
State of California
California Technology Agency
Low Power Computing
Guidelines

Revised March 2012

Section 1

INTRODUCTION TO LOW POWER COMPUTING

Agencies should identify non-compliant devices and develop and implement a transition plan to replace the equipment with lower power computing devices during the agency's equipment replacement cycle. These provisions apply to the acquisition of new and replacement IT hardware by any office, department, board, bureau, commission or other organizational entity within the state government.

The following identified IT equipment should be replaced at end-of-life with low power office equipment (e.g., Energy Star or EPEAT compliant). When presented with the option of various products, agencies should choose the most energy efficient product unless it represents a significantly greater cost that is not offset by reduced power utilization.

In addition, several of the devices listed below should be replaced at the end of life by equipment that is more energy efficient.

1. Desktop and Mobile Computers: State agencies should procure the lowest power computing devices that meet business requirements, including consideration of acquisition cost and energy savings. For example, desktop computers may be able to be replaced with a laptop or other mobile computing device.

Note: Employees should be limited to one computer except when justified by specific job requirements.

2. Monitors: Cathode-Ray Tube (CRT) monitors should be replaced with Liquid Crystal Display (LCD) or other energy efficient monitors.
3. Printers: Printers without energy saving features should be replaced with models that have energy saving features.
4. Other Office Equipment (Copiers, Scanners and Faxes): Single use office devices should be replaced with multi-function devices that have energy saving features.

For this effort, the following definitions apply:

- Desktop Computer: a personal computing device designed to remain in a fixed location.
- Electronic Product Environmental Assessment Tool (EPEAT): the EPEAT program assesses the environmental performance of equipment and ranks devices in three tiers, Bronze, Silver, and Gold. EPEAT Silver is the current state baseline standard.
- Energy Star: a Federal standard for energy efficient consumer products.
- Laptop computer: a personal computing device designed for mobile use.

Section 2

DESKTOP OR LAPTOP DECISION MATRIX

The following guidelines include consideration of energy use reduction and total cost of ownership. In most situations, an employee should have no more than one piece of equipment; i.e., either a laptop or a desktop. Occasionally job duties may require that an employee have both a laptop and a desktop, as indicated below. Each item contains an assumption that the equipment is required to perform one's job. This decision matrix does not apply to employees who do not need computers to perform their jobs:

Item	Description	Desktop	Laptop
1	Employee is a mobile employee working regularly outside the office.		X
2	Employee is a salaried employee, working two hours or more per week outside the office.		X
3	Employee's primary duties are typical office duties generally within normal office hours (e.g., analysts, support staff.)	X	
4	Employee's job duties include the use of products having the most features and requiring the fastest performance or the use of specialized software (e.g., computer-aided design, testing laboratory).	X	
5	Computers used in classrooms, kiosks, or reception areas.	X	
6	Employee's job duties include those described in 3, above, and the employee also works outside of the office. (If the employee requires two devices, an exemption request must be approved.)	X	X