Energy statistics, August 2019

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

Production of crude oil and equivalent products (-2.4%), natural gas (-4.8%) and coal (-5.2%), as well as electricity generation (-3.6%) declined in August compared with the same month in 2018. Over the same period, exports of crude oil and equivalent products (+6.7%) and electricity (+10.4) rose, while exports of natural gas (-8.3%) were down.

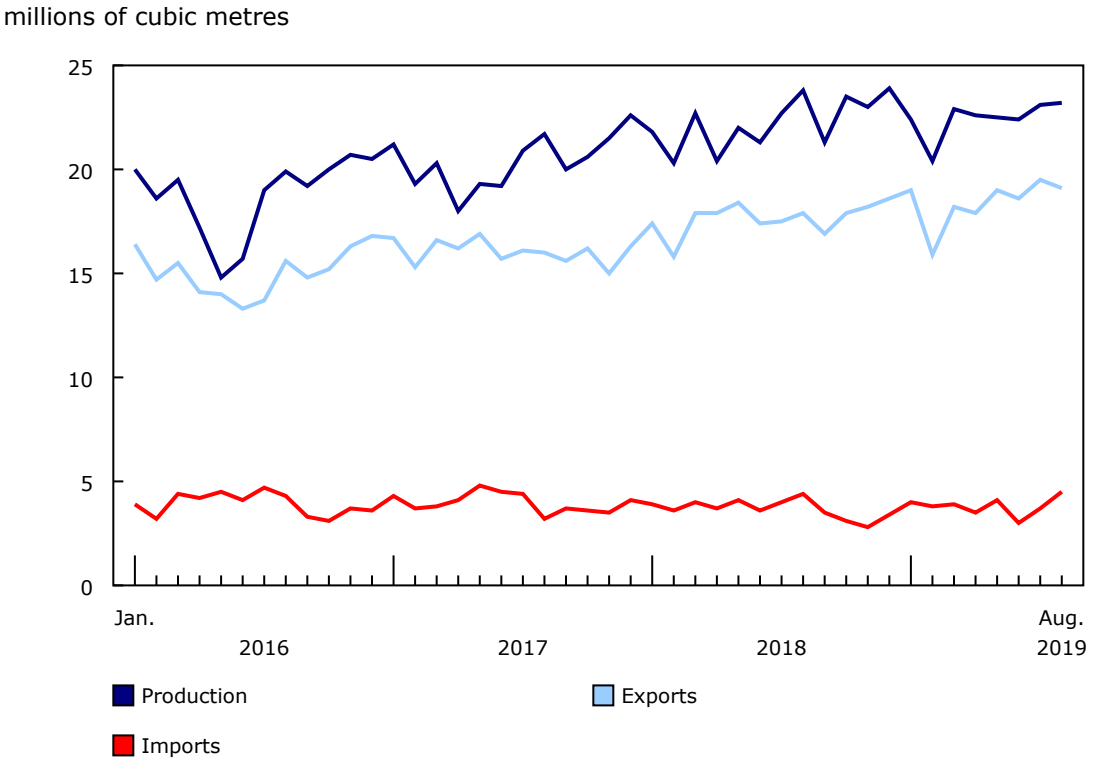
For more information on energy in Canada, please visit the Canadian Energy Information Portal.

Crude oil and equivalent products

In August, production of crude oil and equivalent products declined 2.4% to 23.2 million cubic metres (146.1 million barrels), the first year-over-year decrease since August 2016. Major factors in the decline were reduced levels of in-situ oil sands production in Alberta, combined with operational and maintenance issues affecting Newfoundland and Labrador's offshore production facilities. During the month, non-upgraded production of crude bitumen was down 8.1% to 9.0 million cubic metres, while production of light and medium crude oil (-4.2%) and heavy crude oil (-3.4%) also decreased.

The decline in production of crude oil and equivalent products was partially offset by increases in synthetic crude oil (+7.1% to 6.0 million cubic metres) and equivalent products (+3.9% to 2.2 million cubic metres).

