

THE GREEN PAGES

Plugged-in appliances still turned on even when off



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I remember when I used to have to wind my alarm clock before bed. It was a simple task. No manual. No plug. I also remember the days when my father would yell, "Turn that off when you're done! Do you think I work for the power company?" Well sorry Dad, I can't. It doesn't really go off.

It's as difficult to

turn things off today as it is to buy a wind-up clock. As long as they are plugged in, our residential and commercial devices are powered up, ready to serve. Features hide inside that we may never use or don't even know about. We also can't see the small, but continuous, electrical current used to maintain this alacrity.

Among other things the microwave always draws a little power in order to keep the electronic touch pad and clock active; the TV remembers language and other set-up preferences; and a PC maintains local

network connections. I have no idea what my LCD monitor is doing, but according to the Lawrence Berkeley National Laboratory (a U.S. Department of Energy lab operated by the University of California), it uses nearly a watt even when it's turned off.

A collective waste

There are a lot of different names for the problem (plug loads, vampire energy, phantom power, off-mode consumption, standby power). At issue is the minimum power used by our gadgets, machines and devices when they are at their lowest power-consuming mode. Individually it's not a big deal, but collectively it is a giant waste.

We don't hear about the problem like we did even four years ago because manufacturers have made improvements, but when you consider how electrified all our tasks have become, you realize it still requires vigilance. The U.S. Department of Energy's ENERGY STAR rating program takes the issue seriously and raised its standards for office equipment in 2007. To learn more and find ENERGY STAR products, visit www.energystar.gov.

Besides buying wisely, there are other ways to reduce waste:

- Utilize power management options, particularly on computers and copiers.
- Turn off all monitors at night, and do not use screen savers; they use extra energy

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to run. A 3-D version can use 110 watts or more.

- Switch the entire power strip off to cut electricity to the standby modes of everything plugged into it.
- Do not leave chargers plugged in unless they are actually charging something.
- Employ multifunction machines (fax, scan, copier). Their load may be higher, but not when you tally all the machines replaced.

How much can I save?

I pored through all my manuals and could

not find anything that listed standby power usage, so it's hard to find out the specifics. You can buy a wattage meter and measure the amount of waste each machine generates, but it may not be worth your time.

Usage estimates are available at <http://standby.lbl.gov/>, but the PPL Corp. agrees, "Standby energy consumption is a relatively small piece of a business's energy consumption."

Regardless, my father didn't need to analyze how much energy the unwatched television used. He just knew it was a waste. Since you can assume that power is flowing to everything that is plugged in, it is worth buying only ENERGY STAR products. It's also important to tell your staff to unplug what is rarely used and be vigilant of power management settings, plug loads and standby power. I just don't recommend screaming at them from the next room.

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Office energy eaters

If you're not sure about the magnitude in your office, consider that the following equipment is using power even when not actively in use:

scanners, fax machines, printers, copiers, computers, speakers, routers, personal space heaters, phone chargers, media players and recorders, televisions, vending machines, coffee makers, microwaves, water coolers, phones, answering machines, anything with a digital clock, anything with a remote control, anything with a DC power transformer.

Two common concerns

Will a disabled surge protector protect you from lightning?

Honestly, most strikes will jump a protector no matter what. If you are relying on your outlet surge protectors for prevention, your equipment will likely be fried in a storm. A certified electrician should also implement properly grounded zone protection at the main panels.

Is it harmful to shut down a personal computer?

There was a time when shutting down was harmful to a PC. That is no longer true. In fact, your system may want to be shut down occasionally to freshen up memory use, etc. Automatic updates will then need to run upon startup, which can either slow down your morning or give you a chance to drink your coffee and open the mail.