

ENERGY FACT SLEUTHS



WHAT TO DO

- 1. Read the market snapshots on the province or territory slide assigned to you. Make sure to use the 2020 Report year and the Evolving Scenario.
- 2. Prove or disprove the statement on the slide using the **Exploring Canada's Energy** Future Visualization Tool.
- 3. Copy and paste the link(s) into your slide so they can be shared with the class later.
- 4. Correct any false statements.

Hint: Click the Copy URL button on the top right of the page to create a short bit.ly link to add to your slide. You can use a screenshot program to capture a static image of the visualization to add to your slide.



EXAMPLE

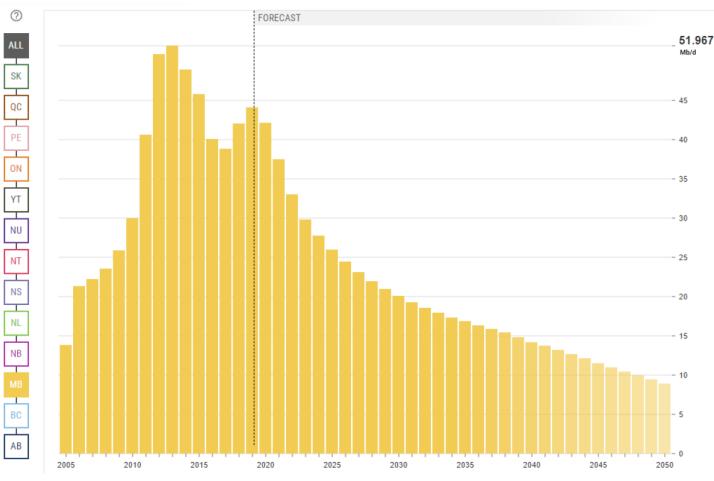
MANITOBA

Using the evolving scenario, Manitoba's oil production <u>is</u> <u>projected to decline</u>.

Answer: True - see

https://bit.ly/3I2ZTSK

OIL PRODUCTION



REPORT: 2020 UNIT: MB/D SCENARIO: EVOLVING

Exploring Canada's Energy Futures 2020 - Canada Energy Regulator



PROVINCES AND TERRITORIES

Province/Territory	Assigned Team Members
Alberta	
British Columbia	
Manitoba	
New Brunswick	
Newfoundland and Labrador	
Nova Scotia	
Nunavut	
Northwest Territories	
Ontario	
PEI	
Québec	
Saskatchewan	
Yukon	
Canada (All)	



ALBERTA (1)

By 2038, BC and Alberta are expected to have comparable population totals. This will make each province's demand for energy comparable as well.

Helpful hints:

BC Population 2038

 $\frac{https://apps.cer-rec.gc.ca/ftrppndc/dflt.aspx?GoCTemplateCulture=en-CA}{and}$

AB Population 2038

https://apps.cer-rec.gc.ca/ftrppndc/dflt.aspx?GoCTemplateCulture=en-CA

ALBERTA (2)

In 2020, approximately 90% of electricity used in Alberta is produced from fossil fuels.



BRITISH COLUMBIA (1)

During the projected timeframe, BC is expected to produce more electricity from renewables than from natural gas and oil combined.



BRITISH COLUMBIA (2)

By 2050, BC is expected have a higher demand for electricity within the transportation sector than of any province.

MANITOBA (1)

Manitoba is among the top producers of natural gas in Canada.



MANITOBA (2)

It is projected that solar and wind electricity generation in MB will provide a larger share of the total electricity generation mix in 2050 (compared to 2020).



NEW BRUNSWICK (1)

By 2050, nuclear power is expected to generate most of New Brunswick's electricity.



NEW BRUNSWICK (2)

In New Brunswick, generation from solar and wind power is projected to increase from zero (naught) in 2005 to approximately 5% of total generation by 2050.



NEWFOUNDLAND AND LABRADOR (1)

Hydro sources generated approximately 97% of Newfoundland and Labrador's electricity in 2020. The percentage of hydro is projected to increase by even more in 2050.



NEWFOUNDLAND AND LABRADOR (2)

In 2020, industrial demand was the largest sector for energy in Newfoundland and Labrador.

<u>CER projections indicate that by 2050, residential</u> demand is expected to become the largest sector for energy.



NOVA SCOTIA (1)

In 2005, coal was the main source of electricity generation but hydro is expected to take the lead by 2050.

NOVA SCOTIA (2)

Natural gas production in Nova Scotia was terminated at the end of 2018.



NUNAVUT (1)

In 2020, almost all of Nunavut's electricity comes from burning imported diesel fuel.



NUNAVUT (2)

In 2020, the transportation sector is the largest consumer of Nunavut's electricity. This is expected to continue through 2050.



NORTHWEST TERRITORIES (1)

This year (2020), natural gas production in the Northwest Territories accounts for more than 10% of totally natural gas production in Canada.



NORTHWEST TERRITORIES (2)

The Government of NWT's <u>Draft 2030 Energy Strategy</u>, written in 2017, has proposed installation of wind turbines in Inuvik to reduce reliance on diesel generation.



ONTARIO (1)

In 2020, approximately 97% of electricity in Ontario was produced by sources with zero carbon emissions.



ONTARIO (2)

In Ontario, a sharp increase in energy demand is expected to occur between 2020 and 2050.



PRINCE EDWARD ISLAND (1)

PEI generates enough electricity to fulfill all of the island's electricity demands.



PRINCE EDWARD ISLAND (2)

PEI's electricity generation from solar and wind is predicted to more than double between 2020 and 2050.

QUEBEC (1)

In 2020, hydroelectric stations have generated most of Quebec's electricity.

Solar and wind is the second largest source of electricity generation in the province.



QUEBEC (2)

Quebec will be significantly increasing its nuclear energy production by 2050 (compared to 2005).



SASKATCHEWAN (1)

Between 2020 and 2050, Saskatchewan Renewables' of electric capacity mix is projected to increase substantially.



SASKATCHEWAN (2)

In 2020, Saskatchewan is Canada's second largest producer of oil. Alberta is the first.

YUKON(1)

In 2020, Yukon has produced a significant amount of commercial crude oil.

YUKON (2)

In 2020, Yukon's total energy demand was the smallest in Canada.



CANADA (1)

In 2020, energy demand for the residential sector increases, while energy demand for all other sectors (industry, commercial, and transportation) decrease from the year prior (2019).



CANADA (2)

In Canada, Ontario ranked first for installed solar and wind capacity in 2020.

From 2007 to 2020, the solar and wind capacity of Ontario has grown over 30-times its original capacity.

CANADA (3)

In 2020, Alberta is the largest producer of crude oil in Canada, accounting for approximately 80% of total production.