Energy statistics, August 2021

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Following an 11.0% increase in July, primary energy production rose another 11.8% year over year in August, the sixth consecutive monthly gain. The large year-over-year increase was attributable to lower levels of energy production in August 2020 following the first wave of the pandemic. Crude oil (+14.5%) and natural gas (+11.2%) were the major contributors to the increase in primary energy production. Secondary energy production was up 15.5% year over year due to higher refinery production.

Total energy exports increased 11.0% year over year in August due to higher volumes of both natural gas (+12.9%) and crude oil (+9.3%) exported primarily to the United States. During the same period, total energy imports increased sharply by 27.1%, on higher demand for crude oil and refined petroleum products. Despite these year-over-year increases, overall energy production and trade in August continued to remain below pre-pandemic levels.

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Oil sands continue to drive the increase in crude oil production

Production of crude oil and equivalent products continued to rise in August, up 14.3% year over year to 23.4 million cubic metres. The sizable year-over-year increase was directly related to the impact of the COVID-19 pandemic on crude oil production in August 2020, coupled with the ongoing recovery of global demand and surging prices for crude oil and other petroleum products in 2021.

Oil sand extraction operators maintained a high level of production in August, up 20.9% to 15.2 million cubic metres, following a 20.0% increase in July. Production of crude bitumen rose 19.3% to 9.8 million cubic metres, the highest level observed in three years. Synthetic crude production increased sharply by 23.7% year over year to 5.4 million cubic metres, although down from the 6.2 million cubic metres recorded last month. In August, planned maintenance at one of the oil sands upgraders in Alberta began.

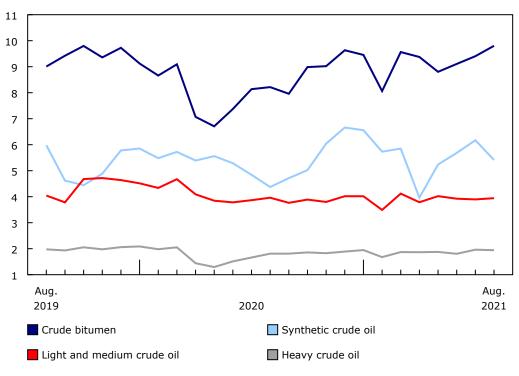
Oil extraction was up 2.0% to 5.9 million cubic metres, on rising demand for heavy crude oil (+7.4%). Meanwhile, light and medium crude oil production edged down 0.4%. Despite the year-over-year gains, overall production of these types of crude oil remained 2.2% below the pre-pandemic levels of August 2019.





Chart 1 Production of crude oil, by type of product

millions of cubic metres



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

By August, the crude oil and bitumen price index was 56.4% higher compared with August 2020. That said, in August, the price index fell 6.2% from July, the first month-over-month decrease since April 2021. The recent decision by the Organization of the Petroleum Exporting Countries Plus (OPEC+) to increase production, coupled with the ongoing uncertainty generated by the rise in global COVID-19 cases, were the main factors affecting the decline in crude oil prices.

Exports of crude oil and equivalent products were up 9.2% to 18.4 million cubic metres in August, the fifth consecutive year-over-year increase. The gain was driven by exports to the United States by pipeline (+5.8%) and by other means, including rail, marine and truck (+48.2%). According to railway carloading statistics, crude oil transported by rail increased for a fourth straight month in August and was more than double compared with August 2020. Exports of crude oil to other countries were up by almost one-third (+32.4%) primarily due to increased volumes originating in Newfoundland and Labrador.

Imports of crude oil and equivalent products to Canada rose 39.7% in August, the largest year-over-year increase in three months. Low import levels in August 2020, as well as increased demand from both refineries (+43.6%) and other entities (+31.3%) contributed to the year-over-year gain.

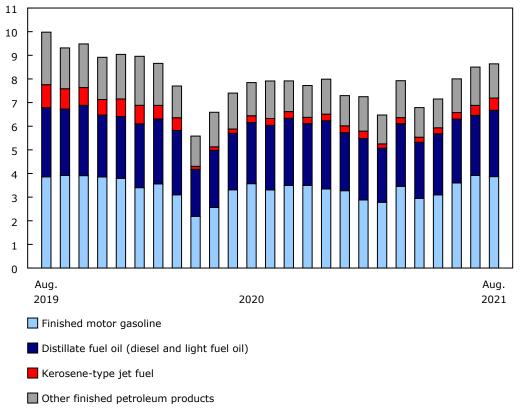
Refined petroleum production and consumption continue to increase year over year

As demand for refined petroleum products increased, refinery activity continued to rise over the summer. Following a 9.9% increase in July, net production of finished petroleum products rose another 13.9% year over year to 9.6 million cubic metres in August. Production of distillate fuel oils (+21.0%), jet fuel (+100.8%) and finished motor gasoline (+3.7%) were the main contributors.

Domestic consumption of refined petroleum products was up 11.2% year over year to 8.9 million cubic metres in August, its highest level since January 2020. A gradual increase in travel activity contributed to the rise in demand for transportation fuels. Consumption of finished motor gasoline was up 17.0% year over year to 3.9 million cubic metres, while jet fuel increased sharply by 79.7%, as airlines continued to recover from the low passenger counts of summer 2020. According to aviation statistics, the number of passengers carried by major Canadian airlines was almost triple in August compared with the same month a year earlier, although levels still remained well below pre-pandemic levels.