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

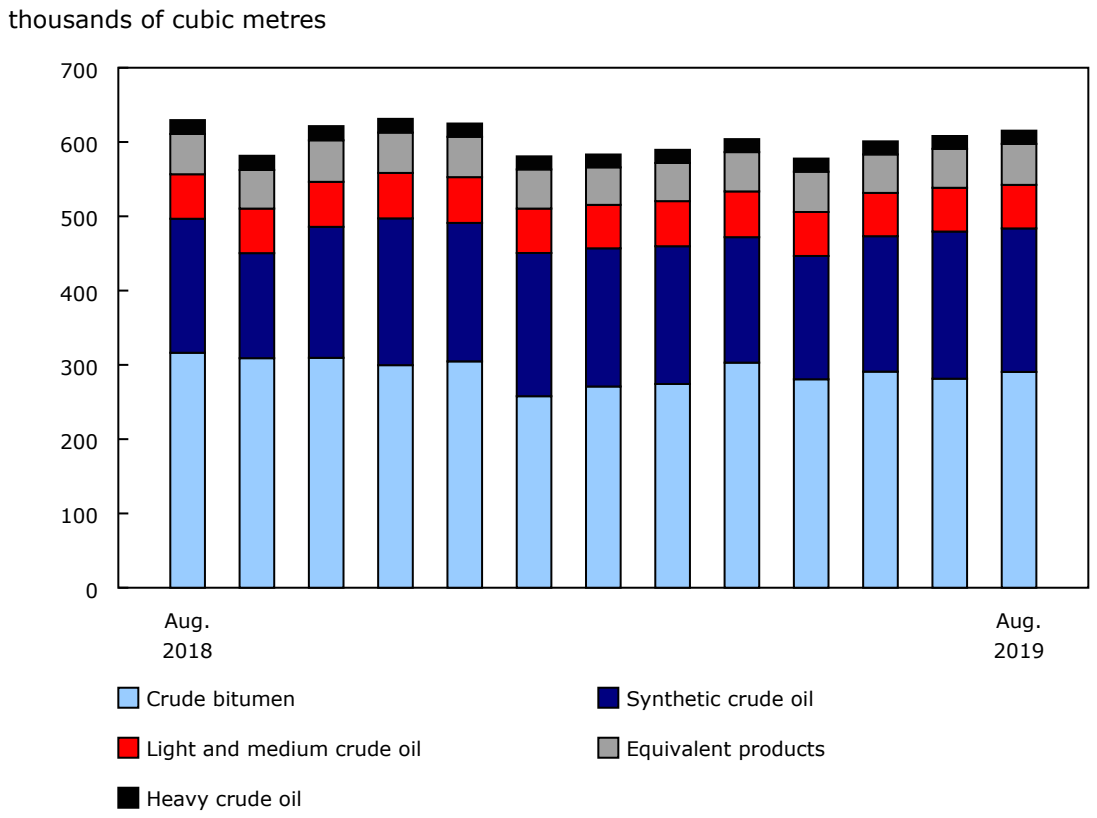


Source(s): Table 25-10-0063-01.

Alberta produced 19.1 million cubic metres of crude oil and equivalent products in August, down 2.2% from a record high of 19.5 million cubic metres in August 2018. The province accounted for 82.1% of total Canadian production.

Despite the year-over-year decline, average daily production of crude oil and equivalent products in August was up 1.2% from the previous month to 615.3 thousand cubic metres per day. This increase was attributable to the continued easing of production limits imposed by the Alberta government at the beginning of 2019.

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



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

In August, Saskatchewan produced 2.4 million cubic metres of crude oil and equivalent products, down 3.1% compared with the same month one year earlier. Over the same period, Newfoundland and Labrador production decreased 10.7% to 1.0 million cubic metres, the lowest level since November 2018.

Crude oil delivered by pipelines to Canadian refineries and upgraders was up 9.1% year over year to 8.6 million cubic metres. Of this total, the majority (64.9%) was delivered to refineries and upgraders in the Western provinces, while the remainder was destined for refineries in Ontario (19.5%) and Quebec (15.6%).

