



A Green-Powered Canada

Students will research and present on renewable energy in Canada – on resources currently being used and those in development.



Learning outcomes

By the end of this activity, students:

- ✓ will have described at least one renewable type of power produced in Canada
- ✓ will be able to confidently communicate the advantages and disadvantages of a variety of energy resources

Complete **ONE** of the following options.

You will only be able to submit work and get credit for one option.

Option 1

A class debate

Students will research current energy production in Canada and hold a class debate on the role renewable energy will have in Canada's energy future.

Option 2

A research project on renewable energy

Students will research renewable energy in Canada and discuss its role in Canada's energy future.

Important

Please respect all school and governmental guidelines and restrictions surrounding COVID-19. Review the 2021 CEDC COVID-19 policy [here](#). This challenge does NOT require students to participate in an in-person event.





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Option 1

A class debate

Students will research current energy production in Canada and hold a class debate on the role renewable energy will have in Canada's energy future.

Materials

Computer with Internet access, pens, pencils, paper.

Proof to be submitted

Photos of debate or student reflections on debate outcomes.

Activity

As a class, brainstorm and list various types of energy produced in Canada. Distinguish between renewable and non-renewable resources and discuss the general benefits and drawbacks of each. Divide students into groups, with each group representing a different type of renewable energy. Have groups research their energy source to find out how it is used in Canada and what the future looks like for the resource. Inform students that they are going to use this information in a class debate, during which each group will argue in favour of their renewable energy. Discuss what a debate is and how to debate in a respectful manner. Moderate the debate, encouraging students to comment on and question how energy production may change in the future. Have students write a reflection paragraph sharing what they learned from the debate. Debates can be held in class or virtually.



Teacher tip

Distribute index cards to assist in the debate. Have students write the type of energy that they're arguing for on one side. Ask them to raise these cards when they wish to speak.



Classroom Energy Diet Challenge



Energydiet.ca



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Option 2

A research project on renewable energy

Students will research renewable energy in Canada and discuss its role in Canada's energy future.

Materials

A Green-Powered Canada worksheet (attached), pens, pencils, paper, computers with Internet access.

Proof to be submitted

Completed worksheets.

Activity

As a class, brainstorm and list various types of energy produced in Canada. Distinguish between renewable and non-renewable resources and discuss the benefits and drawbacks of each. Assign students (individually or in groups) a different renewable energy source found in Canada. Ask students to brainstorm and research where in the country these sources can be found, and to complete their worksheet as a group. Have each student reflect on the role that this energy source may play in the future. When all worksheets have been completed, hold a class discussion about renewable energy in Canada and what Canada's energy future might look like.



Teacher tip

Use this activity to teach students how to research, how to determine which sources are reliable and how to express information in their own words.



Classroom Energy Diet Challenge



Energydiet.ca



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Name _____

Date _____

Worksheet

Energy source	
Type of resource (circle one)	Renewable Non-renewable
Definition	
Benefits	Drawbacks
How is this energy source being used in Canada?	
What role could this energy source have in the future?	
Provide two reliable sources for people who would like to learn more about this energy source:	





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Examples from previous years of how this challenge can be completed:

Example 1

The Mega Munshis studied the pros and cons of wind energy and then participated in a design challenge to come up with innovative uses for old wind turbine blades to prevent them from filling up landfills.



Example 2

S.H.O.E. (Students Helping Our Earth) students broke into groups and researched different renewable sources of electricity. They then presented the posters in class, and put them up in the hallway. This was a great fit for their electricity unit!

