

Energy statistics, May 2022

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An array of factors continued to impact the Canadian energy sector. In May, annual spring maintenance at several energy producing facilities continued while other facilities began to ramp up production following the completion of that maintenance work.

Demand for energy products remained robust as domestic and international travel rebounded since COVID-19 pandemic restrictions were relaxed. Meanwhile, considerable economic and geopolitical uncertainty persisted due to various conflicts in energy-producing regions. As market instability persisted and demand continued to recover, energy product prices increased. For example, in May, the price of conventional crude oil was 82.2% higher year over year, according to the [Raw Material Price Index](#).

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Crude production up as heavy crude oil surges

In May, the production of crude oil and equivalent products rose 2.9% to 22.8 million cubic metres, the fourth consecutive monthly year-over-year increase.

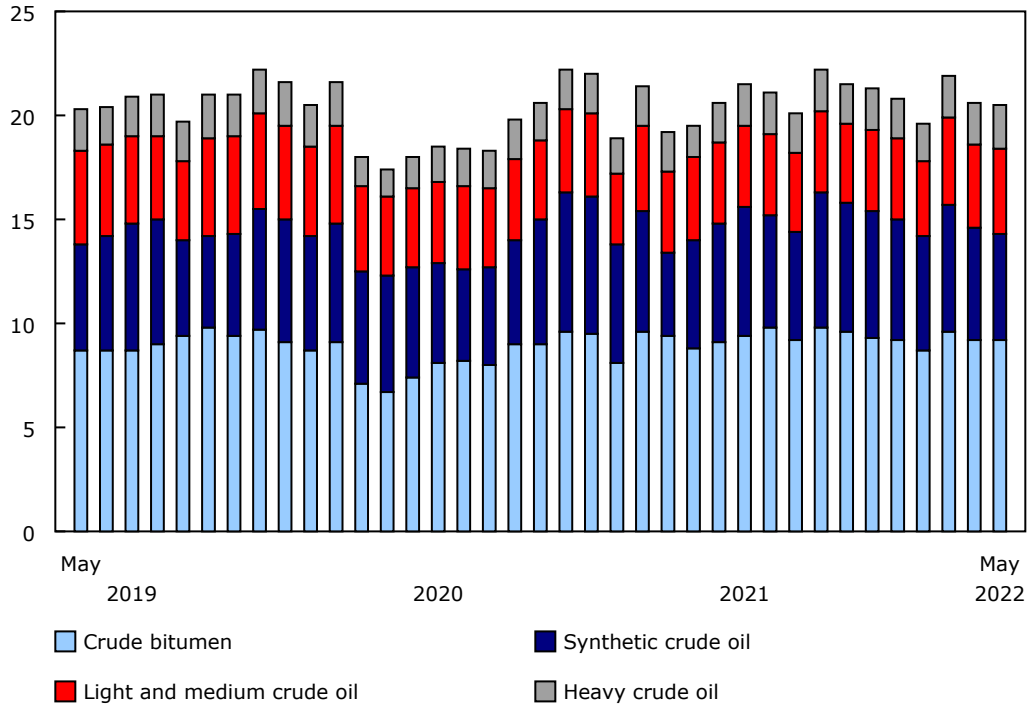
Leading the overall gain was oil extraction, which rose 6.1% to 6.2 million cubic metres. Production of heavy crude oil continued to surge, up 12.0% from May 2021 to 2.1 million cubic metres, the 14th consecutive monthly year-over-year increase, and the highest level of production since the start of this data series in January 2016. In May, light and medium crude oil production rose 3.3% to 4.1 million cubic metres.

Oil sands extraction was up 1.6% to 14.3 million cubic metres in May. The annual maintenance period in the oil sands was in full swing at several upgraders and bitumen mines. Crude bitumen production rose 4.1% to 9.2 million cubic metres, while production of synthetic crude fell 2.5% to 5.1 million cubic metres.



Chart 1
Production of crude oil, by type of product

millions of cubic metres



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

According to the Raw Material Price Index, the price for **crude oil and bitumen** was up 85.0% year over year in May. Crude oil prices have remained elevated since the beginning of the year.

Exports of crude oil and equivalent products were up 3.2% to 19.0 million cubic metres compared with May 2021. This was the 14th consecutive increase, as demand from US refineries remained healthy. The majority of exports are by pipeline to the US, which rose 4.3% to 16.7 million cubic metres.

Imports of crude oil and equivalent products fell 2.6% to 3.6 million cubic metres in May. The decrease was driven by imports by refineries, which was down 9.9% to 2.2 million cubic metres. Offsetting the decline, imports by all other users rose 11.3% to 1.4 million cubic metres.

