



ENERGY EFFICIENCY AND CONSERVATION

CONGRESSWOMAN GABRIELLE GIFFORDS

Reduce Phantom Energy

Phantom energy is consumed when electrical cords to appliances, chargers, and electronics are plugged in when not in use; even if these items are turned off. Phantom energy accounts for about 10% of household power consumption, and costs Americans approximately \$3 billion per year.

Examples of phantom energy in the home:

- Television with remote- 5-20 watts
- Digital cable/satellite box- 4.4-24 watts
- Cell phone charger- 3 watts
- Computer printer, turned off- 5 watts

To save energy

- Unplug items that you don't use frequently.
- Connect clusters of computer or video cables to switchable power strips and turn off when not in use.
- Shop for low standby products, such as ENERGY STAR models.

Save on heating and air conditioning

Look for the Seasonal Energy Efficiency Ratio (SEER) label on air conditioners and heat pumps-

- SEER ratings measure cooling efficiency. Higher numbers = more efficient units.
- ENERGY STAR standards call for a SEER rating of 12, but units rated up to 20 are available.

Buy an efficient water heater, or increase the efficiency of your current unit-

- Water heating accounts for 15-20% of energy use in homes. Look for the EnergyGuide label on new water heaters for information on energy use and operating costs.
- Heat pump water heaters are 2-3 times as efficient as conventional ones.
- Combination systems simultaneously heat water and provide space heating. These can be efficient in homes with low heating needs.
- Demand water heaters produce hot water in limited quantities, but have no storage tank. These are best suited for households with limited hot water use.
- Increase the efficiency of your water heater by using insulating jackets and pipe insulation to limit heat escape, and by installing heat traps to prevent mixing of the hot and cold water.

A programmable thermostat can be a valuable tool for reducing energy use. For example, you can save about 10% on your heating and cooling bills by lowering the temperature of your home by 10-15° for eight hours per day while you are at work or sleeping. Many programmable thermostats even have a "vacation" setting.

Buy ENERGY STAR products

ENERGY STAR products meet energy efficiency standards set by the Environmental Protection Agency. Consumers are expected to recover any additional investment in these products through energy savings in a reasonable amount of time.

- ENERGY STAR products save 10-50% more energy than non-STAR products.
- You can find the ENERGY STAR label on appliances such as washers, dryers, refrigerators, dishwashers and air conditioners; light fixtures and bulbs such as CFL's, and water heaters.

Weatherize your home

Sealing leaks, adding insulation, and installing efficient windows will help to reduce the leakage of cold outside air into the house in the winter or hot outside air into the house in the summer. This will help maintain a comfortable temperature and save on energy.

Seal Leaks-

- Often the most cost-effective way to increase your energy efficiency.
- Seal air leaks throughout the home to stop drafts, and seal holes in air ducts.

Insulate your home-

- Insulate ceilings, walls, crawlspaces, the attic, and the basement to minimize heat transfer.

Reduce air leakage through windows-

- Buy new, energy-efficient windows such as ENERGY STAR windows.
- Add storm windows to existing, older windows.
- Place caulking and weather stripping around windows.
- Use window coverings, such as blinds, awnings, mesh window screens, and shutters.

Conserve Water

- Toilet use accounts for about 27% of water usage in the home. To reduce the amount of water used, install low-flow toilets. Toilets made before 1993 (3.5-8 gallons/flush) use 2-5 times as much water as modern low-flow toilets (≤ 1.6 gallons/flush).
- Clothes washing accounts for 22% of home water usage. ENERGY STAR front loading washing machines drastically reduce the amount of water used compared to traditional washing machines.
- Showering accounts for approximately 16% of the water used in the home. Ultra-low-flow shower heads (~0.5 gallons/minute) can save up to 80% of the water used by "low flow" shower heads (2.5 gallons/minute), without affecting water pressure.

Local Resources for More Information on Energy Efficiency

City of Tucson Office of Conservation and Sustainable Development

Website: www.tucsonaz.gov/ocsd

Phone: (520) 791-4675

Pima County Energy Fact Sheet

Website: www.pimahealth.org/Tips_for_Desert_Dwellers.pdf

Arizona Department of Commerce- Energy Office

Website: www.azcommerce.com/Energy

Email: energydept@azcommerce.com

Phone: (800) 528-8421

Tucson Electric Power Green Energy Website

Website: www.tucsonelectric.com/Green