

# Energy statistics, January 2021

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January saw the continuation of an upward trend for production in some energy sectors and rising energy prices. Production of crude oil and equivalent products increased year over year for the first time since the beginning of the pandemic, while renewable energy generation (including hydro, wind and solar energy) and coal production were also up. In contrast, natural gas, electricity and refinery production declined.

Demand for energy products in Canada was significantly affected by tighter lockdowns, curfews and travel restrictions, especially in Quebec and Ontario. Meanwhile, demand for energy products from the United States continued to grow, leading to higher exports of crude oil, natural gas and electricity.

For more information on energy in Canada, including production, consumption, international trade and much more, please visit the [Canadian Centre for Energy Information](#) website and follow #energynews on social media.

## **Crude oil production increases year over year for the first time since the start of the COVID-19 pandemic**

Production of crude oil and equivalent products rose 1.9% to 24.1 million cubic metres (151.6 million barrels) in January—the first year-over-year increase in 10 months. Higher crude oil prices and rising demand from the United States were the main factors for the gains in January.

Driving the overall increase in crude oil production were synthetic crude oil (+12.0%) and crude bitumen (+3.6%). Strong output in the oil sands continued in January, up 6.9% year over year to 16.0 million cubic metres. This was slightly lower than the record 16.3 million cubic metres produced in December 2020. Equivalent products (+2.2%) were also up in January.

Heavy, light and medium crude oil extraction offset the overall gain, down 9.7% to 6.0 million cubic metres in January. Production of these products has yet to return to pre-pandemic levels as January marked the tenth consecutive monthly year-over-year decline.

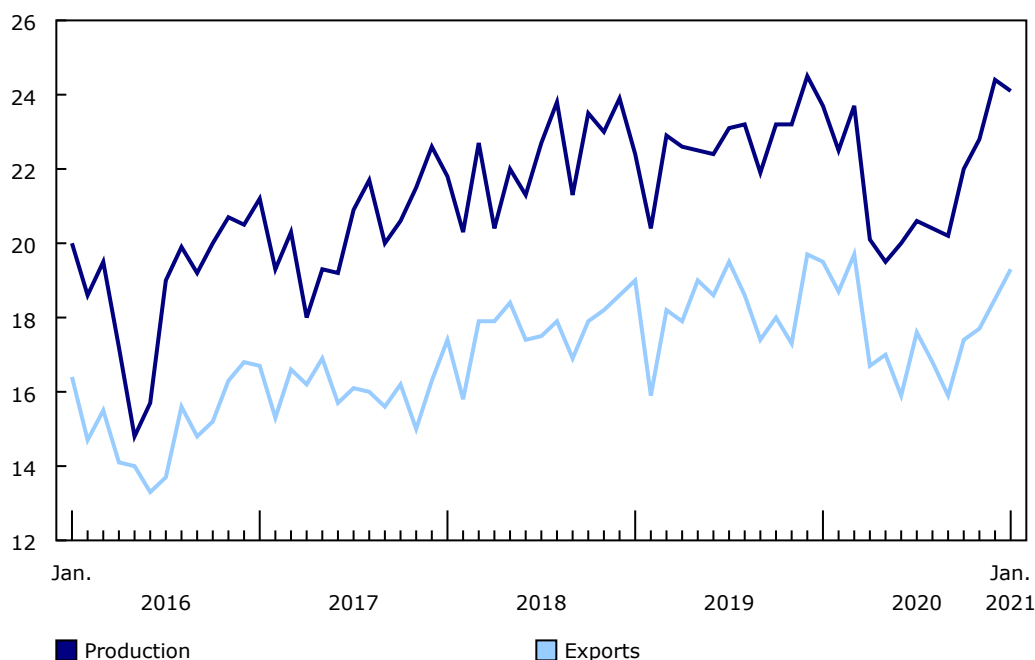
Daily production of crude oil (excluding equivalent products) declined 1.0% from December to 708.7 thousand cubic metres. Although down slightly, the high levels of production observed in December continued into January, largely because of increased demand for Canadian crude from the United States.

Following an 11.8% gain in December, the [crude oil and bitumen price index](#) was up 12.2% in January—the third consecutive monthly increase and the largest rise since June 2020. The gain was largely the result of an agreement between the Organization of the Petroleum Exporting Countries and other major producers to cut crude oil production at the beginning of January.



**Chart 1**  
**Production and exports of crude oil and equivalent products**

millions of cubic metres



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

After two monthly increases, global consumption of crude oil declined 3.3% from December to January, according to the US Energy Information Administration. Similarly, consumption in Canada was down 2.3%, partly because of renewed pandemic-related restrictions in Quebec and Ontario following a resurgence of COVID-19 cases.

