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ELECTRICITY GENERATION

ALBERTA'S ELECTRICITY MIX

(DISCUSSION QUESTIONS)

JUNIOR/SENIOR HIGH



**ENERGY
EDUCATION**
TOOL KIT

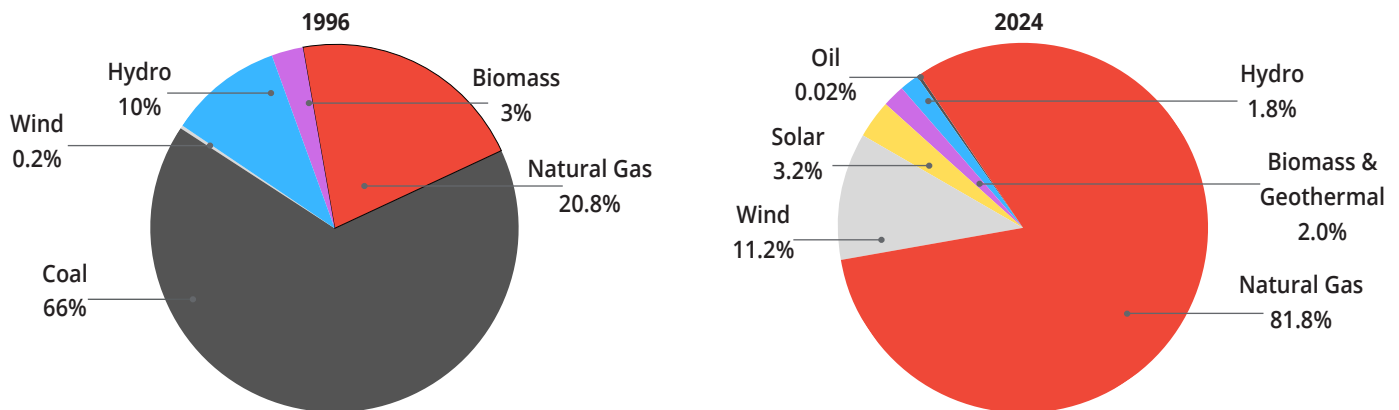
BY INSIDE EDUCATION

ALBERTA'S ELECTRICITY MIX

DISCUSSION QUESTIONS

Each province and territory uses a different combination of natural resources for electricity generation, driven by factors such as population size, accessibility, and environmental concerns.

Take a look at which natural resources have historically been used to generate electricity in Alberta:



Electricity generation data for 1996 is from the Government of Alberta and the Alberta Electric Systems Operator. Electricity generation data for 2024 is from the Canada Energy Regulator⁵ (updated April 2, 2025).

Use the pie charts to discuss the following questions:

1. Why do you think Alberta is using natural gas more in 2024?
2. Which two natural resources have been used the most for electricity generation in Alberta? Why do you think Alberta has used these two natural resources?
3. Which natural resources have decreased over the years? Why? Do you think these resources will be used more or less in 2040?
4. What do you want Alberta to look like in 2040?
 - Create a pie chart and adjust the values for each natural resource according to what you want Alberta's electricity generation to look like in 2040.
 - Think creatively and wishfully, but practically. For example, if you pick 100% nuclear or 100% solar, think about what would need to change in the next 20 years to make it a reality.
 - Which natural resources did you choose to make up the highest percentages of electricity generation? Why?