Your

Green Office Guide

Tip Book

Energy

Energy costs are one of the most easily managed areas in the workplace and often have the greatest potential for reduction. It is important that energy use is reduced wherever possible, no and low cost improvements can reduce energy use by around 20%.

Similarly to water consumption, tracking and monitoring your energy consumption and related CO_2 emissions is an important tool for assessing the environmental performance of your office space.

The practical tips that are listed below will help to reduce your office's energy bills, CO_2 emissions, and also help to improve awareness amongst staff to be more energy efficient in the office and at home.

An office replaced their old oil boiler with a more efficient gas condensing boiler which will reduce their fuel bill by €16,000/annum with an investment of €47,600 – a payback of 36 months.
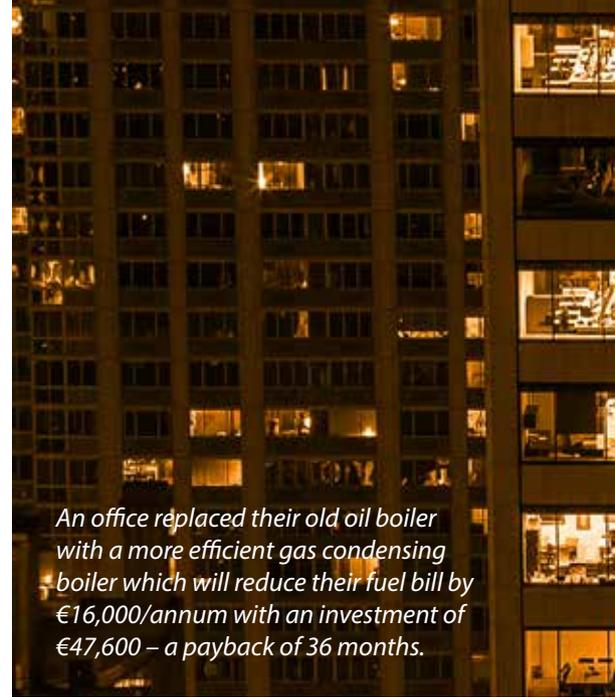
Monitor

Technology can help you visualise your energy usage. Converting raw data measurements into visuals you can understand will assist you with energy savings, operational improvements and business decisions.

The data you collect and monitor will help you to:
- Track your performance over time.
- Highlight areas for improvement by enabling you to compare your performance against established key performance indicators (KPIs) of best practice offices.
- Calculate the carbon footprint of your business.

10 Temperature Reduction

When heating the office set temperature controls to 19ºC, this could save you up to 10% on your heating bill. Similarly with cooling, set air conditioning to come on when temperatures exceed 24ºC.

Natural Lighting

Use natural light where possible. Keep windows clean and encourage staff to open blinds rather than turn on lights. Consider wiring light switches to control lights that are parallel to windows separately, this enables staff to make the most of natural daylight without leaving those spaces further away from the windows in shadow.

Power Down

A typical computer will cost approximately €216 a year in energy if left on all the time. Using a 'sleep' mode can reduce this by 65%, while turning the computer off completely after working hours cuts energy use by 75%.

Energy Efficient Lighting

Replace incandescent light bulbs with energy efficient LED lighting; a 40W Halogen bulb can be replaced with an 8-10W LED, giving the same luminance.

"COMPARING ACTUAL METER READINGS WITH THE READINGS ON THE BILL, WHICH MAY BE ESTIMATES, CAN HIGHLIGHT ANY DISCREPANCIES AND OVERCHARGES"

Waste

The real cost of waste is often 5-20 times the cost of disposal alone. Many business still don't properly know how much they pay for waste, do you? The waste hierarchy illustrates how the priority should be given to the way you deal with the waste produced in your office.

👍 **Prevent** 👍 **Reuse** 👍 **Recycle** 👍 **Recover** 👎 **Disposal**

About 70% of office waste is recyclable. By recycling as much as possible you may be able to reduce your waste disposal costs significantly, particularly as the cost of disposal is increasing due to the Landfill Tax. Recycling costs less than disposal to landfill, particularly if you segregate your waste. Check what is in your bins!

The following 5 tips should help you reduce waste in your office, reduce costs and help the environment.

An office in Cork was using 600,00 cups per annum at a cost of €60,000 plus disposal costs. Staff were provided with their own thermal mugs which resulted in a cost saving of €62,000 – a pay back of 1 month!

Monitor printing
Monitor printing levels to see how much each employee uses the printer. Consider posting a printing league table to encourage employees to reduce the amount they print.

Out with the paper cups
Encourage staff to bring in refillable water/coffee containers.

Reduce the number of printers
Reduce the number of printers in the office if possible, particularly desk printers.

Composting your food waste
For small quantities of food waste from the office consider using an onsite waste food digester or wormery.

Segregate waste
Good waste segregation is key to minimising costs and identifying waste solutions. As a minimum waste should be segregated into: recyclables, food waste and general waste.

"IT IS ESTIMATED THAT THE AVERAGE OFFICE WORKER USES UP TO 45 SHEETS OF PAPER PER DAY, OF WHICH OVER HALF IS CONSIDERED WASTE"

Water

One of the biggest problems that offices face with regard to improving water efficiency is the lack of awareness of the amount of water they actually use. It is critical for a business to know and understand its water consumption; from there it is easier to identify possible areas of improvement, and also to measure the reduction in water consumption after improvements have been made.

Over two thirds of water consumption in an average sized office occurs in the washroom. This is often where substantial savings can be made with little or no cost.

Here are 5 actions you can take in order to reduce water consumption and reduce water related costs.

An office in Dublin saved €3600 by installing PIR motion sensors on urinals and flow restrictors on bathroom taps at a cost of €1500. This is a payback of less than 6 months.

Night time leak test
1. Find your water meter.

2. Record meter reading at the close of business.

3. Ensure all water consumers are turned off, including urinals.

4. Record meter reading first thing in the morning (before business opens).

5. The difference in readings will tell you the night-time usage, when the business is closed.

6. If water consumption is unexpected, and can't be accounted for, you probably have a leak! Leaks can be very costly.

Know your water users
In offices, toilets, urinals, showers and taps can often be the biggest water users. Measuring flush volumes, appliance flow-rates or other appropriate parameters, is the first step toward reducing water use.

Waterless urinals
Use no water and if cleaned correctly produce no odour. Motion sensors flush urinals only after use or on timers to reduce the amount of flushes per hour.

Go auto
Consider installing electronic taps with infrared or push button systems. These tap systems will automatically turn on and off, reducing water consumption but also improving hygiene.

Dual flush
Retrofitting flush devices in existing toilets: A dual flush or siphon mechanism can save you up to 4 litres per flush and cost as little as €25.

"AN UNCONTROLLED URINAL CAN COST YOUR BUSINESS UP TO €1000 PER ANNUM!"

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