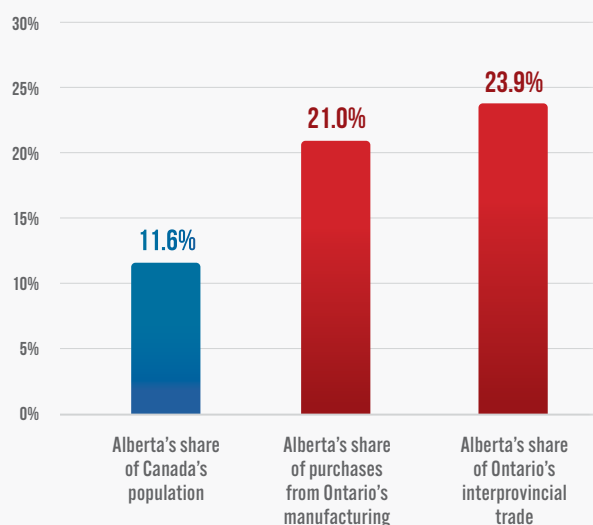
## Alberta's share of Ontario's interprovincial trade: \$32.5 billion or nearly 24%

In 2017, Alberta's share of Ontario's interprovincial trade (beyond just manufacturing) was worth \$32.5 billion or 23.9% of all exports from Ontario that year (see Figure 1). The value of Alberta's purchases to Ontario ranged from \$100 million in the mining, quarrying, and oil and gas extraction sector (4.2% of that sector) to nearly \$8.2 billion in finance and insurance (over 30% of that sector).

Figure 1

**Comparing Alberta's share of Ontario's economy with Alberta's share of Canada's population**

2017, %



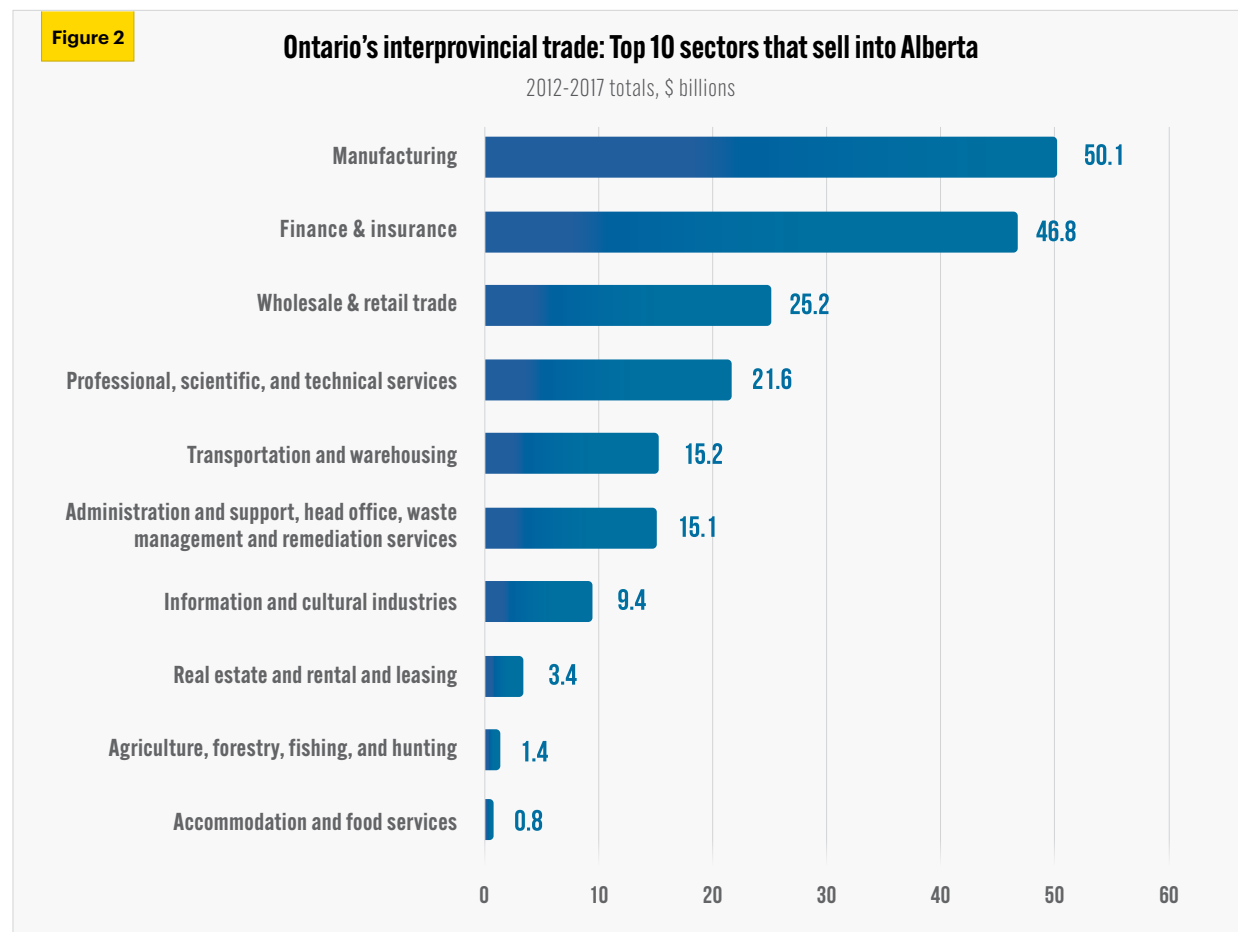
Sources: Statistics Canada, Table 12-10-0088-01; Table: 17-10-0005-01.

