

Energy Savings Checklist:

- √ Enable standby/sleep mode and power management settings.
- √ Review document drafts and emails onscreen instead of printing them out.
- √ Power off your monitor when not in use instead of using screensavers.
- √ Turn off all peripherals (scanners, speakers) when not in use.
- √ Do not leave the computer running overnight and on weekends.
- √ Choose dark backgrounds for your screen display. Bright displays consume more power.
- √ Do not turn on the printer until you are ready to print documents.
- √ Keep computer off until it is to be used.
- √ Reduce the light level in the room when working on the computer.
- √ Network\share printers when possible.
- √ Print on recycled paper.
- √ Use double-sided printing.
- √ E-mail communications as an alternative to paper memos and fax documents.



Want to get involved?

Join the Green Network, Ohio U's coalition of sustainability-minded students, faculty, and staff.

Visit www.ohio.edu/sustainability for more information about the Green Network and other campus initiatives.



Many thanks to:

Ecology & Energy

Conservation Committee

Ohio University



'Green' Computing Guide
Energy Saving Tips for PC's

Office of Sustainability

www.ohio.edu/sustainability

Common Computer Myths:

Myth: *It is bad to turn off the computer.*

Truth: Computers are now designed to handle 40,000 on/off cycles. This is considerably more cycles than the average user will need in the computer's 5-7 year life span. Turning your computer off helps reduce heat stress and wear on the system.

Myth: *Turning your computer off uses more energy than leaving it on.*

Truth: The surge of power used by a CPU to boot up is far less than the energy used by the unit when left on for over 3 minutes.

Myth: *Screen savers save energy.*

Truth: Screen savers were originally designed to help protect the lifespan of monochrome monitors which are no longer used. Most screen savers do not save energy unless they actually turn off the screen or, in the case of laptops, turn off the backlight.

Myth: *Network connections are lost when a PC goes into low-power/sleep mode.*

Truth: Newer computers are designed to sleep on networks to prevent loss of data or connection. CPU's with Wake on LAN (WOL) technology built-in to network cards can be left in sleep mode overnight to wake-up and receive data packets sent to the unit.

Campus E-Waste Recycling:

Do you have old and unused electronics?
Ohio University recycles:

- ◆ CPUs, Monitors, and Printers
- ◆ Floppy Disks and Compact Discs
- ◆ Toner Cartridges and Ink Jets
- ◆ Cell Phones, Palm Pilots (PDA's)
- ◆ 2-Way Radios/Beepers/Pagers
- ◆ Audio and Video Tapes
- ◆ Batteries and Accessories
- ◆ Compact Fluorescent Lightbulbs (CFLs)

Recycle items in depositories outside dining halls, via campus mail, or by direct pick-up. For more information on recycling options contact Campus Recycling 593-0231 or on the web

www.ohio.edu/recycle

Computing the Savings:

A computer left continuously running will emit 2161 pounds of CO₂ (a major cause of global warming) in a year and cost \$45 a year to power at \$0.0372 per kWh.

Turning a computer off at night so it runs only 8 hours a day computes to a reduction of 810 kWh per year, or a 67% yearly savings.



By turning off computers at night, Ohio U can save 9,720,000 kWh per year. This equals \$360,000 (for 12,000 units at \$0.0372 per kWh).

Energy Star Investment:

Energy Star® is a certification for energy efficient appliances. An Energy Star compliant computer in sleep mode uses 70% less electricity than units without power management features.

Sleep, Standby, or Hibernate?

A Standby setting can drop power over 90 percent from maximum. Screen recovery occurs within 1-4 seconds by hitting a key or pushing a mouse. Sleep and Hibernate settings can drop power almost completely, although screen recovery can take up to 10 seconds.

Additional Energy Resources: ¹

Energy Star

- www.energystar.gov

Department of Energy

- www.doe.gov

Environmental Protection Agency

- www.epa.gov

Network Storage on Oak

- www.cns.ohiou.edu/webdav/

1. Ohio University acknowledges that text and concepts in this document were adapted from energy saving information contained within the listed websites.

Creating a "Green" Machine:

Ohio University encourages all computer users to enable their **Power Management Features**.

•**Windows Vista**–To manually put your computer into sleep, select the Power button on the Start menu or the arrow next to the Lock button. To adjust automatic settings, choose Start, Control Panel, System and Maintenance, and Power Options. Then click on "Change plan settings."

•**Windows XP**– Click Start and choose Control Panel. Click Performance and Maintenance and then click Power Options. From the Power Schemes drop-down list, choose the one that most closely fits how you use your computer. Adjust your sleep and hibernate times and click the Hibernate tab to make sure Hibernation is enabled.

•**Windows 98/ME/2000**– Select Start, Settings, Control Panel, and Display. Select the Screen Saver tab. Choose a predominantly black screen saver and set it to wait for 5 minutes. Click on Settings to reach the power management settings. Click the Shut Off Monitor box and set for 10 minutes.

•**Macintosh**– Select System Preferences from the dock (OSX) or click the Apple and select Control Panels (OS9). Select Energy Saver. Under the Sleep tab you can enable your computer, display, and hard drive to go to sleep mode after a period of activity.

To learn more about **Power Management** please refer to the "Green Computing" website for more detail and energy saving tips.

Find Green Computing Tips Online:

www.ohio.edu/sustainability

