



# Are your appliances and electronics wasting energy and money?

## FACT SHEET



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PRODUCTS



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For more information,  
call 800.762.7077 or  
visit [focusonenergy.com](http://focusonenergy.com).

**D**o you know how much your home's electrical devices cost to operate each month? Could some of them be costing you too much? Now you can find out exactly how much energy your appliances and electronics use (yes, even when they're turned off!) with help from Focus on Energy and an instrument called a watt meter.

### "PHANTOM LOAD"— THE INVISIBLE ENERGY THIEF

You may not know it, but your house is haunted. Every minute of every day, dozens of sneaky "energy ghosts" are hard at work stealing energy from your wall sockets—and money from your pocket. (Up to \$100 a year!)

That's because devices such as TVs, VCRs, DVD players, stereos, microwaves and coffee makers don't actually turn off when you push the power button. Instead, they go into "standby mode," which uses electricity to power functions such as clock displays and remote controls.

#### Facts about phantom load:

- In an average home, more than 50 percent of the electricity used to power electronics is consumed while the devices are switched off.
- Standby electricity accounts for about four to seven percent of total electrical consumption in Wisconsin homes—that's four to seven cents for every dollar you spend on electricity!
- In the United States alone, phantom load costs consumers more than \$3 billion a year and adds up to the output of several full-size power plants.

Reducing unnecessary phantom loads helps save energy and protect the environment, as well as your pocketbook.

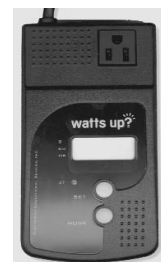
#### Free your home of phantom loads

Don't let phantom loads scare you—stopping these ghosts is easy as pulling a few plugs.

- Unplug household appliances and electronics from wall outlets when not in use.
- For convenience, plug multiple devices into a power strip and turn the strip off when not in use.
- Purchase ENERGY STAR® qualified appliances and electronics, which use up to 50 percent less energy than standard models.
- Unplug battery chargers when batteries are fully charged or when the charger is not in use.

#### Bust those ghosts with a watt meter

A watt meter is an electronic tool that measures power (watts) used by appliances and electronics. When plugged into an electrical device, the meter displays the unit's power consumption, counts the cumulative kilowatt-hour use and calculates the cumulative cost of operating that device.



Use a watt meter to measure energy used by your appliances. Watt meters are available at many libraries in Wisconsin.

Watt meters can measure the electric consumption of most household plug-in devices—appliances, electronics and lighting. You can borrow a watt meter from public libraries in many Wisconsin communities.

To see phantom load in action, plug a watt meter into an outlet, then plug a device into the watt meter. Try it with the device on, then turn it off to see the difference—and watch phantom load at work!

#### CALCULATING ENERGY USE AND COST

Electricity use is measured in kilowatt-hours. One kilowatt-hour is the unit of electricity equal to one kilowatt (or 1,000 watts) operating for one hour. For example, ten 100-watt bulbs, left on for one hour, would consume one kilowatt-hour (or 1,000 watt-hours) of electricity.



**focus on energy™**  
*The power is within you.*

As long as you know the wattage rating of a device, you can estimate energy use and cost easily, even if you don't have access to a watt meter:

1. Calculate the kilowatt-hours used per day:  
(Wattage x hours used per day) ÷ 1,000 = daily kilowatt-hours
2. Calculate the kilowatt-hours used per month: Daily kilowatt-hours x 30 = monthly kilowatt-hours
3. Calculate your monthly cost: Monthly kilowatt-hours x electric rate = monthly cost

Use your utility bill to calculate your electric rate. Add the rates for electricity service and electric distribution service, or call your utility provider. A typical electric rate in Wisconsin is \$0.10 per kilowatt-hour.

### Your refrigerator, for example

Your refrigerator is one of the largest energy consumers in your home, especially if it is more than 10 years old. How much could you save if you upgraded to an ENERGY STAR qualified model? That depends on how much energy your current refrigerator uses.

ANNUAL BREAKDOWN			
	NEW ENERGY STAR REFRIGERATOR	10-YEAR OLD REFRIGERATOR	ANNUAL SAVINGS
Electrical usage	500 kWh	1,927.2 kWh	<b>1,427.2 kWh</b>
Operating cost* (electrical usage x cost per kWh)	\$50.00	\$192.72	<b>\$142.72</b>
*CALCULATED AT 10¢ PER KWH			
10-YEAR COST COMPARISON			
	NEW ENERGY STAR REFRIGERATOR	10-YEAR OLD REFRIGERATOR	
Purchase price	\$795.00	\$795.00	
Operating cost* (10 years x annual electrical usage x cost per kWh)	\$500.00	\$1,927.20	
Total 10-year cost (purchase + operating cost)	\$1,295.00	\$2,722.20	
*CALCULATED AT 10¢ PER KWH			

An ENERGY STAR qualified refrigerator uses about a quarter of the electricity of a standard 10-year-old refrigerator. This can save you money, and those savings add up quickly over the years.

### When is it time to upgrade?

ENERGY STAR qualified appliances, electronics and lighting are good investments because they can save you energy and money while protecting the environment. Typically, ENERGY STAR qualified appliances and lighting use about half the electricity of standard models. In addition, they may be more reliable and offer more features or operate more quietly.

To learn more about your household appliances and electronics and how much energy they use, borrow a watt meter from your local library. Then compare your findings with the energy ratings of new, high-performance ENERGY STAR models. You can also call Focus on Energy at 800.762.7077 and ask for our free fact sheet, "Reducing appliance energy use," or download a copy from [focusonenergy.com](http://focusonenergy.com).

### MORE ENERGY-SAVING IDEAS

Focus on Energy is your source for ideas and information about ways to save energy and money, both at home and at work.

Contact us today to learn more about household appliances and electronics, and how these devices affect your energy costs. And don't forget to request your free fact sheet, "Reducing appliance energy use," by calling 800.762.7077 or visiting [focusonenergy.com](http://focusonenergy.com).