



## DO IT YOURSELF HOME ENERGY AUDIT

Investing in energy efficiency may sound like it requires a lot of effort, time and money, but it doesn't have to. While there are certainly high-impact and high-cost measures that can be done, there are also smaller steps you can take to make your home more energy efficient, help you save energy and money, and live a more comfortable life. Yes, many energy efficiency investments are also associated with increased comfort!

Below is a list of eight simple measures you can take to conduct your own home energy audit.

- 1) Unplug or turn off unused appliances and electronics.** Appliance and miscellaneous electrical loads are taking up more and more of our monthly electric bills. Therefore, one of the simplest things you can do is shut off your electronics, appliances and lights when they are not being used. Some electronics, such as televisions, can draw power even when turned "off," in what is known as phantom loads or vampire draw. This can also occur for smartphone chargers that are not connected. To avoid those pesky energy-sucking creatures, consider completely unplugging them or shutting off the power strips they are connected to. You can also consider a smart power strip, which has certain outlets that can cut power to electronics that are not in use.
- 2) Change out old light bulbs.** Light-emitting diode (LED) bulbs are the way to go. These bulbs can last 20-30 times longer than incandescents while saving more than 75 percent on energy (they are also more efficient than compact fluorescent lamps, or CFLs). In the past, purchasing bulbs was based on the number of watts a bulb had. The more watts, the more powerful or bright the bulb would be. However, watts refer to how much energy a bulb consumes, not how much light it gives off. Because LEDs are more efficient, they use fewer watts to produce light. The features to pay most attention to with LEDs are lumens (how bright the bulb is) and color temperature (how warm or cool the light is). For example, a 10-watt LED can emit the same light as a 60-watt incandescent.
- 3) Replace HVAC air filters.** The air filter(s) on your heating, ventilation and air conditioning (HVAC) system can help keep the air in your home clean by reducing particles and other pollutants. A clean filter also allows your HVAC system to run more smoothly and efficiently because it does not have to work as hard to get air out. Most air filters should be changed every one to three months. They are often found in your HVAC return grill or in a slot right at the air handler, and installation is usually as simple as removing the current filter and sticking in the new one. Just make sure you get the right size and type (your current filter should have this information on its side), and you are good to go. If you decide to change the type of filter, check with an HVAC contractor to make sure your system will still run smoothly and efficiently.

- 4) **Set your thermostat to “Auto” and keep an eye on temperatures.** Setting your thermostat fan to “Auto” will ensure that it is running only when it is supposed to and only when the system is heating or cooling. When the fan is “on,” it is running constantly and can add up to \$50 per month. Also, try to keep your thermostat to the warmest comfortable temperature in the summer and the coolest comfortable temperature in the winter. In the summer, aim for 78 degrees, and in the winter, shoot for 68 degrees. Depending on your daily schedule, you may consider investing in a programmable or smart thermostat to automatically set temperatures when heating or cooling is needed.
- 5) **Have your duct work checked for leaks.** Leaks at the return, air handler and supply can be a major source of high bills. Mobile homes check at the grill, cross over duct and down flow air handler, for leaks.
- 6) **Wash clothes and dishes when loads are full.** Use your laundry and dishwasher only when the loads are full. Use cold water when possible for general clothes washing. Hot water can be saved for bedding or stained or soiled clothes. When dishwashing, try air drying instead of heat drying. If on time-of-day rate, do these activities off peak.
- 7) **Invest in low-flow showerheads and faucets.** Low-flow showerheads and faucets use fewer gallons per minute (gpm) of water and can save money and energy by reducing demand on your water heater. Look for one with the WaterSense® label, which indicates that the product met criteria set by the U.S. Environmental Protection Agency (EPA) to reduce energy use without compromising performance.
- 8) **Look for appliances with the Energy Star® label.** When ready to purchase a new appliance or electronic, look for the Energy Star label. Energy Star is a program through the EPA and U.S. Department of Energy that promotes and supports energy efficiency products. Appliances and electronics with the Energy Star designation have gone through testing to ensure they perform as expected and reduce energy consumption. A huge number of products can be certified by Energy Star, including refrigerators, ceiling fans, light bulbs and washing machines.

These simple actions are low-cost ways to improve your home’s energy efficiency, increase savings and enhance comfort. Some can be done one time and not thought about again for years (e.g., changing light bulbs and faucets), others require maintenance every few months (e.g., replacing filters), and the rest are behavior changes or things to keep an eye on as you go about your day (e.g., temperature settings, turning off electronics). But what they all have in common is their ability to increase comfort while saving you energy and money without taking over your day or breaking the bank. What’s not to like?

*This article was provided by Advanced Energy, a nonprofit energy consulting firm. For more information, visit [www.advancedenergy.org](http://www.advancedenergy.org).*

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