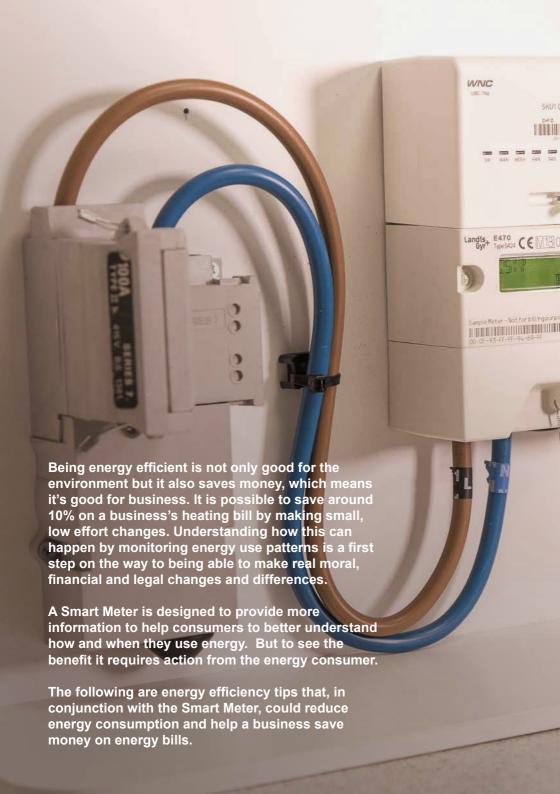


# Energy Efficiency Information for Customers



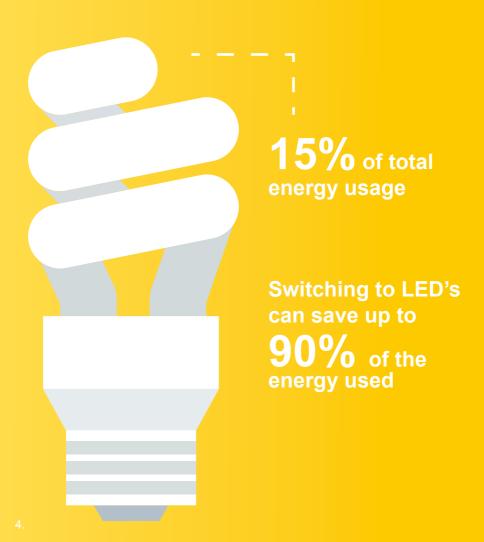




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### Lighting



## Reduce Energy Consumption Through Lighting

Lighting typically accounts for 15% of total energy usage in a business.

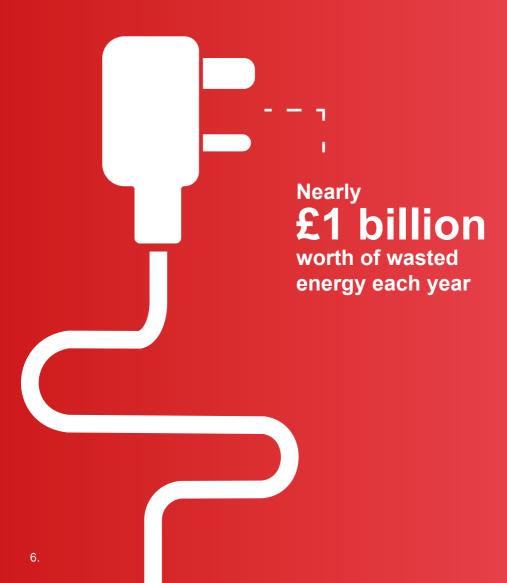
Replacing existing light bulbs with more efficient LED types can help save energy and keep costs down.

LED's do not produce heat and save significant amounts of energy compared to other types and are available in a range of colours, brightness and intensities.

When compared to standard incandescent lighting, LED's can save up to 90% of the energy used. In addition, LED's have a much longer life expectancy which means further savings due to reduced replacement and maintenance costs.

- Fit LED low energy alternatives, it is recommended to buy branded products that are safe and reliable.
- It is always cheaper to switch off lights, no matter how short the time period, and turn off lights when leaving a room. A light switched off for just a few seconds will save more energy than it takes for the light to power up again, regardless of the type of light. You should also consider using light sensors.
- Consider fitting Passive Infra Red Sensors (PIR) or occupancy switches to automatically switch lights off.
- Consider more advanced controls that will switch lights off when there is adequate daylight. Alternatively you can use blinds that can be rolled up.

