



Get Smart About Energy

A Little Energy Goes a Long Way!

By reducing energy use, our schools could spend approximately \$1.5 billion more on books, computers, and teachers each year by the year 2010. That amounts to almost 40 million new text books, or 30,000 new teachers.

Energy Smart Schools, a new partnership led by the Department of Energy, brings together public and private organizations to cut school energy bills while providing healthy, comfortable classrooms. Find out more about how to improve your school at www.eren.doe.gov/energysmartschools or call 1-800-DOE-3732.



Energy Smart Schools



Q: What Affects Everything and Everyone on Earth?

A: That's Right, ENERGY!

From the time we wake up in the morning until we go to bed, we experience the impact energy has on our lives. The heat and light from the sun dries our clothes, brightens our rooms, warms our homes, and can determine how much we use appliances, light bulbs, and our heating and air conditioning. We use energy to grow, cook, and preserve our food, bring water to our showers and bathtubs, drive our cars, and use our computers. In short, energy is a part of everything we do. But, using energy costs money and can pollute the environment.

Students, working hand in hand with their teachers and parents, can learn about how our energy choices affect their homes, schools, and communities. And, our young people — the decision-makers of tomorrow — can learn about new technologies that do the same work with less energy. For example, we can use more energy from clean and renewable fuel sources like the sun.

The U.S. Department of Energy is committed to helping people understand how energy choices affect their lives and the environment. Because most of us live and work in buildings, a natural topic to study is the relationship between energy, buildings and occupants — how we use energy, how we can save energy and how energy affects the environment.

The Office of Building Technology, State and Community Programs has created a web page with free teachers' guides, transparency masters for in-class presentations, energy and environment primers, and reproducible student worksheets with real life applications of math and science. The Internet address for these materials is: www.eren.doe.gov/buildings/k-12activities/. These age-level appropriate activities are described in detail on the back.

Energy Smart Schools Earth Day Activities and Teachers' Guides - Netscape

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Bookmarks Location: <http://www.eren.doe.gov/buildings/k-12activities/>

OFFICE OF BUILDING TECHNOLOGY, STATE AND COMMUNITY PROGRAMS

Get Energy Smart

Teachers' Guides • Worksheets • Resources

Click picture for a larger view then Download Adobe Acrobat Reader

Energize Your Students to Read (K-3)
 Coloring Bookmarks (PDF 35KB)
 Explore Roofus's solar doghouse (PDF 27KB)
 Make pizza box solar oven s'mores (PDF 23KB)
 Slides 1-5 (PDF 1.55MB) Slides 6-10 (PDF 1.5MB)

Home Lighting Energy Saver Detective (4-7)
 Research (PDF 45KB)
 Hypothesis (PDF 45KB)
 Analyze current energy impact (PDF 1.12MB)
 Analyze energy efficiency Impact (PDF 1.2MB)
 Slides 1-6 (PDF 1.5MB) Slides 7-12 (PDF 1.55MB)
 Conclusion (PDF 1.2MB)

School Library Energy Audit (8-12)
 Class 1 (PDF 66KB) Class 2 (PDF 45KB)
 Lighting Technology Reader (PDF 5MB)

Overviews, Glossaries, Assessments, Primers
 K-3 (PDF 31KB) 4-7 (PDF 65KB) 8-12 (PDF 35KB)

More Resources
 Energy and Environment Reader (PDF 55KB)
 Kid's Page Energy Smart Schools

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U.S. Department of Energy

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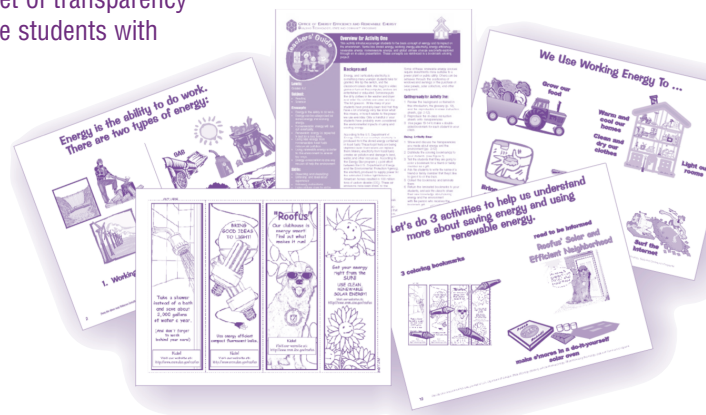


