

Carbon Ambassadors Energy Audit Checklist

Key energy saving opportunities

General Questions to ask		Comments	No of bulbs/electrical item & wattages
1	What are the organisations opening hours ? What are the periods of most energy use, for example when the building has the most number of staff in it?		
2	What is the organisations main business? Are there any bits of equipment that tend to use a lot of energy connected with their main business?		
3	How many employees does the organisation have? How many users of the building are there in a typical week?		
4	Does the organisation have a shut-down procedure for evenings and weekends? Does the organisation have a shut-down procedure for extended periods of the building being completely shut?		
5	What is the electricity tariff that the organisation is on? This can be checked by looking at their bill or contacting their electricity supplier.		
6	Is the organisation on a ' green tariff ' or receive renewable electricity at all? Their tariff will be higher in this case but their carbon footprint will be lower (or non-existent if they have 100% renewable electricity).		
7	What is the organisations main focus in completing the audit? To save money or reduce carbon emissions?		
8	Has the organisation had an energy survey or audit before?		
9	Are there any major refurbishments or upgrades planned?		
10	What is the annual electricity bill for the organisation approximately?		

	Equipment	Comments	No of bulbs/electrical item & wattages
1	Is equipment that is not required overnight switched off ? Games machines; photo machines; vending machines; laser printers, water coolers; tea urns and any other equipment.		
2	Is all equipment switched off at the wall at the end of the day/when not needed and not left on standby? Check water coolers, TVs, vending machines, printers etc.		
3	Are the computer monitors the old style CRT monitors rather than modern efficient LCD monitors?		
4	Is there more than one laser printer per five members of staff (approx)?		
5	Do any staff have kettles and fridges in their offices for their own use ? Communal facilities should be used at all times.		
6	Is the voltage over 244 Volts in any part of the building? (If you have an energy tracker you can use this to check but don't worry about this if you don't have one).		
7	What are the energy ratings of various pieces of equipment in the business? (If you can see them on the Energy Display Certificates stuck to the item).		
8	Do staff only fill kettles with enough water for their cup of tea as opposed to the whole kettle being filled for one cup?		
9	Can any equipment be switched off using timers ? This reduces dependence on human behaviour to switch off.		

Fridges

10	Are ice machines located near to glass washers/cooking equipment which creates heat? Are they in well-ventilated areas?		
11	Are any bars regularly not used for 48h or more? If so, are the bottle fridges switched off during these periods of non-use? If not why not?		
12	Is the fridge set to temperature setting 2-3 as opposed to the highest setting?		
13	Are the blinds on the dairy deck fridges closed overnight?		
14	Does the freezer have more than 2cm of ice build up? Check the freezer box of fridges too.		

15	Do any of the fridges have dirty or dusty radiators ? These should be cleaned often to heighten efficiency. Are there any cracks in the door seals?		
16	Are fridges/freezers actually used? If not they can be unplugged, and possibly disposed of.		

Heating, cooling and ventilation		Comments	No of bulbs/electrical item & wattages
17	Are the users of individual rooms happy with the temperature of their rooms? If not controls and timers need to be checked and adjusted.		
18	If the main ventilation equipment is being switched off by timers , when was it last checked to make sure it is working and at the appropriate timings? Is it set to 'timed' on the control panel, or has it been set to 'manual override'?		
19	Is ventilation/air conditioning switched off as soon as possible after areas close?		
20	Are bar areas still using equipment designed to divide smoking and non smoking areas? These should now be switched off given the smoking ban. Fan speeds on ventilation systems should also be reduced to reflect the reduction in pollution in the air.		
21	For any areas with air conditioning, what are the set point temperatures on the control panels? Ideally they will set to 24°C. They should not be less than 20°C.		
22	If air conditioning is being used, are all windows and doors closed and radiators turned off?		
23	If any portable electric heaters are being used, has the organisation eradicated any draughts / installed insulation over false ceilings?		
24	Are current central heating radiators on appropriate temperature settings and unobstructed by boxes, tables etc?		
25	Is the central heating thermostat set at around 18°C? It might need to be a little higher depending on users of the building?		
26	Are any extraction fan grills grimy or dusty ? If yes they will be working inefficiently.		

27	If there is a swimming pool , is it covered every night?		
28	Are there any draughty areas in the building? If so there are many types of cheap draught-excluding methods that can be used to combat this.		
29	Is the venue using as much natural lighting and ventilation as possible?		

Lighting		Comments	No of bulbs/electrical item & wattages
30	Are there any old standard tungsten filament bulbs (typically 60W or 100W) in use? Especially look over pool tables / in up-lighters / in desk lamps. Please count them.		
31	Are there any Halogen spotlights (these will be 25W or 50W) in use in kitchens or bathrooms (these bulbs will have the pronged endings)? Please count them.		
32	Are there any Halogen spotlights (these will be 25W or 50W) in use in mains voltage areas such as corridors and main rooms (these bulbs will have the circular endings)? Please count them.		
33	Are there any old fluorescent T12 tubes in use? These need to be changed to the newer, more efficient T8 tubes. Please count them.		
34	Does the building have any energy-efficient fluorescent T8s, T5s or compact fluorescent bulbs ? Please count them.		
35	Does the building have any energy-efficient LED lighting at all?		
36	What time do the cleaners clean each area? Does the organisation leave lights on for the cleaners? Do the cleaners leave the lights on after they have finished? If this is the case it is useful for you to count up all the lightbulbs and wattages in the building so we can calculate the savings possible.		
37	Are there any motion or light sensors in the building?		
38	Are there any lights on where there is adequate natural lighting ? Check atriums and foyers, any corridors with lots of windows and outside lighting.		
39	Are any areas over-lit ? Look at corridors and meeting rooms. Could every other bulb be removed?		

40	Are there any areas with lights on and no-one in the room ?		
41	In areas with large banks of light switches are there labels to direct users to the right switches?		
42	Are there any light bulbs that are flickering or blown but are still in the socket? These need to be removed even if there is no replacement bulb available immediately.		
43	Are there any outside lights in use? Are these turned off when not needed or on a sensor?		
44	Can desks/furniture be moved around in line with light switches and organisation?		
45	Is it more efficient to use desk lamps rather than central lighting?		

Water		Comments	No of bulbs/electrical item & wattages
46	Do the toilets have any water-saving devices installed? Such as Hippos?		
47	Are all urinals regulated by either a motion sensor or a flow restrictor pressure valve?		
48	Is the tap water too hot ? Look for 'warning/caution' signs that have been placed above taps. The cylinder thermostat should be set to 60°C/140°F.		
49	Are there any dripping taps?		

Awareness

50	Do staff turn lights off when they go to lunch / meetings?		
51	Do staff turn their computers off if they are away from their desks for more than an hour?		
52	Are there awareness stickers by the light switches? These are available free from the Carbon Trust.		
53	Do staff receive training or guidance on how to reduce energy consumption?		