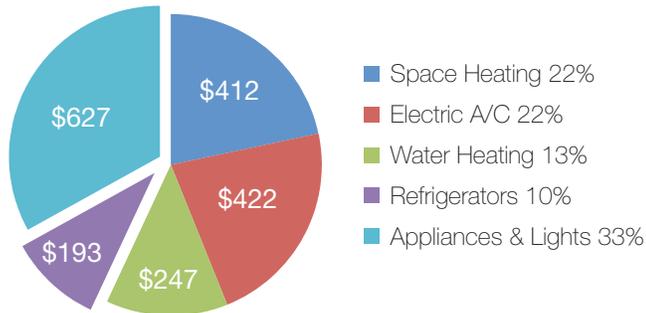


LIGHTING & APPLIANCES

Electrical appliances, lighting, and refrigeration can account for 43 percent or more of your household energy consumption. For the average Arkansas household, this could add up to \$820 a year (see figure 1). Understanding where and how much electricity is used to power your home's appliances and lighting will help you use energy more efficiently, reduce wasteful use and save money.

figure 1

Arkansas Average Annual Utility Costs

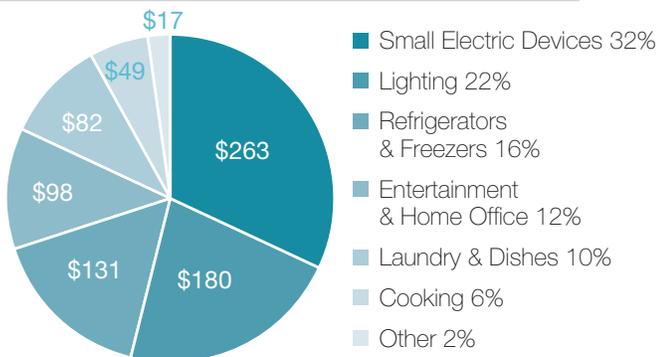


Source: Energy Information Administration 2001 Residential Energy Consumption Survey Applying 2007 Average Utility Costs

Figure 2 shows the average annual energy costs for appliances, lighting and other uses. A surprising number of electronic devices are consuming electricity when not in use, even when the switch is turned off — these are called “phantom loads,” which can account for 5 to 10 percent of your electricity bill. Phantom loads

figure 2

Average Annual Costs for Lights & Appliances



Source: American Council for an Energy-Efficient Economy

include such things as the digital clocks, instant-on TVs, DVD/VCR players, computers and small plug-in transformers that charge cell phones, batteries, etc.

Myths and Facts

Myth: “Long-life” incandescent bulbs are a good investment.

Fact: While a “long-life” bulb does last longer than a standard incandescent bulb, it still uses a lot of energy and it doesn’t last as long as a CFL. A long-life, 60-watt incandescent bulb usually lasts for 2,000 hours, but an equivalent 13-watt ENERGY STAR® qualified CFL will last 6,000 hours or more and use 75 percent less energy.

Myth: Computers last longer when they are left on all the time.

Fact: According to the Environmental Protection Agency (EPA), because of built-in “power down” modes, and by remembering to turn off your equipment when not in use, computers and home office equipment can last up to ten times longer than conventional products. If your computer must be left on when you are not using it make sure that you enable the power-management feature on your computer for “sleep” mode. Set it to turn the monitor off after 10 minutes and the computer off after 20 minutes. At full power your computer and monitor could draw over 250 watts of power; in “sleep” mode, 15 watts. Also, screen savers do not save energy and can prevent your computer from “sleeping.” Many computers and home office equipment now offer energy-saving power management features. Products incorporating this technology are most easily recognized by the ENERGY STAR® label. When purchasing new equipment ask for an ENERGY STAR® rated product.

No Cost

- **Turn off lights and fans** in unoccupied areas and open blinds and shades to allow natural lighting during the day. Use task or desktop lamps with Compact Fluorescent Light bulbs (CFL) instead of overhead lights.
- **Unplug unnecessary electronics** and other equipment when not in use. When their energy consumption is added together, these small items can use as much power as your refrigerator. Suggestion: use a power strip to make it easier to turn electronics on and off.
- **Check the temperatures of your refrigerator** (38 °F to 42 °F) and freezer (0 °F to 5 °F) and clean the coils annually. If the refrigerator or freezer is just 10 degrees colder than necessary your energy consumption could be 25 percent higher.
- **Use smaller or lower-energy appliances when possible.** A larger cooking appliance will use more energy than a smaller one. Also match the pan size to the element or burner size. A six-inch pan on an eight-inch burner wastes more than 40 percent of the heat produced by the burner.
- **Wash only full loads** and use the air-dry feature on your dishwasher. This can save 15 percent or more on the energy your dishwasher uses.
- **Use one bulb instead of multiple bulbs in a multi-bulb fixture whenever possible.** A single 100-watt bulb produces the same amount of light as two 60-watt bulbs and uses 20 percent less energy.
- **Clean bulbs and lampshades regularly** to get all the light you're paying for.

Low Cost

- **Check the condition of your appliances**, especially the refrigerator. Check that the refrigerator door is sealed tightly by trying to pull a dollar bill out of the closed door. If it removes easily then the gasket needs to be replaced.
- **Replace incandescent bulbs with ENERGY STAR® qualified CFLs.** CFLs can cost several times more but last 10 times longer and use 75 percent less energy. With a CFL you can save an average of \$30 or more in energy costs over each bulb's lifetime. Put ENERGY STAR® qualified CFL bulbs in five locations where the light is on the longest period of time and save more than \$150 dollars. Don't forget about your exterior

lights; look for CFLs rated for outdoor use. If the incandescent bulb you are replacing with a CFL is still working, save it and use it in places where lights are seldom or briefly used such as closets, attics and the garage.

- **Replace halogen lamps with ENERGY STAR® compact fluorescent torchieres.** The newer bulbs produce less heat and reduce energy costs by 60 to 80 percent.
- **Replace your night light** with a 4-watt mini-fluorescent, or 1-watt Light Emitting Diode (LED) night light.

Investment

- **There are two price tags on new appliances:** the purchase price and what you pay for the energy it uses over its lifetime. Purchase the most energy efficient replacement appliance that you can afford. Use the yellow EnergyGuide label to compare estimated operating costs. Also look for the ENERGY STAR® tag or symbol on appliances; these use 10 to 50 percent less energy than standard models.
- **New ENERGY STAR® dishwashers** are 25 percent more efficient than standard models.
- **An ENERGY STAR® labeled new refrigerator** uses at least 15 percent less energy than standard models. Note: the least efficient refrigerator is a side-by-side model; also through-the-door water and automatic ice makers can increase energy use by up to 20 percent. Refrigerators with freezers on the top or bottom perform about 10 to 20 percent better than side-by-side models.
- **A horizontal axis or front-loading washing machine** is the best option to select when replacing your washing machine. These use 50 percent less energy than standard models.



When shopping for new appliances or CFL light bulbs, look for the **ENERGY STAR®** logo.

This Fact Sheet was developed for Energy Efficiency Arkansas (EEA), a partnership between the Arkansas Energy Office and Arkansas's investor-owned electric and gas utilities and electric cooperatives, to provide Arkansans with unbiased information about cost effective energy efficient practices, improvements and technologies. For further information go to www.EnergyEfficiencyArkansas.org.

