



Department for
Energy Security
& Net Zero

CATAPULT
Energy Systems

Climate Action Plan Decarbonisation



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What is the purpose of this guide?

As part of the **Public Sector Decarbonisation Guidance** funded by the Department for Energy Security and Net Zero (DESNZ), the Energy Systems Catapult (the Catapult) has produced this guidance to support schools and help them to access the funding needed to plan for and deliver decarbonisation projects across their built estates. To do this, the guide focusses on what is required to develop the decarbonisation pillar of a Climate Action Plan. It is designed to help schools that are at the beginning of their climate action planning journey and will explain the common terms used in relation to building decarbonisation, and signpost to more resources and support for those ready to take the next steps.

Who is this guide for?

This guide is written for the **sustainability leadership** in your school. This leadership could be:

- A head teacher.
- A staff member with responsibility for sustainability.
- A school business manager or bursar.
- A school governor.
- Operational staff such as facilities or estate management.
- A group of people who are collectively responsible for sustainability.

Identifying what sustainability leadership looks like for your school is completely **down to the needs of your school or trust**.

Getting a team in place

Department for Education (DfE) best practice has shown that change is delivered when driven by a diverse team of passionate individuals.

It is important that your sustainability leadership includes a diverse set of skills across your school environment. Your climate action plan will be informed by education staff (such as teachers) who know what is needed to foster a good learning environment, operational staff (such as estate management) who know the technical aspects of how your site operates, pupils through climate action groups, and the senior leadership team.

Children and young people are worried about climate change and want to know more about how climate change will impact their lives in the future. Getting pupils involved in your climate action plan will help embed the plan in the culture and ethos of your school. This can be done by forming Climate Action Groups, appointing 'eco reps', and partaking in impact days like Earth Hour¹.

The presence of senior leaders from your organisation (such as the Senior Leadership Team or governors) is critical for planning and implementation to be successful. They have the authority, capacity, and support to influence and lead strategic change within the setting.

For multi-academy trusts, your sustainability leadership might be devolved to individual settings, or you might have one centralised team who are responsible for sustainability across the trust.

¹ <https://www.earthhour.org/>

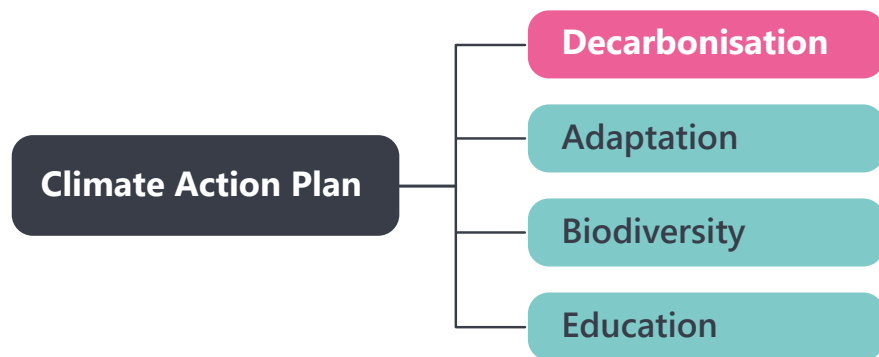
Background

A key initiative of the DfE's sustainability and climate change strategy for education is that all education settings should have a **nominated sustainability lead and will have a holistic climate action plan by 2025**. This includes early years settings, schools, multi-academy trusts, colleges, and universities.

A climate action plan is a strategy that outlines a pathway to reducing your school setting's impact on climate change while reducing your energy bills. You may have multiple climate action plans across your setting (for example in a multi-academy trust), or a single plan covering your whole estate.

The DfE has identified four pillars covered by a Climate Action Plan². Each of these sections in your climate action plan may be formed of one or several documents working together to form a whole.

DfE are providing support and guidance on the **Sustainability Support for Education** digital support hub to help support nurseries, schools and colleges with developing a complete climate action plan.

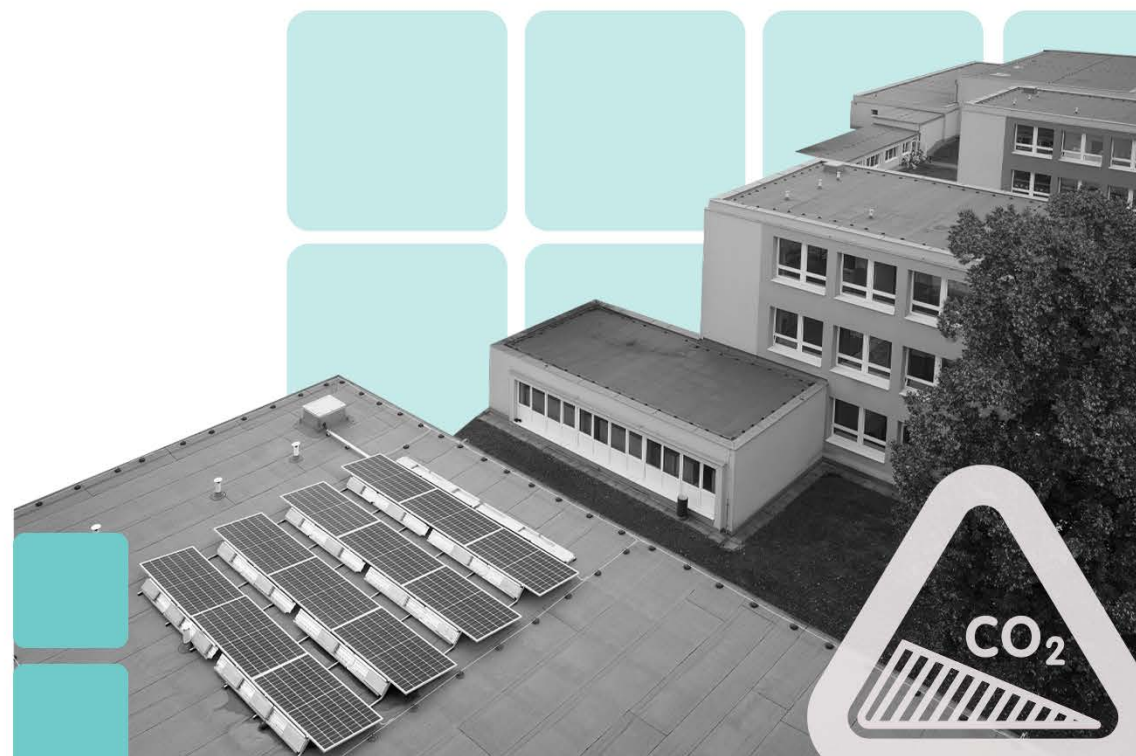


² <https://www.gov.uk/government/publications/sustainability-and-climate-change-strategy/sustainability-and-climate-change-a-strategy-for-the-education-and-childrens-services-systems>

What is decarbonisation?

For a school, decarbonisation in the simplest of terms is the process of reducing or eliminating the emission of greenhouse gases generated through energy use in a school building. This is achieved through a combination of improving energy efficiency, such as upgrading lighting to LEDs, replacing fossil fuel use with low-carbon technology such as replacing gas boilers with heat pumps, and installing renewable energy such as solar PV.

