## Local government offices walk around checklist (based on air conditioned office space)

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>Local authorities sector overview</u> (CTV028), downloadable from the website, which will give further detail on some of the below topics.

Heating, ventilation and air conditioning (HVAC)	Complete	Actions/comments
Are building systems being maintained at the intervals recommended by the installer? Dirty or faulty fans, blocked filters, air ducts and components directly affect system efficiency and will increase running costs and risk of breakdown.		
Look out for signs of over-heating – for example, staff wearing summer clothes in winter or opening windows when the heating is on. Ask staff for feedback on internal comfort conditions.		
Check that air conditioning is operating only when required. Ensure a dead band is in operation – the heating should switch off when a temperature of 19°C has been reached and cooling should not come on until the temperature exceeds 24°C.		
Check that air ducts, heaters and radiators are not obstructed. If heat emitters are obscured, the room will not be warmed effectively.		
Are windows and doors kept closed in air conditioned rooms?		
Ensure air conditioning is switched off as soon as optimum comfort conditions are met and at the end of each day. Experiment with switch-on times for heating and air conditioning and switch off well before the end of the working day.		
Ensure that thermostats are set correctly and that controls are not being misused and cannot be tampered with.		
Ensure thermostats are appropriately positioned, particularly where there have been changes to building layout. Thermostats placed in an area that is exposed to draughts will significantly increase heating costs.		

Heating, ventilation and air conditioning (HVAC)	Complete	Actions/comments
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.		
Ensure time controls take account of unoccupied periods so that heating does not operate when there is no one around. Are heating or hot water controls set to minimise preheat times? Monitor space heating and water temperatures regularly to ensure services are delivered when needed and not before.		
Consider set-back controls to allow lower temperatures at night where they can be safely reduced. Night set-back controls will allow around 8% savings with each degree reduction in temperature.		
Where applicable check that controls such as weather compensation, optimisation and seven day time control are set correctly to save energy and money.		
Ensure multiple boilers are interlinked so that both boilers and circulation pumps are controlled by room thermostats. This will ensure boilers do not fire when there is no demand for heat.		
Check boiler operation during summer walk arounds. In large offices, there are often several boilers for space heating and most of these can be switched off during the summer to save energy.		
Check insulation of boilers and associated pipework and repair or replace if damaged.		
Building fabric	Complete	Actions/comments
Check for draughts and damage to windows, window frames and doors. Repair any damage and install or maintain draught seals.		
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.		
Shading	Complete	Actions/comments
Horizontal blinds or external shading are extremely effective in reducing heat and glare from the sun through exposed windows. Check that they are being used effectively to protect the occupants from heat and glare.		

Lighting	Complete	Actions/comments
Check that lighting in unoccupied areas is switched off as well as all non-essential lighting (including tubular fluorescent lamps) outside core hours. Promotional material, such as posters and stickers, will assist with this task.		
Check and label light switches to help staff select only those lights they need for the work being carried out.		
Ensure external lighting is switched off during the day.		
Check sensors and timers on lights, making sure they are altered when the clocks change.		
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.  • Where appropriate, remove one fluorescent tube from multiple tube fittings in corridors and non-critical areas.  • Encourage staff to report failing lamps and replace any failed lights with more efficient alternatives.  • If fittings are compatible, replace old-style 38 mm (T12) fluorescent tubes with 26 mm (T8) tubes.  Establish a basic lighting maintenance and cleaning schedule to reduce costs as well as improving office appearance. A cleaning schedule should include windows, skylights, luminaires and sensors.		
IT equipment	Complete	Actions/comments
Check and enable energy saving features on computers and other electrical equipment.		
Check hours of operation of all equipment and ensure all unnecessary equipment is switched off overnight and at weekends. The installation of timers can help automate this process.		

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ACT ON CO<sub>2</sub> is the Government's initiative to help individuals understand and reduce their carbon footprint. Visit http://actonco2.direct.gov.uk for more information.

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