

# The Vampires Lurking In Your Home

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**Vampires have frightened people for generations. The fangs, the wings, the immortality: it's scary stuff. Though that's all legend—a subject for movies and Halloween costumes—a different breed of vampire could be lurking in your home right now. These vampires don't drink blood; they consume electricity.**

An energy vampire, also called a phantom or parasitic load, is any device that consumes electricity when turned “off.” These electronic devices provide the modern-day conveniences we love, but they also waste energy and cost us money.

Vampire loads can be found in almost every room of a home, though a favorite spot is the entertainment center. When the television is turned off, it isn't really off. It's sitting there, waiting patiently for someone to press the ‘on’ button of the remote—and waiting uses energy. TVs also use energy to remember channel line-ups, language preferences, and the time. VCRs, DVD players, DVRs, and cable or satellite boxes also use energy when turned off.

The problem is significant. According to a study conducted by the Lawrence Berkeley National Laboratory, the average home loses 8 percent of its monthly energy consumption to these energy vampires. A full 75 percent of the power used to run home electronics is

consumed when those appliances are turned off, according to the U.S. Department of Energy.

Common energy vampires include:

- TVs
- Stereos
- VCRs, DVD players, and DVRs
- Cable/satellite boxes
- Computers
- Battery chargers

According to the Arlington, Va.-based National Rural Electric Cooperative Association, the average electric co-op residential member consumes roughly 13,900 kilowatt-hours (kWh) per year. If 8 percent of this power is consumed when electronics are turned off, the average home wastes 1,112 kWh annually.

Assuming a cost of \$0.10 per kWh, the average household spends \$111 per year to pay for these vampire loads.

The good news is that a sharp stake isn't

necessary to kill off these vampires (unlike their TV and movie counterparts). To eliminate the power consumption of an energy vampire, simply unplug the device or plug it into a power strip and use the power strip's switch to eliminate electricity to everything plugged into it. Power strips work like an extension of the wall outlet.

**TYPICAL POWER CONSUMPTION OF HOUSEHOLD ITEMS, IN WATTS**

Device	On	Standby Mode	Off
40-inch LCD TV	200	—	1–3
42-inch plasma TV	240–320	—	1–30
DVD player	13	10	2.3
Stereo	123	—	23.4
Xbox 360	173	168	2.2
Nintendo Wii	17	10	1
Power tool battery charger	33.7	4.2	—
Coffee maker	1,100	70	0.8



*Smart Power Strip*

They completely cut all power to plugs when they are switched off.

Of course, there's always a catch. Some devices use standby power to make life more convenient. If you unplug your television or cable/satellite receiver box, what happens? When plugged back in, the TV or set top box usually will have to run its initial setup program. Depending on the particular device, it could take up to 20 minutes for channels to be recognized or for the user to reset preferences, which isn't something most of us are willing to do every day.

But there are numerous devices in the home that can be unplugged easily and safely, or plugged into a power strip, without causing any inconvenience. Computer equipment, such as printers, scanners, desktop computers, and broadband modems, can be "unplugged" without harm.

Cell phone, tool, and other battery chargers also should be unplugged when not in use. Even though the charger is not charging anything, it is still drawing power.

A new device called the "smart" strip is beginning to find its way onto store shelves. Smart power strips allow you to plug devices into a specially marked section of the power strip so they will still have power when turned off. Other devices that can be turned off safely are plugged into the rest of the strip.

This allows you to turn off parts of a home entertainment system, such as the stereo, DVD player, or home theater audio system, without losing the ability to record programs to a DVR or having to reprogram the television every time you want to watch a show.

For devices that cannot be turned off, consumers should look for Energy Star-certified devices or ask the salesperson about a device's standby power consumption. There can be big differences in power consumption between manufacturers, and sometimes even between models from the same manufacturer.

As in the movies, it is impossible to kill off all of the energy vampires in your home—but every energy vampire vanquished will mean that much less of a bite out of your wallet.

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*The Cooperative Research Network monitors, evaluates, and applies technologies that help electric cooperatives control costs, increase productivity, and enhance service to their consumers.*

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