

Saving Money and the Environment:

Top 10 Ways to Conserve Energy



As the cost of energy continues to rise, Americans are looking for ways to reduce those expenses, without drastically changing their lifestyles. With those goals in mind, here are some ideas for keeping money in your pocketbook, while still helping the environment:

1) MAKE YOUR HOME A "SMART HOME" The more functions in your home that can be automated based on behavior, the less energy you will waste. Smart Home technology can be as basic as a programmable thermostat, but often encompasses more home features and can be specified to a greater degree. When building or remodeling a home, make sure to ask about ways to control lighting, climate, security systems, and even multi-media home entertainment systems all with the touch of a button and with settings that respond to your lifestyle.

2) REDUCE, REUSE, AND RECYCLE Most people know that recycling and reusing material is great for the environment (each home that recycles ½ of their household waste will save 2,400 pounds of carbon dioxide annually). But it can also save you money

when you recycle materials used in the construction or remodel of your home. According to Mark Hanley with Cornerstone Disposal & Recycling, Inc, "up to 75% of the new home construction debris [can be recycled]," thereby saving the homeowner a substantial amount of "tipping fees" at landfills.

3) UTILIZE A WALL STRUCTURE THAT MINIMIZES AIR LEAKAGE Conventionally built walls naturally have areas where air can transfer from the exterior to the interior. Advances in wall systems, such as the use of Structural Insulated Panels (SIPs) or Insulated Concrete Forms (ICFs) can drastically minimize air intrusion into the home. Using these wall structures in a new home or a remodeling project will significantly improve your cooling and heating cost each year.

4) SEAL ALL LEAKS IN YOUR HOME According to Keith Terry, with Wisconsin Insulation Services, "the United States Department of Energy reports that up to 40% of the cost of heating and cooling a home is lost to uncontrolled air leakage." He notes that sealing those air leaks will help

you maintain your home at a comfortable temperature all year long and help lower energy bills. "The biggest gaps and holes are most often found in the attic and the box sill," notes Terry. Terry goes on to assert that, "using spray-applied polyurethane foam combines superior insulation performance with seamless air and moisture impermeability to eliminate uncontrolled air leakage for improved energy efficiency."

5) REPLACE YOUR INCANDESCENT BULBS WITH COMPACT FLORESCENT LIGHTS (CFLS) CFLs use approximately 75% less energy than incandescent bulbs and last about ten times longer. While they cost slightly more than incandescent bulbs up front, the savings that homeowners see based on the lower everyday usage, as well as the long life of the bulb more than pays homeowners back. In fact, a single CFL pays for itself in just six months!

6) CUT DOWN ON YOUR HOT WATER USE Heating water in your home can account for anywhere from 14% to 26% of your home's energy



usage. You can reduce that by using fixtures that utilize less water every time you turn them on. The EPA has created the WaterSense program which, in part, approves fixtures that provide exceptional performance while reducing water use. If the fixtures in your home are more than ten years old, consider replacing them with newer, more energy efficient, WaterSense rated products.

7) LOOK FOR THE ENERGY STAR® LABEL WHEN LOOKING FOR NEW APPLIANCES

When shopping for an appliance, it is important to note that they really have two price tags: the purchase price, and what it costs for the energy to run it all year. An ENERGY STAR® qualified appliance ensures that you will be saving money over other appliances in operating costs because they run considerably more efficient than standard models.

8) ONLY WASH DISHES AND CLOTHES WHEN THERE IS A FULL LOAD AND USE COLD WATER WHEN POSSIBLE

Dishwashers and washing machines waste most of their energy on heat-

ing water for a load. When you wash a small load of either clothes or dishes, the machine still needs to waste energy to heat up a considerable amount of water. Instead, only operate these machines when there is full load, thereby saving energy. Better yet – use cold water whenever you can!

9) CHANGE YOUR FURNACE FILTER ON A MONTHLY BASIS

Furnaces operate most efficiently when there are no impediments to air flow. However, if you don't change your filter on a frequent basis, the filter can get clogged with dust and other airborne particles, forcing your furnace to work harder to maintain airflow. This will reduce your furnace's efficiency and can cause damage. Because filters are relatively inexpensive, change yours on a monthly basis to ensure that your furnace is operating as efficiently as possible.

10) USE LANDSCAPE WISELY

While most people think of internal components when assessing energy-saving measures, the landscape you choose can have a considerable impact on your energy bills. Glenn Rieker,

from Johnson's Nursery, Inc., suggests that, "tree selection and placement is critical when attempting to reap the benefits of passive solar heating and/or cooling, as well as allowing a homeowner to take advantage of natural lighting." For the cold winter months, Rieker suggests that the placement of dense evergreens, like Black Hills, Blue or Norway Spruce, on the north and west side of a home, help with insulation by blocking the cold westerly and northern winds.

While not every homeowner can incorporate all of these suggestions, most can incorporate a majority, which will have a noticeable impact on your energy bill.

Mark Hanley with Cornerstone Disposal & Recycling, Inc., Keith Terry with Wisconsin Insulation Services, and Glenn Rieker with Johnson's Nursery, Inc. shared their expertise for this article.

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