Exports of crude oil and equivalent products fell 1.0% year over year to 19.3 million cubic metres in January. Despite the decline, this was the highest level of exports since March 2020, as demand for Canadian crude from US-based refineries continued to rise. Higher volumes and prices both contributed to the growth in crude exports, which remained one of the main contributors to the higher [Canadian international merchandise trade](#) balance in January. Exports to the United States by pipeline were up 4.9% to 17.0 million cubic metres—the highest level on record. Exports to other countries increased 8.4% year over year, because of higher volumes originating in Newfoundland and Labrador. Exports to the United States by other means of transportation were down by over one-third (-33.7%), primarily because of lower volumes transported by rail. Crude transported by rail declined year over year for the tenth consecutive month in January, according to [railway carloadings statistics](#).

Following a 5.1% increase in December, imports of crude oil and equivalent products fell 20.8% year over year in January, returning to the downward trend observed since the onset of the pandemic. Imports by refineries fell by one-quarter (-25.0%), while imports by other entities were also down (-11.4%).

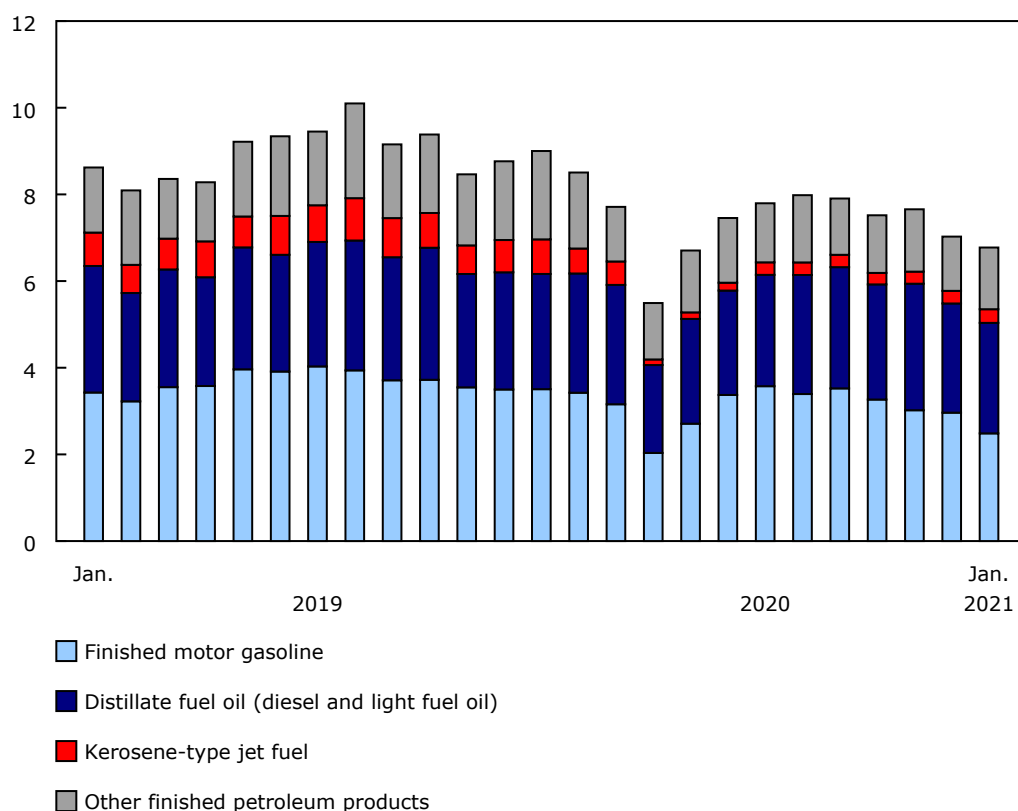
## Lockdowns affect refinery activity in January

Widespread lockdowns in several provinces resulted in reduced Canadian refinery activity in January. Inputs of crude oil to refineries dropped 9.7% year over year to 8.0 million cubic metres. Net production of finished petroleum products fell 15.1% year over year to 8.8 million cubic metres—the lowest production level in five months. Finished motor gasoline (-25.9%) was the main contributor to the overall decline, while distillate fuel oil (-9.3%) and kerosene-type jet fuel (-36.1%) were also down.

Demand for petroleum products was also significantly reduced in January as curfews and travel restrictions remained in place in most provinces. Refinery products supplied to Canadian consumers fell by almost one-quarter (-24.4%) year over year to 6.9 million cubic metres—the lowest level since May 2020. Demand for transportation fuels was particularly affected, with finished motor gasoline (-29.1%), distillate fuel oil, including diesel and light fuel oils (-4.1%), and kerosene-type jet fuel (-60.6%) all down year over year. The number of [return trips made by Canadians](#) from the United States in January was down sharply (-91.4%) compared with January 2020, while total movements at Canada's major airports were down 29.8% year over year, according to [aircraft movements statistics](#).