Refined petroleum production up, and jet fuel production strong

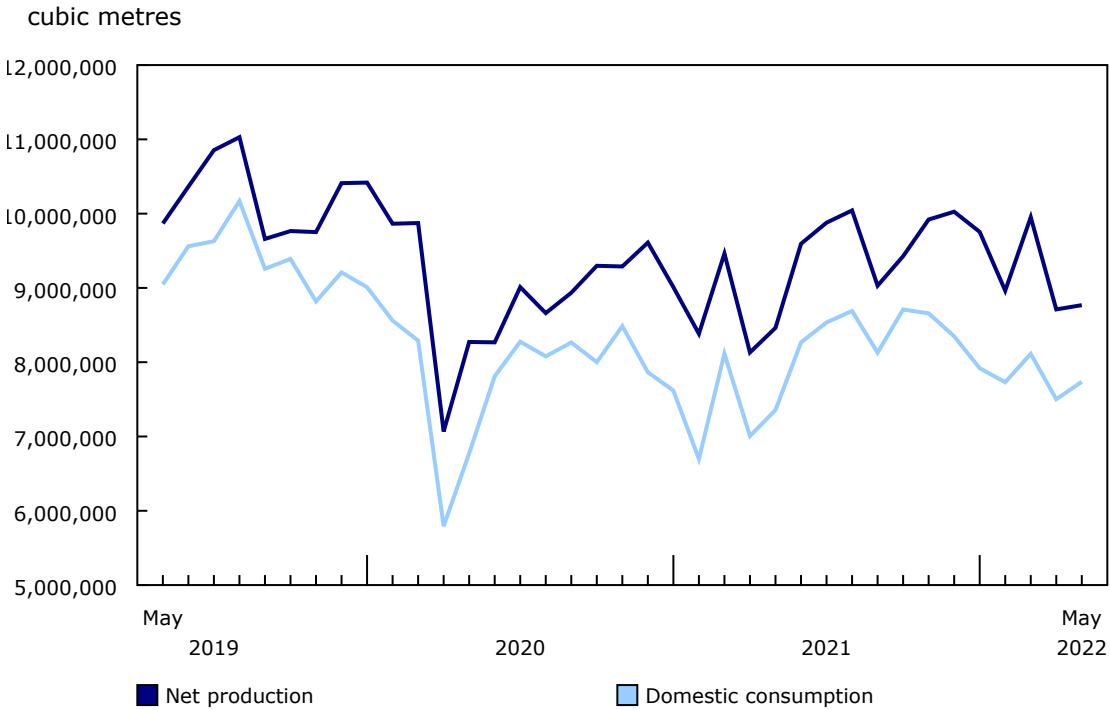
Production of finished petroleum products rose 3.6% to 8.8 million cubic metres in May, the 14th consecutive monthly year-over-year increase. Planned spring maintenance at several refineries slowed domestic production.

The overall increase in production was driven by jet fuel, which jumped 151.0% to 0.6 million cubic metres. Jet fuel production remained strong as demand for global and domestic air travel continued to rise. Meanwhile, production of distillate fuel oils, which is five times larger than jet fuel production in Canada, was up 5.4% to 2.8 million cubic metres in May. On the other hand, production of motor gasoline fell 1.1% to 3.0 million cubic metres, compared with May 2021.

Demand for finished petroleum products in Canada rose 5.2% to 7.7 million cubic metres in May. The overall increase was driven by higher demand for motor gasoline (+11.9% to 3.5 million cubic metres) and jet fuel (+111.5% to 0.5 million cubic metres). Meanwhile, demand for distillate fuel oils (-3.5%) and other petroleum products (-12.9%) was down.

In May, renewable fuel production edged down 0.5% to 170,399 cubic metres. The decrease was attributable to lower production of non-ethanol renewable fuel (-3.9%). Meanwhile, ethanol fuel production was up 0.2%.

Chart 2
Net production and domestic consumption of finished petroleum products



Source(s): Table 25-10-0081-01.

According to the Industrial Product Price Index, prices for refined petroleum energy products were 86.6% higher in May compared with the same month a year earlier. Prices for finished motor gasoline were up 71.1%. Meanwhile diesel fuel prices were up 103.3% and jet fuel was 174.5% more expensive than a year earlier. Aircraft movements at Canada's major airports increased 28.1% from May 2021, as demand for air travel was up.

Exports of finished petroleum products rose 21.1% to 1.5 million cubic metres in May. Distillate fuel oils, other refined petroleum products and jet fuel all contributed to the overall gain.

