

WATT'S UP?



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Energy Myths Debunked

In these challenging times, it's more important than ever to focus on our personal energy use to save both money and the planet. One approach is to begin by questioning some popularly held energy saving strategies and separate those ideas built on sound science from the ones that aren't. We've compiled some from a few authorities like the Lawrence Berkeley National Laboratory and Green Planet. Can you recognize fact from fiction? Read on to test your knowledge and rethink your own strategies.

Myth #1:
The terms "energy efficiency" and "energy conservation" are synonymous, and can be used interchangeably, both referring to "energy services".

Fact #1:
"Energy efficiency" means creating adequate levels of energy services using less energy than previously used for the same tasks. This could apply to anything from lighting a room with CFLs and LEDs, to cooling a house after adding proper insulation, to refrigerating the week's groceries by upgrading to an Energy Star approved appliance. "Energy services" refers to the resultant actions of using energy (e.g., illumination, comfort, or food preservation). "Energy conservation", on the other hand, means reducing the level of services (e.g., reducing the level of lighting, or changing A/C use allowing for higher home temperatures, or setting one's fridge to a higher temperature).

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IS IT YOU? FIND OUT.

Reducing service levels (conservation) does not necessarily mean sacrifice, however. For example, many spaces are over-lit by current-day standards when cooler ambient lighting would suffice. As a strategy, consumers have both the option of improving energy efficiency (e.g., by purchasing more efficient appliances) and the option of reducing service levels. *Remember: Lowering quality of life is not a prerequisite for reducing energy demand.*

Tip:
First explore conservation options that require no sacrifice (e.g., turn off lights, adjust thermostats, etc., and then determine what energy efficiency options and investments may be right for you). Technological innovations that help increase energy efficiency are being introduced all the time now. It's important to stay informed with user's guides (such as this newsletter!) to evaluate new approaches for managing energy use.

Myth #2:
It's more efficient to leave appliances and gadgets on than to switch them off and on.

Fact #2:
The small surge of power needed to turn on some devices is minuscule compared to running the same devices when they are not needed. While it was once true that cycling appliances and lighting off and on significantly reduced their useful lifetimes, technology has advanced so much that lights, appliances, and gadgets can now be turned off any time they aren't needed and turned back on when they are without any risk of harming them. *Most important: Doing so means saving energy.*

Tip:
Install an automatic light sensor to turn lights off when they shouldn't be on. For gadgets and appliances that often get left on, you might want to see how a power monitor device works for you. These devices can help you by telling you in real-time how much electricity you are using, and how much it may be costing you. Some devices can also remind you when to turn off appliances. [Check out these devices by Black & Decker](#) as an option.

Myth #3:
When my appliance is turned off, it is off – even if it's plugged in.

Fact #3:
Most "powered off" appliances continue to draw power even when they're switched off, sometimes as much power as when they're on! A surprisingly large number of electrical products -- from air conditioners to VCRs -- cannot be switched completely off without unplugging the device. These products draw power 24 hours a day, often without your knowledge. This power consumption is known as "phantom power" or "[standby power](#)." *Shocking fact: According to the Lawrence Berkeley National Laboratory, a typical American home has 40 products constantly drawing power – using almost 10% of all residential power!*

Tip:
There are a lot of ways to save energy by avoiding "phantom power". The easiest way, obviously, is to unplug things that are not in use. However, you can also get a power strip that allows you to cut power from anything plugged into it with a simple flip of a switch. For more ideas, [you can review our March 2008 newsletter here.](#)

Myth #4:
Screen savers save energy.

Fact #4:
From the time when screen savers were introduced to protect monochrome monitors from phosphor burn-in (leaving a discoloration of the glass display), people mistakenly had the notion that the timed shift to the screen saver also meant computers had gone into an energy saving mode. Notice how quickly the computer screen pops up again when you touch a key or move the mouse? That's because the screen saver is actually [an executable file your computer is running](#), which means your computer recognizes it as a program or application and leaves it constantly running. There are still legitimate reasons for using a screen saver (e.g., to password encode a return to your previous screen). However, in the interests of energy conservation: *There are better options.*

Tip:
With more recent technology, if you have a color monitor or laptop, simply set your computer to go into sleep mode after a short period of inactivity—say, 10 or 15 minutes. Also, you can set your monitor to turn off in the same, or an even shorter, time frame. Remember: Nothing saves more power than when a machine is powered off.

Myth #5:
Turning your thermostat up will make your home get warmer faster. Likewise, turning your thermostat down will make your home get cooler faster.

Fact #5:
Thermostats are not water taps. Opening the faucet wider may force a quicker steadier stream of water through the pipes, but electricity directed for heating and cooling works more like a light switch: If it's "on", the same amount of light (or, in this instance, heat/cool air) will be created at the same speed, no more and no less. That's because thermostats are simple devices that basically direct the heating or cooling units to turn "on" until a specific temperature is reached, at which time they then direct the unit to turn "off". *Safety concern: While it might seem effective in the moment to set a thermostat higher to respond to dropping temperatures, or lower to respond to rising temperatures, there is a danger of forgetting to reset the thermostat once the optimum temperature has been reached, thereby overheating or overcooling the space and, ultimately, wasting energy.*

Tip:
If you really want to cut energy costs for heating, try turning your thermostat down a degree or two. This actually saves significant energy and costs. How can you extend the impact of your heating energy? Check out our [October 2008 Newsletter](#) for winter energy saving tips and tricks.

We thank you again for your continuing participation in the ComEd Residential Real-Time Pricing Program. We hope this information helps you better manage your future electricity usage.

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Next month: "Electricity Basics" (the ABCs of what you should know, but never stopped to ask)

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