**Chart 2**  
**Finished petroleum products supplied to Canadian consumers**

millions of cubic metres



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

Despite the decline in volumes supplied, [prices of refined petroleum products](#) (+8.2%) rose for the fourth consecutive month in January, fuelled by higher crude oil prices. Motor gasoline (+10.4%), diesel (+4.6%) and jet fuel (+4.5%) prices were all up compared with the previous month.

## Natural gas production slightly down, industrial deliveries and exports up

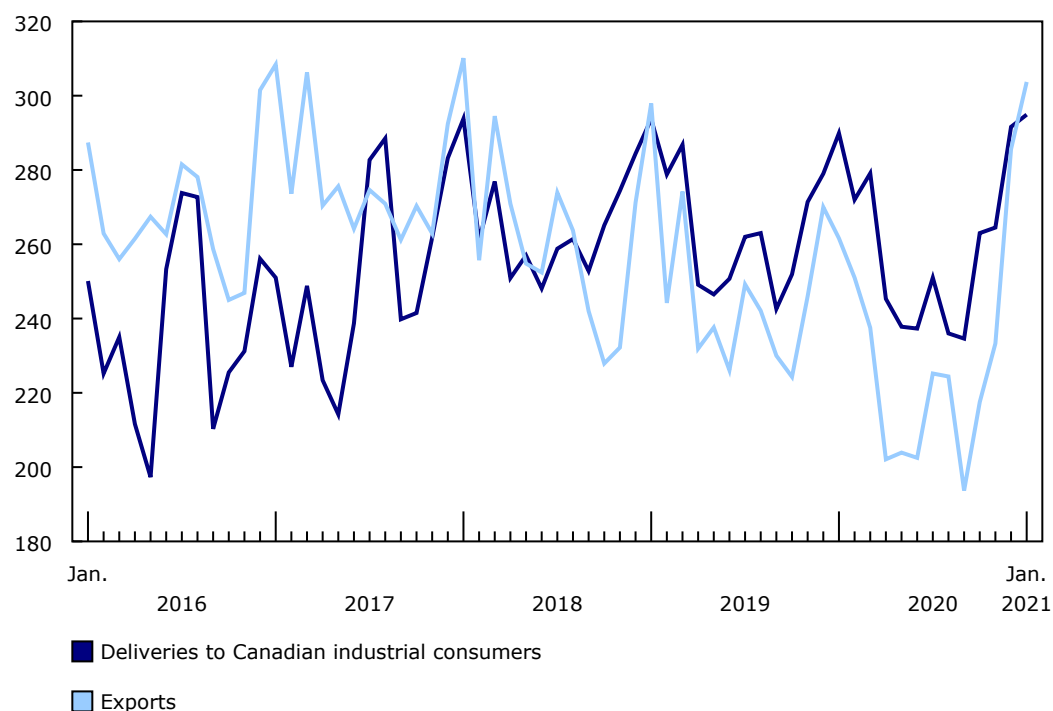
Production of marketable natural gas continued to decline, down 0.3% year over year to 586.3 million gigajoules in January. Nevertheless, this was the smallest year-over-year decrease since June 2020.

Deliveries of natural gas to Canadian consumers were up 0.4% year over year to 496.2 million gigajoules in January. Deliveries to the industrial sector were up 1.8% to 294.9 million gigajoules, the second monthly year-over-year increase and the highest level since the beginning of this series in January 2016. The increase was mainly attributable to higher demand from industrial consumers in Alberta and Ontario.

In contrast, deliveries to residential (-1.7%) and commercial and institutional (-1.5%) customers were down, as January was generally milder on average across the country compared with January 2020, according to Environment and Climate Change Canada data on heating degree days.

**Chart 3**  
**Deliveries to Canadian industrial consumers and exports of natural gas**

millions of gigajoules



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

Demand for Canadian natural gas in the United States rose for the second consecutive month in January. Exports of natural gas by pipeline to the United States increased 16.1% to 303.7 million gigajoules. This was the highest monthly export level in three years (January 2018). Imports of natural gas declined 15.6% to 108.6 million gigajoules. Imports of natural gas have been trending downward year over year since February 2020, mostly on decreased demand from Ontario.