This guide specifically outlines how to develop the first section of your climate action plan: **a plan to decarbonise your school buildings**.



Why is decarbonisation important for schools?

The DfE's Sustainability and Climate Change Strategy sets an ambitious target to **reduce greenhouse gas emissions by 75% by 2037** across all education settings. A climate action plan is the first step for a school to take.

Having a climate action plan for your school not only provides a plan to reduce your organisation's carbon footprint and decarbonise, but it will also help your school to reduce energy bills.

What does this mean in practice?

A pragmatic way for you to tackle the decarbonisation of your school buildings is to prioritise actions:

1. Make your school as energy efficient as possible by insulating, controlling energy usage and using energy efficient equipment.
2. Replacing fossil fuel boilers with low-carbon alternatives such as heat pumps.
3. Installing renewable generation such as solar PV.

This prioritisation is often referred to as the 'whole building approach' and is intended to prioritise actions that will lead to a reduction in your school energy bills, while enabling a low-carbon future.

See a worked example of the impact on fuel bills for decarbonising a school building in the **appendix**.

How will my school benefit?

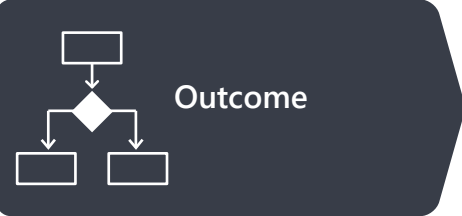


- Reduced energy bills by using energy more efficiently and generating your own clean energy using renewables. Savings can be reinvested back into the school to improve the quality of teaching, learning environment, and offset the energy costs of installing low-carbon heating such as heat pumps.
- Opportunities for staff and students to develop their understanding of green careers and develop their green skills by engaging with actions.
- With careful planning of actions, staff and students can benefit from an improved learning experience with improved comfort levels and learning environment such as better lighting.
- Boosts the school's reputation by demonstrating the school is on a pathway to Net Zero.
- The school's role as a community influencer is amplified, with potential to strengthen connections with the parent community.

How does this guide help?

This guide will help you to plan out the decarbonisation section of your climate action plan and provide you with the advice, guidance and resources needed to access funding.

How this guide is structured

This guide focusses on tackling four key areas:

	1. Taking the first steps	2. The building audit process	3. Your decarbonisation plan	4. Funding
 <p>Outcome</p>	Understand your site's energy performance.	A report outlining potential projects and impact on energy consumption and fuel bills.	A strategy that details a pragmatic approach to decarbonising your school estate.	Explore the funding options available to fund your decarbonisation plan and identified projects.
 <p>Role of the school sustainability leadership</p>	<p>Check that you have a Display Energy Certificate.</p> <p>Identify sources of energy data available.</p>	<p>Source a reputable contractor to undertake a building audit.</p> <p>Act on the "no regret actions" in report findings.</p>	Use the findings of building audits and advice resources to develop a decarbonisation plan.	<p>Apply for funding.</p> <p>Ensure decision makers are on board with proposals and applying for funding.</p>
 <p>Role of a contractor</p>		<p>Carry out the building audit.</p> <p>Work with the school to ensure it has the outputs it requires to progress.</p>	Develop a strategy or support the school in developing a strategy.	<p>Signpost the school to sources of funding, help understand eligibility and timescales.</p> <p>Support a school to develop a robust application for funding.</p>

1. Taking the first steps

This section outlines the first steps to take in your school's decarbonisation journey which is all about understanding your school's energy performance, what information can help you expand your understanding of energy use, and the funding opportunities out there to take the next step.

Actions for you to take

1. Find out if your school has a Display Energy Certificate (DEC) by **searching the government database**.
2. Use that information as the basis to understand the energy performance of your site.
3. If you don't have a DEC, we would advise commissioning one. On average this will cost no more than several hundred pounds per building. A register of qualified DEC assessors can be found at: **Get a new energy certificate**.

Where is energy used in a school?

Energy consumption can vary depending on the size of your school, the age and condition of your buildings and the equipment within, and whether your school hosts any out of hours activities.

