

Energy statistics, November 2019

Released at 8:30 a.m. Eastern time in *The Daily*, Tuesday, February 4, 2020

Canada has vast reserves of crude oil, natural gas and coal, as well as hydroelectricity generation capacity and is one of the largest producers, exporters and consumers of energy products.

Canada also has a developed infrastructure for processing, transport and distribution of energy products including refineries, pipelines, natural gas storage facilities and electricity transmission lines.

In November, modest increases were observed in the production of crude oil and equivalent products (+0.5%), natural gas (+1.1%) and electricity (+0.9%) compared with the same month in 2018. Meanwhile, coal production (-11.6%) declined for the fifth consecutive month. Over the same period, exports of natural gas (+6.1%) and electricity (+15.3%) rose, while exports of crude oil and equivalent products (-5.2%) declined.

For more information on energy in Canada, please visit the [Canadian Energy Information Portal](#). For regular updates on the Canadian Centre for Energy Information initiative, please visit the [website](#) and follow #energynews on social media.

Crude oil and equivalent products

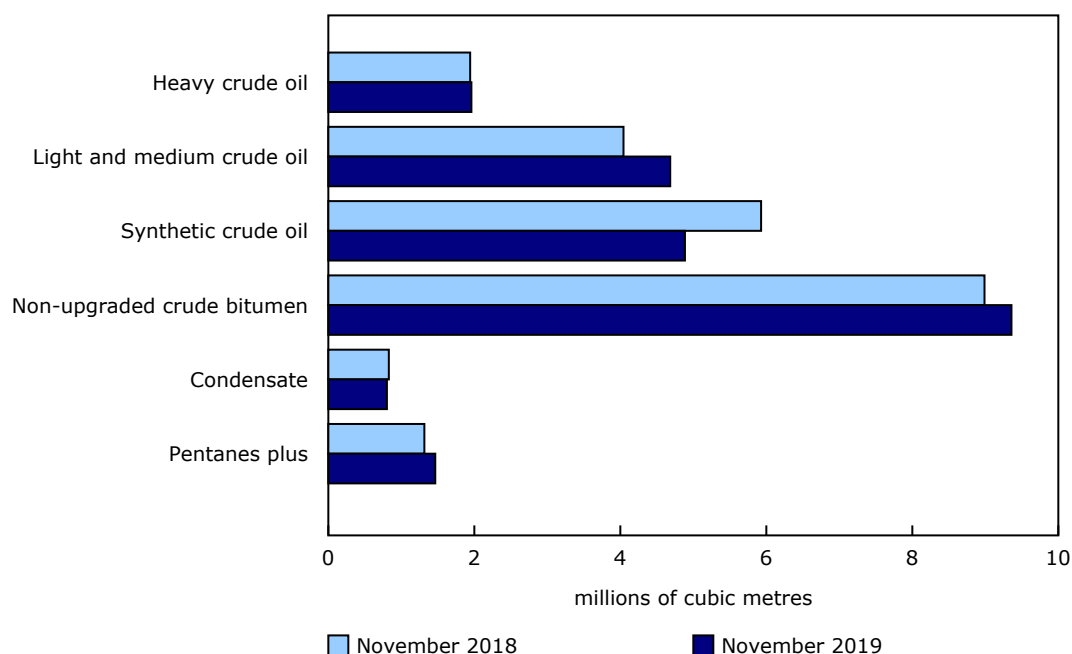
Following a decline in October, production of crude oil and equivalent products edged up 0.5% year over year to 23.2 million cubic metres (145.6 million barrels) in November.

Light and medium crude oil production increased 15.8% to 4.7 million cubic metres, the largest monthly year-over-year increase since June 2017. The gain was mainly attributable to higher output from Newfoundland and Labrador offshore facilities which returned to operation following recent maintenance work. Production of crude bitumen (+4.1% to 9.4 million cubic metres), equivalent products (+5.7% to 2.3 million cubic metres) and heavy crude oil (+0.9% to 2.0 million cubic metres) were also up in November.

Meanwhile, ongoing maintenance at some Alberta upgraders continued to limit the overall production of crude oil. In November, synthetic crude oil production was down 17.6% to 4.9 million cubic metres, the second consecutive monthly year-over-year decrease.



