



**Sustainability Project**  
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**Overview:**

Students will select an alternative energy source for home energy or for transportation energy. The project will be completed on a wiki where other students must review and answer questions.

**Objectives:**

- Expose students to a variety of alternative energy sources
- Students will calculate the equipment needed for an average household
- Students will explain the implications of incorporating such a technology into daily life

**Subjects:** Fundamental Science, Physical Science/Architecture/Drafting

**Suggested Grade Level:** Middle School to High School

**California Standards Addressed:**

**Time:** 1-2 weeks

**Materials:**

Internet for related activities

Computer

URL: <http://pbworks.com>

**Preparation and Background:**

Overview and list of possible projects. Survey of alternative energy technologies presented during a lecture. Expose students to articles that discuss the technologies. Socratic Seminar to follow.

**Procedure:**

1. Choose a topic area
2. Provide background and history of the technology
3. Provide a cost breakdown and equipment list to incorporate the technology into new/retrofit construction
4. Create a wiki project of text and images that teaches students about the technology

**For Discussion:**

If you were awarded a grant of \$75,000, which alternative home technology would you choose to build for a small 1 bedroom dwelling for yourself to occupy during your college/post-college years. Justify your answer and develop your plans.

**Extensions:**

Build a model of your research topic showing how the technology could be implemented in a home or automobile.

-visit a site that currently employs the technology

**Resources:**

<http://nationalgeographicnews.com> (articles)

<http://pbworks.com> (free wiki site)