

Energy Savings

The first step to achieving energy savings at your workplace is to take a tour, looking at how energy is used and where it goes. Think of your office set-up as a whole energy system with interdependent parts – heating, cooling, lighting, refrigeration, cooking and hot water.

How does your workplace use energy?

Think about the building shell, including:

- the design of your office orientation (does it face north?) and materials
- protection from prevailing weather (e.g. cold winds or summer glare)
- insulation.

The fittings and appliances (what you've got):

Your office building will contain a range of fittings, white-goods and appliances – such as heaters, air conditioning units, blinds, lights, hot water systems, fridges, kitchen appliances and tools. Heaters and air conditioners use approximately half the electricity in an office; lighting uses a quarter. You might be surprised by how much energy is unnecessarily lost every day. For example, hot water cylinders can lose one third of their energy through heat loss. Insulating pipes will significantly reduce energy loss. Standby mode often wastes electricity too. For example, computer monitors left on standby still draw power even though they aren't being used. Leaving the instant hot water boiler on overnight can draw significant energy too.

Your lifestyle choices (what you do):

Building infrastructure and fittings can be a given, but how you and your colleagues manage your office environment - your habits, preferences and choices - can make a real difference. Sometimes our energy uses are linked to habits, rather than deliberate choices. For example, keeping a meeting room at 23°C in winter uses far more energy than keeping it at a comfortable 20°C. The temperature of your workplace may be a lifestyle choice – or you may not have thought about it. Being intentional in your energy use can cut down both your energy costs and your emissions.

How could you reduce energy use in your workplace?

Most businesses can reduce their energy usage by looking at: heating/cooling; computers and monitors; printers and copiers; and lights.



Energy Savings Audit for Savvy Workplaces



Energy efficiency can be improved with good energy habits. The first step towards saving energy is to walk around your workplace, looking in detail at energy use. Your mission is to find all the wasted energy and bad habits you can, and pinpoint where changes could be made. This checklist gives clues about where to look.

Be careful of making assumptions - ask questions as you go. Take a digital laser non-contact thermometer with you, and record the temperatures in different rooms as you walk around.

Make an action plan by identifying the most serious problems and address these first.

Clues	Yes	Some	No	Don't Know	Action rating Priority 1-5
Are windows double glazed or energy-saving glass?					
Are windows well sealed with no gaps or draughts? Are there draught stoppers for under-door gaps?					
Are outside and/or inside doors self-closing?					
Does each room have its own thermostat?					
Is the airconditioning set to an energy-efficient temperature?					
Is the fridge set at between 5 and 7 degrees Celsius?					
Is the hot water set correctly (not more than 60 degrees)? Are hot water pipes insulated?					
If you have showers at your workplace, are there low flow shower heads in place?					
Are all lights low-energy bulbs (LEDs) or fluorescent tubes? Are lights switched off when enough daylight?					
Are printers, faxes and photocopiers in energy-saving mode when not in use?					
Are lights, computers and appliances turned off at night?					
Is external lighting turned on only at night?					
Are the external lights on sensors?					
Are fans and air filters regularly cleaned?					
Is there insulation in the ceiling and is it even?					
Can you find energy wasted in unoccupied rooms?					
If yes, where and how?			·	·	
Does the office building have renewable energy (such as photovoltaic solar panels or solar water panels)?					
Other ideas?					

This information and checklist is adapted from the <u>EnergyWise curriculum</u>, developed for Tasmanian schools by Greening Australia's Education Strategist Nel Smit, in partnership with TasNetworks.