Chart 1
Production of crude oil and equivalent products, by type of product



Source(s): Table 25-10-0063-01.

Alberta produced 18.3 million cubic metres of crude oil and equivalent products in November, down 3.2% compared with the same month in 2018. This was the third monthly year-over-year decrease in four months, due primarily to a 4.5% decline in oil sands extraction. Meanwhile, production of equivalent products rose 6.4%, partially offsetting the province's overall decline in crude oil production.

Alberta (79.2% of total production), Saskatchewan (10.1%) and Newfoundland and Labrador (7.0%) accounted for the vast majority of Canadian production of crude oil and equivalent products in November. During the month, Newfoundland and Labrador production totalled 1.6 million cubic metres, the highest level since January 2009.

Pipelines in Canada received 20.6 million cubic metres of crude oil and equivalent products from fields and plants in November, down 6.0% year over year. Lower crude production levels in Alberta, where the majority (86.5%) of these receipts originated, contributed to the overall decline.

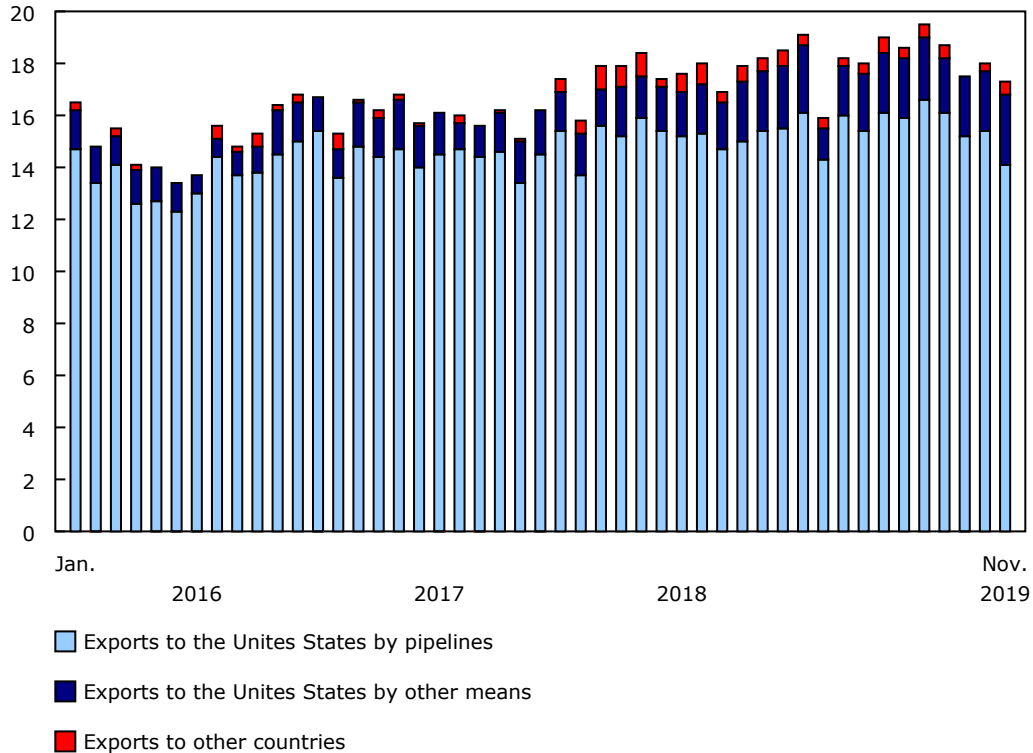
During the month, crude oil delivered by pipelines to Canadian refineries and upgraders was up 4.3% year over year to 8.2 million cubic metres, the majority of which (69.0%) was delivered to facilities in the Western provinces.

Opening inventories of crude oil and equivalent products held in Canadian facilities totalled 17.6 million cubic metres in November. During the month, inventories increased 2.7% to close at 18.0 million cubic metres. Inventories held by transporters (+6.2%) were the main contributor to the monthly increase, while those held at fields and plants (-3.7%) and in refineries (-6.5%) decreased.