For students in grades K-3

Energize Your Students to Read

The U.S. Department of Energy has created reproducible coloring bookmarks and two other activities designed to teach your students about energy and resource conservation. A set of transparency masters makes it easy to provide students with

background about fossil fuels and renewable energy, while supplementing curriculum objectives like *reading to perform a task* and *reading to be informed*. When your students finish these activities they will know how they can use less energy by taking showers, changing light bulbs, and making S'mores in a pizza box solar oven.



Buildings that are more energy efficient, comfortable, and affordable . . .

That's the goal of the Office of Building Technology, State and Community Programs

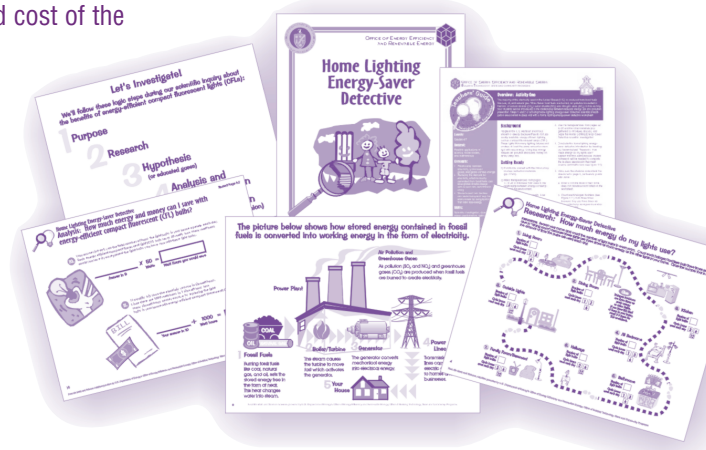
Office of Energy Efficiency and Renewable Energy

For students in grades 4-7

Home Lighting Energy-Saver Detective

The in-class presentation and student worksheets for activities 1-4 follow key steps in a scientific investigation, while reinforcing real life applications for math and science. The students become home lighting

detectives as they research the energy use and cost of the lights in their home. Then they make an educated guess about the impact they could have if they replaced their lights with energy-efficient compact fluorescent light bulbs (hypothesis). Finally, they analyze the data they collected and share their conclusions with the class via a set of multiplication, division, and word problem worksheets. The engaging graphics are sure to be a delight to students familiar with cartoons and video games.



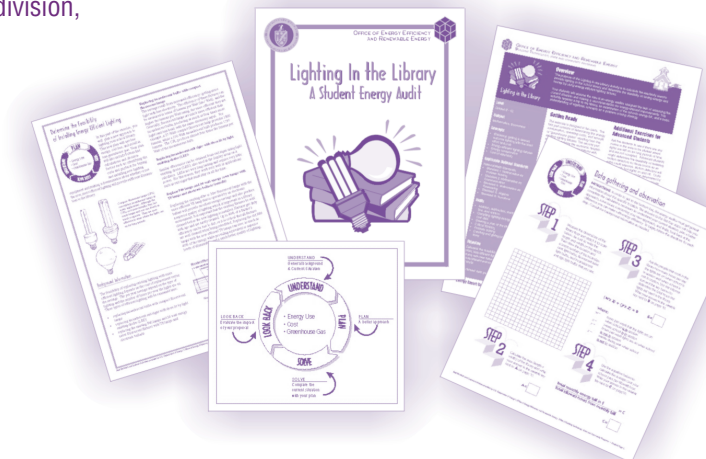
For students in grades 8-12

School Library Energy Audit

The Lighting in the Library activities 1-2 are the first in a series of a student-teacher school energy audits focused on identifying and implementing energy-efficient technology. Students use their

knowledge in algebra, multiplication, division, observation, analysis, economics, presentation-making and problem solving application strategies to:

- Understand the current situation
- Plan a better approach
- Solve comparative equations
- Look back and understand the bottom line



Bookmark us . . . the new year will bring new projects!

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