



# ENVIRONMENTAL GOOD PRACTICE GUIDELINES

## TOPIC – CONSERVING ENERGY

### Summary Information:

Energy use within a business is often difficult to notice. You can save money on bills by reducing the amount of energy you use for electricity, fuel and gas and you can help the environment by reducing Greenhouse gases and other air emissions.

To conserve energy you should:

1. Only use energy when required
2. Discover if energy is being wasted and carry out an energy audit to investigate the causes behind the problem and possible solutions.
3. Negotiable competitive energy pricing and related advice from energy retailers.

### Good Practice Risk Control:

- Delegate one person to review all energy expenditure to monitor all types of energy used.
- Keep records of energy use and investigate any increase in consumption straight away.
- Turn off electrical equipment (e.g. machines, ovens, compressors, hydraulic pumps, computers, hot water urns, photocopiers and printers) when they are not being used.
- Use 7-day timer switches to manage the power supply to processes that always operate at particular intervals.
- Install energy efficient lighting wherever possible  
(For example: Replace tungsten filament globes with compact fluorescent globes.  
Replace standard 40w fluorescent tubes with 36w tri-phosphorus globes).
- Use lighting that is appropriate to the job. Only use lights when they are needed - having separate light switches will help with this.
- Consider installing skylights in factory areas to reduce the need for electrical lighting.
- Maintain air compressors in accordance with the manufacturer's specifications.
- Improve efficiency by regularly checking compressed air systems to identify and repair leaks. (One quick check you can easily carry out is to turn off all the equipment that requires compressed air (e.g. at lunchtime) to see how long the compressor runs for to keep up with leaks – this is wastage).  
A vehicle production manufacturer found that less than 10% of the energy they consumed was converted into useful work, and that compressed air was their most expensive form of energy.
- Improve the insulation on all processes that require heat.
- Set thermostats to 21°C in winter and 24°C in summer.
- Investigate the use of evaporative coolers for large spaces.
- Investigate the use of variable speed drives for fans and pumping applications.
- Check zoning of air conditioning. Ensure thermostats are not competing.
- Check potential use of high efficiency motors.
- Check and monitor vehicle use and fuel consumption. Implement a policy to reduce fuel consumption by purchasing more fuel efficient vehicles.