Chart 2 Finished petroleum products supplied to Canadian consumers





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

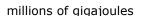
Exports of finished petroleum products were up 42.8% from August 2020, due mostly to distillate fuel oils (+59.7%) and other petroleum products (+78.1%). In contrast, imports of finished petroleum products were down by almost one-fifth (-19.2%) in August.

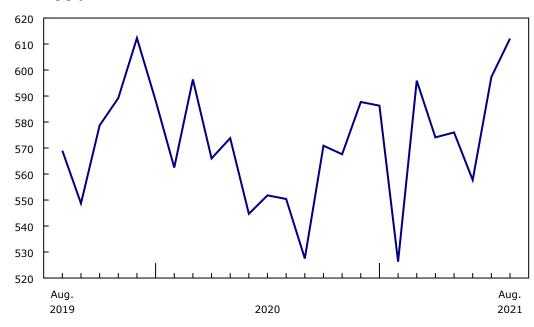
Natural gas production and consumption continue to increase

Production of marketable natural gas continued to rise, up 11.2% to 612.1 million gigajoules in August, the fifth consecutive monthly year-over-year increase and the highest level since December 2019. The production of natural gas was concentrated in Alberta (+68.4%) and British Columbia (+30.4%).

Total deliveries of natural gas to Canadian consumers rose 20.4% year over year to 320.4 million gigajoules in August, driven primarily by higher demand from industrial sectors in Alberta (+22.2%) and Ontario (+40.0%). Meanwhile, deliveries to commercial and institutional (+10.4%) and residential (+5.3%) consumers were also up due to increased demand in Ontario.

Chart 3 Marketable production of natural gas





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

Demand for Canadian natural gas by the United States continued to rise for nine consecutive months. Following a 9.5% increase in July, exports of natural gas to the United States increased 12.9% to 253.4 million gigajoules, the highest export level in five months.

Following a 4.6% decline in July, imports of natural gas from the United States by pipeline rose 32.6% to 91.6 million gigajoules in August, the highest year-over-year increase since May 2019 (+34.6%). Higher demand from consumers in Ontario was the main contributor to the steep increase in imports in August.

Electricity generation down, consumption up year over year

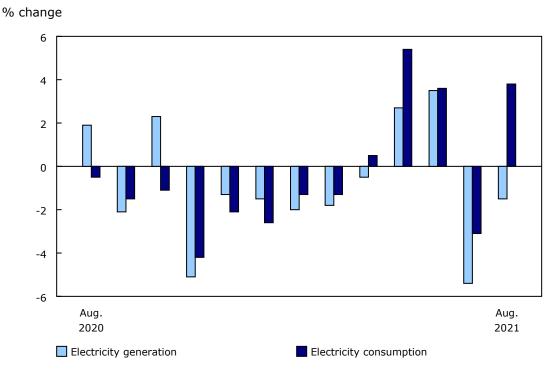
Electricity generation continued on a downward trend in August, declining 1.5% year over year to 50.3 million megawatt-hours (MWh). Hydroelectricity generation (-4.9%) was the main contributor to the overall decline, as extreme heat and droughts in recent months reduced the water levels at many generating stations in Western Canada. Wind power (-14.7%) and nuclear energy (-1.6%) were also down in August.

Meanwhile, combustible fuel electricity generation rose 10.8% year over year to 11.8 million MWh and accounted for almost one-quarter (23.4%) of Canada's electricity generation in August.

Following a 3.1% decline in July, electricity consumption rose 3.8% in August, mostly on increased demand for cooling in Quebec (+12.4%) and Ontario (+5.6%). In contrast, lower demand in British Columbia (-8.5%) and Alberta (-2.0%) partially offset the overall increase in consumption in August.

August also saw higher electricity prices. After decreasing 1.9% in July, the electric power selling price index for industrial and commercial users rose 6.0% month over month in August. Higher prices in Ontario and Alberta were the main contributors to the largest month-over-month increase in electricity prices since February 2020 (+6.7%).

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



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

Following a 15.6% year-over-year decrease in July, electricity exports to the United States fell by almost one-quarter (-24.1% to 5.4 million MWh) in August. Lower exports from Manitoba and British Columbia were the main contributors to the year-over-year decline. In contrast, electricity imports from the United States were up 124.5% to 1.3 million MWh, the highest level since July 2019. The increase was primarily due to higher demand in Manitoba and British Columbia for imported electricity, with both provinces reporting significant decreases in domestic production in August.

Coal production and exports rise year over year

Coal production rose 13.3% to 3.6 million tonnes in August compared with the same month a year earlier, while exports of coal increased 5.8% to 2.2 million tonnes.

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 July 2021 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). Data from January 2019 to July 2021 have been revised.
- Renewable fuel plant statistics (survey number 5294, table 25-10-0082-01). National estimates presented on renewable plant statistics by supply and disposition characteristics (production, shipments, inventories, etc.) Data from January 2020 to July 2021 have been revised.
- Electric power statistics (survey number 2151, tables 25-10-0015-01 and 25-10-0016-01). Data for July 2021 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, 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; **STATCAN.infostats-infostats.STATCAN@canada.ca**) or Media Relations (613-951-4636; **STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca**).