

Suggestions for Developing an Energy-Reduction Plan at Your School

Dream in Green applauds you for leading your school in reducing its carbon footprint. This is urgent and timely work. As a visionary educator, you are leading your school in one of the most important worldwide initiatives today – facing climate change.

As the Champion of your school's 'greening' initiative, you are the architect in the design of your project and the resources that you choose to use. There are many additional resources available and some are listed below. Please do not hesitate to contact Dream in Green's Executive Director, Gabriole Van Bryce, or the Green Schools Challenge Coordinator, Lesmarie Nicholson, should you have additional questions. Telephone: 305-576-3500/1966; Email: Gabriole@dreamingreen.org, Lesmarie@dreamingreen.org

Try the following activities:

- a. Divide your student green team (or Energy Patrol) into areas of the school.
- b. Conduct an energy mapping exercise (see lesson plan attached).
- c. Have students interview faculty, administration and facility staff in the schools to learn when lights and appliances are on unnecessarily and if the thermostat can be raised a degree or two and still be within a comfort zone.
- d. These interviews can then be supported by checking for unnecessary use of lights, electronic equipment and appliances and also by taking temperature readings at various times during the day and days of week, with an infra-red thermometer.
- e. The Green Team can then create an incentive-based point system for energy saving behaviors by classroom (e.g., lights, electronics, etc. off when not in use). Use and/or modify the Behavior Monthly Tracking sheet as a tool.
- f. Your Green Team can meet with your school's facility staff to develop a plan for reducing electricity waste. If you are a private school, your administration can invite FPL to conduct a free on-site audit which will provide your Green Team with a report on what can be done at the school.



Additional Resources:

www.Energyhog.org

Has a fun set of classroom activities where students explore sources of energy, how we use energy in homes and why it's important to save energy. It includes the take-home "Energy Hog Scavenger Hunt."

Florida Solar Energy Center

www.FSEC.ucf.edu

Building Performance Matters Curriculum Grades 9-12 - A nine-lesson unit consisting of two primary sections: (1) background information and concepts and (2) a school lighting audit. All of the activities are inquiry-based and have been aligned to the National Science Standards. Also included are pretests and posttests, teacher preparation materials, and student worksheets.

Climate Ark

www.climateark.org

This site has many current articles concerning climate and energy conservation with many links to other sites that include the causes of global warming, the impacts of warming, and renewable energy resources.

U.S.EPA

Climate Change & You: What You Can Do at School

www.epa.gov/climatechange/

EPA's Climate Change Emissions Calculator tools for middle and senior high schools. Also, EPA's personal emissions calculator has conversion factors for waste reduction, various types of recycling, transportation measures etc. <http://www.usctgateway.gov/tool/>

U.S. Dept. of Energy Efficiency and Renewable Energy

www1.EERE.energy.gov/education/lessonplans/

K-12 Lesson Plans.

National Environmental Education Foundation

www.eeweek.org/resources/energycurricula.htm

Energy lesson plans K-12 and many additional lessons plans aligned to national standards.

Facing the Future

www.facingthefuture.org

K-12 science lesson plans, aligned by state. Many lessons are available for free download, others can be purchased for very reasonable prices, in booklets, arranged by topic.