Covenant University Energy Inspection Checklist

Note: This is adapted from the **University and College Union (UCU) energy inspection checklist**, as compiled from a combination of Carbon Trust and Prospect checklists.

ENERGY	Yes	No	Comments
Has your organisation signed up to the Carbon Trust's carbon management programme, which helps large public and private sector organisations to reduce energy use?			
Do you have any on-site renewable energy sources installed?			

AIR CONDITIONING	Yes	No	Comments
Have there been any complaints about comfort conditions or reports of over/under cooling issues?			
Have ACs / Chillers been serviced in the last 12 months?			
Are heaters and air conditioning units operating in the same space at the same time?			
Is your air conditioning set to activate only when the temperature reaches 24 °C?			
Are the thermostats in the right places and set to the right temperature?			
Are filters and grills associated with heating, ventilation and air conditioning systems cleaned at intervals recommended by the supplier?			
Are there no obstructions in front of radiators, and air ducts?			
Are doors or windows closed when the heating or air conditioning is on?			
Is your building properly insulated and			

draught-proofed?			
Can staff individually control cooling in their workplace?			
Is air conditioning switched off when it is not required?			

LIGHTING	Yes	No	Comments
Can staff individually control lighting in their workplace?			
Are all bulbs low-energy? (LED, compact or modern fluorescent)			
Is lighting switched off in areas, or at times of day, when there's enough daylight?			
Is external lighting switched off during the day?			
Are bulbs, fittings and roof lights clean?			
Are light switches arranged conveniently and labelled?			
Are there individual desk lamps where appropriate?			
Do all staff turn off lights whenever and wherever they're not needed?			
Are motion sensor lights used in low-use areas?			
Does your workplace make good use of natural daylight?			

EQUIPMENT			
Is equipment regularly serviced and clearly labelled?			
Is any equipment left on when not in use? Why?			
Are there automatic power-reducing features, eg motion sensor lights, timers on water coolers, vending machines, IT power downs?			
Are all computer monitors flat-screen?			

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Are the energy-saving features on your office equipment activated, such as PCs, monitors, faxes, and printers?			
Is equipment labelled with the amount of energy it uses?			
Does the equipment have an energy monitor?			
Is new equipment installed in a way that makes it easy to use its eco-features?			
Are staff fully trained in its use?			
Do PCs automatically power down after working hours?			
Do you have seven-day timers (which ensure appliances are not left on overnight and at weekends) on shared equipment, such as printers, vending machines, and water coolers?			

Use the Carbon Trust free factsheet *'Assessing the energy use in your building'*
http://www.eauc.org.uk/sorted/files/ctl003.pdf

What to look for – simple checks and opportunities
The energy no-one is using

- Out of hours tests — Take meter readings at the end of the day and at the start of the next. The difference is the energy used whilst the building is empty. Can you account for this?
- Standby to save money — Some equipment will need to remain on during the day for occasional use, such as printers, photocopiers and coffee machines. Check for and enable any energy-saving modes.
- Lights are on, but no one is home — Lights switched on first thing can remain on all day, especially in winter when people arrive in the dark. Switch off the lights when there is sufficient daylight
- Workstations empty but equipment left on — Encourage staff to turn off monitors and desk lighting when leaving their desk for any length of time
- Ventilation fans running — Switch off ventilation fans in unoccupied areas to save fan energy and the need to replace any warm (or cool) air.

Take control

- Provide the right temperature — Check thermostat settings are correct and compare with the actual space temperature.
- Get the timing right — Check timers are correctly set for building occupancy. A minor adjustment may be required to achieve optimum comfort conditions
- Check lighting controls — External lighting should only be on when it is dark. If lighting is used as a security measure out of hours, can it be controlled by movement sensors?

Maintenance of energy-using equipment

Reducing the energy your building uses

The building fabric (walls, floors, roof, windows and doors) helps to keep staff comfortable but can contribute to heat loss.

- Reduce air leaks — Check around windows, doors, skirting and eaves for draughts and ask staff to report any discomfort. Fit and routinely check draught stripping for signs of wear or damage
- Repair any cracks — Replace any broken windows and repair any damage to the roof or walls immediately
- Replace any damaged or damp insulation — Check that pipework (especially hot pipes) and accessible roof spaces are insulated. Use removable covers on flanges to encourage replacement after maintenance
- Stop the drip — Check water services including taps, storage facilities and pipework, and ensure all drips are fixed immediately.

Reducing the energy your services use

Building services (heating, hot water, lighting and ventilation) are significant energy users in a business.

- See the light — Keep light fittings and glazing clean. Consider replacing old yellow fittings with reflector (mirrored) fittings
- Keep filters clean — Replace them at the manufacturer's recommended intervals and do not block fans
- Spot the difference — Ask staff to report any hot or cold spots in the building. Check when colder areas reach a comfortable temperature, what happens in the hot areas? Your heating may need balancing, or require more controls. Seek advice from a HVAC technician