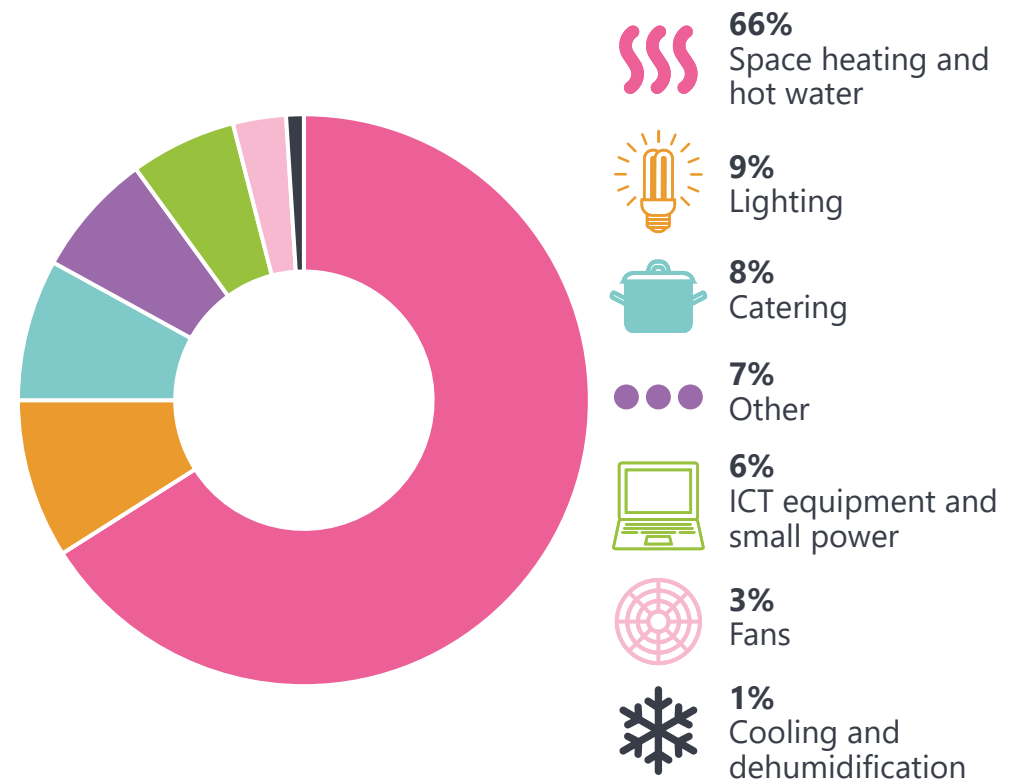


Figure 1: Percentage energy use in a typical school³

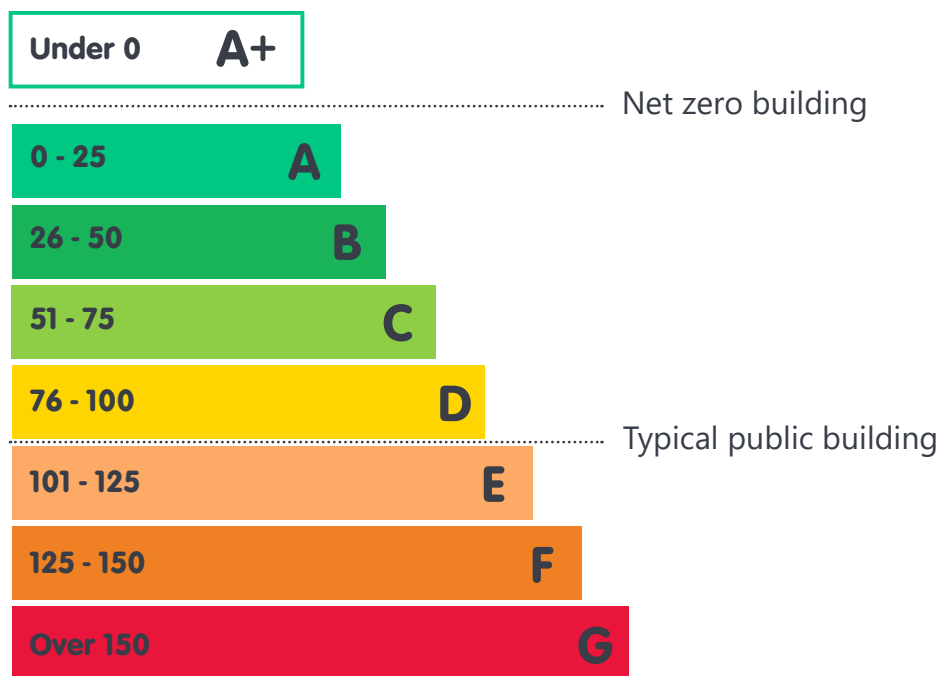
³ Building Energy Efficiency Survey 2015

Understanding energy use

There are several sources of information that can be accessed quickly to understand the energy performance of your school. The first place to look is your school's Display Energy Certificate (DEC).

If you don't have an in-date DEC, we would advise commissioning one. On average this will cost no more than several hundred pounds per building.

Your DEC will tell you the energy performance of your school and provide an operational rating on a scale of A to G, with A being the most efficient and G being the least. The typical performance of a public building is D (100).



⁴ These are called MPAN or MPRN numbers and are useful information to collect as they can help you access the metered data.

Other sources of energy information

There are several other sources of energy information that might be available across your school setting. These are:

Data Source	Use	Scope	Granularity
Energy Performance Certificates (EPC)	Understand building energy performance	Building	Benchmark
Utility bill: provided as a monthly or quarterly bill for individual types of fuel for the entire site	Baselining your energy consumption	Whole site	Quarterly to monthly
Fiscal meter: a meter located at a building in-come and will typically have a serial number ⁴ used for billing	Understanding building energy demand and billing	Building	Monthly to half-hourly
Sub meter: measurement of a defined zone, area, circuit, or system (e.g. lighting) in granular detail	Identify areas of high demand	Department System	Monthly to half-hourly

Recommended action:



If you are unsure about what metering you have in place, speak with your utility provider to see what scope and granularity of data can be made available. This is usually at little to no additional cost and could give you access to the most detailed half-hourly data for your site consumption.

2. The building audit process

This section outlines what a building audit will provide you with, what the process of getting an audit involves and how you can make sure that you are getting the best audit for your site's needs by working with a contractor.

A building audit is the next step in advancing your understanding of how energy is used in your setting and beginning to identify measures that will help you to reduce your energy use. The building audit process will use the data collected in step one to identify potential areas of focus for the audit and help determine what measures are the most appropriate for your setting.

Actions for you to take



1. Speak to staff in your school who might have access to information sources about your school's energy use and collate as much information as you can.
2. Speak with your contractor⁵ so they can advise you what information they will require.
3. Understand what outcomes you'd like from your building audit. These can range from energy auditing, through to conditions and identification of energy-saving measures.
4. Understand your school's internal procurement processes.
5. Speak with your local authority about access to building auditing services, or accessing service frameworks.

A building audit will need to be undertaken by a third party. They will require data on a school's energy consumption to understand how and where energy is used to create a baseline from which to identify energy savings.

What is an energy baseline?

It is the amount of energy used when your school is operating during a typical school day when all classrooms are in use, lights are on, heating, ventilation and cooling (HVAC) systems are running, and students and staff are using computers and other electronic devices.

Understanding this baseline helps schools figure out ways to save energy and money, like turning off lights when they're not needed or using more energy-efficient appliances.

Building audits are a form of survey which **help to establish the way in which energy is used in a property**, to determine whether energy management arrangements are being followed and are effective, and to identify opportunities to improve energy management and performance.

⁵ If you don't have a contractor on board yet, please see the sections on the next pages which detail where to find a building auditor and what to look for in a contractor

What does an audit involve?

A building audit often includes desktop assessment activities ahead of visiting the site to ensure the auditor has a base understanding of the building(s) energy use. This will be followed by a site visit and site walkaround. It is recommended that staff who are familiar with the mechanical operation of the school are present for the visit to provide access to equipment (e.g. boiler rooms) and provide information on maintenance.

What information to provide

In advance of the site visit, make sure to provide your contractor with as much background information about the site as possible. This will make sure the building audit process runs smoothly. Where available, you should provide:

- Energy consumption data.
- Building plans showing room layouts
- Diagrams of heating and electrical circuits.
- Asbestos and reinforced autoclaved aerated concrete (RAAC) assessments.

If you are unsure what information to provide, make sure to speak with your contractor before they are due at the site so that you have sufficient time to locate the required information.

What outcomes should I expect from a building audit?

The audit should include an assessment of current energy consumption, cost of energy, and carbon emissions as well as the condition and operation of the energy using equipment/plant within the building.

Why is condition of heating plant important?

The heating plant is the equipment that generates heat for your site. Typically, this will be a boiler.

This information will help you determine when it is most economically viable to potentially upgrade your boiler to a low-carbon source of heating, such as a heat pump, and make applications for funding.

The routine maintenance cost of replacing the boiler like-for-like could be considered as an offset for some of the cost of a new heat pump.

Funding schemes such as the **Public Sector Decarbonisation Scheme** have an eligibility requirement that heating systems must be at the end of its useful life, which typically means a boiler in excess of 10 years old, before grant funding can be considered.

The audit will also include suggestions of improvements that could be made to reduce energy consumption, costs and carbon emissions.

Make sure that you specify what outcomes and formats you would like the information to be provided in. This could include upgrades or replacement of equipment (for example upgrading lighting to LEDs), changes to controls (to make sure buildings are heated efficiently), or installation of new measures (for example solar PV).

The suggestions may also include high-level recommendations for how and when heating system upgrades, such as the replacement of end-of-life equipment, might take place. For such measures, a building audit will not usually be sufficiently detailed to prove the feasibility of the proposed changes and ensure the best options are selected.

