Australian Government

Department of the Environment, Water, Heritage and the Arts

OFFICE EQUIPMENT

For Small and Medium Enterprises (SME's)

Climate Change

Climate change caused by greenhouse gases is one of the most serious challenges facing our community. Human actions—particularly burning fossil fuels (coal, oil and natural gas) and land clearing—are generating more greenhouse gases. These additional greenhouse gases trap more heat and raise the earth's surface temperature. This is called the enhanced greenhouse effect—it causes global warming and is changing our climate. The impacts of climate change will have social, environmental and economic consequences that will affect all communities across the globe.

Why Small and Medium Enterprises

Greenhouse gas abatement is not just for the big end of town. Climate change will affect all of us and therefore it is to everyone's benefit to reduce greenhouse gas emissions. Most measures to reduce energy consumption and greenhouse gas emissions will save you money in the long term, increasing profitability. Some measures will even help to improve productivity and the marketability of your business. Reducing greenhouse gas emissions should be seen as an opportunity to provide your business with a strong business advantage.

Office equipment

The modern business is heavily reliant on the use of a wide range of office equipment; hence the use of such equipment significantly contributes to the total amount greenhouse gas emissions from most businesses. You can reduce the greenhouse emissions from the use of office equipment through both purchasing energy efficient equipment and by making many basic changes to the way you use the equipment.

Simple No Cost Changes

Turn equipment off.

- All equipment should be turned off every night and every weekend, especially larger equipment like photocopiers. Remember to check the appliance is really off and not just in sleep mode.

- If possible equipment should be turned off at the power point. Modern technology is designed in such a way that many appliances still draw power while waiting to be activated. If power points are difficult to reach you may want to consider using power boards with individual switches or simple plug-in timer controls which can automatically switch appliances off or on as required during normal business hours.

- Equipment should be turned off when not in use during the day. Encourage staff to turn off equipment if they are going to a meeting or having lunch. If something is not in use for 30 minutes it should be turned off.

- With computers, at least switch off the monitor. Some people think switching off is bad for computers and monitors but it's perfectly safe. And far from wearing-out your computer, switching it off will usually reduce wear and tear on key systems like the hard disk and on the monitor.

Most computers can have sleep or standby mode activated (see control panel – power options) to automatically turn the monitor and/or the PC into standby mode when not in use. These modes can reduce the energy consumption of PCs dramatically.

- Turn off things like coffee machines, paper shredders, desk lamps, rechargers, transformers and scanners. Many consume power in standby mode.

- If your PC acts as a network server and needs to be left on, remember to switch its monitor off.

Activate 'sleep' mode on equipment. Most modern office equipment has a sleep, standby or power management feature. If you are unable to turn off the piece of equipment, activate it's 'sleep' mode as this can reduce energy use of idle equipment by up to 40%.

Work smarter. Can you better organise work so that electronic equipment is running for shorter periods? For example, can photocopying be done in a single run each day allowing the copier to be turned off at all other times?

Do you need it? When equipment fails, before buying a replacement consider whether it is possible to share with other staff members. Devices such as printers, scanners and copiers can be easily networked to allow use by several staff members.

Low Cost Options

Install timers. The use of readily available plug-in timers allows you to specify periods in which equipment is to be kept running and alternatively turned off. Timers allow you to program times that will automate turning equipment on and off as required. Remember to let staff know how to override timers if they are working outside of business hours.

Use ink-jet printers. Inkjet printers consume 90 per cent less energy than laser printers and printing in colour uses more energy than in black and white. Try to use laser and colour printing only when necessary.

Refill ink cartridges. Where possible use refillable or recyclable ink cartridges and toners for photocopiers, printers and fax machines.

Investment Projects

Buy energy efficient equipment. Remember that depending on the age of your equipment it can sometimes be more cost effective to purchase a new more efficient machine prior to the old one breaking down. Look for the Energy Star label when purchasing computers, monitors, photocopiers, printers, multi-function devices and fax machines. Choosing ENERGY STAR qualified equipment in a single home office (e.g., computer, monitor, printer, and fax) can save enough electricity over the equipments life time to light an entire home for more than 4 years. Do remember to ensure that the ENERGY STAR features are enabled on equipment. For help to enable the energy star features of your computer go to: www.energystar.gov.au/consumers/using.html#enabling

Buy environmentally friendly equipment. When purchasing new equipment check that it will assist you to reduce your greenhouse gas emissions. Check if it will operate with recycled paper, whether the ink and toner cartridges can be refilled, whether printers have a double sided printing option and fax machines can scan double-sided pages and look for equipment made from recycled materials or that can be recycled.

Choose laptop computers. A laptop computer uses up to 90 per cent less energy than a standard desktop computer.

LCD Monitors. Liquid crystal displays or LCD Monitors use less power than conventional computer monitors.

Equipment size. Consider size when purchasing equipment such as photocopiers and monitors. Generally, the larger the equipment

the more power it will require to function. Choose the appropriate size for your needs.

Additional Benefits

Comfort. By reducing energy usage of office equipment the excess heat they produce will also be reduced. Additional potential savings to businesses may be realised with reductions in air conditioning costs and maintenance.

Quiet. Office background noise will be reduced with fewer appliances operating at once and for shorter periods.

Equipment longevity. Using equipment efficiently can help improve the lifetime of the equipment. Spending a large portion of time in low-power mode or off, not only saves energy but helps equipment run cooler and last longer. By leaving equipment on around the clock, you not only add to your electricity bill, the equipment will also suck in more dust and be more vulnerable to power surges.

Enhance corporate image. By employing energy efficient measures your business is not only setting a good example to employees but also projecting a positive corporateimage for your business by contributing to the reduction of greenhouse gas emissions.

Case Study

RMIT University provides higher education for over 63,000 students locally and more internationally with over 100 partner institutions worldwide. RMIT Property Services has the responsibility to operate, maintain and enhance the university's 116 buildings over eight sites across Melbourne.

After conducting an energy audit to identify the stand out opportunities for greenhouse gas reduction, RMIT decided to analyse the benefits of a centralised computing system for their networks. The analysis determined that implementing power management of computers in the RMIT computer labs and library could potentially contribute to a reduction of 4,000 tonnes/year and create electricity cost saving of up to $200,000 p.a. [1]

Office Equipment Fundamentals

- Turn all equipment off when not in use.

- Purchase energy efficient equipment.

- Organise work so that electronic equipment is running for shorter periods.

- Use sleep and power down features on equipment.

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1   Emission savings based on research undertaken by the student placement initiative run through North Link/NIETL and RMIT University, in partnership with the Greenhouse Challenge Plus program and are estimates only.

Office equipment