In November, exports of crude oil and equivalent products decreased 5.2% year over year to 17.3 million cubic metres, the lowest level since February 2019. November was marked by disruptions in crude oil pipeline transportation following a rupture at one of the main export lines in late October. As a result, exports to the United States by pipelines fell 8.4% to 14.1 million cubic metres. In contrast, exports to the United States by other means (rail, truck and marine) were up 16.4% year over year to 2.7 million cubic metres, the highest level since this data series started in January 2016. Exports to other countries decreased in November.

Chart 2
Exports of crude oil and equivalent products

millions of cubic metres



Source(s): Table 25-10-0063-01.

Imports of crude oil and equivalent products, which tend to be volatile, rose 38.6% to 3.8 million cubic metres in November, the fourth consecutive monthly year-over-year increase.

Refined petroleum products

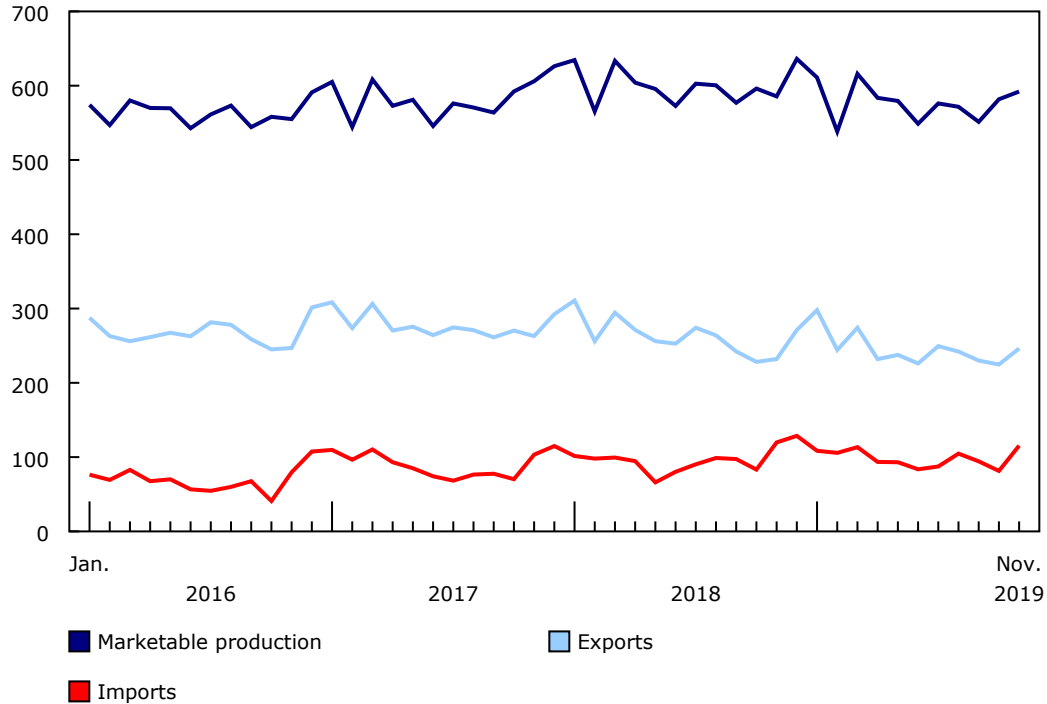
Net production of motor gasoline (including blending components and ethanol fuel) totalled 3.8 million cubic metres in November, while net production of diesel fuel oil was 3.2 million cubic metres. Closing inventories held at refineries, terminals and upgraders amounted to 2.2 million cubic metres of motor gasoline and 1.7 million cubic metres of diesel fuel oil.

Natural gas

Canadian marketable natural gas production was 592.1 million gigajoules in November, up 1.1% from the same month in 2018. The increase was attributable to higher natural gas production in British Columbia (+12.9%). Meanwhile, Alberta production decreased 2.7% year over year.

