

Energy statistics, April 2020

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The overall decline in energy production in April reflected how the first full month of physical distancing measures related to the COVID-19 pandemic has changed our lives.

Motor gasoline, diesel fuel oil and kerosene-type jet fuel production fell sharply in April due to the rise of remote work, travel restrictions and business and school closures. In contrast, consumption of natural gas by residential consumers increased partially due to higher demand as Canadians followed stay-at-home guidelines.

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 [Canadian Centre for Energy Information](#) website and follow #energynews on social media.

Falling energy prices and excess supply curtail crude oil production

Canada produced 20.5 million cubic metres (129.2 million barrels) of crude oil and equivalent products in April, down 9.0% from April 2019. This was the largest year-over-year decrease since June 2016 (-9.4%) in the aftermath of the widespread wildfires that affected northern Alberta earlier that spring.

The main contributor to the year-over-year decrease was crude bitumen production, down 22.2% to 7.1 million cubic metres. This was the lowest production level in almost four years. Both in-situ and mined operations significantly reduced outputs as producers imposed voluntary production cuts.

Extraction of heavy (-9.1%) and light and medium (-5.0%) crude oil was also down in April. The overall decline in production was partially offset by synthetic crude oil (+6.4%) and equivalent products (+2.9%).

Factors affecting the energy sector in April

Energy markets continued to face increased challenges in April. Physical distancing measures and travel restrictions imposed by governments in March to reduce the spread of COVID-19 continued to affect most energy sectors.

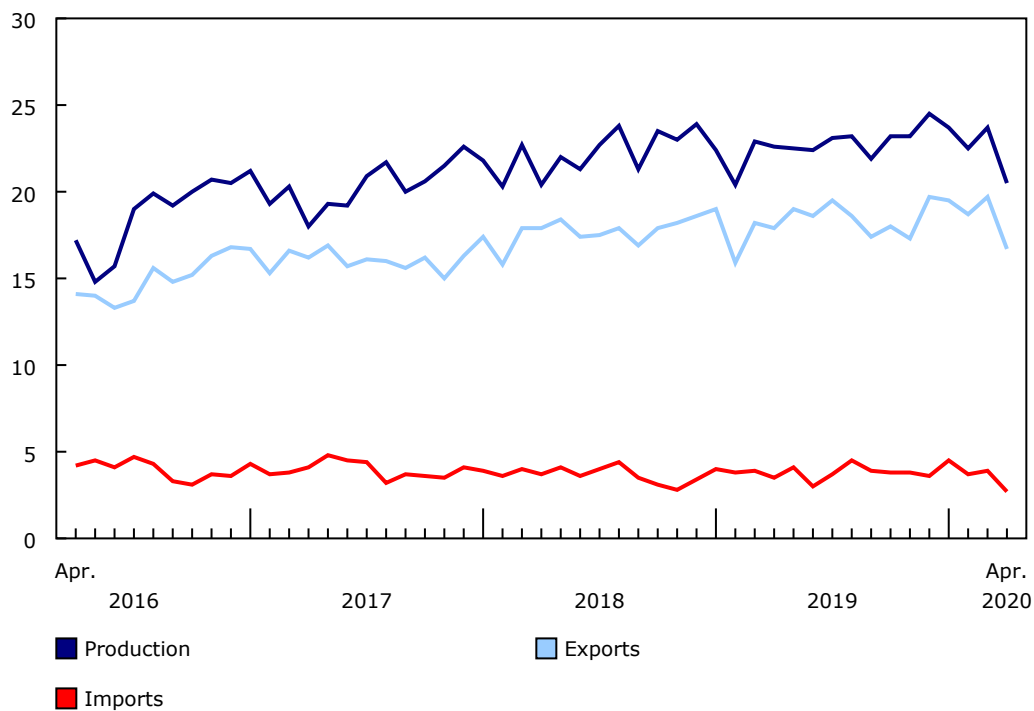
Global demand for crude oil collapsed because of the COVID-19 pandemic. According to estimates from the US Energy Information Administration, from January to April 2020, global demand for oil fell by over one-fifth (-22.7%), while global supply of crude oil decreased by 2.0%. April saw historically low crude oil prices, primarily due to supply outpacing demand. As reported by the [Raw Materials Price Index](#), the price of crude oil fell 44.6% from March to April—the largest monthly drop since the beginning of this series in January 1981.

