# **Energy statistics, October 2019**

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

The energy sector contributed almost one-tenth to Canada's nominal gross domestic product in the first half of 2019. During the same period, the energy sector directly employed over a quarter of a million people and indirectly supported many jobs in other sectors of the economy.

For more information on energy in Canada, please visit the Canadian Energy Information Portal.

In October 2019, energy production in Canada declined in several sectors compared with the same month in 2018.

Production of crude oil and equivalent products (-1.7%), natural gas (-1.3%), and coal (-9.3%), as well as electricity generation (-3.3%) declined in October compared with the same month in 2018. Over the same period, exports of crude oil and equivalent products (+0.7%) rose, while exports of natural gas (-4.6%) and electricity (-9.6%) were down.

## Crude oil and equivalent products

In October, production of crude oil and equivalent products declined 1.7% to 23.1 million cubic metres (145.3 million barrels), the second monthly year-over-year decrease in three months. Ongoing maintenance at some Alberta upgraders was the primary factor in the decline. During the month, synthetic crude oil production was down 18.7% to 4.4 million cubic metres, the lowest level since September 2018. Production of heavy crude oil (-3.0%) and equivalent products (-1.1%) also decreased in October.

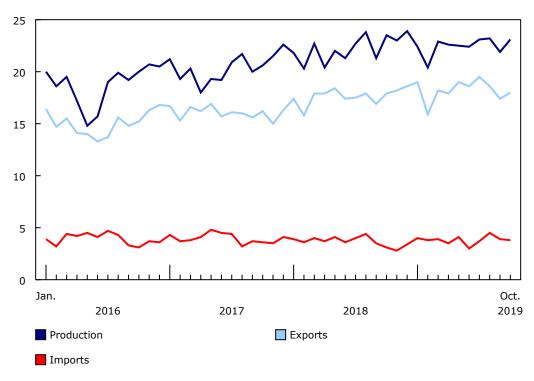
The overall decline in production of crude oil and equivalent products was partially offset by a 12.2% increase in light and medium crude oil production to 4.7 million cubic metres. This gain was attributable to higher post-maintenance production at offshore facilities in Newfoundland and Labrador. Crude bitumen production (+2.2% to 9.8 million cubic metres) was also up in October, driven by higher levels of in-situ production.





Chart 1
Production, exports and imports of crude oil and equivalent products

millions of cubic metres



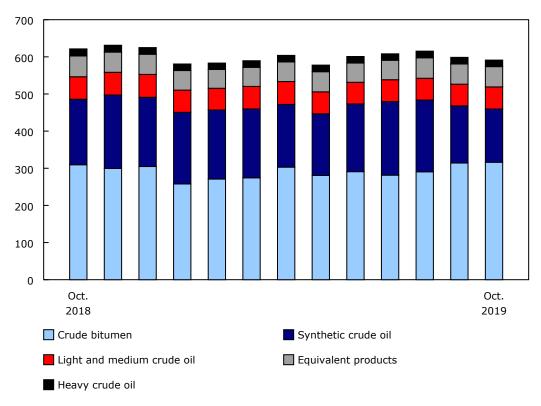
Source(s): Table 25-10-0063-01.

Alberta produced 18.3 million cubic metres of crude oil and equivalent products in October, down 4.9% compared with the same month in 2018, primarily because of a decline in oil sands extraction. This province accounted for 79.4% of total Canadian crude oil production.

Average daily production of crude oil and equivalent products in Alberta was down 1.2% from the previous month to 591.2 thousand cubic metres. This was the second consecutive monthly decline and the lowest average daily production level in five months.

Chart 2
Average daily production of crude oil and equivalent products in Alberta, by type of product

thousands of cubic metres



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

Saskatchewan (10.3% of total production) and Newfoundland and Labrador (6.8%) were also key producing provinces in October.

Pipelines in Canada received 20.8 million cubic metres of crude oil and equivalent products from fields and plants in October, down 6.6% from the same month in 2018. The majority of these receipts (86.4%) originated in Alberta.

During the month, crude oil delivered by pipelines to Canadian refineries and upgraders was up 10.7% year over year to 8.5 million cubic metres, the majority of which (68.7%) was delivered to refineries and upgraders in the Western provinces.

Opening inventories of crude oil and equivalent products held in Canadian facilities totalled 18.0 million cubic metres in October. During the month, inventories decreased 2.5% to close at 17.6 million cubic metres, because of lower volumes held at fields and plants (-11.1%) and refineries (-4.8%). Inventories held by transporters edged up 0.4% in October.

Exports of crude oil and equivalent products rose 0.7% year over year to 18.0 million cubic metres in October. Exports to the United States by pipelines increased 2.6% to 15.4 million cubic metres and accounted for 85.3% of total exports. Over the same period, exports to the United States by other means (rail, truck and marine) edged up 0.1% to 2.3 million cubic metres, while exports to other countries were down.

Imports of crude oil and equivalent products, which tend to be volatile, rose 22.2% to 3.8 million cubic metres in October, the third consecutive monthly year-over-year increase.