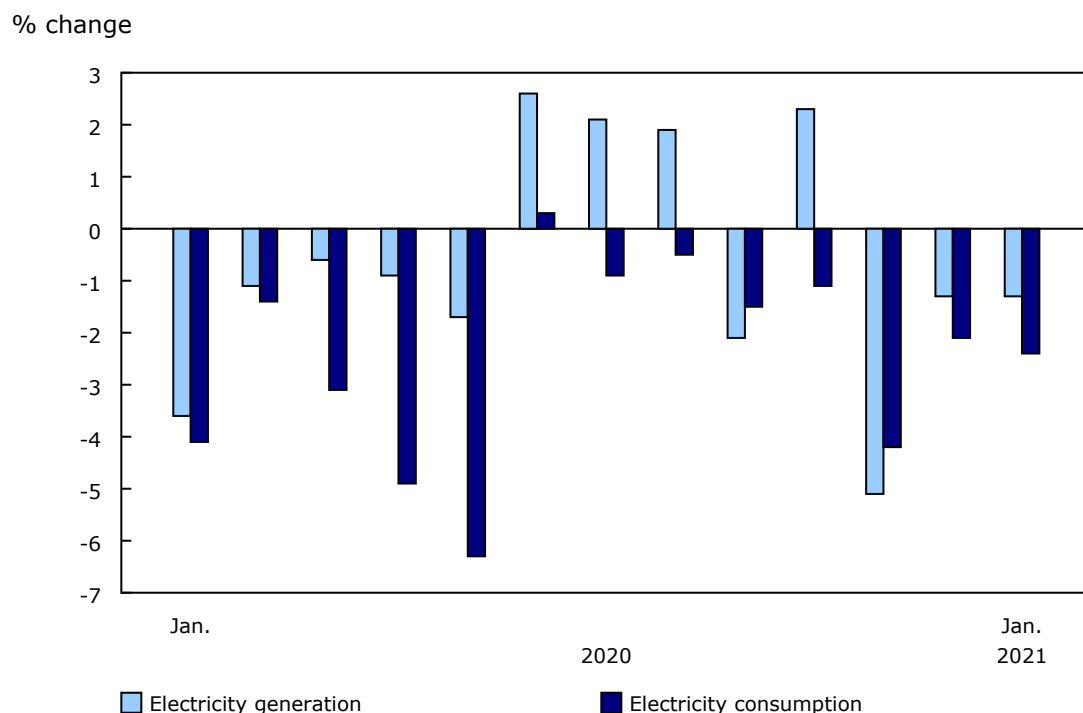
### Electricity generation and consumption decline year over year on lower demand

After a 1.3% decrease in December, electricity generation fell another 1.3% year over year to 61.9 million megawatt-hours (MWh) in January—the lowest production level for a month of January since 2015. The decline was primarily driven by nuclear generation, down 13.5% year over year to 7.7 million MWh. Electricity generated from combustible fuels (-9.2% to 10.9 million MWh) was also down, mostly as a result of lower volumes produced in Alberta.

Partially offsetting the overall decrease, electricity generation from renewable energy sources (including hydro, wind, solar and other sources) was up 3.5% to 44.1 million MWh—accounting for 71.2% of Canada's electricity mix in January.

By generation type, hydro was the single largest contributor to Canada's electricity mix, producing 40.1 million MWh of electricity, up 3.5% year over year. Wind (+3.7%) and solar (+25.4%) electricity generation also increased.

**Chart 4**  
**Electricity generation and consumption, year-over-year change**



Source(s): Tables [25-10-0015-01](#) and [25-10-0016-01](#).

Electricity consumption decreased for the seventh consecutive month, down 2.4% year over year to 57.3 million MWh in January, the lowest level of consumption for a month of January since 2015. The decrease was mainly attributable to lower demand in Quebec (-3.8%) and Alberta (-7.5%), on account of lower seasonal demand for heating.

Electricity exports to the United States increased 7.6% year over year to 5.4 million MWh in January. Imports of electricity from the United States were down 18.8% to 0.9 million MWh.

## Production of coal rises year over year

Coal production was up 5.9% to 3.6 million tonnes in January—the first year-over-year increase since June 2019, while exports of coal edged down 0.3% to 1.9 million tonnes. Coke production increased 1.6% to 190.0 thousand tonnes in January.

## Note to readers

New as of March 2021 in the energy statistics release: selected provincial supply and disposition estimates for petroleum and other liquids. These data are now available in a new table (25-10-0081-01), which includes both Canadian and provincial supply and disposition estimates. The former table, 25-10-0076-01 (Petroleum products supply and disposition) was discontinued as of the December 2020 reference month.

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.

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). Selected data from November 2016 to December 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).
- Refined petroleum products (survey number [2150](#), table 25-10-0081-01). National and provincial supply estimates for renewable fuels, including ethanol fuel and renewable fuels except ethanol, are now available in table 25-10-0081-01 starting with the January 2020 reference month. More detailed renewable fuel data are also available upon request. Data for December 2020 have been revised.
- Electric power statistics (survey number [2151](#), tables 25-10-0015-01 and 25-10-0016-01). Data for December 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. 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.

**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](#) and [25-10-0081-01](#).

**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; [STATCAN.infostats-infostats.STATCAN@canada.ca](mailto:STATCAN.infostats-infostats.STATCAN@canada.ca)) or Media Relations (613-951-4636; [STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca](mailto:STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca)).