11. Standby controllers and efficient computer settings

Standby power, also known as 'ghost' or 'phantom' loads, can waste a lot of energy.

What is standby?

Standby is the electricity used by appliances when they are plugged in but not being used. Having an appliance in standby mode means it takes less time to start up when you turn it on.

Devices like computers, printers, remote controls and even the clock on the microwave all use standby power.

If an appliance is showing a little red light, a lighted dial or a clock or is giving off heat, it is using energy.

How does it draw power?

The power used in standby mode may not seem like much but it does add up. Your centre may have multiple devices like microwaves, TVs, music systems, phone chargers and computers all using standby power. Estimates vary, but the energy consumed in standby mode can be as high as 5–10%.

Turning off appliances

As well as saving energy, switching off standby power reduces the risk of fire and storm surge damage. However, some devices, such as answering machines, servers or exit lights, may need to stay on.

Modes and settings

Most computer equipment has modes and settings that save energy. There are various settings that will send your computer to sleep or into hibernation when it has been inactive for a set period. See your computer instructions for details as settings will vary.

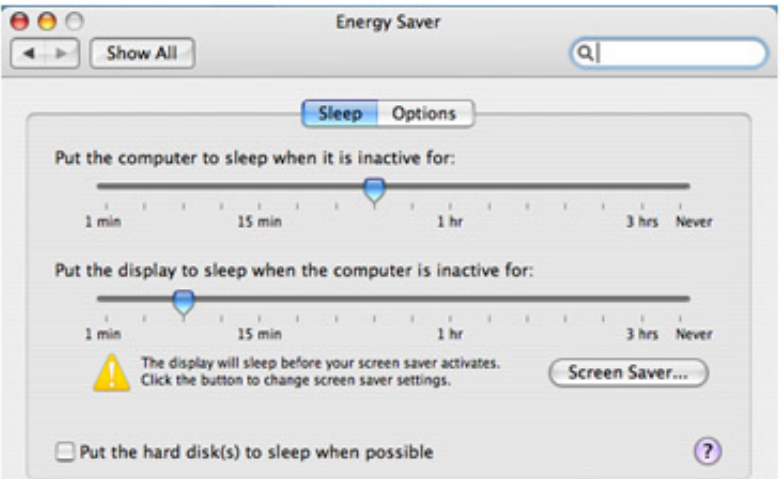
Reducing standby power

- Switch off the device at the wall.
- For hard-to-reach switches, devices such as the 'eco switch', foot pedals or remote controlled switches allow you to power off everything connected to a power board. For example, you may have multiple workstations all connected to the one remote switch that can easily be turned off.
- Install timers that can be set to switch off a device/s at the end of the day.
- If you have computer labs or offices with lots of computers, have a master switch wired in.
- Put up reminder signs to completely shut down devices and include procedures in induction documentation.
- Remote switches and shutdown devices aren't cheap but take less than a year to pay for themselves with energy savings.

- Consider getting an energy auditor to take consumption readings and to find ways to cut down standby power.

Computer power saving options

- Lower screen brightness to reduce energy use.
- Use auto energy saving settings available on most computers.
- Select settings to shut down or go into sleep mode after no use for 15 minutes.
- Avoid screen savers – simply turn the monitor off instead.
- Shut down computer equipment if you are going to lunch or to a meeting.
- Choose new equipment based on its energy efficiency and functionality, if it has a blue energy star (US based rating system), it will use less standby power.
- Laptops use less power than desktop computers.
- Share hardware where feasible such as printers, routers and scanners, etc.
- Turn off peripherals, such as separate speakers or printers, if they are not in use.



CHECK POINTS

- Identify which devices are drawing standby power.
- Shut them down when not in use.
- Talk with the team about convenience versus energy saving.
- Focus on appliances that draw the most energy.
- Select power saving settings for computers.
- Ask for everyone's cooperation.

Further resources

Check out A Greenhouse Around the Corner website:

www.agreenhouse.net.au/helpful-resources

Related fact sheets

Fact sheet 3: The economics of energy efficiency

Fact sheet 13: Energy auditing and using a power meter

For more fact sheets, go to A Greenhouse Around the Corner website:

www.agreenhouse.net.au/fact-sheets

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