

Energy Efficiency Fact Sheet: Lighting

Lighting accounts for a significant portion of energy costs in a business and is one of the best and easiest areas in which you can save energy and money. An office that spends \$2000 per quarter on electricity typically spends around \$800 per quarter on lighting. If you work together with an energy auditor and a licensed electrician, up to 50% of this cost can be saved through energy efficiency.

Quick and easy things to do

- 💡 **Turn off lights that are not being used.** This sounds obvious but we often forget to do this. Putting up easy-to-read signs will help people remember to turn lights off when they leave an area. A sensor switch is a great low-cost way to do this automatically.
- 💡 **Make use of natural light.** Simple things like opening blinds, installing skylights and clearing obstructions from windows can reduce dependency on electric light.
- 💡 **Keep lights clean and free from dust.** Dirty lights and light fittings can reduce brightness by almost half. Cleaning lights regularly will allow you to use fewer lights to achieve the same brightness.
- 💡 **De-lamp your fluorescents.** If you have twin fluorescent lamp fittings, try removing one tube from each fitting in areas where not so much lighting is needed, such as right next to walls and immediately above shelves. The other tube will work just as well on its own.
- 💡 **Maximise internal reflection.** Paint the walls and ceilings in light colours and keep darker surfaces clean to maximise light reflection.
- 💡 **Reduce night lighting.** Display signs and display cases need not be fully lit at night, if at all.
- 💡 **Switch all incandescent lights to CFL's.** CFL's use 80% less energy and can last up to ten times longer.

Energy Savers



LED downlight



LED tube



T8-T5 fluorescent converter



LED shoplighter



CFL

Investments in Energy Efficiency

- 💡 **Change magnetic ballast lamps to electronic ballast varieties.** Lamps with electronic ballasts use up to 20% less energy.
- 💡 **Replace low reflection light fittings with high reflection varieties.** Installing light fittings with well-designed reflectors will increase light output by up to 40%, which may allow other lights to be switched off entirely.
- 💡 **Install lighting controls.** Occupancy sensors, light sensors and dimmers all help to reduce unnecessary lighting. Well-designed lighting controls can save up to 80% of energy use in lighting.
- 💡 **Install multiple light switches.** If some areas are used more than others, install multiple light switches so lights can be turned off in unused areas without affecting others.
- 💡 **Upgrade to energy efficient products.** An energy audit will determine whether or not this is profitable for your business. Register for a free energy audit at 3eproject.org.au.

Did you know?

- 💡 Natural lighting can reduce your need for electric lighting by up to 30%.
- 💡 Most lights can be turned on and off over 5000 times before they begin to degrade.
- 💡 In poorly designed light fittings up to 50% of useful light can be wasted.

“We change all lights in shop to energy efficient lights and straight away electricity bill went down by \$300 per quarter. I am so happy!”

- Sylvia, Fairfield Heights

Energy Savers



CFL Spotlight



Induction Hi-bay



LED Hi-bay



LED floodlight



LED display strip

For further information contact the 3E Project Team on 1800 242 845 or by email at info@3eproject.org.au