

Energy Saving Week

**A brief guide to energy
saving opportunities
for organisations**

Energy Saving For Organisations

With troubling news about economic prospects and energy prices which, despite falling back, are still high compared to the last few years, reducing energy use is more important than ever.

Cutting consumption now, will provide an ongoing benefit reducing your cost base and improving contribution. At the same time it also cuts carbon emissions so it provides twice the benefit.

Of course each business has a unique set of requirements and constraints so we have focused on the sorts of actions that most organisations can undertake to cut consumption. Some actions will have little or no financial costs, some will require investment and an evaluation of payback. Savings can be found in the region of six - ten percent from these measures, although with some investment the savings can reach 25%.



Key Areas For Improvement

Energy efficiency comes from two main sources, improving control and upgrading equipment. Control can be improved through changing behavior or through the installation of automated systems. Upgrading equipment obviously is much more capital intensive and can take longer but should deliver significant savings.



Potential ways to improve control:

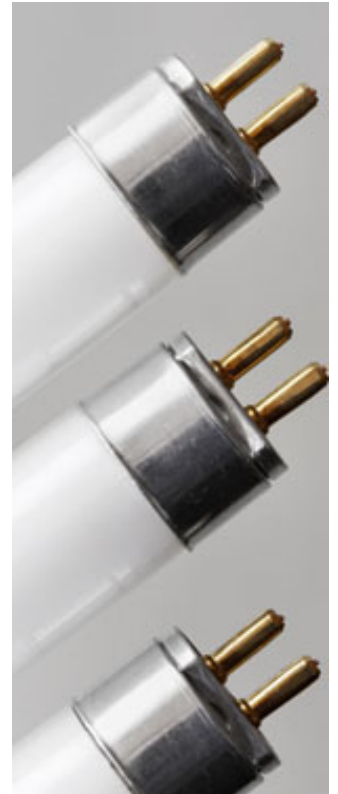
- Switching off equipment when not in use rather than leaving on standby
- Maintain the right temperature. 19°C -21°C is the recommended range
- Set timers to match working patterns
- Set thermostats to provide a 4-6°C band between heating and cooling to prevent both operating at once
- Fit occupancy sensors in low use areas for lighting

When considering upgrading equipment it is clearly important to review the whole cost. For example if you have to reduce or suspend operations then there is an opportunity cost to add to the direct cost.

Some ideas for upgrades

- Replace any remaining tungsten bulbs with compact fluorescent lamps
- Exchange 38mm T8 fluorescent lamps with 16mm T5's
- Consider redecoration, changing to a lighter colour increases brightness with changing lighting
- Replace constant speed compressors with variable speed where possible

If you have already addressed these types of issues then you may need to look at some form of renewable generation or heating, in order to reduce your fuel or power consumption.



A Seven Step Approach To Energy Savings



Delivering substantial energy savings requires a systematic approach based on up to date information. At Inenco we apply the approach summarised below:

- Gather and analyse consumption information, ideally breaking figures down across the day
- Match the pattern of consumption to working patterns to identify anomalies for further investigation
- Survey the site to identify key areas of improvement and equipment that is not performing to standard
- Focus on major spend areas, HVAC, air movement fans and drives and lighting
- Investigate the potential to use on site renewable options for heating, cooling and power
- Compile a list of options and prioritise based on return on investment
- Establish a business case and implementation plan to deliver the agreed improvements

Energy Saving Examples

- Exchanging 28mm T12 fluorescent tubes for 26mm T8's will save 8% on energy and provide longer lifetimes
- Exchanging Tungsten Halogen floodlights with metal halide lights can save 60%-75% on energy
- Lowering room temperatures by 1 degree can save 8% of the energy used for heating
- A speed reduction of 20% in a Variable Speed Drive can deliver a power reduction of almost 50%
- Fitting timers to water coolers and vending machines can reduce their consumption by 70%
- Increasing the temperature of chilled space by 1 degree will save 2% of the energy costs

Some of our customers



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understanding energy