

10 WAYS TO SAVE ENERGY

AND CHANGE OTHER STUFF, TOO

Many people are concerned about energy use and its effects on budgets and the environment. Sometimes energy issues may seem complex, expensive, and out of our control. The reality, however, is that *conservation and efficiency are the most effective ways to reduce energy usage*. Our cumulative efforts will make for real changes in our energy independence, our fiscal security, and our actions to mitigate global climate changes.

Here, then, are 10 simple things *you* can do to save energy and change other stuff, too...



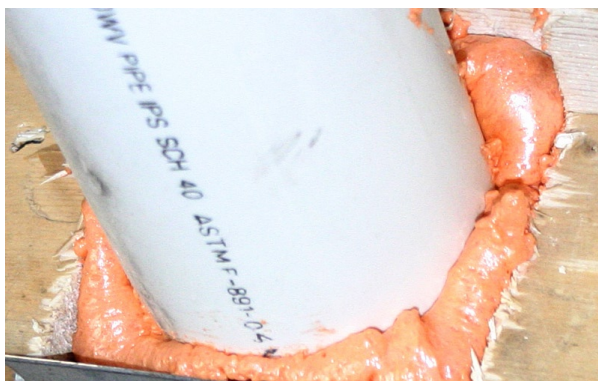
1. Have an Energy Audit

Before you do anything else, find out how your house is working, right now. An Energy Audit (or Home Performance Review) will give you an evaluation of your energy use, insulation levels, air leakage and mechanical systems

(like heating, cooling, & ventilation). Available through utility companies and private contractors, an Energy Audit may include several diagnostics, such as a blower door test, infrared camera scan, and a combustion appliance test. The results can help you decide what energy improvements to do first, and which ones can wait.

2. Seal Air Leaks

An enormous amount of energy is wasted when inside air (either heated or cooled) escapes to the outside through leaks in attics, walls, windows, and doors. Wires, pipes, and ducts that enter the attic must have caulking or foam sealant applied—insulation is not enough! Doors and windows need tight weather stripping and caulking, and wall penetrations (faucets, wires) need to be sealed or caulked, too. And sealing joints in duct work with approved foil tape or mastic can increase the efficiency of your heating and cooling systems by delivering heated or cooled air where you want it.



3. Check Mechanical Systems

We maintain cars, lawns, software... why not our furnace? Water heaters, air conditioners, furnaces, gas fireplaces, and ventilation systems should be inspected and

tuned-up to keep them operating efficiently and safely. Mechanical system inspection should be done annually, and furnace filters should be changed every month. The energy savings alone might pay for the inspection!

4. Heat Efficiently

As prices escalate, some people seek other fuel types that appear (presently) cheaper. Because fuel prices fluctuate over time, investing in one particular type of heating system should be based on something other than fuel price shock. Replacing old inefficient systems with new high efficiency options makes the most sense. Fuel type should be selected according to local and long-term availability and environmental effects. Also, don't use fans—either on a furnace or the ceiling—to control uneven heating; moving air makes us feel cooler and fans use electricity.

Seal ductwork and direct airflow through registers and baffles to increase comfort and reduce heating demand. And don't be fooled

into thinking that electric space heaters will automatically save you money; they add to your electric bill, which has increased environmental effects.

5. Use a Programmable Thermostat

If you adjust your thermostat 1 degree (down in winter, up in summer) for 16 hours a day, you can save 2% of your fuel bill. Letting a programmable thermostat do it for you means you won't forget, and allows you to be comfortable when you are home, and save energy when you are gone. Easy to install, a programmable thermostat will pay for itself in no time, and it can control your furnace, air conditioner, air exchanger, and humidifier. And it is a myth that it takes more energy to bring your house back to your comfort temperature.



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6. Control Hot Water Use



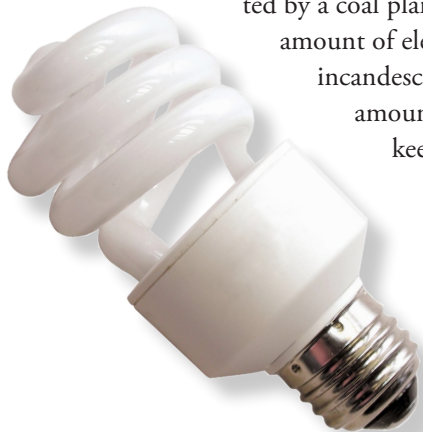
A standard showerhead can use up to 5.5 gallons of water a minute. Depending on your mix of hot/cold water, that means a 10 minute shower could use 40 gallons of hot water! New, low-flow showerheads deliver a high pressure spray at under 2 gallons

per minute. Not only do you save the energy to heat all that water, you save the water, too. And don't forget to turn down your water heater to 120 degrees, and wash clothes in cold water.

7. Replace Light Bulbs

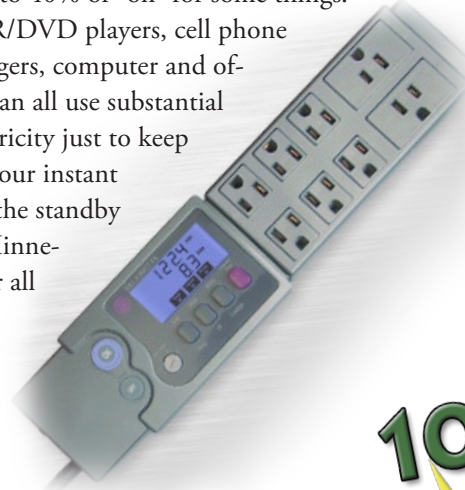
A CFL bulb can save \$30 over the life of the bulb in energy costs. If every household in the country replaced their five most frequently used incandescents with CFLs, 21 power plants would not need to be built! And no excuses about size or shape or colors! CFL bulbs are now made to fit nearly every fixture and for nearly every use—spots, 3-ways, dimmables, outdoor, and more. And a word about mercury: CFLs do contain a small amount

and need to be disposed of properly, *but* the amount is less than what is emitted by a coal plant to produce the amount of electricity to run an incandescent for the same amount of time. And keep an eye out for the next lighting technology: LEDs.



8. Use Outlet Switches

Standby power or “phantom load” is the electricity that flows through appliances and devices when they are turned “off”—up to 40% of “on” for some things! Televisions, VCR/DVD players, cell phone and battery chargers, computer and office equipment can all use substantial amounts of electricity just to keep them ready for your instant use. (In fact, all the standby power used in Minnesota could power all the single-family homes in St. Paul!) Plug things in to an outlet switch and only use them when you need to. And, new generation outlet strips have meters to show you exactly how much electricity you are using—and how much you can save by turning something off!



9. Install Timers/Motion Detectors

Why keep things on when you aren't using them? Timers and motion detector switches can operate devices that are used infrequently or have switches that are hard to get to. Outside security lights, lights that are frequently left on (bathroom or basement) or lights in remote locations (like a garage) can be set up to turn on when a person walks within range and turn off after they have left. You can also use timers to control engine block heaters, battery chargers, indoor security lights, or other devices that are only used during limited times.

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