However, the high-level recommendations can be used to highlight buildings and systems which should be taken forward into feasibility studies.

Often outputs are report based but there will typically be a spreadsheet with calculations sitting behind it. Make sure you ask for the audit notes as well as the calculations. Seek out justification and/or references for any assumptions and methodologies applied.

You may be asked to explain these later, for example as part of an application for funding or when making the case to school governors. Having the information clearly set out in your audit will help you.

This is especially important if multiple contractors complete audits across your estate (e.g. multi-academy trust), using slightly different approaches and assumptions.

How much will an audit cost?

Cost will vary based on several factors including:

- The size of your school.
- The type of activity you require (see section above).
- The level of detail you require. For example, do you need your contractor to provide you with more detail about options?
- The availability of data for your site. If data is missing, then it will take time for someone to collect and analyse missing information.
- Accessibility to your site. Can your site be always accessed, are some areas such as roofs accessible?
- Any site-specific complexities for example: specialist therapy equipment, swimming pools or grade listed buildings.

The average cost for a building audit and the resulting report is shown in the table below:

School size	Typical cost
Small: 1-2 buildings, 1 plant room	£2,000 - £5,000
Medium: 2-3 buildings, 2 plant rooms	£3,000 - £7,000
Large: 4-6 buildings, 2-4 plant rooms	£5,000 - £12,000
Extra-large: 6+ buildings, 4+ plant rooms	£7,000 - £20,000

It is important that you seek firm costs by obtaining quotes, in line with your internal procurement processes. This will ensure that you are receiving good value for money.

Where to find a building auditor

You will be responsible for finding a contractor to undertake your building audit. There are several routes to finding the skills and expertise you need.

- Speak with your local authority to see if they have existing relationships with contractors, or can access service frameworks on your behalf.
- Check what your school's procurement rules are and follow DfE guidance on **finding the right route to buy**⁶. For low-to medium value projects (up to £40,000), seek at least 3 quotes from suppliers to help determine the best value for money for the service you are seeking.

⁶ <https://www.gov.uk/guidance/buying-procedures-and-procurement-law-for-schools/find-the-right-way-to-buy>

- Speak with your local Net Zero Hub for advice on securing a contractor in your local area. There are five Hubs across England. To contact your Hub, please visit their website (details provided in the help and resources section).
- Speak with other schools in your local network and ask for recommendations for contractors.

Need to develop a scope of works?

Please download our **standard scope of works toolkit**⁷ which provides you with example scopes that you can edit to suit the requirements of your project.

Using frameworks to your advantage

A procurement framework is a structured way of accessing goods and services from a pre-approved supplier list. It helps simplify the process of acquiring skills and expertise by establishing a set of rules and guidelines for procurement activities, ensuring that purchasing decisions are consistent, efficient, and compliant with relevant regulations.

There are several routes you can explore to find which frameworks your school might be able to access.

- Begin by reviewing DfE's guidance on finding the right route to buy. This includes guidance on when to buy from a framework agreement, when to get bids or quotes and when to run a public contracts regulations (PCR) compliant buying process.⁵

- Consult with central purchasing bodies such as **Crown Commercial Services**⁸ or speak with your local authority to see what frameworks they have access to.
- Review advice from the DfE on **buying for a school**⁹ and approved framework list where you can search for frameworks for a wide range of services.
- MATs will likely have a dedicated procurement team that can advise about the frameworks the Trust can access.
- There are several government-operated online tender portals such as **Find a Tender**¹⁰ and **Contracts Finder**¹¹ that can be used to advertise for goods and services.

List of procurement frameworks:



A quick way to search for procurement frameworks is to download our list of **frameworks and procurement routes**. You can filter the list down to the type of services required and audience.

⁷ <https://es.catapult.org.uk/tools-and-labs/public-sector-decarbonisation-guidance/procurement/>

⁸ <https://www.crowncommercial.gov.uk/>

⁹ <https://www.gov.uk/guidance/find-a-dfe-approved-framework-for-your-school>

¹⁰ <https://www.gov.uk/find-tender>

¹¹ <https://www.gov.uk/contracts-finder>

What to look for in a contractor

- 1. Certifications:** look for a contractor with relevant qualifications in conducting buildings audits, building services assessment or energy management. These might include Chartered Engineer (CEng), Member of the Chartered Institution of Building Services Engineers (MCIBSE), or Certified Measurement and Verification Professional (CMVP).
- 2. Track record:** ask your contractor to provide examples of previous heat decarbonisation plans, case studies of projects they have delivered, and ask for references. Speak to your local authority to see if they have used the contractor before.
- 3. Technical expertise:** your contractor should have a strong understanding of building systems, HVAC (heating, ventilation, and air conditioning) systems, lighting, insulation, and other factors that impact energy consumption. Look for contractors with engineers or technicians skilled in energy analysis.
- 4. Knowledge of regulations and standards:** ensure that your contractor is familiar with relevant energy regulations, standards, and best practices in your region. This includes knowledge of energy codes, building regulations, and industry standards for energy efficiency.



3. Your decarbonisation plan

This section outlines how to get the best decarbonisation plan for your school.

The shape and structure of your decarbonisation plan will vary school to school. A multi-academy trust may have one decarbonisation plan covering their entire estate, or multiple decarbonisation plans covering individual schools in the trust.

Some schools may choose to add additional sections to their decarbonisation plans, for example specifically linking decarbonisation planning to the curriculum.

With the above in mind, the following sections should be considered as a guide, and not exhaustive to all the ways schools will shape their plans to meet their individual requirements.

Drivers and vision

Before you start to develop your decarbonisation plan, you should think about what the key drivers and vision may be for your school and state them clearly in your document. How well you do this is likely to determine the level of engagement you will be able to achieve and enable you to set an aspiration level.

Think about how your organisational values/vision aligns with different drivers, which are likely to resonate more?



How can your decarbonisation...

- a. Reinvest budget saved on reduced fuel bills into student education?
- b. Improve comfort and education environment through better heating and lighting?
- c. Promote climate credentials of the school?

Note: these will be different and specific to your school.

Governance structure

Ensuring the correct governance framework is in place is fundamental when developing your decarbonisation plan. This will ensure an accountable party is appointed to oversee the programme. This could be the sustainability leadership in your school, the senior leadership team, or governors.

1. Who are the key stakeholders at all levels?
2. Who is responsible and for what?
3. Are there clear roles and responsibilities for different teams and individuals?
4. How do the roles relate? (they may be in different teams but need to work together)
5. How will the approval, sign-off and decision-making process be set up in an appropriate but streamlined manner, ensuring all relevant stakeholders are consulted and content with the arrangements?

Record this in organisational structure diagrams with roles and names, and governance style terms of reference, reflecting on how different types of decisions will be made from both a project and programme perspective.

Progress reporting and decision making

You will need to make sure that within the governance structure there is a plan for regular reporting and sharing that keeps stakeholders up to date. This might be at monthly governor meetings, or senior leadership team meetings.