The [Industrial Product Price Index](#) decreased 2.3% from March to April, the fourth consecutive monthly decrease and the largest decline since December 2008. Lower prices for energy and petroleum products, particularly motor gasoline (-30.6%), diesel fuel (-24.5%) and jet fuel (-28.0%) contributed the most to the decline.



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

millions of cubic metres



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

Exports of crude oil and equivalent products fell 6.7% to 16.7 million cubic metres in April, the first monthly year-over-year decline in five months. The decrease was due to lower demand for crude oil from refineries in the United States.

Exports to the United States by pipeline fell to their lowest level since February 2019, down 6.7% to 14.3 million cubic metres. Exports to the United States by other means (rail, truck and marine) also decreased in April, as less transport capacity was required to supplement pipelines. Meanwhile, exports to other countries were up due to higher volumes exported from Newfoundland and Labrador.

Imports of crude oil and equivalent products decreased 21.7% to 2.7 million cubic metres in April—the lowest level since the data series began in January 2016. Imports by refineries fell by over one-third (-35.4%) due to the partial or complete closure of several Canadian refineries that import crude oil.

Production and consumption of refined petroleum products down sharply

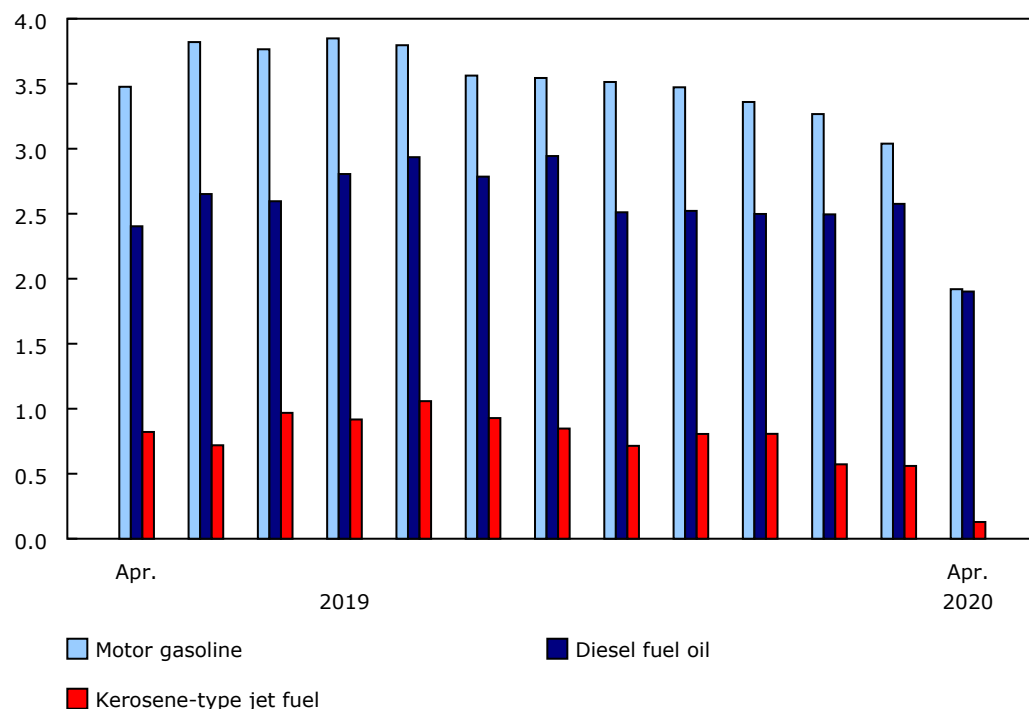
Refinery activity continued to trend downward in April as many refineries curtailed or shut down production in response to lower demand for energy products. Input of crude oil to Canadian refineries fell 21.8% year over year to 6.0 million cubic metres, the lowest level since April 2018.

Net production of motor gasoline (including blending components and ethanol fuel) decreased 32.0% year over year to 2.3 million cubic metres in April. Diesel fuel oil production was down 8.9%, while jet fuel production fell 88.9%.

Despite low retail prices, the demand for refined petroleum products decreased in April due to more people working from home, travel restrictions as well as business and school closures. Year over year, domestic consumption of motor gasoline (-44.8%) and diesel fuel oil (-20.9%) were both down sharply.

