

The Great Energy Debate

http://www.ccge.org/resources/learning_centre/classroom_activities/great_energy_debate.asp

Time

Three to six hours

Materials

- Internet access
- Printed materials about energy issues in Canada and North America

Overview

Energy resources keep the lights on and the wheels turning around the world. Canada, due to our Northern climate and dependence on automobiles, uses a huge amount of energy in relation to our population. Recently, some of our provinces have thought about boosting their economies and becoming less dependent on outside energy sources. Some of the ways suggested to lessen this dependency are to use more of our public lands for energy production and to invest in renewable energy. Both of these strategies are controversial because of the environmental, economic, political, and cultural implications associated with them.

This lesson explores the controversial issues surrounding the energy debate in Canada. Students will research recent initiatives being taken in this area and analyze their implications. They will then assume the roles of pivotal stakeholders in this debate and testify to a mock congressional committee responsible for making decisions about public lands and energy resources.

Objectives

Students will:

- Identify sources of energy used in Canada
- Distinguish between fossil fuels and renewable energy
- Describe how energy production and consumption can impact public lands
- Learn about alternatives to fossil fuels
- Participate in a debate over whether to use public lands as sources of energy

Suggested Procedure

Opening

Have students list the ways they depend upon energy in their everyday lives. Then ask them to identify those activities that are dependent upon fossil fuels (oil, coal, and natural gas). List answers on the board.

Next, ask them to think about and then discuss as a group the following questions:

- Where do these energy resources come from?
- How are our public lands connected to these resources?
- What is meant by the term alternative energy?
- What are some examples of alternative energy sources?

Conduct a discussion about the advantages and disadvantages of renewable and non-renewable sources of energy. Ask students if they know of any renewable sources of energy in their area (for example, windmills, hydroelectric dams, solar panels). Write the six most common renewable energy sources on the board or overhead (hydroelectric, geothermal, wind, biomass, tidal, and solar).

Divide the class into six groups and assign each group to research one source of energy. Have groups provide the following information about their alternative energy source to the class: a definition, three examples of how the source is used, and three advantages and three disadvantages of using the source. Once they have completed this research, have the groups make a summary presentation of their findings to the rest of the class.

Development

Explain to students that they will now be participating in a mock hearing of the Parliamentary Committee for Energy and Natural Resources. The hearing is being held to determine whether or not to explore for renewable energy sources on a specific parcel of public land. You may provide the students with a fictitious or real-life public land example.

Each group will assume the role of one of the stakeholders in the debate, trying to persuade the committee that its opinion is the right one. Review the list of possible stakeholders below, add additional appropriate stakeholders for your example, and discuss how each might contribute to the debate.

Assign or have student groups select the stakeholder they wish to represent.

- Member of Parliament
- First Nations
- President of the Canadian Petroleum Institute
- Director of GreenPeace
- Tourism officials
- Ministry of Natural Resources
- Unemployed people
- Wildlife experts
- Economists
- Energy experts
- Members of Youth for Environmental Action

Give students a few days to conduct research related to their role. A list of Web sites to help with research is located at the end of this lesson. Caution students that, in a highly controversial issue like this, certain information might be presented with a bias. For example, one particular group may present possible environmental damage as minimal, while another will present it as significant. Students must use their best judgment about what is factual and may even want to try to find additional sources to validate information.

Closing

Conduct the committee hearing. Each group will have 10 minutes to state its case. Then the committee (which can be played by students, faculty, or even parents) will be permitted to ask additional questions. After each group testifies, ask the committee to determine which group was most persuasive and why.

Suggested Student Assessment

Have students develop counterarguments to the position they represented in the committee hearing. They should identify groups most likely to disagree with their positions and list three issues these opponents would raise and what their arguments might be. Have students anticipate and prepare rebuttals.

Extending the Lesson

Review the recent energy problems occurring in Canada and ask students to suggest ways to solve these problems. Have students take action by writing a letter or sending an E-mail to their MLA or MP. Use the Internet to find out how to contact individual members.

Research career opportunities related to resource management, conservation, and energy.