1. Have you set out how frequently the stakeholders will meet to discuss progress?
2. Are there different groups who would meet at different times? An oversight group and a working group?
3. How are the meetings going to be managed?
4. What should be discussed?

Communication and stakeholder engagement

You should also consider including a section on how you will report progress and decision making (where appropriate) to other stakeholders both within and beyond the school. This should include communicating with everyone involved in or affected by your decarbonisation plan.

1. You have mapped out your stakeholders and stakeholder groups.
2. You understand what their concerns are.
3. How the stakeholders fit with your strategy and vision, and how you propose to communicate it.

Decarbonisation projects

Using information gathered at the first steps and building audit, detail what projects are required to decarbonise your school buildings.

Make sure to consider:



1. What are the feasible projects and how does this link in with routine maintenance of your school?
2. What budget is required to deliver and what internal budgets are available?
3. What are the anticipated impacts on energy bills and carbon emissions?
4. What are the funding sources that are eligible to apply for, and when are they open to applications?

You should acknowledge the investment needed to fund the projects identified in the plan. This should cover all aspects of the programme from the management and organisational, to the delivery of projects and subsequent monitoring.

Having an overall budget estimate for the whole programme is useful to manage expectations and plan for future funding calls. It is likely to improve in quality and accuracy as knowledge of costs grows through delivery.

Baseline emissions and target setting

You should have a clear view of where your emissions come from. You should provide a summary of the size/make up of your school estate and operational activities.

Much of this information will come from the building audit stage.

Consider outlining in your plan:



1. Your built estate – number of buildings/sites
2. Age of the buildings
3. Age and condition of the current heating system.
4. Future plans to alter your organisational boundary (disposals/mergers/acquisitions/new builds)

Your baseline consumption and emissions set an important starting point from which everything is measured. Information on setting a baseline is covered in the first sections of this guide.

In most circumstances, you will likely need the support of a specialist contractor to help you determine what your baseline is.

Check that you have:



1. The baseline year you have used, with justification.
2. Energy - Your current energy consumption levels, if benchmarks are available then check how your buildings compare.
3. Costs - Your energy costs which show how much you are currently spending on energy consumption in figures plus, if possible, as a percentage of total spend of your organisation.
4. Emissions – the carbon emissions associated with your building energy use and information on how this was calculated (e.g. emission factors used).
5. The organisational and operational boundaries applied (pertinent to multi-academy trusts).
6. Sources used for emissions data – utility bills, sub-metered data etc.

If you have targets that have been set, then these should be stated. If you have interim targets, these should be included and if these are to be monitored then make sure you include a description of how you will measure progress against them.

Think about how other strategies for your school might impact your plans.

Think about:



1. Changes to the size of your school or trust.
2. Planned or future changes to how the school might operate.
3. Projects that are already in the pipeline.

Timelines and reporting progress

Where possible, aim to set realistic targets that at a minimum fulfil your role in meeting greenhouse gas emission reduction of 50% by 2032 and 75% by 2037.¹²

State when you are aiming to deliver different projects and what they will contribute to your strategy (after the project is finished).

1. Show targets against a timeline.
2. Set interim targets to help monitor progress.



Scoping, designing and evaluating the impact of a decarbonisation project relies on access to high-quality data.

State how you are going to monitor progress including how it will be measured. Have you detailed the processes your school will put in place as part of a monitoring and verification plan, including:

1. Data collection – i.e. submetering for energy usage
2. Internal and/or external verification of data
3. Key performance indicators (KPIs) to evaluate project success against



You may require external support to help you develop a monitoring plan for your project. They can be complicated and require specialist expertise to put in place. You can determine the level of scrutiny you need, which may allow you to measure success at a high level (e.g. changes to fuel bills).

¹² Sustainability and climate change: a strategy for the education and children's services systems (Department for Education, 2023)

Resources, skills and capabilities

You should provide the context around existing resources available and outline future resources required to develop and deliver your decarbonisation plan. This should include external capacity and capabilities that will be required.

Consider the following points:



1. How many projects do you plan to undertake across your decarbonisation plan and building portfolio?
2. Timescale considerations- how long will it take to deliver the plan?
3. What are the anticipated resource requirements (both financial and human)?
4. Do you have the capacity or skills in-house to deliver decarbonisation projects?
5. If not, what will the delivery route look like? What skills or services will need to be procured externally?

Engaging pupils

The development and delivery of your decarbonisation plan is a fantastic opportunity to engage students with the issue of climate change. It provides opportunities for students to develop their green skills as well as understand what opportunities exist in green careers.

Depending on your setting and project, engagement opportunities will vary. For younger students an exploration of why the decarbonisation plan is being developed could be followed, alongside developing students' understanding of the technologies being delivered in the plan.

For older students there are opportunities to engage with some of the preliminary work by calculating the school carbon footprint (Count Your Carbon tool by Eco-Schools¹³) and through talking directly to the various stakeholders involved in installation of the project to understand future opportunities in green careers.

Where renewable energy technologies are adopted, suppliers will be able to provide accurate and timely data on generation which can be incorporated into the curriculum and used as a tool to engage the school community.

¹³ Count Your Carbon tool by Eco-Schools

Linking to other pillars of your climate action plan

Whilst decarbonising the school estate is an important step towards the DfE target of **reducing greenhouse gas emissions by 75% by 2037**, we know this alone will not be enough.

Significant emissions from schools relate to the way in which the community travel to and from site each day, the food that is consumed on site and the procurement of goods and services used by the education setting. A comprehensive climate action plan should begin to consider these contributors to a setting's carbon footprint and implement actions that reduce emissions from these sources.

Improvements to the education setting also need to consider how best to adapt and be resilient to climate impacts. Many decarbonisation plans will involve measures which address this pillar and this should be explicitly thought about when undertaking any capital works.

Through decarbonising the school estate and reducing emissions, your education setting is indirectly supporting biodiversity and green infrastructure by reducing the potentially ecologically harmful impacts associated with a high emissions scenario.

The Department for Education (DfE) are supporting education settings on their sustainability journey with providing the **Sustainability Support for Education**, a digital hub of resources, guidance, services and tools to help nurseries, schools and colleges identify appropriate action to develop, or build on a climate action plan. The DfE have also funded a national roll-out of the **Climate Ambassadors** programme, which matches volunteer climate experts across a range of industries with local settings in need of expert support and peer to peer learning opportunities. The Climate Ambassadors regional hubs can also connect settings with **Let's Go Zero Climate Action Advisors**.



4. Funding

This section outlines the funding options to help plan for, and decarbonise your school. The section covers funding that is specifically available for schools, and then covers wider public sector grant schemes that schools can apply for.

Actions for you to take:



1. Check if your school received additional school condition allocations (SCA) for energy efficiency. If this funding is unspent, it can be used for decarbonisation planning.
2. Check what funding you might be eligible to receive from your local authority (for maintained schools) via Section 106 funding.
3. Check if you are eligible to apply for the Conditions Improvement Fund.
4. Determine which grant funding programmes you are eligible for which meet your project needs.
5. Ensure you are aware of all funding source/scheme timescales and application requirements, so that you can plan when and how you will make your applications.