Chart 2 Domestic consumption of motor gasoline, diesel fuel and kerosene-type jet fuel

millions of cubic metres



Source(s): Table 25-10-0076-01.

Consumption of jet fuel fell a record 84.3% year over year in April, as major air carriers suspended or drastically curtailed operations following domestic and international travel restrictions.

Natural gas production declines on lower demand

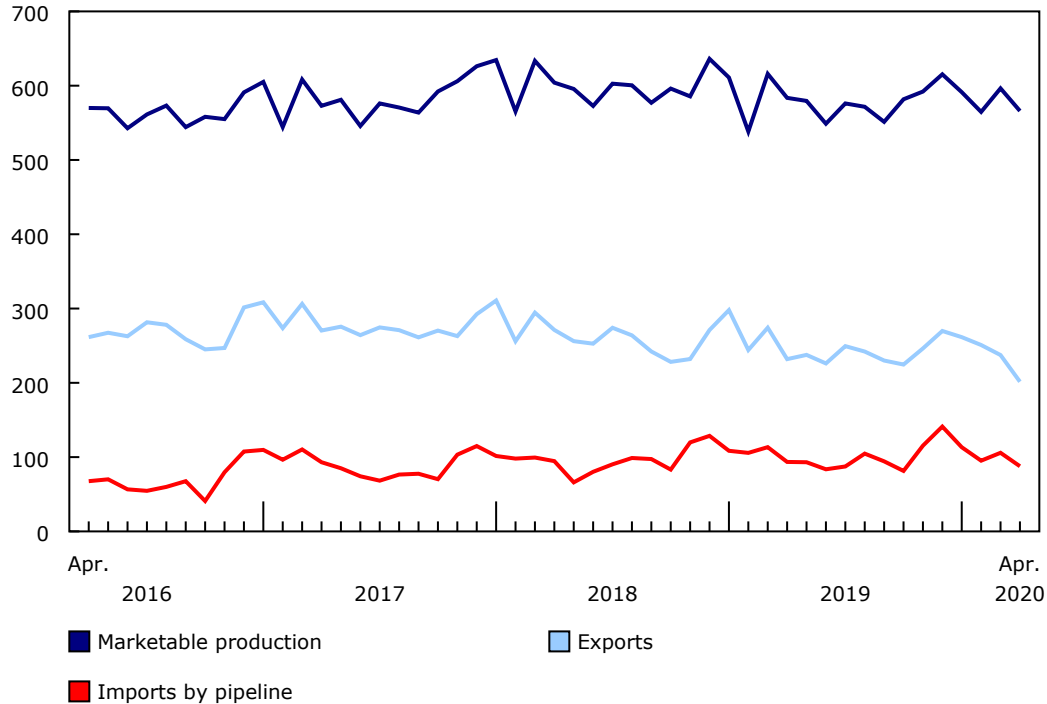
Canadian marketable natural gas production decreased for the fourth time in five months, down 3.0% year over year to 566.0 million gigajoules in April.

Total deliveries of natural gas to Canadian consumers rose 1.9% year over year to 402.5 million gigajoules in April. This increase was primarily due to higher demand from residential consumers (+10.5%), as Canadians followed stay at home guidelines, as well as colder-than-usual temperatures in Central and Western Canada. Deliveries to industrial consumers were down 0.9% compared with April 2019.

Following a 13.4% year-over-year decline in March, exports of natural gas by pipeline to the United States fell another 13.1% to 201.5 million gigajoules in April. This was the lowest level of exports since the data series began in January 2016. Demand for Canadian natural gas has fallen in tandem with the sustained economic slowdown in the United States.

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](#).

Imports of natural gas from the United States by pipeline were down 6.2% to 87.7 million gigajoules, the third consecutive monthly year-over-year decline, with the majority imported into Ontario.

