Fact Sheet #8

Office Equipment

In this fact sheet you will discover:

- *The opportunity for energy efficiency*

- *How to reduce your office e-waste*

- *Low cost actions to reduce energy usage now*

- *Investments to reduce costs over the longer-term*

Australian Government

Department of Industry and Science

The office equipment opportunity

Offices are one of the last places business owners look to make energy efficiency improvements, yet there are many things that can be done readily. Computers, printers, fax machines, photocopiers, refrigerators, urns and kettles can all waste energy. The good news is that you can make your office energy efficient with very little effort.

Saving energy with office equipment can also lead to other benefits, such as:
- Longer equipment lifetime
- Increased flexibility (due to shift from desktop workstations to laptops or tablet point of sale units)
- Reduced ventilation and AC requirements

> Office equipment is the fastest growing energy user in the business world, consuming 15% of the total electricity used in offices.
>
> Source: UK Carbon Trust

Office equipment and e-waste

An important hidden cost of office equipment is the e-waste burden it can create at the end of its useful life. From an energy efficiency perspective it is often worth upgrading equipment to save on energy costs. Disposing of old or unused equipment should always be done so in a responsible way.

For **FREE** drop-off locations of old or unused equipment see these websites:
- Computers and televisions - www.environment.gov.au/ewaste
- Mobile phones - www.mobilemuster.com.au
- Printer cartridges - www.recyclingnearyou.com.au/cartridges/

For other e-waste or business recycling needs see www.businessrecycling.com.au

Low Cost Actions

1. Move low-use office equipment to naturally cooled rooms

All electrical equipment generates heat, which adds to cooling costs. Moving low-use equipment such as photocopiers, printers, fax machines, water coolers and refrigerators to naturally cooled rooms will save energy.

2. Switch equipment off at the power point

Many appliances use standby power even when they are not being used for their primary purpose. Switching off equipment at the power point overnight and on weekends can save up to 20% of total energy use.

3. Enable the energy saving features on computers

Monitors and hard disks can be automatically switched to low power modes after periods of inactivity. Most monitors use just 10% of their total power in standby or sleep mode and for hard disks it can be as low as 5%.

Set all monitors to switch off after around five minutes of inactivity. Computers should go into a 'sleep' mode after around 30 minutes of inactivity. Also ensure that all computers are switched off over-night.
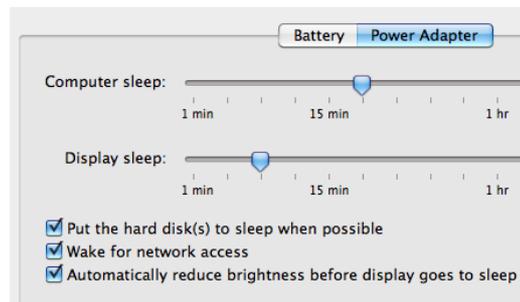
4. Consider the usage of printers and copiers

Most printers and photocopiers use energy at their highest power rating when they are warming up. Printing and copying in batches minimises warm-up time and saves energy. Also, printing at 300dpi instead of 600dpi saves toner and reduces environmental waste.

5. Consider the usage of server rooms or racks

Many businesses have a server rack or a dedicated server room. Often these areas have an unnecessary amount of equipment running, or are left on overnight when not needed, or are over-cooled with air conditioning systems. Ask your IT provider to determine which equipment can be switched off when not needed.

6. Build an energy efficient office culture

Most important of all is to involve your staff and visitors in the shift to improved energy efficiency. Set good energy efficiency policy then train staff, evaluate performance and reward good behaviour. Consider appointing an energy efficiency 'champion' who is responsible for driving this culture change.

More Ways to Save

7. Measure and monitor energy use

Often it can be hard to determine how much electricity an appliance is actually using. Power meters and energy monitors are a low-cost way to find out exactly where energy is being used in your business (refer to Fact Sheet #1 and #2).

8. Use timers and remote switches

Often it is neither practical nor easy to switch off unused equipment at the power point. In these cases, consider using plug-in timer switches or remote controlled power outlets to turn off equipment such as printers, waters coolers and water heaters. An electrician can install a timer switch at your switchboard for any hard-wired equipment.

9. Upgrade your computer hardware

Upgrading your computer hardware can often lead to a significant reduction in energy consumption, for example:

- Replace tube-style monitors with LCD monitors (about 50%)
- Upgrade from desktop to laptop computers (about 70%)
- Consider replacing point of sale units with efficient alternatives such as tablet computers.