Exports of crude oil and equivalent products rose 6.7% year over year to 19.1 million cubic metres. The increase was driven largely by exports to the United States via pipelines, which were up 8.2% to 16.6 million cubic metres. Pipelines were the primary mode of transport (86.6% of total exports). Meanwhile, exports to the United States by other means (rail, truck and marine) were up 10.6% to 2.1 million cubic metres. Exports to other countries decreased in August.

Imports of crude oil and equivalent products were up 1.8% year over year to 4.5 million cubic metres.

Refined petroleum products

Net production of motor gasoline (including blending components and ethanol fuel) totalled 4.2 million cubic metres in August, while net production of diesel fuel oil was 3.6 million cubic metres. Closing inventories held at refineries, terminals and upgraders amounted to 2.3 million cubic metres of motor gasoline and 1.9 million cubic metres of diesel fuel oil.

Natural gas

Canadian marketable natural gas production was 571.6 million gigajoules in August, down 4.8% from August 2018. Natural gas production was concentrated in Alberta (71.4%) and British Columbia (26.7%).

During the month, natural gas transmission and distribution systems delivered 304.7 million gigajoules to Canadian consumers, up 3.2% year over year. Deliveries to industrial consumers rose 2.4% to 268.7 million gigajoules, while deliveries to residential (18.4 million gigajoules) and commercial and institutional (17.6 million gigajoules) consumers were also up.

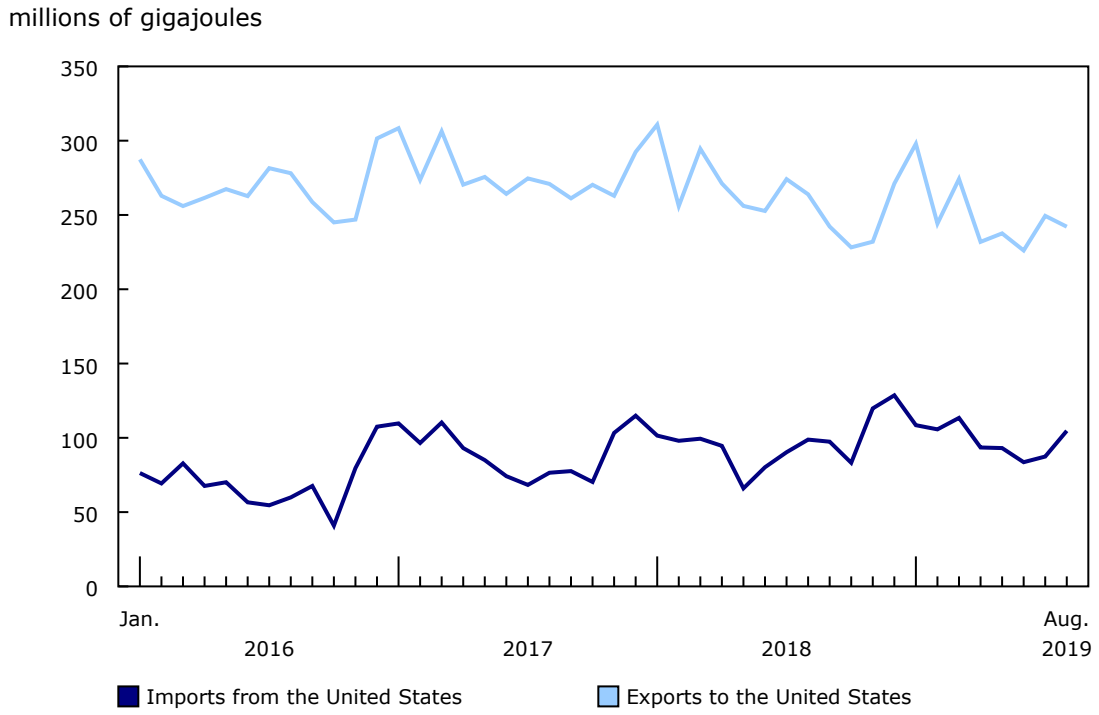
Deliveries of natural gas in Alberta totalled 199.5 million gigajoules in August. The vast majority (96.4%) was sent to the industrial sector, which accounted for 63.1% of all natural gas delivered in Canada.

