



Energy Efficiency

EcoSmart Business Program – Fact Sheet



Step 1 – Energy Efficiency

Your first step to becoming an EcoSmart Business and making the journey towards carbon neutrality is to make your business more energy efficient.

Being energy efficient means getting the most out of the energy that you use. It doesn't mean decreasing productivity but recognising that energy is a valuable resource that shouldn't be wasted.

Being more efficient with energy will not only save your business money through reduced energy bills but will also reduce the amount of greenhouse gases being emitted into the atmosphere.

How to become more energy efficient

In becoming more energy efficient you need to think about how you can do the same thing but with less energy. This could be by managing demand, changing how you use your equipment or making technological changes. Some areas in which significant changes can be made are outlined below.

Lighting

Ensure lights are turned off when not needed or install motion sensors in areas that are not used often such as meeting rooms, storerooms etc.

Install more energy efficient lighting; fluorescent lights including compact fluoros generate only 1/5 as much greenhouse gases as ordinary globes.

Don't over light areas, choose an adequate but lower wattage globe, this will also prevent glare.

For localised areas that need bright lighting for detailed work utilise spotlighting such as lamps or LED lights rather than over lighting the whole room.

Silver or aluminium reflectors fitted behind lamps can improve efficiency by up to 40%.

Heating and Cooling

- Don't overheat or overcool: Winter temperatures should be 18-20°C and in summer 24-25°C. Every extra degree of heating or cooling will significantly increase your energy bills.

- Keep external doors closed where possible, this will make your heating and cooling much more efficient rather than watching your dollars go out the door. Fitting automatic door closers can make this easier.
- Turn off heating and cooling when it is not required including at nights and weekends. Use a timer to turn on the heater or cooler 30 mins before the start of work rather than leaving it on overnight.
- Turn off equipment that is not being used – powered equipment and lighting creates heat that can significantly increase cooling requirements.
- Make sure your heating and cooling systems are maintained and kept dust free this will ensure it performs efficiently.
- Installing insulation in the ceiling will make a massive difference to the amount of heating and cooling required and will increase comfort levels.
- Installing shades and blinds will keep the heat out in summer and the warmth in during the winter.

Transport

- Encourage your staff to become more travel smart for their journey to work. Offer them incentives to catch public transport, ride their bike or car pool with other staff.
- When purchasing products and services choose local as this will not only support local industry but will mean less greenhouse gases are produced in transporting the goods to your door.
- When purchasing new fleet vehicles only buy vehicles as big as you need and consider alternative fuels such as hybrid, gas or diesel.

Processes and Equipment

Each EcoSmart Business utilises different equipment and processes. Your EcoSmart Business energy audit will provide you with some suggestions about how you can improve the efficiency of your operations. Some general tips include:

- Turn equipment off when not in use especially overnight and on weekends. If equipment needs to warm up before work use a timer.

- Equipment should be turned off at the power point to ensure they are not using standby power.
- Buy energy efficient equipment including computers, photocopiers, heating and cooling systems, refrigeration systems etc...

Energy efficient may cost a little more to purchase but will save money in the long run on reduced energy bills. The energy star rating system makes it easy to identify the energy efficiency of equipment; the more stars the more efficient. For industrial equipment that doesn't have an energy rating check their specification.

Get your staff on side

There are two sides to energy efficiency - technology and behaviour. How equipment and appliances are operated and used has a significant impact on the amount of energy they use. That's why it is important to get your staff involved in saving energy. Some tips to get them involved include:

Tell your staff about the EcoSmart Business program and what you are trying to achieve.

Ask staff for their ideas on how to save energy and improve the efficiency of operations. Their day-to-day knowledge of the operations can offer a different insight.

Give your staff information and training on how to operate equipment efficiently and make sure they know about any new processes or installations, such as timers.