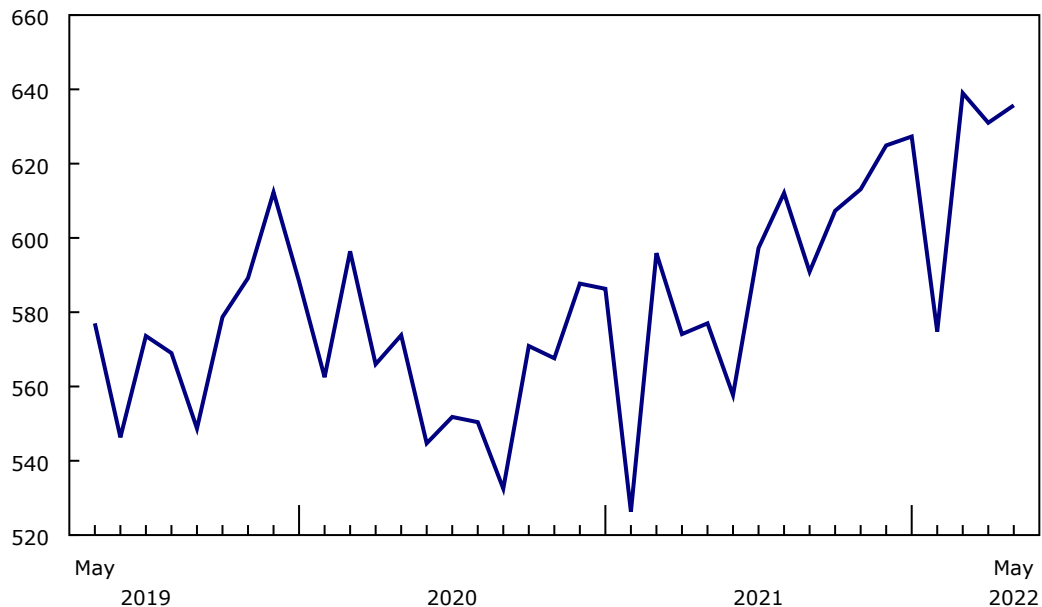
Imports of finished petroleum products were up 30.8% compared with May 2021, due in large part to increased imports of distillate fuel oils and motor gasoline.

Natural gas production and consumption increase as inventories replenish

Production of marketable natural gas in Canada rose 10.2% to 635.7 million gigajoules in May, becoming the 14th consecutive monthly year-over-year increase as high prices and export demand continued to drive production. May's total production was second only to March's record-high level of 639 million gigajoules. Meanwhile, average daily production of natural gas (monthly production divided by the number of days per month) was 20.5 million gigajoules, a step down from April's record-high value of 21.1 million gigajoules.

Chart 3 Marketable production of natural gas

thousands of gigajoules



Source(s): Table 25-10-0055-01.

Total deliveries to the residential, commercial and institutional, and industrial sectors rose 9.0% year over year in May to 352.0 million gigajoules as most provinces and territories had stringent pandemic measures that contributed to reduced economic activity the previous year. A major driver of the national consumption of natural gas was Alberta's industrial sector. This provincial sector consumed 55.7% of all-natural gas delivered in Canada in May and reported a 7.9% increase in deliveries that month.

Significant injections of natural gas into storage in May resulted in a rise in closing inventories of natural gas held in Canadian facilities, up 22.3% month over month to 526.3 million gigajoules, but still remained 20% lower than inventory levels from May 2021.

Exports of natural gas by pipeline to the United States rose 15.8% to 260.5 million gigajoules, while imports of natural gas from the United States rose 19.9% to 106.0 million gigajoules. Due to the war in Ukraine and resulting energy market insecurity, there has been greater demand by Europe for US liquefied natural gas, which in turn has resulted in increased demand for Canadian natural gas in the US.

According to the [natural gas price index](#), Canadians paid 50.3% more for natural gas in May compared with the same month in 2021 and 5.2% more compared with April 2022.

Electricity generation flat in May

Electricity generation in Canada slightly decreased 0.1% year over year to 48.1 million megawatt-hours (MWh) in May 2022.