Chart 3
Marketable production, exports and imports of natural gas

millions of gigajoules



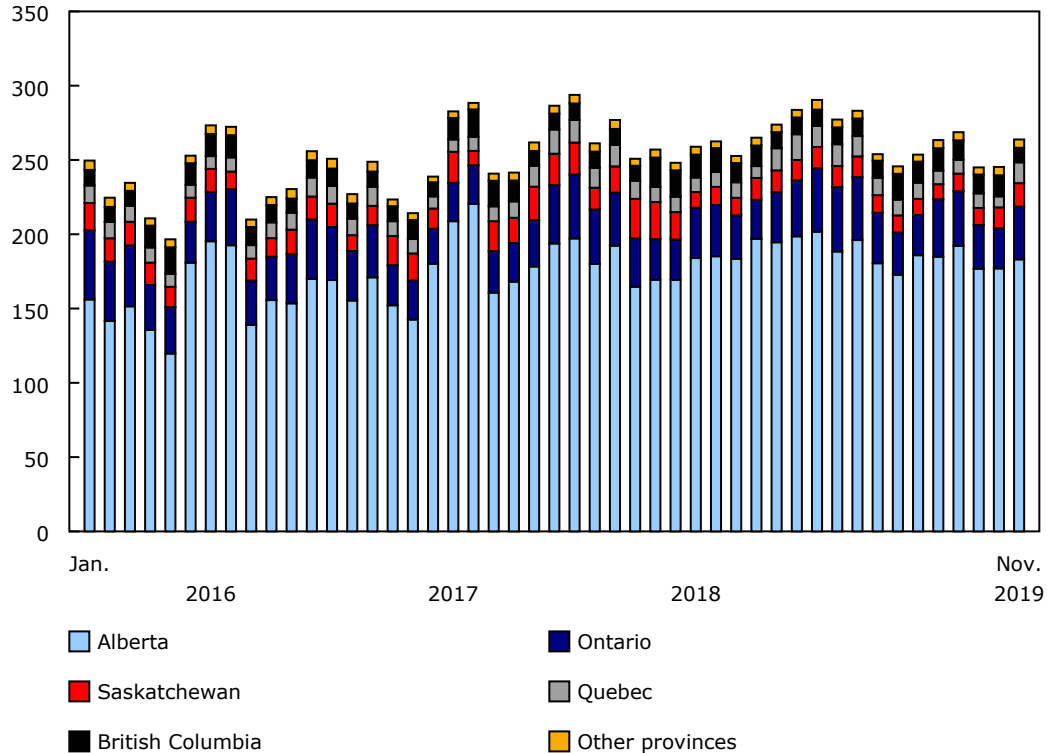
Source(s): Tables [25-10-0055-01](#) and [25-10-0058-01](#).

Deliveries of natural gas to Canadian consumers decreased 0.6% year over year to 396.1 million gigajoules. The decline was due to lower deliveries to industrial consumers, down 3.7% to 263.7 million gigajoules. Meanwhile, deliveries of natural gas to residential (70.5 million gigajoules) and commercial and institutional (61.9 million gigajoules) consumers rose due to increased demand for heating.

Deliveries of natural gas in Alberta amounted to 210.4 million gigajoules in November. The vast majority (87.0%, or 183.1 million gigajoules) was sent to the industrial sector, which accounted for 46.2% of all natural gas delivered in Canada.

Chart 4
Deliveries of natural gas to industrial consumers, by province

millions of gigajoules



Source(s): Tables 25-10-0058-01 and 25-10-0059-01.

In Ontario, transmission and distribution systems delivered 101.3 million gigajoules of natural gas. Of this total, 37.3 million gigajoules went to the residential sector, accounting for 52.8% of deliveries to residential consumers in Canada.

Opening inventories of natural gas held in Canadian storage facilities totalled 928.3 million gigajoules in November. During the month, inventories decreased 4.7% to close at 884.3 million gigajoules. This was the first decline in inventories in seven months, due to an increase in demand for natural gas in the colder months.

Canadian exports of natural gas by pipeline to the United States rose 6.1% year over year to 246.3 million gigajoules in November. Over the same period, imports of natural gas from the United States by pipeline were down 3.6% to 115.4 million gigajoules, with the majority imported into Ontario (106.4 million gigajoules).

