

MyFlorida Green Building

CONSERVATION TIPS

Air Conditioning

Air conditioning and heating account for more than 50 percent of the electric bill, so making small changes in how you cool and heat your home can really pay off.

- Raising your thermostat can save up to 10% of your cooling costs for each degree above 78.
- To cool your home without breaking the bank, set your air conditioning thermostat at 78 degrees. When you leave the house, turn it up to 85 degrees or higher and plan on a savings of 6-8 percent for each degree you raise the setting. In winter, set your thermostat at 68 degrees.
- Change or clean heating and air-conditioning filters monthly. Dirty filters put an unnecessary strain on the unit and can increase operating costs.
- Get your A/C checked now - operational problems can cause extremely high bills.
- Don't make your A/C work harder than it has to - make sure drapes and furniture aren't blocking any vents.
- Keeping interior doors and vents open allows your air conditioning unit to operate more efficiently.
- Use passive solar to capture heat in your home by opening the curtains during the day, and closing them at dusk. In the summer, keep curtains closed during the hottest hours of the day. Besides carbon, you'll save 25-75% on your heating and cooling bills. CO2 emission reductions: 2,700 lbs/yr.
- Make sure your dryer is vented to the outside to reduce the workload on your air conditioner.
- Check air handler and ductwork for leaks; weather-strip or caulk around windows, doors, plumbing and other gaps so that heating and cooling energy won't escape.
- Install a programmable thermostat for your air conditioner or heater.
- Increase your attic insulation.

Appliances

- Looking for a new refrigerator? Look for the "Energy Guide Label" to compare model features with improved insulation and efficiency.
- Buy energy-efficient appliances. ENERGY STAR® appliances use 10 to 50 percent less energy and water than traditional products. CO2 emission reductions: dishwasher - 340 lbs/yr, refrigerator - 780 lbs/yr and washing machine - 1,200 lbs/yr.
- Use a microwave instead of a conventional oven to reheat small quantities of food. CO2 emission reductions: 1 lb/meal.
- Minimize opening the refrigerator
- Clean the condenser coils behind or underneath the refrigerator every six months.
- Wash only full loads in dishwasher and clothes washer. You'll save on the electricity that heats the water and runs the appliances.
- Clean the dryer lint filter after every load.

- Use the cold or warm setting on the clothes washer instead of hot and set your water heater to 125 degrees.
- Repair leaking faucets and toilets.
- Install water-saver flush valves in toilets and water-saver shower heads.
- Don't flush the toilet just to get rid of trash.

Automobiles

- Buy Smart - before buying or renting a vehicle, check out EPA's Green Vehicle Guide at: www.epa.gov/greenvehicle. This resource provides information on emissions, fuel economy, and performance.
- Drive Smart - to improve fuel economy and reduce emissions, accelerate gradually and drive the speed limit. CO2 emission reductions: 250 lbs/yr.
- Use cruise control on the highway: CO2 emission reductions: 100 lbs/yr.
- Combine errands into one trip and save 500 miles of driving/yr. CO2 emission reductions: 510 lbs/yr.
- Lighten your load. 100 pounds of junk in the trunk can reduce gas mileage by 2%. CO2 emission reductions: 10 lbs/yr.
- Check your air filter monthly and replace it when it looks dirty. CO2 emission reductions: 800 lbs/yr.
- Keep tires properly inflated. Under-inflated tires increase tire wear, reduce fuel economy by up to 3%, and emit more pollutants into the air. CO2 emission reductions: 100lbs/yr.
- Use your AC sparingly, or not at all. CO2 emission reductions: sparingly - 100 lbs/yr and never - 600 lbs/yr.
- Don't idle for more than 10 seconds; instead, turn off your engine. CO2 emission reductions: 500 lbs/10 non-idling minutes.
- Carpool or bus or ride your bike to work instead of driving besides saving you money you'll also help the environment. CO2 emission reductions: carpool - 500 lbs/yr, bus - 690 lbs/yr and bike - 2,220 lbs/yr.
- Remove your roof rack when you're not using it; a rack can reduce fuel efficiency by 5%. CO2 emission reductions: 250 lbs/yr.
- Consider using renewable fuels. Use biodiesel or ethanol to fuel your vehicle or drive a hybrid. CO2 emission reductions: 50 lbs/100 miles driven.

Ceiling Fans

- Run your ceiling fans instead of AC. CO2 emission reductions: 2,700 lbs/yr.
- Install ceiling fans throughout your home to help you stay comfortably cool.
- Turn ceiling fans off in unoccupied rooms. They consume energy and the motor generates heat.

Computers and Electronics

- Laptops use up to 80 percent less energy, so consider buying a laptop the next time you're looking for a computer. CO2 emission reductions: 400 lbs/yr.
- Screensavers are cute - but they don't save energy. Set your computer to sleep mode, and you'll save energy...and sleep better at night.
- Activate the power management features on your computer and monitor.

- Unplug laptops and turn off equipment and lights at the end of the day.
- Purchase Energy Star qualified office equipment, such as computers, copiers, and printers, as well as lighting, heating and cooling equipment. These products use 30-75% less electricity.
- Use rechargeable (lithium-ion batteries) instead of standard AA or AAA batteries to power small electronics. CO2 emission reductions: 450 lbs/yr.
- Turn off electronic devices that use standby power.
- Buying a flat screen TV? Choose an LCD model instead of the plasma type and reduce energy use by 40-50 percent.

Ducts

- Have your duct system checked for leakage. Heating/cooling costs can be cut by up to 30 percent when leaks are eliminated.

