Business Activities (office based) walk around checklist

Use this walk around checklist to help identify key low or no cost energy saving opportunities within your organisation. Conducting regular housekeeping walk arounds will help form the basis of an action plan to reduce your energy use and carbon footprint.

This checklist should be read in conjunction with the <u>Business Activities Sector Overview</u> (CTV007), downloadable from the website, which provides further detail on most of the topics outlined below.

Heating, ventilation and air conditioning (HVAC)	Complete	Actions/comments
Check that radiators and other heating surfaces are unobstructed.		
Are windows and doors closed where possible when heating or air conditioning is operating?		
Check thermostat settings. The recommended temperature for an office is 19°C. A 1°C drop in average space temperature can cut fuel consumption by about 8%.		
Check thermostatic radiator valve (TRV) settings on radiators. Comfortable temperatures of 19°C are usually maintained when TRVs are set to '3'. If the valve is kept at '5' or 'max', there is no control over the amount of heat emitted from the radiator.		
Undertake regular checks on air conditioning control settings. Air conditioning should not be switched on until temperatures reach 24°C.		
Ensure HVAC time switches are adjusted to match occupancy patterns. Most systems use 7-day time controllers, so varying occupancy patterns can be catered for. Moreover, sufficient heat is often held in the building fabric and radiators to enable heating to be switched off a couple of hours before staff go home.		
Ensure hot water is switched off and time and temperature controls are adjusted over holiday periods. There is no need for water to remain at temperature during this time.		
Check boiler operation during summer walk arounds. In large offices, there are often several boilers for space heating and many of these can be switched off during the summer to save energy.		
Does the office have frost thermostats? These should be tamper-proof and checked regularly. Typically, internal thermostats are set to 4°C and external to 1°C.		

Heating, ventilation and air conditioning (HVAC)	Complete	Actions/comments
Are boilers operating efficiently? Check for warning lights, signs of leakage from pipework, valves and flanges, as well as smells of gas and oil. Look for damage and burn marks to boilers and hot surfaces.		
Is there undue noise from burners or pumps?		
Check extract fans are switched off after hours. Often, fan operation is linked with light operation and will continue to operate if lights are left switched on. Fans in themselves are expensive to run, and if fans continue to remove heat from the building overnight, this will also increase the amount of heat required to bring the building up to a comfortable temperature the next morning.		
Check filters in ventilation systems. Blocked filters reduce air flow and increase electricity consumption.		
Lighting	Complete	Actions/comments
Check that lighting in unoccupied areas is switched off and all non-essential lighting is switched off outside of business hours. • Are light switches clearly labelled? • Ensure external lighting is switched off during the day.		
Ensure blinds are open when there is sufficient daylight available. Large items of furniture such as filing cabinets should be moved so as not to obscure daylight.		
Do you still use traditional tungsten light bulbs? If so replace them with energy efficient, compact fluorescent lamps (CFLs) to reduce operating and maintenance costs.		
Review light levels in the office. Often, corridors are over-lit, especially if there have been changes to internal layout. Where appropriate, remove one fluorescent tube from multiple tube fittings in corridors and non-critical areas.		
Are lights switched off in toilets and store cupboards? If not, consider posters and stickers to remind staff to turn lights off, or possibly automatic lighting controls.		
Are windows, skylights, luminaires and sensors being kept clean? Establish a basic lighting maintenance and cleaning schedule to reduce costs as well as improving in-store appearance.		

Office equipment	Complete	Actions/comments
Check hours of operation of all equipment (such as photocopiers and vending machines) and ensure all unnecessary equipment is switched off overnight and at weekends.		
Building fabric	Complete	Actions/comments
Check whether parts of the building fabric are old or damaged. Cold air and water may infiltrate which can cause damage and lead to increased heating costs.		
Check for draughts and damage to windows, window frames and doors. Repair any damage and install or maintain draught seals.		

For further advice on how to improve existing systems across the above areas, please visit www.carbontrust.co.uk/energy/startsaving/technology.htm

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