

Introduction

Conducting energy audits on a regular basis helps identify energy waste and identify opportunities for improving energy practices. This aids carbon emission reductions, can make working environments more comfortable, ensures Health and Safety guidelines are met and helps improve communications between your estates department and the people that work in your building.

On the following pages is an audit checklist. It is designed to stimulate questions about energy practices. Not all questions will be applicable in your department but we've tried to make them as relevant to as many people as we can. Some questions may be difficult to answer without external help (e.g. is there roof insulation?). However, these questions are still worth asking as issues may have been overlooked.

Most of the measures are simple good housekeeping measures which can be implemented immediately. Other measures are low cost (e.g. fitting timers, pipe insulation or draught proofing) and will involve some expenditure and/or contacting estates.

1. Basic Information

Date of energy audit:	
Department/Building/Area covered:	
Persons conducting audit:	
Normal occupancy hours of building:	
Cleaning times:	

2. Lighting

Are any tungsten lights present? Can they be replaced with compact fluorescents (energy saving bulbs)? Look particularly in store rooms, uplighters, desk lamps etc.	
If there are several light switches, can they be labeled to make it more obvious which switches relate to which appliances?	
Can lights be switched off to make use of daylight? (e.g. lights parallel to windows or in corridors)	
If space is intermittently occupied (e.g. store rooms, toilets, kitchen areas, copying rooms, corridors) is there scope for automatic lighting controls?	
Are any external lights on during daylight hours?	

Can main lighting ever be switched off and use made of desk lamps?	
Do any light fittings need cleaning?	
Do windows and skylights need cleaning to allow in more natural light?	

3. Heating

What is the actual temperature in the space?	
Does the temperature vary much during the day?	
Do occupants complain it is too hot or too cold?	
If there are Thermostatic Radiator Valves (TRVs), are they set correctly? Do they actually work or are they broken?	
Are radiators effective and giving consistent heat? They may need bleeding of air or maintenance to remove dust and sediment.	
If there is a room thermostat, is it correctly set?	
If the room tends to overheat, is there any bare pipework that could be insulated?	
Are radiators blocked by boxes and furniture restricting air circulation?	
Are portable electric heaters in use? If so, why is the heating system not adequate?	
If there are permanent electric heaters with individual temperature and time control, are they set correctly?	
Are external doors and windows closed when heating is on?	
Are any window panes cracked or broken?	
Is there evidence of problems with double glazing (e.g. moisture between panes).	
Is there adequate draught proofing on windows and external doors?	
If there is a roof space, is it insulated?	
Are blinds closed at the end of the day during winter to cut down on heat loss?	

Is heating or air conditioning on in unused spaces, such as cupboards, corridors?	

4. Cooling and Ventilation

If there is air conditioning with local controls, make sure it is only on when necessary. Is it obvious how to control it? What temperature is it set to?	
Is air conditioning running at the same time as heating?	
Could the building reduce heat by closing blinds or fitting reflective film to windows which reduce solar gain? Remember, unnecessary lights and electrical equipment also produce heat.	
Are all external doors and windows closed when air conditioning is on?	
Are you making the most of natural ventilation? Opening windows overnight in the summer, where it doesn't present a security risk, will help cool the building down and reduce the need for air conditioning.	
Is heating or air conditioning on in unused spaces, such as cupboards, corridors?	

5. Electrical Equipment

Are computers, printers, photocopiers and other equipment switched off at the end of the day?	
Can screens and other equipment be switched off during the day?	
Can computers be programmed to 'power down' mode?	
Can standby settings be avoided? (e.g. TVs, LCD projectors, printers etc.)	
Are photocopiers, fax machines and other equipment on 'Energy Saver' mode during the day?	
Are photocopiers in a well ventilated area – not where there is air conditioning?	
Can a 7 day timer be put on some equipment? (e.g. photocopiers, water coolers, cold drinks machines). These cost less than £10 and can be	

purchased online or from electrical and homeware shops.	
Can any equipment be switched on later and switched off earlier?	
Could timers be fitted to water coolers?	
Are kettles overfilled for hot drinks?	
Can kettles be removed if there is a wall mounted boiler?	
Are fridges placed next to heat sources? They run more efficiently when in a cool environment.	
Is the office fridge/freezer defrosted regularly?	
Is the fridge thermostat working and set to the right temperature (2-4 °C)?	
Are microwaves switched off at the plug after use?	
Is equipment clearly labeled so that staff know how to activate energy saving features or switch it off?	

6. Water Use

Is there any evidence of water leaks? (e.g. wet pathways on a dry day)	
Are taps left running? Are there any dripping taps? Do taps need maintenance?	
Is there scope for push button taps?	
Are hot water heater timers set correctly?	
If there is no timer should one be fitted?	
Is water escaping from overflows either inside or outside buildings?	

7. Awareness

Are there posters/stickers/guidance displayed to remind people of good practice?	
Would it be of benefit to have a formal energy audit with a member of the estates team?	