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 2023 Report year and the Global Net-zero 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.

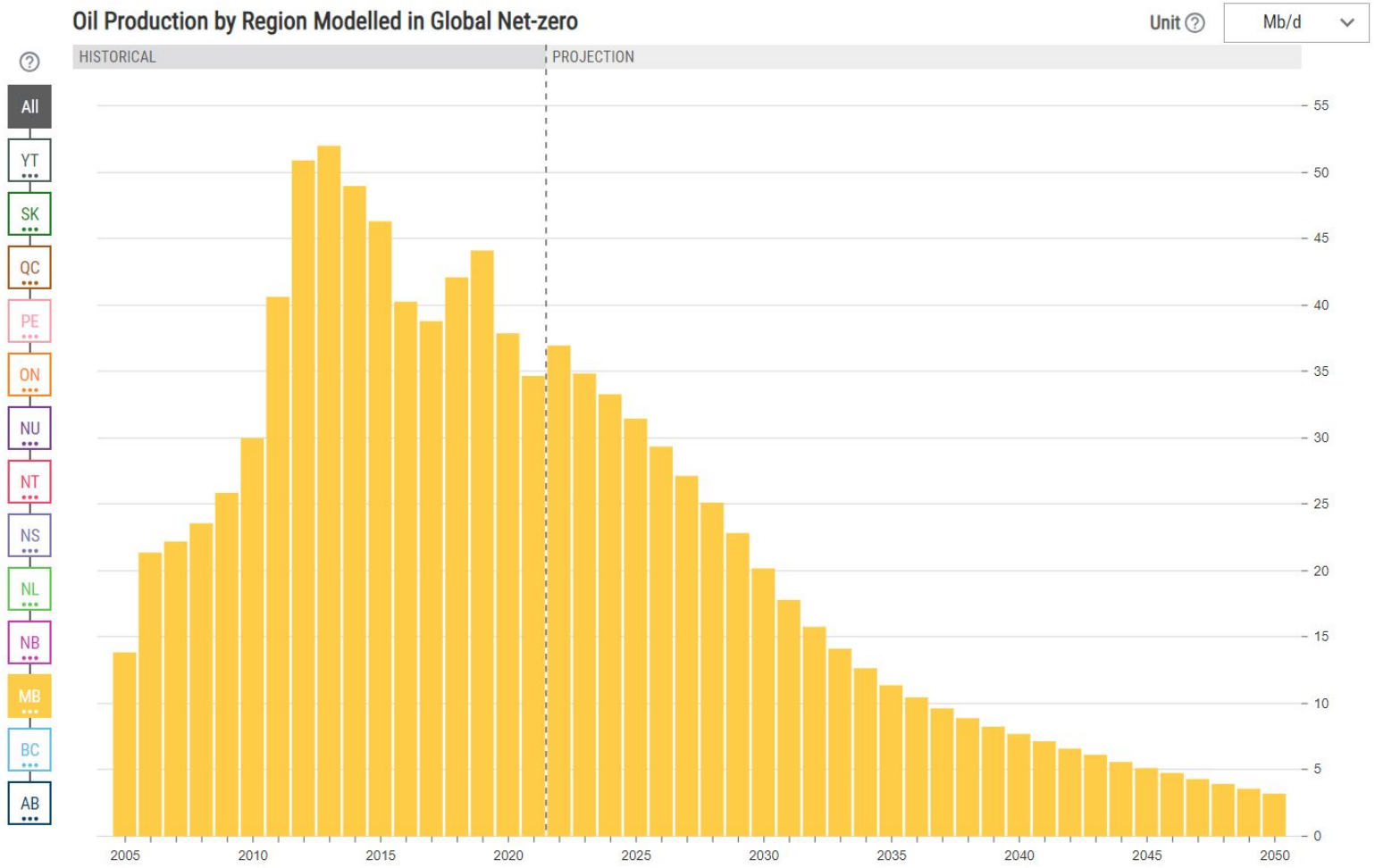
EXAMPLE

MANITOBA

Using the Global Net-zero scenario, Manitoba's oil production is projected to decline.

