Energy and housekeeping audit checklist

Conducting energy audits on a regular basis helps identify energy waste and opportunities for improving energy practices. This supports carbon reduction, can make working environments more comfortable, ensures Health and Safety guidelines are met, and can save money.

The below is an example audit checklist. It is designed to stimulate questions about energy practices. Not all questions will be applicable in your team, and you may also have specialist equipment that is not covered in the checklist, so please use it as a starting point and add/remove questions to suit your space. Some questions may also be difficult to answer without external help (e.g. is there roof insulation?), however, so you may need to discuss with relevant estates or facilities staff.

You may want to conduct your audit during different times of day (e.g. during peak use and at the end of the day), and in different seasons to increase the accuracy of your results. Most of the measures are simple good housekeeping which can be implemented immediately at no cost. Other measures are low cost (e.g. fitting timers, pipe insulation or draught proofing) and will involve some expenditure and/or contacting estates or facilities for support.

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) or LEDs? Look particularly in storerooms, uplighters, desk lamps etc. |  |
| If there are several light switches, can they be labeled to make it more obvious which switches relate to which lights? |  |
| 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? |  |
| Could the main overhead lighting be switched off and desk lamps used instead? |  |
| 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 left 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 make better use of the sun/shade to heat/cool the building? Perhaps 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 in favour of a full shut down? (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 are a low cost measure. |  |
| 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 places 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? |  |
| Are staff aware of how to report an issue that is leading to water and/or energy waste? |  |

8. General Comments and actions

Make sure to assign a person responsible and deadline for any action points.