This guide does not cover private sector funding options, however this might be a path that schools wish to explore.

School condition allocations for energy efficiency

In 2022/23, eligible schools and sixth-form colleges received £447 million of capital funding as part of their SCA to invest in energy efficiency upgrades, helping to manage energy consumption and save on bills.

Funding could be used for the installation of new energy efficiency measures to reduce energy bills, and to carry out building audits, a crucial step in developing your decarbonisation plan. How funding was spent was left entirely up to individual schools.

To find out how much your school received, you can search the **published list of school funding allocations here** on the DfE website.

Once you have this information, speak with your school finance manager to see whether that budget is available, whether it is earmarked for a project, or what it has been spent on.

Section 106 funding

Section 106 funding is allocated by local authorities and contributions can be used to improve the infrastructure of existing schools, such as upgrading classrooms, building new facilities like sports halls or libraries, and enhancing outdoor play areas. These improvements ensure that schools can handle the increased number of students without compromising the quality of education.

Section 106 funding can be used to support energy efficiency projects in schools, including the installation of renewable energy, and water conservation projects.

Part of the funding can also be dedicated to educating students and staff about energy efficiency and sustainability practices. This can include creating green teams, developing curriculum materials, and conducting workshops and training sessions.

To find out more about what funding might be available to your school, speak to your school's administrators or facility managers to reach out to the planning department of your local authority to inquire about available funding programs, eligibility criteria, and application procedures for energy efficiency projects or other initiatives supported by Section 106 contributions.

Additionally, education departments or school funding offices within the local authority may provide guidance and assistance regarding funding opportunities for schools.

Conditions Improvement Fund

The Condition Improvement Fund (CIF) is a UK government funding scheme aimed at helping eligible academies, sixth-form colleges and voluntary aided (VA) schools maintain and improve their buildings and facilities. It is administered by the Education and Skills Funding Agency (ESFA).

The CIF provides funding for essential repairs, maintenance, and improvements to school buildings to ensure they are safe, secure, and provide a suitable environment for teaching and learning.

The primary objective of the CIF is to address significant condition needs and health and safety issues in school buildings. This includes funding for repairs to roofs, windows, heating systems, electrical wiring, and other essential infrastructure. Funding is prioritised on the severity of conditions need, impact on teaching and learning, and value for money.

Energy efficiency improvements that align with the core aims of the scheme to improve the condition of schools could be eligible for funding. CIF can also be used as contribution towards the Public Sector Decarbonisation Scheme (see next section) whereby the CIF would fund the like-for-like replacement cost of a boiler, and the Public Sector Decarbonisation Scheme could provide the additional funding needed to install a low-carbon alternative.

For more information about the scheme, please visit the **DfE website for CIF**.

Grant funding schemes

Grant funding schemes are typically provided by a government department and administered (take applications in and correspond with applicants) by a third-party organisation.

This section covers two of the key government grant funding schemes provided by the Department for Energy Security and Net Zero and administered by Salix Finance Ltd.

Did you know?

We publish a list of decarbonisation grant funding sources that is updated quarterly to reflect the latest funding availability. Download it **here** from the Catapult's website.

Public Sector Decarbonisation Scheme

The Public Sector Decarbonisation Scheme (PSDS) supports the aim of reducing emissions from public sector buildings by 75% by 2037, compared to a 2017 baseline, as set out in the 2021 Net Zero and Heat and Buildings strategies.

Funding is provided by the Department for Energy Security and Net Zero (DESNZ) and is administered by Salix Finance.

PSDS provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures. The scheme is designed to help upgrade heating systems in public buildings, to ones powered by cleaner, cheaper and renewable energy.

A funding pot of £1.17 billion for Phase 4 of the scheme was confirmed in December 2023 for public sector decarbonisation that will be delivered over three years:

- £670 million available in 2025 to 2026.
- £300 million in 2026 to 2027.
- £200 million in 2027 to 2028.

Further details about Phase 4 scheme including application criteria are anticipated in summer 2024. Please visit the Salix Finance website for the latest information about the scheme.

The application will require you to have a detailed feasibility study in place with energy efficiency and low-carbon projects sufficiently developed to enable the application for funding. The application forms are detailed, and you will likely require the support of your contractor to complete the necessary information.

Recommended action:



When developing your specification for a building audit or feasibility study, you can include a request for the contractor to review the latest PSDS application material and ensure that they provide all the necessary data points required to enable you to apply for the scheme.

Public Sector Low Carbon Skills Fund

The Public Sector Low Carbon Skills Fund provides grants for public sector organisations to engage the specialist and expert advice and skills required to develop a heat decarbonisation plan.

Having a robust heat decarbonisation plan will put organisations in a strong position to take the next steps in decarbonising, including by enabling them to develop detailed project proposals that will help them to apply for any future grant funding for capital decarbonisation measures such as the PSDS.

This means organisations can think more strategically and be better prepared for future decarbonisation opportunities.

Funding is available for heat decarbonisation plans that either 1) develop a heat decarbonisation strategy, 2) conduct a feasibility study, or 3) undertake design for low-carbon measures.

The latest Phase 5 of the scheme closed to applications in May 2024 and no future funding has been announced. Please register for the Salix Finance newsletter to receive the latest information about any future funding schemes.

Recommended action:



Register for an account on **Salix Finance's website** and select the option to receive notifications about the latest funding announcements.

Public Sector Decarbonisation guidance

This guide is part of the **Public Sector Decarbonisation Guidance**, a free resource covering seven themes for developing and delivering decarbonisation programmes. This guide covers multiple themes, from developing and delivering your strategy, through to funding. See how this guide maps on to the **Public Sector Decarbonisation Guidance** themes below, and visit the website for additional free resources and information to help inform your climate action plan, and the next steps in your decarbonisation journey.

Content covered in this guide. Visit the **Public Sector Decarbonisation Guidance** website to access more guidance and toolkits across the themes.

When you are ready to take the next steps, more free resources await you on our website to help guide you.



1

Strategic definition, planning and briefing

Setting an organisational strategy to decarbonise heating. Gaining decision maker and stakeholder buy-in. Setting emissions reduction targets. Selecting projects and planning delivery, developing project briefs.



2

Feasibility and design

Developing a detailed feasibility study for one or a suite of investible decarbonisation measures. Securing budgets and determining project timescales.



3

Procurement

Running a procurement process and ensuring value for money is achieved through a competitive process. Accessing framework agreements and designing contracts.



4

Funding

Securing external or internal funding for at scale decarbonisation projects. Writing robust business cases.



5

Installation

Project management of installation and implementation of a decarbonisation project. Monitoring progress against programme of works and implementing quality assurance processes.



6

Commissioning and handover

Handing over a completed decarbonisation project including staff training, correct setup and commissioning of equipment and ensuring all handover documentation is in place.



7

Monitoring and evaluation

Understanding the benefits being delivered by an energy efficiency and/or decarbonisation measure through metering and analysis. Analysis of energy data as part of good energy management and ensuring benefits are reported

Help and resources

The table below outlines some of the additional help and resources that are out there for schools to access and the organisations that provide them.