Answer: True – see

https://bit.ly/3rok1qw



Exploring Canada's Energy Futures 2023 - 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)

The higher the global price of oil and natural gas in 2050, the higher their production levels.

ALBERTA (2)

Oil production in Alberta in 2050, in both Global Net-zero and Canada Net-zero scenarios, is roughly the same.

BRITISH COLUMBIA (1)

By 2050, in Global Net-zero, in BC, wind will make up the second largest source of electricity generation behind hydro.

BRITISH COLUMBIA (2)

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

MANITOBA (1)

Manitoba is among Canada's top natural gas producers in all scenarios.

MANITOBA (2)

Oil products continue to provide the largest share of total energy demand in Manitoba through the projected period in all scenarios.

NEW BRUNSWICK (1)

The total demand for energy in New Brunswick will be the same in 2050 in all three scenarios.

NEW BRUNSWICK (2)

In New Brunswick, in the Global Net-zero scenario, electricity will make up over 90% of energy demand in the residential sector by 2050.

NEWFOUNDLAND AND LABRADOR (1)

In the Current Measures scenario, Newfoundland and Labrador's conventional oil production will grow between 2021 and 2050.

NEWFOUNDLAND AND LABRADOR (2)

In 2050, Newfoundland's electricity demand will be 75% of the total energy demand in the Global Net-zero scenario.

NOVA SCOTIA (1)

Historically in Nova Scotia, coal was the main source of electricity generation, but it will stop being used by 2030 in all scenarios.

NOVA SCOTIA (2)

In Global Net-zero, electricity generation in Nova Scotia is higher than in Current Measures; therefore, total energy demand is also higher in Global Net-zero.

NUNAVUT (1)

In 2021, almost all of Nunavut's electricity came from burning imported oil..

NUNAVUT (2)

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

NORTHWEST TERRITORIES (1)

In 2021, natural gas production in the Northwest Territories accounted for more than 10% of total natural gas production in Canada.

NORTHWEST TERRITORIES (2)

The NWTs use the least amount of energy in Canada.

ONTARIO (1)

In all three scenarios, Ontario will emerge as the leading electricity generator in Canada by 2050.

ONTARIO (2)

In the Global Net-zero scenario, hydrogen will make up just under 8% of Ontario's industrial demand by 2050.

PRINCE EDWARD ISLAND (1)

In 2021, PEI generated enough electricity to fulfill all of the island's electricity demands.

PRINCE EDWARD ISLAND (2)

In the Global Net-zero scenario, hydrogen makes up nearly 30% of transportation demand in 2050.

QUEBEC (1)

In the Global Net-zero scenario, Quebec's electricity demand will make up 62% of its total energy demand by 2050. This is the highest share of electricity demand in the country.

QUEBEC (2)

In the Global Net-zero scenario, Quebec will significantly increase its nuclear energy generation by 2050 (compared to 2021).

SASKATCHEWAN (1)

In all scenarios, biomass-based electricity generation in Saskatchewan is projected to become the dominant generation source by 2050.

SASKATCHEWAN (2)

In 2021, Saskatchewan was Canada's second-largest producer of oil. Alberta was the first.

YUKON (1)

The Yukon will use more energy in the Net-zero scenarios than in Current Measures throughout the projection period.

YUKON (2)

In the Yukon, in the Global Net-zero scenario, the largest source of energy in Transportation by 2050 will be electricity.

CANADA (1)

Current Measures has higher oil and gas emissions than the Net-zero scenarios from 2023 throughout the projection period.

CANADA (2)

Direct air capture is responsible for more negative emissions in Canada Net-zero than in Global Net-zero. There is no direct air capture in the Current Measures Scenario.

CANADA (3)

Electricity generation and hydrogen production start with positive emissions but become negative-emitting sectors throughout the projection period in all scenarios.

CANADA (4)

In 2050, using the Global Net-zero scenario, emissions from the oil & gas and transportation sectors will be less than 10% of 2021 levels.