## 2012-2017 total: \$193 billion

Ontario has benefited from the growth in Alberta's oil and gas sector and the purchase of goods and services from Ontario by Alberta-based residents, businesses, and governments. Between 2012 and 2017 inclusive, Alberta imported \$193 billion worth of goods and services from Ontario. Among other sectors, this includes:

- More than \$50 billion from the manufacturing sector;<sup>4</sup>
- \$46.8 billion from the finance and insurance industry;
- \$21.6 billion from the professional services sector; and
- \$9.4 billion from the information and culture industry.

The top 5 Ontario sectors sold \$159 billion worth of goods and services into Alberta between 2012 and 2017 inclusive (see Figure 2).



Source: Authors' calculations from Statistics Canada, Table: 12-10-0088-01.

<sup>4</sup> 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; other manufactured products.

## Alberta is Ontario's third largest export market after the United States and Quebec

Ontario's interprovincial trade with Alberta was worth \$32.5 billion in 2017. That was behind only the United States (over \$197 billion) and Quebec (\$44.7 billion) and ahead of international markets such as the United Kingdom (\$14.7 billion), China (\$3.4 billion), and Mexico (\$3.2 billion) among others (see Table 3).

Table 3

### Markets for Ontario's international exports and interprovincial trade

2017

	\$ billions
United States	197.0
Quebec	44.7
Alberta	32.5
United Kingdom	14.7
China	3.4
Mexico	3.2
Germany	1.9
Japan	1.7
Norway	1.6
Hong Kong	1.2
Saudi Arabia	1.0
Italy (incl. Vatican City State)	0.9

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

Table 4

### Selected markets for Ontario's manufacturing sector

2017

	\$ billions
United States	168.0
Alberta	9.3
Mexico	3.2
United Kingdom	2.6
China	2.4
Germany	1.7
Norway	1.6
Japan	1.4
Saudi Arabia	1.0
Italy (incl. Vatican City State)	0.7
Netherlands	0.7

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

## The takeaway

The oil and gas sector in Canada has a significant impact on Ontario's export sectors, directly and indirectly, as does the purchase of goods and services by citizens, businesses, and governments in the province where the oil and gas sector is concentrated, i.e., by those in Alberta.

