

Lesson Plan

Energies for the Future

Book: *Energy from Wind*

Series: Energy for the Future

Level: Navigator

Objective

To help students practice organizing information and reporting on a key energy technology for the future.

Supplies

- *Energy from Wind* book
- Access to the US Energy Information Administration's Energy Kids website: <https://www.eia.gov/kids/energy-sources/>
- Computer access for students
- Pencils and paper
- Poster board and markers

Before the Activity

Read through the *Energy from Wind* book, or assign it to students to read on their own. Have students pull up the Energy Kids website in their web browsers.

Activity

The Energy Kids website describes several energy sources, some of which could help people slow climate change. Divide the students into six groups and assign each group one of the following renewable or nonrenewable energy sources:

- Biomass
- Geothermal
- Hydropower
- Solar
- Wind
- Uranium (nuclear)

Students should use the links on the website to click to their assigned topic. Then, students should read the article about their topic. Each group should prepare a PowerPoint presentation to share what they learned about their topic with the rest of the class. Each student in a group is expected to assist in presenting to the class. Presentations should address the following questions, but they can include additional facts that the students find interesting:

- How is electricity generated from this energy source?
- Can this energy source be used in other ways (for example, to produce direct heat)?
- What are the pros and cons of using this energy source?
- How much is this energy source used in the United States?

After giving groups time (perhaps multiple class periods) to prepare their presentations, have groups present their presentations to the class. Allow time for questions and answers after each presentation.

Evaluation

Give each group up to 40 points:

- 5 points for well-organized PowerPoint slides and text that is relatively free of spelling and grammatical errors
- 5 points for a clear explanation on how electricity is generated from the group's energy source
- 5 points for explaining if the energy source can be used in other ways
- 10 points for an objective analysis of the pros and cons of using the energy source
- 5 points for stating how much the energy source is used in the United States
- 10 points for each student in the group participating in the presentation

Standards

This lesson may be used to address the Common Core State Standards' speaking and listening standards, grade 6 (SL 6.2, 6.4, 6.7).