



Defeat the Heat

How to Save Energy, Money, and the Planet in Warmer Months

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As the temperature outside warms, the environmental implications of our daily actions become even more prominent. This brochure will show you how you can save money and protect our natural resources during this time.

Cooling

Issue:

- Home cooling accounts for 6 percent of the average U.S. home's energy use, leading to high energy bills during the warm months.
- Roughly 2/3 of all U.S. homes have air conditioners, and it costs homeowners nationwide roughly \$11 billion annually to cool their houses.

Solutions:

Fans:

- Use natural ventilation rather than air conditioning, especially on windy days. Open windows to create a cross-wise breeze, use fans to circulate air



in a room, and use whole house fans to pull air in through the windows and exhaust it through the house's attic and roof. Remember to turn off fans when you leave a room.

- When using air conditioning, use a ceiling fan to allow you to raise the thermostat setting about 4°F higher with no reduction in comfort.
- Use the bathroom fan when taking a shower and a range hood when cooking to remove heat and humidity from your home.

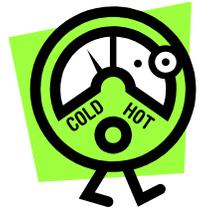
Insulation:

- Install window coverings to prevent interior heat gain.
- Turn off your cooling system and open your windows before sleeping. In the morning, shut the windows and blinds to capture the cool air.
- Have about 17 inches of fiberglass or cellulose based attic insulation (an appropriate amount for homes in the central or northern U.S.), and properly insulate the outer walls and floors to prevent warm air from leaking in. This will also save money in the cooler times of the year by preventing warmer air from escaping.
- Properly insulate and seal the ducts that deliver your system's cooled air. Eliminating leaks increases your system's efficiency and can save 10% on annual energy costs.



Air Conditioning System:

- Regularly clean and replace your cooling unit's filters, and vacuum registers regularly to remove any dust buildup.
- Ensure that furniture and other objects are not blocking the airflow through your registers.
- Avoid placing lamps or TV sets near your room air-conditioning thermostat. The thermostat senses heat from these appliances, which can cause the air conditioner to run longer than necessary.
- Install a central air conditioner with an ENERGY STAR certification, which uses 25 to 40 percent less energy than new conventional models.
- Install a programmable thermostat that allows you to pre-program up to four settings to consistently control your home's temperature on weekdays and weekends, saving you approximately \$100 annually.



Water

Issue:

- The average family of four in the U.S. uses about 400 gallons of water per day. During the summer, this amount can be up to 1,000 gallons per day.
- Depending on the region, homeowners use 30-60% of their water outdoors. Roughly 50% of that is wasted, in part due to overwatering.
- The remaining home use is spent on daily activities like showering, brushing teeth, using the toilet, cooking, washing clothes, etc.



Solutions:

Outside:

- Mow your lawn less. Longer grass promotes a more drought-resistant lawn with reduced evaporation and fewer weeds.

- Leave the grass clippings on your lawn after you mow. The clippings quickly decompose and release valuable nutrients back into the soil to feed the grass, reducing the need for nitrogen fertilizer.
- Eliminate or minimize fertilizer use, and only use fertilizer products that contains "natural organic" or "slow-release" ingredients.
- Aerate your soil with a simple lawn aerator to improve water flow to the plant's root zone and reduce water runoff.
- When landscaping, use native plants that are more appropriate for the region. They use less water and are more resistant to pests and diseases.
- Use mulch around shrubs and garden plants to reduce evaporation, inhibit weed growth, moderate soil temperature, and prevent erosion.
- Plan to water in the early morning (before 7:00am) or evening (after 5:00pm) to limit daytime evaporation.
- Switch your conventional sprinkler system with a micro-irrigation or drip system, which use 20-50% less water and can save up to 30,000 gallons per year.
- Install rain barrels or cisterns to harvest rain water for irrigation and other outdoor water uses. This naturally soft water (free of chlorine, lime and calcium) is ideal for watering gardens, and indoor and outdoor container plants, and can also be used for cleaning household windows and washing cars.
- Don't use an automatic irrigation system; it can consume about 50% more water than a manual one.
- Inspect your irrigation system routinely and fix leaks and broken or clogged sprinkler heads immediately. Just 1 broken sprinkler head can waste up to 25,000 gallons over a 6-month period.
- Use contractors certified through a WaterSense-labeled program to audit, install, or maintain home irrigation system to reduce irrigation water use by up to 15%.



Bathroom:

- Turn off the tap while shaving or brushing teeth.
- Take short showers instead of baths, and turn off the water while lathering up.
- Install a WaterSense labeled showerhead. Just one such showerhead can save the average family more than \$70 in annual energy and water costs.
- Repair any leaks throughout the house. The average U.S. household can waste over 10,000 gallons of water annually from leaking toilets, dripping faucets, or leaks in pipes inside and in the garden.

Kitchen:

- Use the dishwasher only when it's fully loaded.
- Use food wastes to make compost instead of rinsing them into the garbage disposal.
- Soak heavily stained pots and pans instead of letting the water run while you scrape them clean.



Laundry Room:

- Lower the temperature on your water heater to about 120°F.
- Only wash full loads of laundry and make the appropriate water selection according to the load size.
- Wash with warm or cold water; water heating can account for 14% to 25% of home energy consumption.

To Learn More

- Visit the EPA's WaterSense website to learn more tips on saving water and how much money you can save with each upgrade: <http://www.epa.gov/watersense/index.html>
- Visit the EPA's Greenversations Blog to stay updated on the latest conversations in energy and water efficiency: <http://blog.epa.gov/blog/>
- Visit Baltimore Gas & Electric's Smart Energy Savers Program website to schedule a Quick Home Energy Checkup and learn more about improving your home's heating efficiency:
<http://www.bgesmartenergy.com/>
- Visit the Department of Energy's EnergySaver website for more tips that will help you save money by saving energy: www.energysaver.gov