Organisation	Campaign	What help you can get	Website
Ashden	<p>Ashden is a not-for-profit organisation who provide crucial support for schools through their Let's Go Zero campaign.</p> <p>Ashden assist schools in developing delivery roadmaps and use these plans to advocate for increased support from the UK government.</p> <p>To date, over 3,000 schools are signed up to the campaign and the more schools that join strengthens the call to government to open new avenues of funding and creating new policies that support schools in their sustainability journey.</p>	<p>By signing up for the campaign, you'll get support on setting your zero carbon targets and developing roadmaps for delivery, and will help influence our discussions with politicians as we work to get more support for schools.</p>	<p>Visit the Let's Go Zero campaign here:</p> <p>https://letsgozero.org/</p>
Climate Ambassadors	<p>The Climate Ambassadors scheme provides free expertise and support for developing impactful and tailored climate action plans.</p> <p>There are nine regional hubs in England to support the development of peer-to-peer networks and to help match local Climate Ambassador volunteers with settings in need of expertise.</p>	<p>A Climate Ambassador can provide free expertise to help develop a climate action plan and help overcome barriers for generating action, they can advise school leaders and inspire students with in-person interactions</p>	<p>Visit the Climate Ambassadors website here:</p> <p>Climate Ambassadors: Turning Climate Ambition into Climate Action in Education Climate Ambassadors</p> <p>Request a Climate Ambassador through the STEM Learning platform:</p> <p>Climate Ambassadors - Teachers and Schools (stem.org.uk)</p>

Organisation	Campaign	What help you can get	Website
Climate Science	Climate Science is an educational charity creating engaging and science-backed content on solutions to climate change.	Climate Science offers free resources, activities and programmes for students and educators worldwide to get involved in.	https://climatescience.org/
Earth Cubs	Earth Cubs aims to educate kids all over the world about the environment by providing entertaining and inspiring resources.	Free resources available for student engagement activities, lesson plans, arts & crafts, covering a wide range of climate subjects.	https://earthcubs.com/
Eco Schools	The Eco-Schools programme provides a simple, seven-step framework that answers the question "where do I begin", whilst empowering young people to make a difference in their school, local community and beyond.	By registering on the Eco Schools website, you will gain access to resources to start delivering your programme. You can also apply to be Eco Schools Green Flag registered at a cost of £200+VAT to recognise the progress your school is making and help fund the programme in creating new material and providing support to schools.	https://www.eco-schools.org.uk/
Energy Heroes	Energy Heroes is an organisation that aims to improve numeracy and science skills through exploration of local data associated with energy and climate change.	They deliver a Maths programme aimed at pupils in year 5, also with a focus on engaging families and the wider school community, supporting schools to become leaders in climate education and energy management, saving money, creating less carbon dioxide and exploring how we can preserve the world's precious resources.	https://energy-heroes.org.uk/
Energy Sparks	Energy Sparks is a registered charity that supports schools to tackle climate change by taking measurable action to reduce their carbon emissions. They help schools to better understand energy use in their buildings through metering and analysis.	Their website provides learning resources that are designed to either support small groups of children (such as eco clubs or student councils) to take action within the school or to be used in lessons for class groups to learn about the issues before taking action.	https://energysparks.uk/
Green Schools Project	Green Schools Project works with schools to transform the way they respond to the climate and nature crisis. They help students to lead projects, deliver teacher training sessions, and support schools to reduce their carbon emissions with a focus on the learning opportunities provided by this process.	By registering, you will gain access to a coordinator guide, information and activities you can do with pupils about the climate crisis, as well as guidance on how to run projects such as energy saving, youth activism, wildlife, food, waste and more.	https://www.green-schoolsproject.org.uk/

Organisation	Campaign	What help you can get	Website
InterClimate Network	InterClimate Network inspires and enables young people to consider climate sustainability to be one of their priorities in planning their careers and lives. It works in secondary schools, helping young people to make their voices heard through UN-style climate conferences and support for climate action.	Tailored support to schools through ICN's Climate Voices programme can currently be offered to eligible schools in Bristol, Gloucestershire, London Borough of Hounslow, Reading and Solihull.	https://interclimate.org/
Local Partnerships	Local Partnerships is an in-house public sector consultancy jointly owned by the Local Government Association, HM Treasury and Welsh Government. They work solely for central government departments, the Welsh Government, councils and combined authorities.	Local Partnerships work with the public sector to deliver strategic and practical approaches to achieve Net-Zero. They can provide advice on developing your Net Zero strategy.	https://localpartnerships.gov.uk/
Net Zero Hubs	<p>The Local Net Zero Hubs programme helps local authorities and communities in England to play a leading role in decarbonisation, supporting local authorities to develop Net Zero projects and attract commercial investment.</p> <p>Funded by the Department for Energy Security and Net Zero, there are five Hubs across the country, all focusing on helping the UK reach Net-Zero carbon emissions by 2050.</p>	<p>The Hubs have small teams that provide the following support across regions:</p> <ul style="list-style-type: none"> • Delivering energy strategy across the regions. • Supporting and accelerating the development of local and regional, low and zero carbon energy projects. • Delivering significant investment programmes such as housing retrofit and public sector decarbonisation. • Bringing forward business cases that can attract investment in energy infrastructure. • Sharing best practice across a national programme. • Developing a pipeline of innovative projects to support the region's clean growth agenda. 	<p>You can contact your local Hub for support on their website:</p> <p>North East and Yorkshire Local Net Zero Hub</p> <p>North West Local Net Zero Hub</p> <p>Midlands Local Net Zero Hub</p> <p>South West Local Net Zero Hub</p> <p>South East Local Net Zero Hub</p>

Organisation	Campaign	What help you can get	Website
Sustainability Support for Education	The Sustainability Support for Education is a digital hub of guidance and resources, commissioned by DfE, to help education settings with developing or building upon their climate action plans.	By signing up to the mailing list there will be notifications when the digital hub is updated with new resources and additional features such as creating a personalised profile	https://www.sustainabilitysupportforeducation.org.uk/
Salix Finance	Salix Finance deliver government funding schemes across the UK to support local authorities, schools, housing associations, hospitals and universities boost their energy efficiency, reduce their impact on the environment, save money and to remove more households from fuel poverty. They operate both the PSDS and the LCSF grant funding schemes.	Aside from the grant funding schemes described in Section 4 of this guide, Salix also have a wealth of knowledge and case studies that can be accessed for free on their website.	https://www.salixfinance.co.uk/
Young Climate Warriors	Young Climate Warriors is a fledging climate change charity but has already engaged with over 15,000 children in eco-activities and carbon-emissions-busting challenges, providing free resources to over 400 schools and 800 families.	Young Climate Warriors offers weekly 'carbon-busting, sustainable living challenges' - for families, children and teachers - via schools and community organisations. They also have a growing team of local ambassadors, based across the UK, sharing climate change discussions in assemblies.	https://www.youngclimatewarriors.org/

