

# **Energy Saving Tips for Schools**

# Lighting

- 1. Turn off lights when not in use—lighting accounts for nearly 50% of the electric bill in most schools. There's no reason to leave lights on if a room is empty for more than one minute. (And, yes, this applies to the new energy-efficient fluorescent lights.)
- Form a student energy patrol to ensure lights are out when rooms are empty (check classrooms, the cafeteria, the auditorium, etc.).
- Have students make signs and stickers to remind people to turn off the lights when they leave a room.
- Put light switches where people can find and operate them.
- 2. Remove unneeded light fixtures near windows, especially in unused corners or along banks of windows.
- Have students conduct an experiment in classrooms by turning off selected banks of lights and surveying occupancy comfort at different lighting levels (often, occupants prefer working under natural light).
- 3. Use energy efficient compact fluorescent light bulbs (CFLs) and light-emitting diode (LED) bulbs.
- Have students calculate the energy savings achieved by:
  - Replacing incandescent light bulbs with CFLs
  - o Changing incandescent lights in Exit Signs to light-emitting diode (LED) bulbs

## **Heating & Cooling**

- 1. Save on energy costs without sacrificing comfort. It's expensive to heat and cool school buildings, but indoor temperatures must be comfortable so teachers can concentrate on teaching and kids can concentrate on learning. A rule of thumb: Consider setting thermostats at 68 degrees for heating and 78 degrees for cooling. Using fans can make people feel degrees cooler, at much less cost than air conditioning.
- 2. Where classrooms or other areas are uncomfortably cold or drafty, find out why and fix the problem. Custodians, teachers, and students should work together to increase building comfort.
- Don't block the airflow around vents. Keep bookcases and other bulky items away from the heating and cooling units so they don't block and/or absorb the warm (or cool) air that should be coming into the room.
- Install programmable thermostats in areas like the cafeteria to minimize operating hours of the heating and cooling systems during low occupancy periods.
- Turn down heat in the hallways. And—keep classroom doors closed. Otherwise, the heat runs down the hall and outside—where it is wasted to the outdoors.
- Clean furnace filters regularly.
- 3. Stop leaks!! Look for simple draft beating strategies.
- Have students determine areas of energy loss by using "draftmeters" made from plastic wrap and pencils to study where drafts are coming in.

- Avoid infiltration in conditioned spaces.
  - Have students help replace insulation and stuff energy loss "holes" through innovative measures, such as making translucent window quilts to hang in classrooms and "insulation snakes" to put at the bottom of doors and windows.
- Work with facility staff to install permanent weather stripping, caulking, and insulation.

#### Computers

- 1. If your school computers have power-management features, make sure controls are set so they will go into the "sleep" mode when not in active use. (Screen savers don't save energy—only the sleep mode does.)
- 2. Students should turn off monitors that will not be used for the next class period. All computer equipment should be turned off at the end of the day and on weekends, unless your network technicians specifically instruct otherwise.
- Form a student energy patrol to make sure monitors are off when computers are not in use and to turn computers off at the end of the day.
- 3. Is your school purchasing new equipment? Save 50% on energy costs by using Energy Star computers, monitors, printers, fax machines, copiers and other equipment. (Visit <u>www.energystar.gov</u> for more information.) Have students calculate potential savings from the use of Energy Star equipment and present the results to school administrators. If your school purchases the equipment, make sure the Energy Star features are enabled.

### Appliances

- 1. Maintain appliances and replace old appliances.
- Have students use a watt meter to study how much electricity a device uses. This is useful in determining which appliances are outdated and less efficient.
- Have students conduct a survey of the number of appliances in each classroom and encourage teachers to take away unneeded appliances.
- 2. Clean refrigerator coils regularly.

#### **Involve the Whole School**

- 1. Get the entire school involved. Energy savings add up when the entire school joins together in conservation efforts. Schools with effective conservation programs have reported reductions of as much as 25% in utility bills.
- 2. Publicize energy costs and savings. When people know how much it costs to power their school, they can see why it's worth some extra effort to avoid waste.

#### **Involve the Whole District**

See if your district administrators would be willing to return a percentage of the dollars saved from your school's no-cost energy efficiency changes

http://www.ase.org/resources/energy-saving-tips-schools