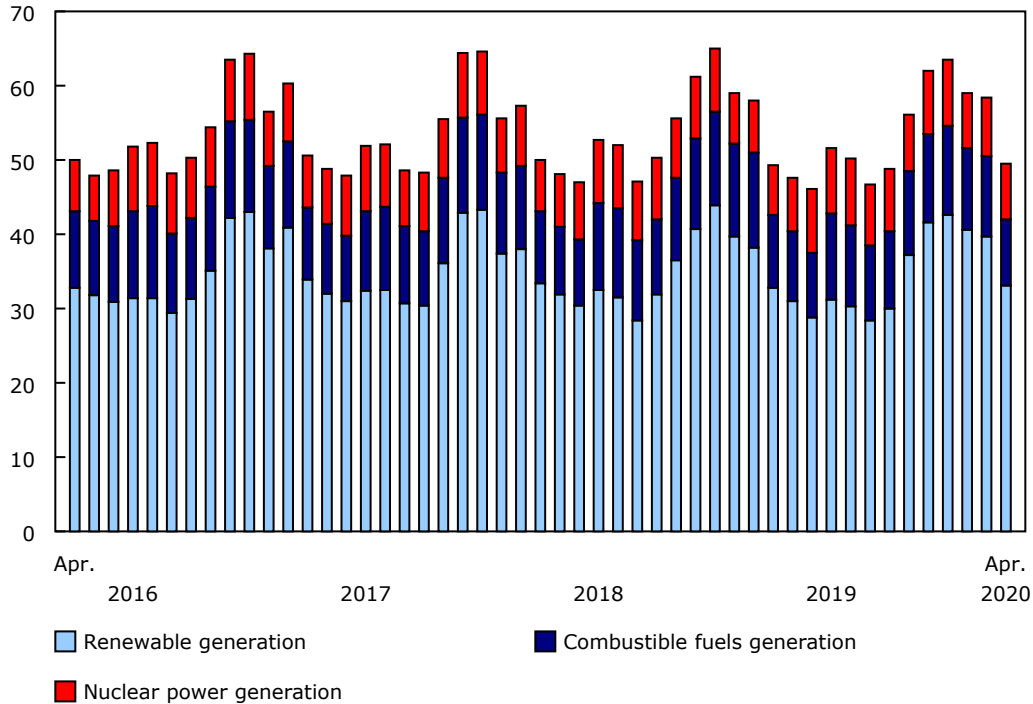
Lower electricity generation and consumption

Electricity generation in Canada decreased 1.0% year over year to 48.8 million megawatt-hours (MWh) in April. The decline was mainly attributable to electricity generated from combustible fuels, down 9.6% to 8.9 million MWh.

The overall decrease in electricity generation was partially offset by renewable generation (including hydro, wind, solar, tidal and other sources), up 1.1% year over year to 33.1 million MWh, and nuclear generation, up 13.3% year over year to 7.5 million MWh.

**Chart 4
Electricity generation**

millions of megawatt-hours



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

Electricity consumption in Canada was down 4.9% in April, the largest monthly year-over-year decrease since December 2015 (-6.8%). The decline was a combination of an expected seasonal decrease and lower demand for electricity as many commercial and industrial consumers reduced their operations due to COVID-19.

Electricity exports to the United States rose 30.6% to 5.0 million MWh in April. Quebec, Ontario and Manitoba were the main exporting provinces. Imports of electricity from the United States, which tend to be volatile, decreased 44.2% to 0.8 million MWh, with the majority of electricity imported to British Columbia.

Coal production falls by almost one-fifth

Coal production continued on a downward trend, declining 18.7% year over year to 3.2 million tonnes in April, as some mines closed due to COVID-19. Coke production decreased 15.1% to 177.8 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 March 2020 have been revised.
- energy transportation and storage (survey number [5300](#), tables [25-10-0075-01](#) and [25-10-0077-01](#)).
- 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](#)).
- supply and disposition of refined petroleum products (survey number [2150](#), table [25-10-0076-01](#)).
- electric power statistics (survey number [2151](#), tables [25-10-0015-01](#) and [25-10-0016-01](#))—data for March 2020 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 2020, the questionnaire for the Monthly Canadian Pipeline Transport of Oil and Other Liquid Petroleum Products Survey has been redesigned. The new survey (named Monthly Energy Transportation and Storage Survey) content has changed to reflect the evolving petroleum industry. In addition to pipeline companies, rail and marine transportation are now included in the sample. New variables have been added, while other variables have been discontinued. Due to the change in methodology, the current estimates may not be comparable with the estimates available in the published tables prior to January 2020.

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.

The energy statistics program uses respondent and administrative data.

Data in this release are not seasonally adjusted.

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](#), [2149](#), [2150](#), [2151](#), [2198](#), [5210](#), [5215](#) and [5300](#).

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).