## **Equipment** on Standby



## Easy Ways to Reduce the Standby Habit

Leaving equipment on standby costs the UK nearly £1 billion worth of wasted energy each year.

Almost all electrical and electronic appliances can be turned off at the plug without upsetting their programming, but do check the manufacturer's instructions for any appliances you aren't sure about.

- Do not leave equipment on standby. Minimise energy consumption by switching off unused refrigerators, computer monitors and any other equipment that can save energy.
- Consider using time switches to disconnect loads when not required.
- Consider a standby saver which allows you to turn all your appliances off or to standby.
- Computing equipment accounts for 7% of a typical office's energy bill, so encourage employees to turn their computer monitors off if they are going to be away from their desks for more than a few minutes.

- Consider using laptops instead of desktop PCs as they use significantly less energy. But do not leave unnecessary chargers connected to the mains as they will continue to draw power even when not charging equipment - so unplug when not in use.
- Encourage employees to turn off their PCs, monitors and communal equipment at the end of the day.
- Replace older equipment with more energy efficient versions ("A" rated or better).



## Talking about energy use is the key to improving efficiency

- Encourage behaviour change.
   Try to engage everyone in the business so that everyone is working towards a more energy efficient workplace.
- Appoint an energy champion who can undertake regular checks on energy waste in their department and produce informal reports on what can be improved, as well as help to engage other employees.
- Conduct an energy audit and take regular meter readings to keep track of energy consumption, that way you will know what processes use the most energy and will be able to identify areas where savings could be made.

# Take Control of Heating and Cooling



# half of its energy on heating

- Set a thermostat to match staff shift patterns so that the space heating and ventilation systems are only working when they need to.
- Also take into consideration seasonal temperature variations; turning down your thermostat by just 1°C could cut fuel bills by up to 10%
- Fit external doors with spring loaded door closers to make sure they are not left open and encourage cleaners to close blinds and curtains at night. This will reduce heat loss when rooms are unoccupied.

- In warehouses ensure doors are closed when not in use.
- Don't switch on air conditioning too early.
- Consider installing heat pumps or new more efficient heating technology.
- If you can, it is recommended to turn off your heating at weekends.

# Other Energy Efficiency Ideas



### **Energy** Saving Advice

- Improving the insulation in older structures may lower the annual heating and cooling bill by up to 20%.
- Regularly cleaning and servicing equipment such as filters will keep them free of dust and blockages so the machines don't have to work harder, thus maximising efficiency.
- Invest in micro-generation and consider solar panels. The use of solar panels can collect sunlight and convert it into energy that can be used for electricity and hot water.

- Heating water consumes a lot of energy, so insulate tanks and pipes to prevent unwanted heat loss and hot water in pipes will remain hot for longer saving you money.
- Regularly service heating system.
   A serviced boiler can save up to 10% on heating costs.
- Display energy efficiency posters and advice as a reminder to turn off lights and other equipment.

## Electrical Safety Advice

Energy can be dangerous and the following advice is offered to minimise risk:

- Do not store flammable or corrosive liquids near an electric meter or source of heat.
- Never over load an electric socket – use only one appliance per socket.
- Always switch off and unplug any appliance before cleaning or adjusting them.
- Consider using a residual current device (RCD) and/or isolation transformers between the electrical supply and the equipment, especially when working outdoors.
- Electrical installation should be periodically tested by a competent person.

- Regularly service equipment in accordance with the manufacturer's instructions.
- Do not use plugs and sockets that are damaged.
- Never route cables under carpets or rugs.
- Never use mains-powered electrical tools or appliances in areas that are damp or wet unless they are designed for those environments.
- Ensure light bulbs do not exceed the fitting specifications for wattage or temperature.
- Do not cover equipment's air vents.
- Do not block air vents or ducts required for correct operation of gas appliances.



#### For more information on Energy Saving please visit:

www.carbontrust.com

www.energysavingtrust.org.uk

www.estaenergy.org.uk



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