Energy statistics, January 2023

Released at 8:30 a.m. Eastern time in The Daily, Wednesday, April 12, 2023

January 2023 rang in a new year, and weather was a key influencer on the energy sector. Due to warmer-than-usual temperatures, January was Canada's warmest January since 2017, as noted by Environment and Climate Change Canada data. Various weather-related events, including winter storms and very cold temperatures in late December, also contributed to temporary disruptions at various Canadian and US energy-producing facilities in January.

Against this backdrop, Canadian energy producers posted a 5.7% increase in the production of primary energy compared with January 2022. Primary electricity (-3.4%) was the only subsector to post a decline. Meanwhile, production of secondary energy increased 2.2%, largely attributable to the refined petroleum products sector (+3.0%).

For more information on energy in Canada, including production, consumption, international trade and much more, please visit the Canadian Centre for Energy Information portal and follow #EnergyNews on social media.

Crude production up despite winter storms in western Canada

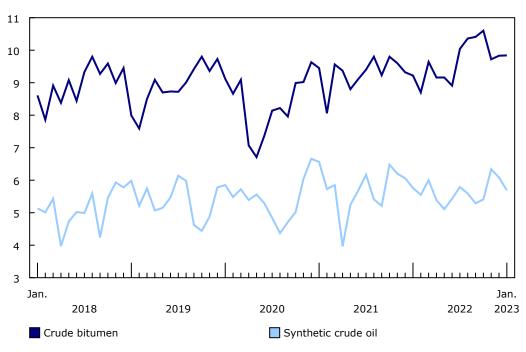
Production of crude oil and equivalent products rose 4.4% to 24.0 million cubic metres in January. This was the seventh consecutive monthly year-over-year gain, as prices started to level off from recent increases.

Crude bitumen production was up 6.7% year over year, while synthetic crude production contracted 1.3%, due in part to temporary disruptions caused by cold weather and winter storms.



Chart 1 Production of crude bitumen and synthetic crude oil

millions of cubic metres



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

In recent months, the price of crude oil and bitumen has been less volatile, following sharp price increases in 2022 after the Russian invasion of Ukraine. According to the Raw Materials Price Index, the price for crude oil and bitumen in January was up 0.4% from the same month last year.

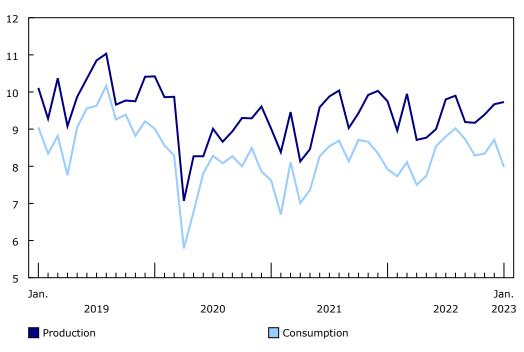
Production and consumption of finished petroleum products essentially flat

Production of finished petroleum products in Canada edged down 0.2% year over year to 9.7 million cubic metres in January. Decreases in other petroleum products, including petroleum coke and still gas, were largely offset by higher distillate fuel oil and kerosene jet-fuel production.

In contrast, consumption of finished petroleum products was up 0.7% in January due to a 74.3% increase in kerosene-type jet fuel.

Chart 2 Production and consumption of finished petroleum products

millions of cubic metres



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

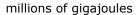
Exports of finished petroleum products rose 5.8% to 1.6 million cubic metres in January, due in part to weather-related outages in late December at some refineries in the United States.

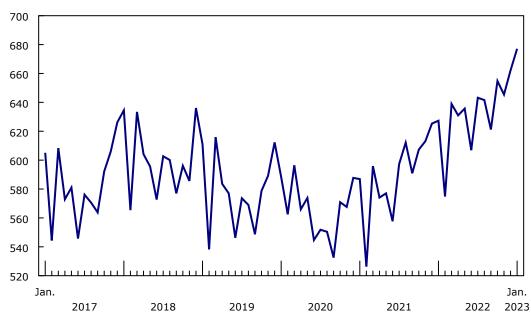
According to the Industrial Product Price Index, prices of refined petroleum products were up 21.0% year over year in January.

Natural gas consumption falls, while production continues to increase

Despite a year-over-year decrease in demand, production of marketable natural gas continued to rise in January, up 7.9% to 677.1 million gigajoules, which is the highest production level since this series began in January 2016.

Chart 3 Production of natural gas in Canada





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

Total deliveries of natural gas fell 7.2% to 530.9 million gigajoules in January, mostly driven by the commercial and institutional (-16.4%) and residential (-14.8%) sectors. This decline was partly tied to warmer-than-usual temperatures.

While consumption declined, inventories of natural gas held in Canadian facilities rose 4.5% compared with January 2022.

Generation and consumption of electricity fall

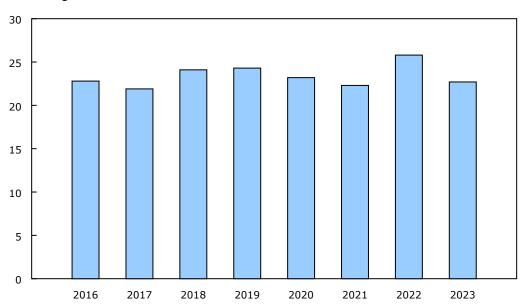
In January, consumption of electricity in Canada dropped 5.7% year over year to 58.0 million megawatt-hours (MWh), largely attributable to reduced demand for domestic heating in hydro-rich Quebec.

The lower consumption contributed to a 4.0% decline in total electricity generation, which stood at 62.5 million MWh in January. All sources, except solar, posted lower generation levels compared with January 2022.

Alongside the decline in demand, Canadian imports of electricity fell 47.7% in January, mainly due to reduced imports by Manitoba. Meanwhile, exports of electricity to the United States were up a modest 1.3%.

Chart 4
January electricity consumption declines in Quebec in 2023

millions of megawatt-hours



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

Note to readers

The consolidated energy statistics table (25-10-0079-01) presents monthly data on primary and secondary energy by fuel type (crude oil, natural gas, electricity, coal, etc.) in terajoules 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 which support the "Energy statistics" release include:

- Crude oil and natural gas (survey number 2198; tables 25-10-0036-01, 25-10-0055-01 and 25-10-0063-01). Data from January 2021 to December 2022 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). Data from December 2022 have been revised.
- 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).
- Coal and coke statistics (survey numbers 2147 and 2003, tables 25-10-0045-01 and 25-10-0046-01). Data for November and December 2022 have been revised.

Data are subject to revisions. Energy data and other supporting data used in the text 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 the respective survey number.

The Energy Statistics Program uses respondent and administrative data.

Data in this release are not seasonally adjusted.

Data from Environment and Climate Change Canada referenced by the Energy Statistics Program uses Heating Degree Days (HDDs) as a measure of temperature. HDDs reflect the relationship between outdoor temperatures and the need to heat indoors to maintain room temperature. As temperatures outside fall, the number of HDDs increases.

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).