In Ontario, transmission and distribution systems delivered 56.8 million gigajoules of natural gas. Of this total, 11.0 million gigajoules were delivered to the residential sector, which accounted for 59.7% of deliveries to residential consumers in Canada.

Opening inventories of natural gas held in Canadian storage facilities stood at 750.1 million gigajoules in August. During the month, inventories increased 10.0% to close at 825.3 million gigajoules, the fifth consecutive monthly increase. Gas storage facilities tend to build inventories during the warmer months in preparation for higher demand in the winter.

Canadian exports of natural gas by pipeline to the United States declined 8.3% year over year to 242.1 million gigajoules in August.

Chart 3
Canadian imports and exports of natural gas



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

Year over year, imports of natural gas from the United States by pipeline increased 5.9% to 104.7 million gigajoules, with the majority imported into Ontario (98.8 million gigajoules).

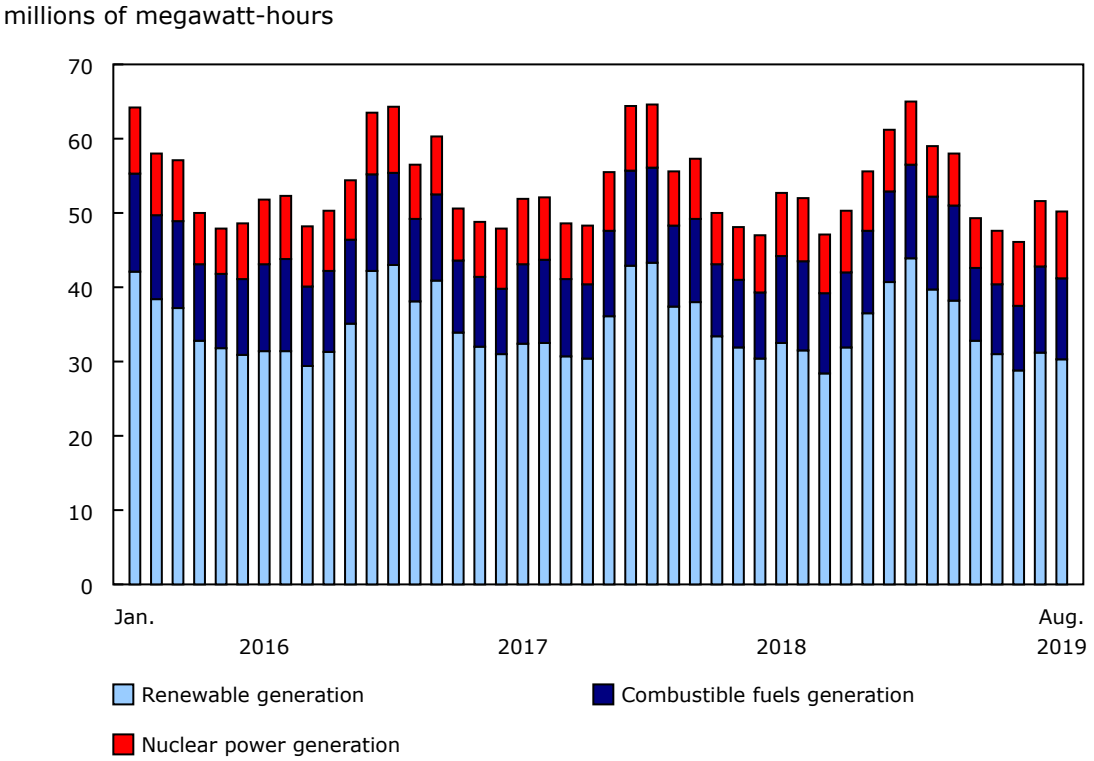
Electricity

Electricity generation in Canada decreased 3.6% year over year to 50.1 million megawatt-hours (MWh) in August. Renewable generation (including hydro, wind, solar, tidal and others), decreased 3.9% to 30.3 million MWh, while electricity generated from combustible fuels was down 9.8% to 10.9 million MWh. The decrease in electricity production was moderated by nuclear generation, up 6.3% to 9.0 million MWh.