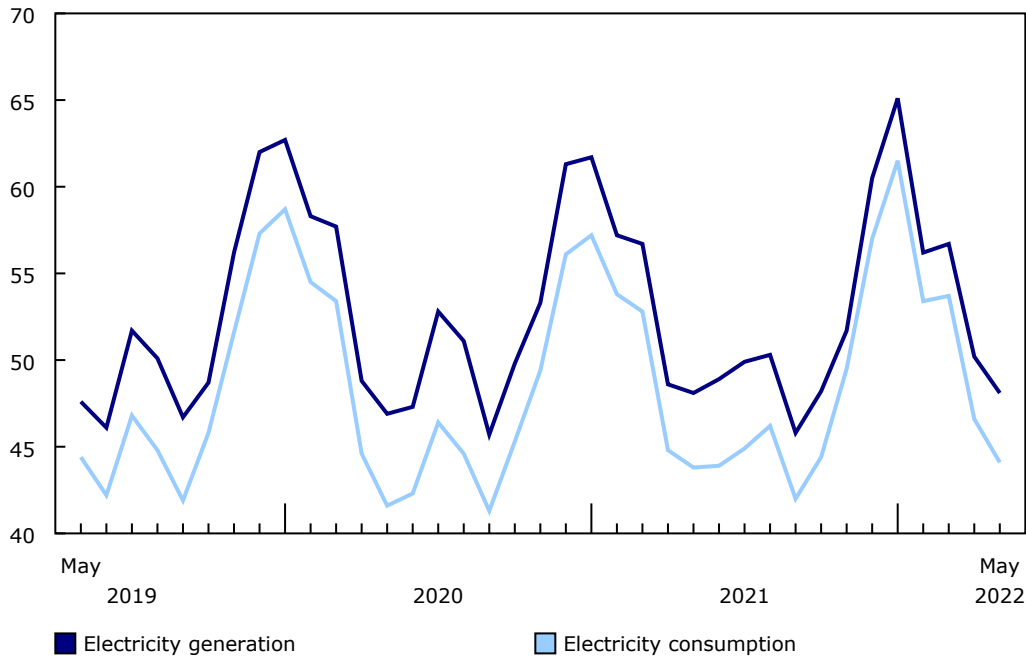
A 22.2% decrease in electricity generated from nuclear turbines was the most notable year-over-year change in May, falling to 5.9 million MWh. The decline was attributable to the refurbishment of one unit at the Bruce Nuclear Generating Station in Ontario and the ongoing scheduled maintenance at Point Lepreau Nuclear Generating Station in New Brunswick, which resulted in that province producing no electricity from nuclear sources in May.

Increases in hydroelectric generation (+3.0%), combustible fuels (+3.4%), wind (+17.1%), and solar (+6.1%) offset the drop in nuclear generation.

Electricity consumption across Canada edged up 0.6% year over year to 44.1 million MWh in May.

Chart 4 Electricity generation and consumption

millions of megawatt-hours



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

Exports of electricity to the United States rose 0.5% year over year, as a 28.1% increase in exports from Manitoba counterbalanced decreases from the other exporting provinces. In May, Manitoba recorded its first year-over-year increase in exports of electricity since November 2020. Near-record levels of precipitation in Manitoba were observed in spring 2022 by [Environment and Climate Change Canada](#). As a result, Manitoba posted higher levels of hydroelectric generation for domestic consumption and export.

In May, imports of electricity from the United States rose 37.7% year over year to 1.2 MWh, largely driven by a 36.8% increase in imports to British Columbia, which accounted for 71.4% of national imports.

Coal production continues to decline

Total coal production was 3.4 million metric tonnes, down 6.1% compared with May 2021, marking the seventh consecutive monthly year-over-year decline. Coal exports decreased 4.6% compared with May 2021 to 2.4 million tonnes, which represented 69.7% of total monthly production.

Coke production increased 12.1% year over year to 188.9 million tonnes in May.

Note to readers

The consolidated energy statistics table (25-10-0079-01) presents monthly data on primary and secondary energy by fuel type in terajoules (crude oil, natural gas, electricity, coal, etc.) and supply and demand characteristics (production, exports, imports, etc.) for Canada. The table uses data from a variety of survey and administrative sources. Estimates are available starting with the January 2020 reference month. For more information, please consult the [Consolidated Energy Statistics Table: User Guide](#).

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

- Crude oil and natural gas (survey number [2198](#), tables 25-10-0036-01, 25-10-0055-01 and 25-10-0063-01). Data for April 2022 have been revised.
- Energy transportation and storage (survey number [5300](#), tables 25-10-0075-01 and 25-10-0077-01). Data for April 2022 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).
- Refined petroleum products (survey number [2150](#), table 25-10-0081-01).
- Renewable fuel plant statistics (survey number [5294](#), table 25-10-0082-01). National estimates of renewable fuel plant statistics are presented by supply and disposition characteristics (production, shipments, inventories, etc.).
- Electric power statistics (survey number [2151](#), tables 25-10-0015-01 and 25-10-0016-01). Data for April 2022 have been revised.
- Coal and coke statistics (survey numbers [2147](#) and [2003](#), tables 25-10-0045-01 and 25-10-0046-01). Data for October and December 2021 and January to April 2022 have been revised.

Data are subject to revisions. Energy data are revised on an ongoing basis for each month of the current year to reflect new information provided by respondents and updates to administrative data. Historical revisions are also performed periodically.

Definitions, data sources and methods for each survey program are available under their respective survey number.

The Energy Statistics Program uses respondent and administrative data.

Data in this release are not seasonally adjusted.

For more information about liquid renewable fuels, consult the infographic [Liquid renewable fuels in Canada, 2020](#).

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](#), [25-10-0079-01](#), [25-10-0081-01](#) and [25-10-0082-01](#).

Definitions, data sources and methods: survey numbers [2003](#), [2147](#), [2149](#), [2150](#), [2151](#), [2198](#), [5210](#), [5215](#), [5294](#) 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; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).