

E-Conservation Home Energy Management Series

TOP TEN LOW COST/NO COST TIPS FOR SAVING ENERGY AND MONEY

1. CONTROL YOUR THERMOSTAT. You can save on your heating and cooling bill by keeping your thermostat at an energy efficient and comfortable setting during the day and adjusting the temperature a few degrees at night and when you are not home. During the colder months, try setting the thermostat at 68°F or less during the day and 60°F when you are away or sleeping. For cooling, set your thermostat as high as comfortable in the summer while still maintaining comfortable humidity levels. Because of the way heat pumps operate, it is best to operate a heat pump unit at a constant moderate setting or use a programmable thermostat specifically designed to work with heat pumps.

Remember, too, that a thermostat is not like a gas pedal on a car. Setting the temperature significantly higher or lower in order to heat or cool faster does not work. It will take the same amount of time to reach the temperature you want if you set the thermostat at your goal temperature and wait for the unit to do its work. Also, it's likely that if you take the gas pedal approach you will forget that you've made the dramatic adjustment and end up cooling or heating at a higher or lower temperature than you truly want.



2. LOWER YOUR WATER TEMPERATURE. Most water heaters are set at 140°F. This high setting is only needed if you have a dishwasher without a booster heater. To save six to 10 percent on your water-heating costs, turn the temperature down to 120°F (medium setting on a gas heater dial). Most electric heaters have both an upper and a lower thermostat to adjust.

3. INSULATE YOUR WATER HEATER. If your water heater is located in an unheated location, such as a garage or attic, wrapping the tank in a blanket of glass fiber insulation. This action can help reduce heat loss by as much as 25 to 45 percent, resulting in a cost savings of four to nine percent on your water-heating bill. Water heater insulation kits are available at your local hardware store or through your utility company. Insulation wraps and blankets are most appropriate for older water heaters and those located in unheated areas. Some manufacturers do not recommend an insulation wrap for newer water heaters.

SAFETY TIP: When adding insulation to your water heater, be sure to follow the installation directions. It is important not to block exhaust vents and air intakes on gas models, and thermostat access panels on electric heaters with insulation. If you have questions, concerns, or doubts about proper installation, contact a plumber for assistance.



E-Conservation
power to control what you spend

NC State University
A&T State University
**COOPERATIVE
EXTENSION**
Empowering People · Providing Solutions

NC STATE UNIVERSITY

4. REPLACE YOUR SHOWERHEAD. A standard showerhead uses up to eight gallons of hot water per minute. Replacing your showerhead with a quality low-flow showerhead will allow you to use only one to two gallons of water per minute. Newer low-flow showerheads are able to maintain water pressure, while using significantly less water. Low-flow showerheads typically pay for themselves within a year. With low-flow showerheads you can save twice—both on your electric or gas bill and on your water use bill.

5. WASH CLOTHES IN COLD WATER. About 90 percent of the energy used by washing machines goes toward water heating. Often, using hot water is unnecessary except for special loads such as diapers or stained work clothes. To save on energy costs, try washing in cold water, using cold water detergents, and wash full loads whenever possible. To save even more, on sunny days, use the clothesline instead of the dryer to dry your laundry.

6. SEAL AIR LEAKS. If you feel warm or cold drafts in your home, particularly near wall outlets, windows, doors and fireplaces, then consider air sealing. On windows, use weatherstrip tape along the gap where the glass meets the frame. To stop leakage under exterior doors, install an inexpensive door sweep. If the door leaks around the entire frame, install foam weatherstripping with adhesive backing between the door and the frame.

Use caulk or foam to seal around door and window frames and holes around water pipes and plumbing fixtures. Use foam gaskets that fit behind the cover plates to seal air leaks around light switches and electrical outlets. Remember, every hole you seal means fewer drafts and a more comfortable, energy efficient home.

If you rarely use your fireplace, make sure the damper is closed and the opening is sealed. Another option is to use a chimney balloon. These are inflatable balloon like items that can be installed to help block air leakage in an unused fireplace.

SAFETY TIP: Be sure to post a highly visible reminder to remove the balloon and open the damper before building a fire.

7. INSTALL STORM WINDOWS. Once you have sealed air leaks around your windows, you can double the insulating value by installing storm windows. Adding another layer of glass or plastic creates a dead air space, and trapped air is an excellent insulator.

Plastic film window kits are the lowest-cost option and can be easily installed on the inside of your existing

windows. If installing exterior mounted storm windows, make certain that the weep hole that is left open so that any moisture can escape.

8. REGULARLY CLEAN OR REPLACE YOUR FILTER. All forced air furnaces and central air conditioners have air filters that filter particulates such as dust and dirt. Filters serve two purposes—to protect the unit and to help with the air quality in the home. If not periodically cleaned or replaced, dirty filters can greatly affect the heating and cooling ability of your unit and waste valuable energy. Some filters are disposable while others can be washed and reused. It's important to know what kind of filter you have and not reuse disposable filters. Check your filters each month and clean or replace them as needed.

9. MONITOR YOUR REFRIGERATOR. Refrigerators make up about three to five percent of your home's total energy use. To keep out warm room air, keep the refrigerator door closed as much as possible. Make certain that door gaskets have a tight fit. To test the fit, close a dollar bill in the door and try to pull it out. If it falls out or can be removed easily, you need to remove and replace the gasket. To help with energy savings, regularly clean dust out of the coils and defrost the freezer. Keep the refrigerator at 32–40°F (below 41°F for food safety) and the freezer at 0°F. If you have more than one refrigerator or freezer and one doesn't get much use, unplug it and save.

10. CONTACT YOUR UTILITY COMPANY. Your utility company may have programs to help their customers save money and energy including time of use rates and load management credits. With time of use rates, you will pay a higher price for the electricity you use during peak hours. Peak hours are those times when electricity is in high demand. If you can adjust your greatest electrical use to non-peak hours, you will save money. Some utility companies offer load management credits that provide monetary credit on your electric bill. With load management, the customer allows the utility company to install a load management switch on their major electrical appliances such as central air conditioning, electric water heater or electric heat strips. On those days when electrical power is in high demand, the utility turns off those controlled appliances for a few minutes at various intervals in order to reduce the demand on the electrical system.

Your utility may offer additional incentives to help them control electrical loads and help you save money. Investigate the rebates and incentives offered by your utility company and figure out which are best for you.

SOURCE: Adapted from Top Ten Tips, E3A: Energy Management for the Home, Montana State University Extension, 2013

ADDITIONAL SOURCE: U.S. Department of Energy (2013). Energy Incentive Program, North Carolina. http://www1.eere.energy.gov/femp/financing/eip_nc.html



E-Conservation



NC STATE UNIVERSITY