

# Energy-Efficient Office Equipment

A Pacific Energy Center Factsheet



## Why Purchase Energy-Efficient Office Equipment?

Office equipment is the fastest growing use of electricity in commercial buildings in the United States. Businesses pay more than \$2 billion for the electricity consumed by office equipment. Air-conditioning to remove the waste heat from office equipment costs nearly \$1 billion more. Businesses often fail to account for energy costs when purchasing office equipment, even though more energy-efficient equipment with comparable features and performance is available for the same price.

Recent efforts by equipment manufacturers and the federal government have produced energy rating systems to help the business purchaser find more efficient office equipment. Look for the Department of Energy's Energy Star(R) Logo, indicating that the equipment meets federal standards for energy efficiency. This fact sheet describes the energy efficiency features you should look for when buying copiers, personal computers, computer monitors and printers. In addition, tips are provided on how to efficiently operate these types of office equipment.

## Copiers



Approximately seven million copiers are now in use in US homes and businesses, and over 1.5 million new ones are sold each year. Copiers are the most energy-intensive type of office equipment. Because they waste energy sitting idle for several hours each day, there is great potential to improve their energy efficiency. Energy cost for a typical office copier is \$110 to \$130 per year.

## What to Buy

?? Energy Star ® logo. All copiers with this logo automatically turn off after a period of inactivity. High-speed (> 44 copies per minute) copiers are set to automatically make double-sided copies, saving energy and paper costs.



- ?? High Quality Automatic Duplexing. Look for a copier with high-quality automatic duplexing (two-sided copying) capability. Easy and reliable duplex operation will encourage users to copy on both sides. Independent lab tests of duplex copying speed and frequency of jams should be available from the sales literature.
- ?? Correctly sized Copier. A mid-volume (20 to 44 copies per minute) copier in a low-volume office can use 70 percent more energy per page than an efficient low-volume (< 20 copies per minute) copier.

### *Efficient Operation*

- ?? Turn copiers off at night and on weekends, especially if you do not have an Energy Star copier.
- ?? Enable the energy-saver features if they are available on your copier.
- ?? Set your copier to automatically default to making two-sided copies to ensure the duplexing feature is used.

## **Personal Computers**

Computer equipment is the fastest growing electric load in the business world. In fact, energy use by computers could double by the year 2000. Energy cost for each personal computer (excluding the monitor) is \$15 to \$20 per year.



### What to Buy

- ?? Energy Star(R) Logo. Over 1200 Energy Star(R) computer models are available which incorporate power-management features designed to save energy.
- ?? Laptop and Notebook Computers. Although somewhat more expensive, notebook computers use much less power than desktop PCs. Their portability and immunity to power interruptions may be important features for some business users.

### *Efficient Operation*

- ?? Turn computers off at night and on weekends. This will save energy and will not shorten the life of the equipment.
- ?? If your PC does not have automatic power management, turn it off during extended periods of inactivity.
- ?? Enable the power-management feature. Energy Star(R) computers are required to have this feature but are not required to ship with it turned on.

## Computer Monitors

More than half the energy consumed by most desktop PCs goes to the monitor. Energy cost for each monitor is \$10 to \$15 per year.

### *What to Buy*

- ?? Energy Star(R) Logo. Energy Star(R) monitors automatically power down to 30 watts or less when not in use. To wake up a monitor, you simply touch the keyboard or mouse.
- ?? Buy monitors only as large as needed. For example, a 17" color monitor consumes 35 percent more energy than a 14" monitor.

### *Efficient Operation*

- ?? Turn monitors off during periods of extended inactivity: nights, weekends or during the work day.
- ?? Enable power-management feature. Energy Star(R) computers are required to have this feature but are not required to ship with it turned on.

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## Printers

Printers are typically left on 24 hours a day, but are active only a small percent of the time-which means they can waste a lot of energy and money. Energy cost for a typical laser printer is \$10 to \$15 per year.



### *What to Buy*

- ?? Energy Star(R) Logo. Energy Star(R) printers automatically power down to 15-45 watts. This can cut a printer's electricity use by over 65 percent.
- ?? Consider other energy-saving features: ink jet printing, printer sharing, or printers with duplex printing capability.

### *Efficient Operation*

- ?? Turn printers off at night, on weekends and during periods of extended inactivity during the work day.
- ?? Reduce Paper Use. Ink jet printers can print on the blank side of used paper (paper re-use is not recommended for laser printers). Using the "print preview" feature available in most software can reduce the number of printed drafts.

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### **For More Information**

Contact your PG&E representative or call 1-800-468-4743 for more information about PG&E's energy efficiency programs and other services.

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