## Refined petroleum products

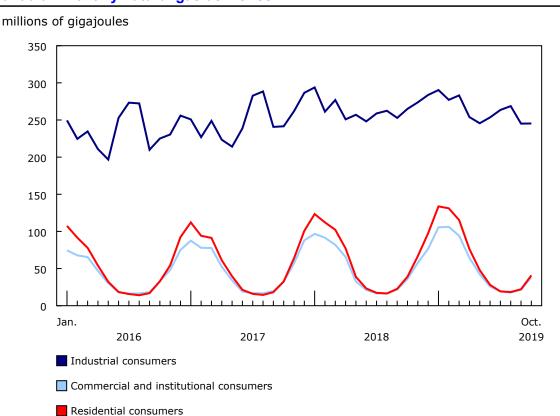
Net production of motor gasoline (including blending components and ethanol fuel) totalled 4.0 million cubic metres in October, while net production of diesel fuel oil was 3.4 million cubic metres. Closing inventories held at refineries, terminals and upgraders amounted to 2.2 million cubic metres of motor gasoline and 1.7 million cubic metres of diesel fuel oil.

# Natural gas

Canadian marketable natural gas production totalled 588.3 million gigajoules in October, down 1.3% from the same month in 2018. Alberta (71.0%) and British Columbia (27.2%) accounted for the vast majority of Canadian natural gas production.

Deliveries of natural gas to Canadian consumers decreased 4.7% year over year to 324.0 million gigajoules. The decline was due to lower deliveries to industrial consumers, down 7.4% to 245.3 million gigajoules. Meanwhile, deliveries of natural gas to residential consumers (40.8 million gigajoules) and commercial and institutional consumers (38.0 million gigajoules) increased because of higher demand for heating.

Chart 3
Canadian monthly natural gas deliveries



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

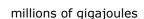
Deliveries of natural gas in Alberta amounted to 196.7 million gigajoules in October. The vast majority (90.0%) was sent to the industrial sector, which accounted for 54.6% of all natural gas delivered in Canada.

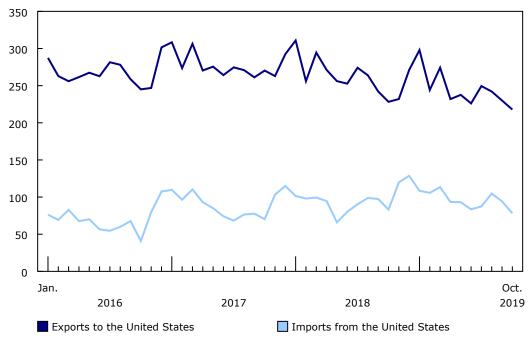
In Ontario, transmission and distribution systems delivered 60.5 million gigajoules of natural gas, 17.6 million of which were delivered to the residential sector, accounting for 43.2% of deliveries to residential consumers in Canada.

Opening inventories of natural gas held in Canadian storage facilities totalled 893.9 million gigajoules in October. During the month, inventories increased 2.6% to close at 917.6 million gigajoules. This was the seventh consecutive monthly increase as gas storage facilities continued to build inventories in preparation for higher demand in the winter.

Canadian exports of natural gas by pipeline to the United States declined 4.6% year over year to 217.8 million gigajoules in October. Over the same period, imports of natural gas from the United States by pipeline were down 6.1% to 78.2 million gigajoules, with the majority imported into Ontario (72.4 million gigajoules).

Chart 4
Canadian exports and imports of natural gas





Source(s): Table 25-10-0058-01.

#### **Electricity**

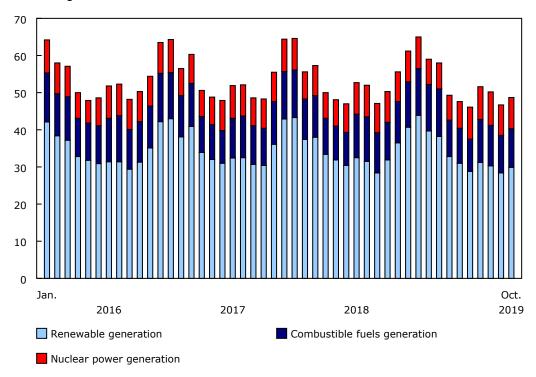
In October, electricity generation in Canada decreased 3.3% year over year to 48.7 million megawatt-hours (MWh). The decline was primarily driven by renewable generation (including hydro, wind, solar and tidal), down 6.2% to 29.9 million megawatt-hours. In contrast, electricity generated from combustible fuels increased 2.7% to 10.4 million MWh, while nuclear generation edged up 0.8% to 8.4 million MWh.

By generation type, hydro was the main contributor to Canada's electricity production, accounting for over half of total electricity generation in October. Quebec (13.3 million MWh) was the largest generator of hydroelectricity, followed by British Columbia (4.8 million MWh) and Newfoundland and Labrador (2.9 million MWh).

Alberta (6.3 million MWh) and Saskatchewan (1.8 million MWh) generated the most electricity from combustible fuels in October, while the vast majority of nuclear electricity was generated in Ontario (94.2%) with the remainder produced in New Brunswick.

**Chart 5 Electricity generation** 





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

Following increases in the two previous months, exports of electricity to the United States were down 9.6% year over year in October to 3.8 million MWh. The decline was mostly due to lower deliveries from Quebec, Ontario and British Columbia—the main exporting provinces. Imports of electricity from the United States decreased 2.6% during the month to 0.9 million MWh, with most of the imports going to British Columbia (0.7 million MWh).

#### Coal and coke

In October, coal production was down 9.3% to 4.1 million tonnes—the fourth consecutive monthly year-over-year decrease. Over the same period, coke production was down 10.0% to 191.1 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 for September 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 for September 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).
- electric power statistics (survey number 2151, tables 25-10-0015-01 and 25-10-0016-01)—data for September 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**).