Electricity

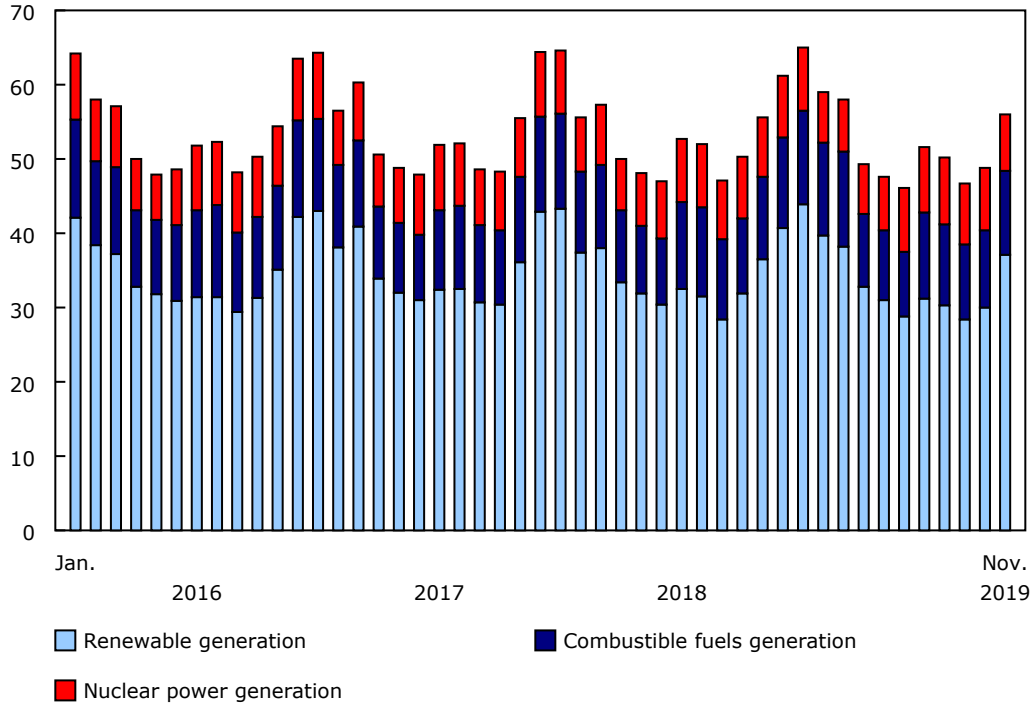
Electricity generation in Canada edged up 0.9% year over year to 56.1 million megawatt-hours (MWh) in November. Renewable generation (including hydro, wind, solar and tidal and other sources) was up 1.8% to 37.1 million megawatt-hours, and electricity generated from combustible fuels rose 2.0% to 11.3 million MWh. The overall increase was partially offset by nuclear generation, down 4.6% year over year to 7.6 million MWh.

By generation type, hydro was the main contributor to Canada's electricity production, accounting for over 60% of total generation in November. Quebec (17.3 million MWh) was the largest generator of hydroelectricity, followed by British Columbia (5.5 million MWh) and Newfoundland and Labrador (4.0 million MWh).

Alberta (6.4 million MWh) and Saskatchewan (1.7 million MWh) generated over two-thirds of electricity from combustible fuels in November, while the vast majority of nuclear electricity was generated in Ontario (93.8%).