Hydro generation was the largest contributor to Canada's electricity mix, producing 28.2 million MWh of electricity in August, down 4.2% year over year. More than half of total hydro-electricity was generated in Quebec (15.1 million MWh), while British Columbia (4.3 million MWh) and Manitoba (2.8 million MWh) were also major contributors.

In August, Alberta (6.0 million MWh) was the main producer of electricity from combustible fuels, followed by Saskatchewan (1.6 million MWh) and Ontario (1.4 million MWh). Meanwhile, most nuclear electricity was generated in Ontario (94.6% of total production), with the remainder produced in New Brunswick.

Chart 4
Electricity generation



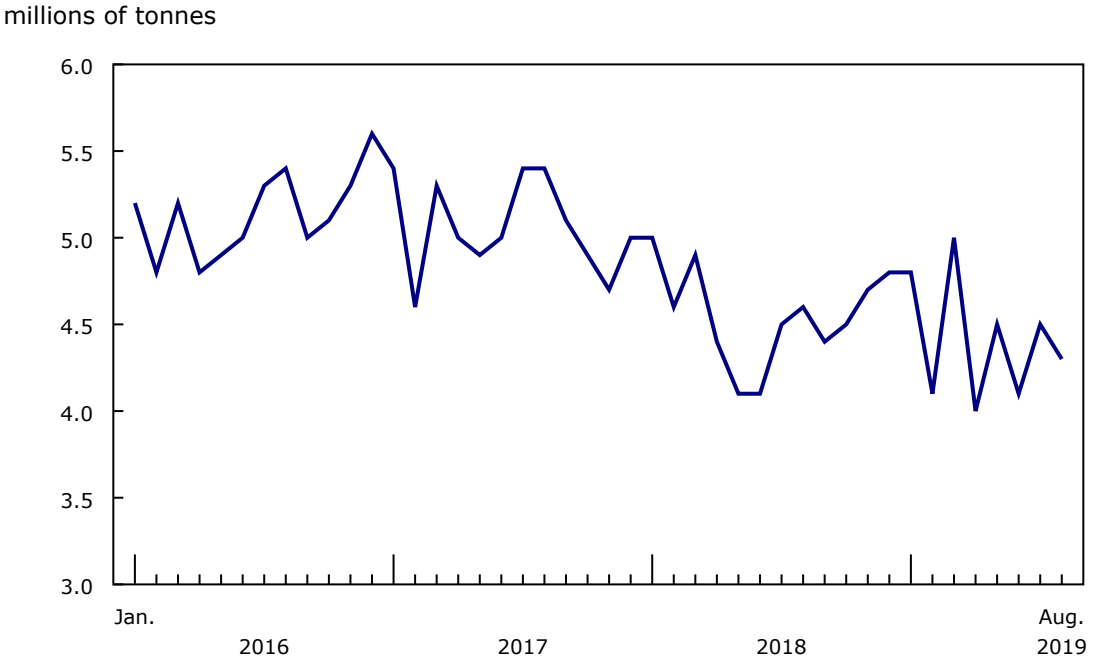
Source(s): Table 25-10-0015-01.

Exports of electricity to the United States were up 10.4% year over year to 6.5 million MWh in August. Quebec (2.7 million MWh) and Ontario (1.6 million MWh) were the main exporting provinces. Imports of electricity from the United States increased during the month to 1.1 million MWh, with most of the imports going to British Columbia (1.0 million MWh).

Coal and coke

In August, coal production decreased 5.2% year over year to 4.3 million tonnes, while coke production was down 1.7% to 207.9 thousand tonnes.

Chart 5
Coal production



Source(s): Table 25-10-0046-01.

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 2016 to July 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 July 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 January 2016 to July 2019 have been revised.*
- *Electric power statistics (survey number 2151, tables 25-10-0015-01 and 25-10-0016-01). Data for July 2019 have been revised.*
- *Coal and coke statistics (survey numbers 2147 and 2003, tables 25-10-0045-01 and 25-10-0046-01).*

The tables associated with the above survey programs remain unchanged, although release dates for most tables have changed. Data in these tables 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.

Data are subject to revisions.

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**).