

COUNT YOUR CARBON

Self-led Energy Audit

Produced by



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Introduction

This simple audit is designed to support schools to understand the sustainability of their energy practices, the key factors that contribute to this, and to identify areas within your control that you can change.

It's formatted as a checklist with points listed under sub-categories. It can be completed on a walkaround, with most questions requiring a tick or a cross. Some may need a short amount of text.

You may require the support of your site/operations manager and your business manager to complete some questions.

The results will enable you to identify actions that are 'quick wins' or short term, and those that are longer term projects, requiring more investment and support. You can include your chosen actions in your carbon reduction plan.

These results can also be shared with an external energy-audit company, should you engage one, who will support you to make deeper, more involved sustainable changes.

Procurement

Question	✓ / x / text
Do you purchase your energy on a 'green tariff'? On a green tariff, some or all of your energy comes from renewable electricity sources like wind, hydroelectric and solar, or the supplier contributes to the development of renewable energy products.	

Buildings/site

Question	✓ / x / text
What type of buildings do you have across your site? I.e. brick, portacabin, stone etc. Understanding your buildings will help you to know what type of action/retrofit you may require to make them more energy-efficient.	
Do you have any renewable energy sources on site? I.e. solar panels or wind turbines. Self generation can greatly reduce your energy carbon-footprint and lower bills.	
Do you know what percentage of your energy usage comes from these sources?	

Monitoring and management

Question	✓ / x / text
Do you have SMART metering for gas and electricity usage set up across your site?	
Is SMART metre information monitored and tracked to identify peak usage times and areas? This will help to identify energy waste, such as energy being used outside school hours?	
If you have oil heating on parts of your site, are you able to monitor and track usage? ie. through a gauge or assessment of regular bills.	

Lighting

Question	✓ / x / text
Do you have energy-efficient LED lighting in each room? LED is the most energy efficient form of lighting, followed by fluorescent tubes. Fluorescent tubes differ and are measured in T-Sizes. They're efficiency order is T5 > T8 > T12.	

Lighting continued

Question	✓ / x / text
Have all lights (internal and external), from classroom to staffroom, been audited and labelled with a traffic light system, so everyone is aware which lights don't necessarily need to be switched on during the daytime?	
Do you have motion sensor lighting for areas with intermittent usage?	
Are all windows in your school kept display-free to reduce the need for artificial lighting?	

Heating and cooling

Question	✓ / x / text
What type of heating do you use in your buildings? Options include mains gas (the most commonly used), LPG, coal and biomass (which is generally more eco-friendly).	
Has your boiler been serviced in the last 12 months, ensuring efficiency?	
Are boiler elements such as valves and pipes insulated, reducing heat-loss?	

Heating and cooling continued

Question	✓ / x / text
Is your hot water storage tank insulated reducing heat-loss?	
Is heating timed to ensure usage is set for active (ie. learning) times only?	
Are classroom and staffroom thermostats set to 18°C (21°C for some SEND schools and those with very young children)?	
Are corridors, the school hall and toilet thermostats set to 15°C (18°C for some SEND schools and those with very young children)?	
What type of glazing do the windows across your site have? I.e. Single, double, secondary, triple or a mixture? Secondary and triple are the recommended options.	
Are radiators free from obstruction, ensuring efficient heat circulation?	
Have exterior doors been audited and amended to reduce draughts and heat loss?	
In colder months, do pupils enter their classrooms through communal entrances and internal doors to avoid opening multiple, external classroom doors?	
If you have air conditioning units, are they set to come on only at >24°C?	

Device usage

Question	✓ / x / text
Are devices (ie. computers, tablets, printers and whiteboards) labelled with a traffic light system, so everyone is aware which should be turned off when not in use and which devices should remain permanently switched on?	
Do you have staff or pupil energy monitors to ensure devices are on only when in use?	
Do you have automatic shut down enabled on on ipads, computers, and laptops?	

Kitchen

Question	✓ / x / text
Are thermostats in kitchens set to lower temperature than other spaces - 16-18°C - reflecting the fact that food production also heats this space?	
Are fridges and freezers emptied and powered down during holidays, if possible?	
Are ovens labelled with warm-up times, so they can be used more precisely?	

Education and Culture

Question	✓ / x / text
In the previous 12 months, has your school had an assembly focused on reducing energy use in school?	
Does your school provide regular updates about its energy use with pupils, staff, and parents?	
Is energy sustainability a regular agenda point on staff and governor meetings?	