Chart 5
Electricity generation

millions of megawatt-hours

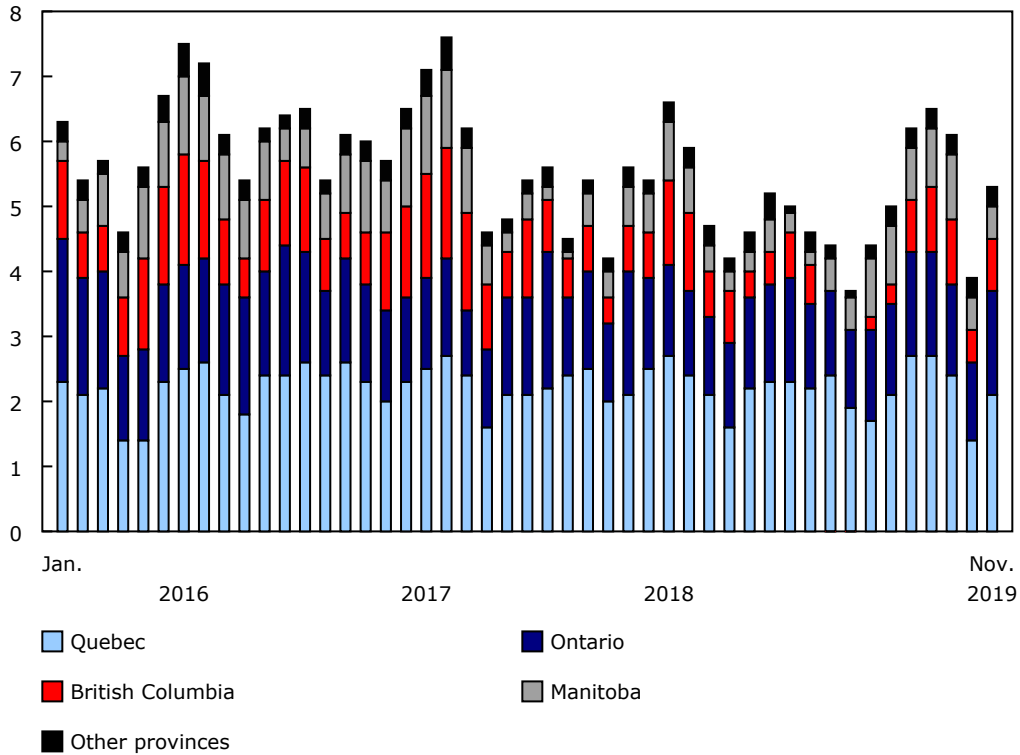


Source(s): Table 25-10-0015-01.

Following a decrease in the previous month, exports of electricity to the United States rose 15.3% year over year to 5.3 million MWh in November. Quebec, Ontario and British Columbia were the main exporting provinces.

Chart 6
Exports of electricity to the United States, by province

millions of megawatt hours



Source(s): Table 25-10-0016-01.

Imports of electricity from the United States, which tend to be volatile, were down 44.5% year over year in November, mostly because of lower volumes going to British Columbia, the main importing province.

Coal and coke

In November, coal production was down 11.6% to 4.1 million tonnes, marking a fifth consecutive monthly year-over-year decrease. Over the same period, coke production was down 6.7% to 184.8 thousand tonnes.

Note to readers

The survey programs that support the energy statistics release include the following:

- crude oil and natural gas, supply and disposition (survey number 2198, tables 25-10-0036-01, 25-10-0055-01 and 25-10-0063-01)—data from January to October 2019 have been revised.
- pipeline transportation of oil and other liquid petroleum products (survey number 2148, table 25-10-0056-01).
- supply and disposition of refined petroleum products (survey number 2150, table 25-10-0076-01)—data from January to October 2019 have been revised.
- natural gas transmission, storage and distribution (survey numbers 2149, 5210 and 5215, tables 25-10-0057-01, 25-10-0058-01 and 25-10-0059-01)—data from August to October 2019 have been revised.
- electric power statistics (survey number 2151, tables 25-10-0015-01 and 25-10-0016-01)—data for October 2019 have been revised.
- coal and coke statistics (survey numbers 2147 and 2003, tables 25-10-0045-01 and 25-10-0046-01).

Data are subject to revisions. Definitions, data sources and methods for each survey program remain available by accessing each survey's respective number.

As of reference month January 2019, the Monthly Refined Petroleum Products Survey has been redesigned. The questionnaire content has changed to reflect the evolving refined petroleum industry. Upgraders and petroleum terminals are now included in the survey frame. New variables have been added, while other variables have been discontinued. Because of the change in methodology, the current estimates may not be comparable with the estimates available prior to January 2019. Net production of refined petroleum products is calculated by subtracting inputs from production.

The energy statistics program uses respondent and administrative data.

Data in this release are not seasonally adjusted.

It takes approximately 100 gigajoules or 2 700 cubic metres of natural gas to heat a new average-sized single detached home in Canada for one year.

A megawatt-hour (or 1 000 kilowatt hours) is equivalent to the amount of electricity used by about 330 homes in one hour.

Available tables: [25-10-0015-01](#), [25-10-0016-01](#), [25-10-0036-01](#), [25-10-0045-01](#), [25-10-0046-01](#), [25-10-0055-01](#), [25-10-0063-01](#) and [25-10-0076-01](#).

Definitions, data sources and methods: survey numbers [2003](#), [2147](#), [2148](#), [2149](#), [2150](#), [2151](#), [2198](#), [5210](#) and [5215](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; STATCAN.infostats-infostats.STATCAN@canada.ca) or Media Relations (613-951-4636; STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca).