

Ten tips for cooling your home—and your energy bill—this summer

By Erin K. Witt

The heat is on in Indiana—and along with the traditional summer swelter, rising energy bills are leaving many Hoosier consumers hot.

Heating and cooling costs the average homeowner about \$600 a year—nearly half of the average home's total energy costs. And about one-sixth of all the electricity generated in the U.S. is used to air condition buildings.

The following tips from Building Environmental Science and Technology can help make any home more energy efficient this summer, and in turn, more cost effective.

Tip #1: Seal it up. Sealing your home "envelope"—the outer walls, ceiling, windows and floors—can help increase the energy efficiency of your home. This includes adding insulation, especially to the attic; sealing air leaks to stop drafts and get full performance from your insulation; sealing ducts, and installing windows qualified for energy efficiency when replacing old windows. Effective air sealing, combined with the right amount of insulation (in the Midwest, between 9 inches to 12 inches of insulation) can save up to 10 percent on energy bills.

Tip #2: Save with shade. Control the sun, inside and out. If drapes and shades are closed during the brightest and hottest parts of the day, homeowners can reduce air conditioning demands by 25 percent. In addition, planting leafy plants on the southwest side of the house can also help reduce unwanted heat gains that make air conditioning units run overtime.

Tip #3: Lean on landscaping. Carefully positioned trees can save up to 25 percent of a household's energy consumption for heating and cooling. The U.S. Department of Energy predicts that three properly placed trees will save an average household between \$100 and \$250 annually. This is especially important in the hot summer months. Because cool air settles near the ground, air temperatures directly under trees can be as much as 25 degrees cooler than air temperatures above nearby blacktop. A well-planned landscape can reduce an unshaded home's summer air-conditioning costs by 15 percent to 50 percent—and as much as 75 percent for small mobile homes.

Tip #4: Circulate with a ceiling fan. According to Do-it-Yourself Network, a ceiling fan can save up to 40 percent on summer cooling costs. Ceiling fans cool the room by creating a "wind chill effect"—for example, a ceiling fan in a room that is 85 degrees would make the room feel like 78 degrees. These fans work well in major common areas of the home, like a family room, kitchen, den, but can also be effective in upstairs bedrooms that may become overheated.

Tip #5: Open up. Opening the windows on cool summer evenings can flush the heat of the day from the house, preventing the need to run an air conditioner 24 hours a day. However, on humid nights it can be better to leave homes closed and continue running the air conditioner to avoid unwanted moisture buildup in carpet and furniture. Humidity levels higher than 60 percent can also lead to mold and dust mite allergen pollution.

Tip #6: Dial it down with digital. Digital thermostats—now widely available for less than \$100—can help reduce air-conditioning bills by automatically “throttling down” the air-conditioner during the hotter part of the day. By altering temperature settings, homeowners can also take advantage of “time-of-use” utility rates and pre-cool the home, so it can remain comfortable during expensive power times. Set the air-conditioner thermostat at 78 degrees or higher if possible. According to Pacific Gas and Electric, 3 percent to 5 percent more energy is used for each degree the air conditioner is set below 78.

Tip #7: Cook with care. Be energy conscious when using appliances in the summer months. Cook outside on the grill to keep cooking heat outdoors. Stoves and ovens also heat up the kitchen, making the air conditioning system and the refrigerator work harder. If you must use the stove, vent the heat with a range hood. Or better yet, use a microwave: Microwaves use less than half the power of a conventional oven and cook food in about one-fourth the time.

Tip #8: Ditch the second fridge. Many families keep a spare fridge around for cold beverages or other entertaining needs. But a second refrigerator or freezer in the garage may be costing you \$200-\$300 a year. By turning in an old, functioning second unit, consumer can earn a utility rebate or compensation from the Appliance Recycling Centers of America, INC. (ARCA).

Tip #9: Drop the drips. Fix defective plumbing or dripping faucets. A single dripping hot water faucet can waste 212 gallons of water a month, Pacific Gas and Electric reports. That not only increases water bills, but also increases the gas or electric bill for heating the water.

Tip #10: Lessen your lighting load. Identify the lighting fixtures that you use the most and change your incandescent bulbs to compact florescent lamps. Even though you will pay \$4 to \$12 for a CFL at the store, over a five-year period you could realize savings of \$60 to \$120 per lamp, depending on use and electricity rates. Energy efficient fluorescent floor lamps, indoor and outdoor hard-wired lamps and motion sensors are also available.