

Skills and Strategies

- Questioning and Predicting
- Planning and Conducting
- Processing and Analyzing
- Evaluating
- Communicating

What You Need

- access to information resources (for example: online, in-print, interviews)

Create a Sustainable Energy Plan for Your School

Renewable energy sources, energy efficiency, and energy conservation each play an important role in a sustainable energy plan. In this investigation, you will apply these three components to create a plan to generate and use electrical energy more sustainably at your school.

Question

How can you create a sustainable energy plan for your school?

Procedure

1. Working in a group, you will prepare a presentation on the topic “A Sustainable Energy Plan for Our School.” Your presentation format is up to you, but the presentation must meet the design criteria on the next page.
2. With your group, brainstorm how you will gather information. After you have collected your information, work together to organize it.
3. Design and create any images, models, or props that you will use.
4. Prepare your final presentation. Make your presentation as directed by your teacher.

Evaluate

1. Did you present enough data to convince your audience that your action plan was realistic? Explain.
2. What adjustments would you make to your plan for a new school being built in your community? Explain.

Design Criteria

- A.** Your presentation should explain why it is important that your school generate and use electrical energy more sustainably.
- B.** Your presentation should answer the question “Can our school generate and use electrical energy more sustainably?” If your answer is “no,” you must provide evidence and explain your reasoning. If your answer is “yes,” include a step-by-step plan, focussing on how this change can be brought about.
- C.** Your presentation should include data on where and when electrical energy is currently used in the school, how much electrical energy is used, and what sources supply this energy.
- D.** Your presentation should assess the cost of implementing your plan. Consider the sustainable energy pyramid shown below.
- The top level consists of renewable energy sources. These resources tend to be expensive to produce. However, they are still important to a sustainable energy plan if affordable.
 - The middle level addresses energy efficiency. This often involves buying newer, more efficient appliances and comes with a significant price tag.
 - The base of the pyramid consists of energy conservation. It is the most cost-effective level and the one that the most people can participate in.

