

PURPOSE

Office equipment is the fastest-growing use of electricity in commercial buildings in the United States, accounting for 7% of all commercial-sector power consumption.¹ Power management features, which allow inactive office equipment to enter low-power sleep modes, are the key energy saving feature of ENERGY STAR qualified computers, monitors, printers, copiers, and fax machines. This document provides information about the potential energy savings for different office equipment that has earned the ENERGY STAR. It also provides power management tips and resources.

WHAT IS ENERGY STAR?

ENERGY STAR is a government-backed program devoted to helping businesses and individuals protect the environment through superior energy efficiency. ENERGY STAR provides federal agencies and other partners a proven energy management strategy to save energy and money while demonstrating environmental leadership. Utilizing ENERGY STAR qualified equipment is not only a commitment to taxpayers but to the environment as well.

Computers and Laptops

An ENERGY STAR qualified computer uses 70% less electricity than computers without enabled power management features.

- If left inactive, ENERGY STAR qualified computers enter a low-power mode and use two watts or less.
- New chip technologies make power management features more reliable, dependable, and user-friendly than even a few years ago.

Monitors

An ENERGY STAR qualified computer monitor uses up to 50% less electricity than standard models.

- Computer monitors must meet stringent requirements in On, Sleep, and Off Modes in order to earn the ENERGY STAR.
- In On Mode, the maximum allowed power varies based on the monitor's resolution.
- In Sleep Mode, models must consume two watts or less.
- In Off Mode, models must consume one watt or less.

Did You Know?*

- In 2004 alone, Americans, with the help of ENERGY STAR, saved enough energy to power 24 million homes and avoid greenhouse gas emissions equivalent to those from 20 million cars - all while saving \$10 billion.
- Over its lifetime, ENERGY STAR qualified equipment in a single home office can save enough electricity to light an entire home for more than 4 years.
- Spending a large portion of time in low-power mode not only saves energy, but helps equipment run cooler and last longer.
- Organizations that use ENERGY STAR enabled office equipment may realize additional savings on air conditioning and maintenance.

**From the ENERGY STAR web site.*

¹ <http://www.eere.energy.gov/buildings/info/components/appliances/officeequipment.html>

Printers

The new ENERGY STAR specification for imaging equipment (including printers, copiers, fax machines, multi-function devices, scanners, and mail machines) will go into effect in 2007. This will lead to the development of imaging equipment that's 30% more energy efficient than conventional products.

- ENERGY STAR qualified printers automatically enter a low-power "sleep" mode after a period of inactivity. Separate specifications are available for stand-alone printer models depending on paper handling size and color capabilities.
- Many ENERGY STAR qualified machines can print double-sided pages, reducing paper use and costs.

Copiers

Copiers are the most energy-intensive type of office equipment because they sit idle for long periods of time.

- ENERGY STAR qualified high-speed copiers may feature duplexing units that automatically make double-sided copies, reducing paper use and associated costs. Using less paper also saves energy because it takes 10 times more energy to manufacture a piece of paper than it does to copy an image onto it.

USING POWER MANAGEMENT TOOLS

ENERGY STAR Power Management features — standard in Windows and Macintosh operating systems — place inactive monitors and computers (central processing unit, hard drive, etc.) into a low-power sleep mode. A simple touch of the mouse or keyboard "wakes" the computer and monitor in seconds.

- **Computer power management (CPM)** can save \$15 to \$45 per desktop computer annually.
- **Monitor power management (MPM)** can save \$10 to \$30 per monitor annually.

The U.S. Environmental Protection Agency (EPA) has helped hundreds of federal agencies, state and local governments, schools, higher education institutions and Fortune 500 companies activate power management throughout their organizations quickly and easily.² EPA will help you find the best means to activate power management throughout your organization by working with your information technology staff to:

- Use in-house network capabilities push out power management settings to all your computers.
- Make power management a feature on your standard template image on your computers.
- Use free network tools from EPA or commercially available options to activate power management throughout your organization.

² See list of participants at: http://www.energystar.gov/index.cfm?c=pm_mmd.pr_pm_mmd_contributors



Energy Conservation with ENERGY STAR®

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REDUCING ENERGY WASTE AT YOUR AGENCY OR OFFICE

There are a number of other activities FEC partners can implement to reduce energy waste from electronics:

- Become official partners of ENERGY STAR.
- Establish an Energy Reduction Plan for your electronic equipment within your facility.
- Purchase only ENERGY STAR qualified electronic equipment.
- Make sure your power management features are turned on! Some ENERGY STAR monitors have the power management feature turned off by the vendors.
- Use your network to automate power saving features on all electronic equipment where feasible.
- Use monitor "Sleep" software to power down monitors.
- Establish a Power off policy for all electronic equipment.
- Configure all network equipment to power save when not in use (e.g., printers, faxes, copiers, etc.)
- Educate management and employees on the benefits to be derived from power management.

REFERENCES

For more information on ENERGY STAR or about the tools mentioned here, please visit the ENERGY STAR web site at: <http://www.energystar.gov/>.

CONTACT INFORMATION

If you have questions related to this resource or need other assistance with the Federal Electronics Challenge, please contact your Regional Champion. The list of FEC Regional Champions is available at <http://www.federalelectronicschallenge.net/champions.htm>.

Partners may also request technical assistance via email to partner@electronicschallenge.net.

FEDERAL ELECTRONICS CHALLENGE

Web site: <http://www.federalelectronicschallenge.net/>
E-mail: info@electronicschallenge.net