General

- Buy green power or ask your utility to offer it. The typical U.S. home consumes approximately 10,000 kilowatt-hours per year. Using electricity that is generated from renewable energy sources such as wind and the sun could reduce the annual CO2 emissions by 22,000 lbs.
- Reduce, Reuse, and Recycle items such as: newspapers, beverage containers, paper and other goods. This reduces pollution from resource extraction, manufacturing, and disposal. CO2 emission reductions: 1,300 lbs/yr.
- Use recycled paper (100% post-consumer). CO2 emission reductions: 6 lbs/ream.
- Telecommute. CO2 emission reductions: 5,700 lbs/yr.
- Say no to carpeting your home. CO2 emission reductions: 4,000 lbs/800 sq. ft.
- Consume less meat and buy local produce. It takes energy to raise, farm, ship, and sell livestock. CO2 emission reductions: 1.5 tons/yr.

Lighting

- Replace incandescent lights with compact fluorescent light bulbs (CFLs). Fluorescents give the same light output for one-third to one-half the cost, and they produce less heat.
- Replace the five most frequently used conventional light bulbs with ENERGY STAR rated ones and you'll save approximately \$100/yr. CO2 emission reductions: 120 lbs/bulb/yr.
- Forgetting to turn off lights? Consider installing timers to turn lights on in the morning and off at night.
- Use three-way lamps to reduce energy and increase your lighting options.
- Use convenient and efficient motion-detector lights for all your outdoor lighting.
- Replace exterior lights around your home with solar powered ones. CO2 emission reductions: 110 lbs/yr.

Pools

- Replace your pool heater with a solar pool heating system or a dedicated heat pump.

- Cover your pool or spa to reduce evaporation and check for leaks, making repairs promptly.

Water

- Take shorter showers and turn off the water while brushing your teeth or shaving.
- Recycle water rather than pouring it down the drain. For example, used water from a fish tank is good for watering plants.
- Use a spray nozzle to stop water flow between rinsings when washing your car.
- Clean driveways and sidewalks with a broom instead of a hose.
- Check for leaks in outdoor faucets, pipes and hoses, and make repairs promptly.
- Operate the dishwasher only when you have a full load. When purchasing a dishwasher, consider a water-efficient model.
- When washing dishes by hand, fill one sink or basin with soapy water and fill the rinsing sink to one-third or one-half full. Avoid letting the water run continuously in the rinsing sink.
- Kitchen sink disposals require a lot of water to operate properly. Start a compost pile as an alternative method of disposing of food waste instead of using a garbage disposal.
- Do not use running water to thaw meat or other frozen foods. Defrost food overnight in the refrigerator or by using the defrost setting on your microwave.
- Install instant water heaters in bathrooms and in the kitchen so you don't have to let the water run while it heats up.
- Insulate your water pipes. You'll get hot water faster plus avoid wasting water while it heats up.
- Avoid installing a water-to-air heat pump or air-conditioning system. Newer air-to-air models are just as efficient and do not waste water.
- Install water-softening systems only when necessary. Save water and salt by only running the minimum amount of regenerations necessary to maintain water softness. Turn softeners off while on vacation.
- Never put water down the drain when there may be another use for it such as watering a plant or cleaning.
- Store drinking water in the refrigerator instead of letting the tap run while you wait for cool water to flow.

Water Heating

- Install a solar water heater – you'll reduce water heating costs by 75-90 percent.
- Believe it or not, your laundry detergent works just as well with cold water. So wash with cold water and save.
- Hang laundry to dry. CO2 emission reductions: 4 lbs/yr/load.
- Leaving home for a few days? Turn off your water heater until you get back.
- Showers use up to 30 percent of your household water - so shorten showers to cut hot water costs.
- Install an insulation wrap on your old water heater to help it hold the heat in.
- Set your water heater at 120 degrees F. CO2 emission reductions: electric water heater - 1,200 lbs/yr and natural gas - 880 lbs/yr.
- Use cold water to wash and rinse clothes, instead of hot or warm water. You'll save ~0.50 cents/load. CO2 emission reductions: 27 lbs/yr.

- Use a low-flow showerhead. CO2 emission reductions: electric - 1,800 lbs/yr and natural gas - 430 lbs/yr.

Windows

- Test your windows by holding a lit candle near window seals to see if air is escaping - then caulk any leaks.
- Close curtains, mini-blinds or shutters to keep out the heat. During winter months, open shades to let in the sunshine. For extra shade, plant plenty of trees and shrubs.

Yards

- Trees are nature's air conditioners - plant them for shade on the sunny side of your home.
- Push an electric mower or better yet a reel mower rather than a gas model. CO2 emission reductions: 80 lbs/yr. If you do use a power mower, make sure it's a mulching mower to reduce grass clippings sent to landfills.
- Water only before 10 a.m. or after 4 p.m. to minimize the amount of water lost to evaporation.
- Irrigate just once a week in the cooler months and twice a week in the warmer months to maintain healthy, green grass with a strong root system.
- Avoid watering on windy days and avoid sprinklers that spray a fine mist, which increases evaporation.
- Adjust the timer/controller on automatic sprinklers according to seasonal water demands and weather conditions.

Conservation Tips provided by Florida Solar Energy Center (FSEC), Florida Solar Energy Research and Education Foundation (FlaSEREF), Progress Energy, Orlando Utilities Commission (OUC), St. John's River Water Management District (SJRWMD) and the City of Orlando.

<http://www.myfloridagreenbuilding.info/ConservationTips.html>