Glossary

Term	Explanation
Adaptation	Adjusting to new conditions or changes, especially in response to climate change, to minimise harm or take advantage of opportunities.
Asbestos	A hazardous material once used in building construction for its fire-resistant properties. Now known to cause serious health issues when its fibres are inhaled.
Baseline	A starting point used for comparisons. In sustainability, it often refers to initial measurements of things like energy use or emissions before improvements are made.
Biodiversity	The variety of all living organisms in an ecosystem, including plants, animals, and microorganisms. High biodiversity is essential for a healthy and resilient environment.
Climate Action Plan	A detailed strategy outlining steps to reduce greenhouse gas emissions and adapt to the impacts of climate change.
Decarbonisation	The process of reducing carbon dioxide emissions, typically by switching to renewable energy sources and increasing energy efficiency.
Department for Energy Security and Net Zero (DESNZ)	Department for Energy Security and Net Zero, a UK government department focused on energy policy and efforts to achieve Net Zero emissions.
Department for Education (DfE)	Department for Education, a UK government department responsible for education and children's services.
Display Energy Certificate (DEC)	A certificate that shows the energy performance of a public building, based on its actual energy use over the past year.
Emission factor	A number used to estimate the amount of greenhouse gas emissions produced per unit of activity, such as per kilowatt-hour of electricity used.
Energy efficiency	Using less energy to perform the same task or produce the same outcome, reducing energy waste.
Energy management	The process of monitoring, controlling, and conserving energy in a building or organisation.
Energy Performance Certificate (EPC)	A certificate that rates the energy efficiency of a building, providing an A-G rating and recommendations for improvement.
Fossil fuel	Energy sources like coal, oil, and natural gas that come from the remains of ancient plants and animals. Burning fossil fuels releases greenhouse gases.
Heat pump	A device that transfers heat from one place to another, often used for heating or cooling buildings efficiently.
Heating plant	A facility that generates heat for distribution, often to multiple buildings, using fuels like gas, oil, or biomass.
HVAC	Heating, Ventilation, and Air Conditioning systems that control the indoor climate of buildings.
ICT	Information and Communication Technology, encompassing all digital technology used to manage and communicate information.

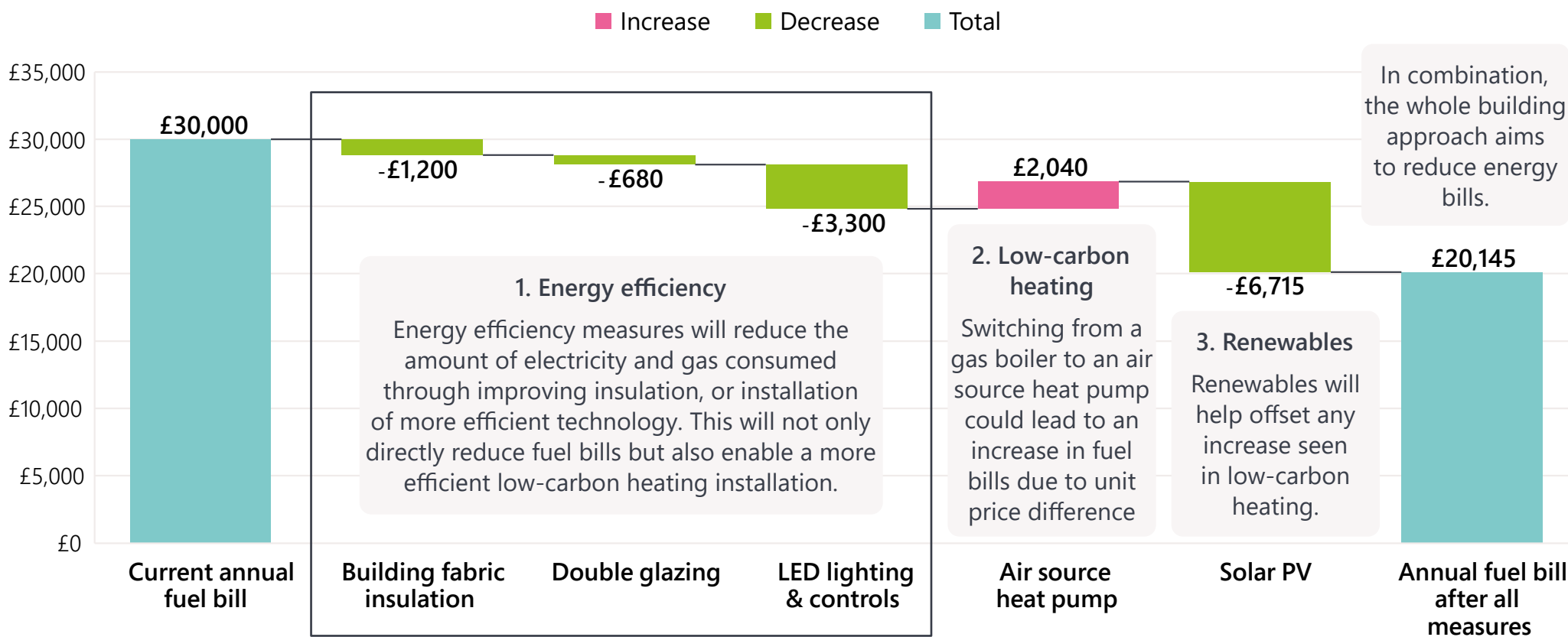
Term	Explanation
Key Performance Indicators (KPIs)	Metrics used to evaluate the success and performance of a retrofit project in achieving its objectives. KPIs in energy efficiency projects typically measure aspects such as energy savings, cost reductions, carbon emission reductions, and project completion timelines. These indicators help assess progress, identify areas for improvement, and guide decision-making to ensure the project meets its goals.
MPAN (Meter Point Administration Number)	A unique number used to identify individual electricity supply points in the UK.
MPRN (Meter Point Reference Number)	A unique number used to identify individual gas supply points in the UK.
Net Zero	Achieving a balance between the amount of greenhouse gases emitted from energy used in buildings (e.g. electricity and gas use) and the amount removed from the atmosphere, aiming for no net increase in emissions.
RAAC (Reinforced Autoclaved Aerated Concrete)	A lightweight form of concrete used in building construction, known for its insulating properties but concerns have been raised about its long term durability.
Renewable energy	Energy from sources that are naturally replenishing, such as solar, wind, and hydro power, which produce little or no greenhouse gas emissions.

Appendix: Worked example of decarbonising a school building

This guide uses the 'whole building approach' concept as a pragmatic approach to prioritise decarbonising a school building. The below waterfall charts seek to explain how different measures (e.g. lighting upgrades) impact your school's fuel bill.

The main factor when determining impact on fuel bills is that the unit cost (pence per kWh) of electricity is typically five times that of gas. This means that when it comes to switching from a gas boiler to an electrical air source heat pump, even though energy and carbon emissions are reduced, the fuel bill costs of the switch can be outweighed by the difference in unit cost.

Impact of different measures on fuel bills





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