

From the Carbon Trust

1. Getting started - top tips

For a quick start – here are some top energy saving tips:

- **Switch off equipment**

Leaving a single computer and monitor switched 'on' for 24 hours-a-day will cost over £50 a year. Switching it off and using 'stand-by' features when you are not using it could reduce this to £15 a year. Doing this may also prolong the lifespan of the equipment.

- **Good maintenance**

Equipment which is poorly maintained will not operate efficiently and will need more energy.

- **Speak to your colleagues**

Make sure everyone knows that saving energy will help the company. Ask your colleagues for their ideas on how you could all save energy. Read more on employee awareness.

2. Easy ways of cutting the energy costs of lighting:

- **Switch lights off in empty rooms**

You could cut your lighting costs by as much as 15%, just by making sure you turn lights off in rooms and corridors that aren't being used.

- **Don't use more light than you need**

If you're only working in one part of the room, why have all the lights on? Don't strain your eyes, but try not to use more light than you need.

- **Make the most of natural light**

Cleaning windows and skylights regularly will allow maximum daylight to enter the building and significantly reduce the need for electric lighting.

- **Maintain existing lighting systems**

A maintenance programme can reduce costs by up to 15% as well as improving light output and appearance.

3. Heating - top tips

Make savings on your energy bills by making sure you follow these top tips on heating:

- **Don't turn up the heating unless you really need to**

Unless it's just too cold for comfort, try to keep your thermostat at 19°C. Your heating costs will go up by 8% each time you increase the temperature by just one degree. Encourage your employees to wear warmer clothing, if they are feeling the cold. The Carbon Trust Thermometer can help you to measure the temperature in your workplace.

- **Leave plenty of space around radiators**

Putting furniture in front of a radiator means it will need to work harder to heat the room.

- **Don't heat unused space**

Storerooms or corridors don't need to be kept as warm as areas in which people spend long periods of time. Equally, if people are doing a lot of physical work in a particular area, the heating can be turned down. You can also turn off or reduce the heating over the weekend, providing no one is in the building.

- **Keep doors and windows closed, and draught-proof, in cold weather**

If employees are too hot, try turning the heat down first. In warmer weather, when the heating is off anyway, you can let more air in.

- **Keep the thermostat away from draughts or hot and cold spots**

These will all affect the thermostat and automatically increase your heating costs.

- **Don't put hot equipment, like photocopiers, near cooling vents**

The cooling system will need to work harder to cool an area that is constantly being heated.

- **Maintain your equipment properly**

If you don't regularly check your heating equipment, you could be adding as much as 10% to your heating bill without knowing it.

4. Manufacturing and industrial processes - top tips

Here are some easy ways that a business could cut the energy costs of manufacturing or industrial processes by addressing 3 core issues:

- Motors
- Compressed air
- Refrigeration

Motors

Easy ways to reduce costs can include:

- **Keep your motors maintained**

If a motor isn't working at its most efficient, it can add 5% or more to your energy costs. So make sure yours are always well maintained.

- **Purchase high efficiency motors**

When you next change your motor, replace it with a Higher Efficiency Motor. These can qualify for tax relief as part of the Enhanced Capital Allowance scheme.

- **Use variable speed drives**

Variable speed drives can reduce running costs by up to 30% when used with fans and pumps.

Compressed air

Costs could be reduced through these simple measures:

- **Find and fix leaks**

Most businesses using compressed air can save up to 30% simply by fixing any leaks.

- **Try to lower the operating pressure**

Reducing it by just 1 bar (15 psi) will save about 7% of the energy.

- **Ensure there is a good supply of cool air around the compressor**

This will ensure it doesn't get overheated and use more energy than necessary.

- **Turn compressor installations off when not needed**

Compressor installations are often left on when there is no demand for air (eg overnight). This wastes energy because power is being used to feed leaks. Even when off-loaded, compressors can consume up to 20-70% of their full load power.

Refrigeration

Energy bills can be reduced by making sure you look at these areas:

- **Keep cold room doors closed**

On average, it will cost you £4 every hour a freezer door stays open.

- **Check your door seals**

A faulty door seal could increase power consumption by 11%.

- **Ensure your system is at the right temperature**

If it's even 1°C lower than needed, your costs could rise by 2-4%.

- **Make sure condensers are clean**

Dirty condensers can increase your costs by 26%.

- **Switch off internal lights when not in use**

Ensure that internal lights in refrigerated spaces are switched off when not in use or outside of trading hours. This will save the energy consumed by the light itself as well as energy used to remove the excess heat.

- **Don't put too much refrigerant charge in**

If it leaks it can increase your energy costs by over 10%.