



Energy/Electricity Audit

Activity

The Energy/Electricity Audit takes place four times in a school year: September, December, February and June. This activity can be done as a class activity and then move into a school wide activity.

Energy Lighting Audit Checklist

The scores are out of five and depend on the extent to which the item is done throughout the building:

- 5= Throughout School
- 4= Over 3/4 of School
- 3 = ½ of School
- 2 = ¼ of School
- 1= We are now aware of this

(Total Possible Points = 90)

Does your school:

- Take advantage of all natural light to save energy?
- Use compact fluorescent bulbs instead of standard incandescent "screw-in" bulbs?
- Use high efficiency fluorescent lamps and electronic ballasts?
- Use high intensity discharge lights (e.g., high pressure sodium) in outdoor areas?
- Replace incandescent bulbs in exit signs with a light-emitting diode (LED) or compact fluorescent replacement kit?
- Use time clocks, occupancy sensors, and dimming controls to reduce lighting energy?
- Use a Building Automation System (BAS)?
- Use lighting only when needed?
- Ensure custodial staff turns off lights after cleaning?
- Ensure teachers, custodians and students turn off lights when they are last out of a room?
- Post "lights out" posters or reminders in the building?
- Use lighting after hours & weekend only in occupied areas?
- Turn off lighting for display purposes (e.g.. trophy cases, etc.) at night & during summer?



- * Ensure no one is using car block heaters in school-supplied outlets? **OR**
- * Use automatic controllers to minimize the use of block heaters for staff parking?
- Turn off all computers when not in use?
- Post "Computer Off" reminders in the classrooms?
- Equip all vending machines with energy misers?
- Ensure there are no desk lamps in use?

*** A school can get points only for one of these two entries.**

Energy Heating and Cooling Audit Checklist

Score one point for each checkmark (Total Possible Points = 26)

Does your school:

- Set heating thermostat set points to maintain 70°F or lower?
- Set air conditioning (A/C) for 73°F-75°F and shut it down during unoccupied hours?
- Operate your building systems (e.g., boilers, fans and pumps) efficiently and optimize efficiency through regular inspections and preventative maintenance?
- Use gas as the main heating fuel?
- Control heating/cooling from the central computer and match the occupancy schedule?
- Use time clocks, and sensor controls to reduce heating/cooling energy?
- Use a Building Automation System (BAS)?
- Keep doors/windows closed during heating and cooling season?
- Close doors/windows when A/C is on in air-conditioned spaces?
- Make effective use of the free cooling available in the early morning hours?
- Run the exhaust systems only when needed?
- Turn on heating and cooling for after hours & weekends only in occupied areas?
- Inspect and clean coils on regularly scheduled basis?
- Leave standby pumps in the off position?
- Test boilers periodically for performance/efficiency?
- Ensure return air grilles are inspected & not blocked by books, cabinets, etc?



- Ensure pneumatic controls air compressor & dryer are clean & in good working order?
- Clean and replace all air filters on a regularly scheduled basis?
- Ensure there are no fans or portable electric space heaters being used by occupants?
- Insulate steam and hot water piping? (Pipes are warm/hot to touch.)
- Use curtains and blinds effectively in heating and cooling seasons?
- Ensure all doors close tightly and have a good weather seal that keeps out drafts and hot air?
- Ensure there is adequate weather stripping around windows/ doors? (Reduce air leak.)
- Seal all penetrations in floors & exterior walls?