## Alberta and Ontario's manufactured goods

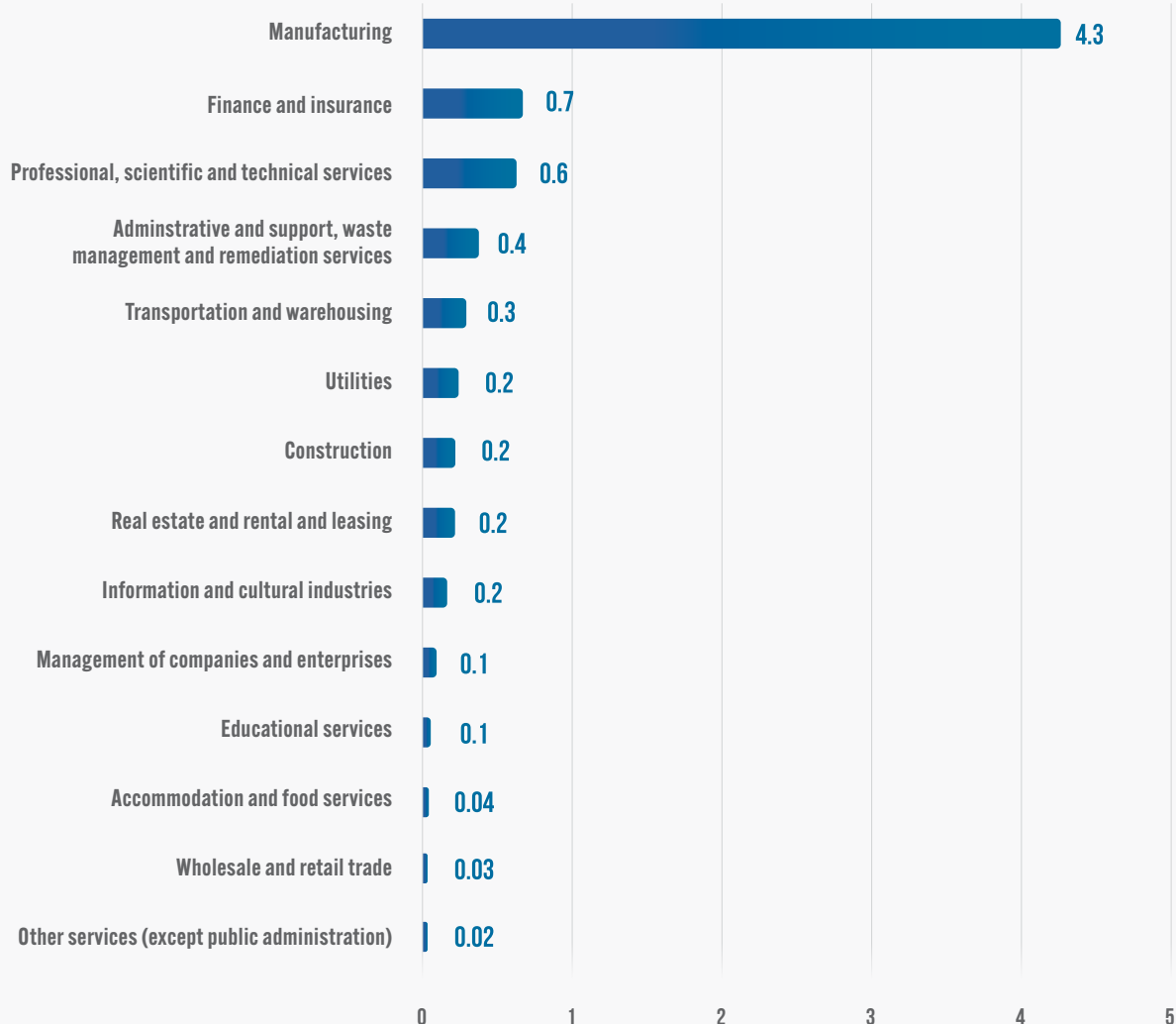
In 2017, Ontario's manufacturing sector exported about \$9.3 billion worth of goods and services to Alberta, about 21% of the industry's total value of interprovincial trade (see Table 4). That was significantly less than Ontario's exports to the United States (over \$168 billion), but ahead of international destinations for Ontario's manufactured exports including Mexico (\$3.2 billion), the United Kingdom (\$2.6 billion), China (\$2.4 billion) and Germany (\$1.7 billion), among others.

## Addendums

### Addendum 1

### Impacts of the oil and natural gas sector on Ontario industries

2017 (\$ billions)



Source: Authors' calculation from Statistics Canada Catalogue No. 15-602-X-2017.

## Addendum 2

## Alberta's impact on selected Ontario industries

2017

	Ontario's total interprovincial trade	Ontario's trade with Alberta	Alberta's share of Ontario's interprovincial trade, by sector
Ontario industry	In \$ billions		%
Finance and insurance	27.1	8.2	30.3
Manufacturing	33.2	7.0	21.1
Professional, scientific, and technical services	15.6	4.5	27.1
Wholesale and retail trade	21.3	4.5	21.1
Transportation and warehousing	8.7	2.7	31.0
Administrative and support, head office, waste management, and remediation services	10.1	2.6	25.7
Information and cultural industries	7.5	1.4	18.7
Real estate and rental and leasing	3.9	0.7	17.9
Agriculture, forestry, fishing, and hunting	1.9	0.3	15.8
Other services (except public administration)	1.3	0.2	15.3
Health care and social assistance	0.8	0.1	12.5
Educational services	0.5	0.1	20.0
Accommodation and food services	1.7	0.1	5.9
Arts, entertainment, and recreation	0.4	0.1	25.0
Mining, quarrying, and oil and gas extraction	1.7	0.1	5.9
Utilities	0.1	0.0	0.0
Construction	0.1	0.0	0.0
<b>Total</b>	<b>136.1</b>	<b>32.5</b>	<b>23.9%</b>

Source: Authors' calculations from Statistics Canada Table 12-10-0088-01.



## Notes

This CEC Fact Sheet was compiled by Ven Venkatachalam at the Canadian Energy Centre ([www.canadianenergycentre.ca](http://www.canadianenergycentre.ca)) and Mark Milke, formerly of the Canadian Energy Centre. 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: [Marcin Skali](#) from Unsplash.com

## References (All links live as of October 18 2021)

Statistics Canada (2020), Supply and Use Tables, 2017: 15-602-X, 2017 <<https://bit.ly/2XHbDUe>>; Statistics Canada (2021a), Supply and Use Tables, custom tabulation; Statistics Canada (2021b), Table 17-10-0057-01: Projected population, by projection scenario, age and sex, as of July <<https://bit.ly/2W8bzfN>>; Statistics Canada (2021c), Table 12-10-0088-01: Interprovincial and international trade flows, basic prices, summary level <<https://bit.ly/3EN0aTR>>; 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 (October 2021) <<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, Ontario'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.

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