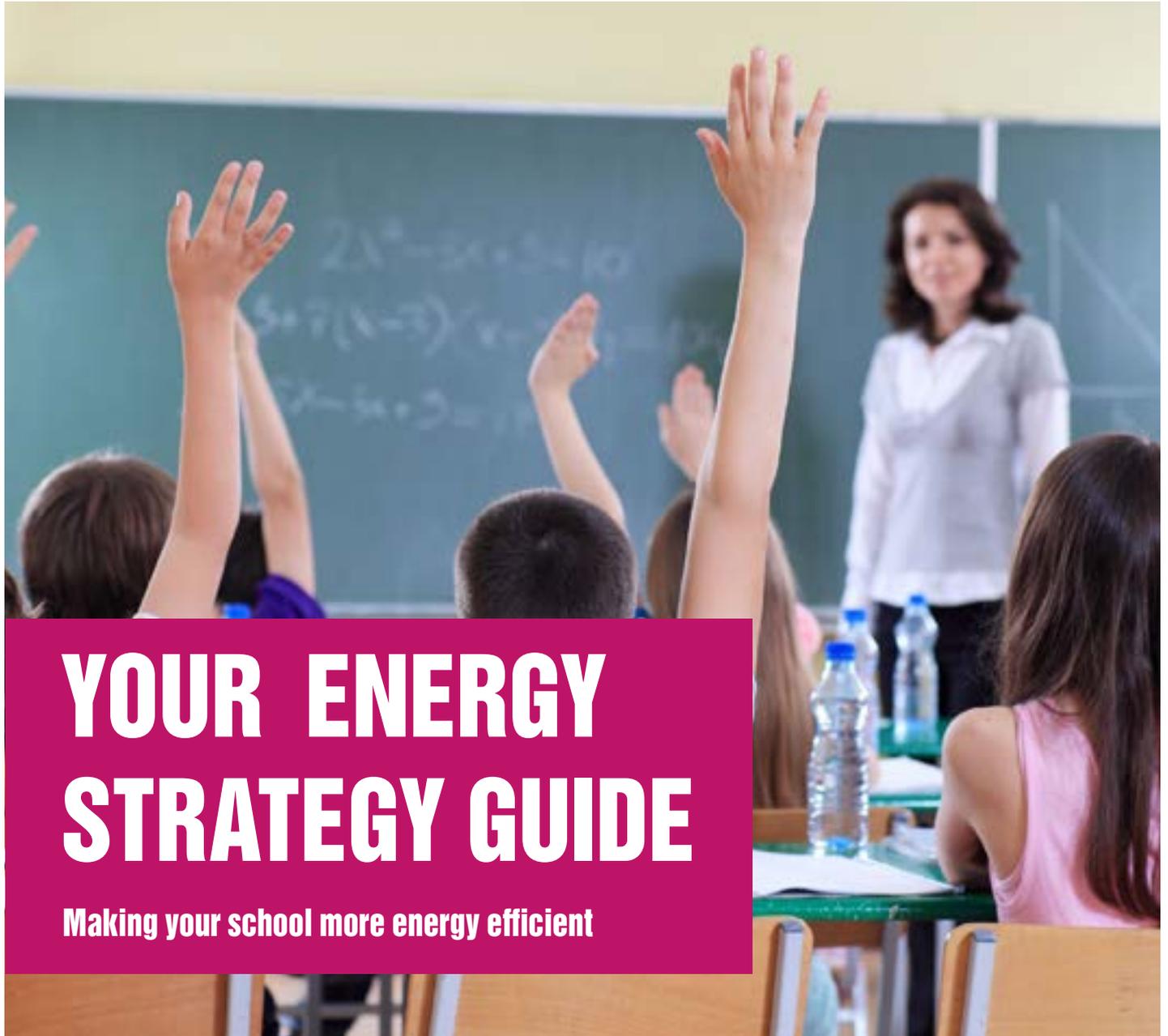


IN COLLABORATION WITH



YOUR ENERGY STRATEGY GUIDE

Making your school more energy efficient

Decreasing energy costs

An introduction to the benefits of reducing energy costs, improving energy efficiency and ensuring compliance.

Pg. 2

Why is energy efficiency important?

Introducing an energy efficiency strategy will not only reduce costs but also improve sustainability credentials.

Pg. 3

Energy as a strategic asset

Implementing energy efficiency strategies can unlock revenue and improve engagement with staff and pupils.

Pg. 4 and 5

Our energy strategy explained

BCR Associates delivers impartial expert advice, offering clear guidance tailored to the trusts individual needs.

Pg. 7

FOREWORD



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In my 14 years as a Lloyds Bank Senior Education Specialist, I have always been keen to add value to the education sector above and beyond my usual banking strategic support. I have been working closely with a significant number of large MATs throughout the pandemic and established that many MATs are keen to explore how they could save money and find new ways of generating additional income to help relieve the financial impact of Coronavirus.

I am delighted that two colleagues who I class as specialists in income generation, cost management and estate management, jumped at the opportunity to create these guides. Following client consultation, Tim Warneford, Warneford Consultants and Steve Bolt, BCR Associates have identified some very real and achievable best practices with great examples from trusts who have already embraced the opportunities available around utilising/improving existing facilities, creating new facilities and in some cases controlled disposal of assets.

Whilst I recognise that your own opportunities and ability to invest in your estate will vary, I hope that this briefing ignites some healthy discussions and helps support your own financial recovery in the months and years ahead as you survive, revive and thrive.

DECREASING ENERGY COSTS IN THE EDUCATION SECTOR

With the impact of COVID-19 both increasing costs and limiting opportunities to generate income, school trusts will be reviewing budgets and scrutinising expenditure for potential savings.

With academies spending between £200,000 - £500,000 per annum on electricity and gas, the cost of electricity predicted to increase by 5% per annum, and the potential for making upwards of 20% savings via implementation of carbon reduction measures – energy and carbon consumption is an obvious area to explore.

If cost savings aren't motivation enough, the ESFA's announcement in June 2020 on "The streamline energy and carbon reporting initiative" known as SECR, requires qualifying trusts to baseline and report their carbon emissions, to provide future evidence of year on year reductions and ultimately contribute to the government's net zero by 2050 target.

Given the potential savings and obligation to evidence progressive carbon savings, we recommend that schools take a holistic approach to energy management by establishing a detailed energy strategy.



WHY IS ENERGY EFFICIENCY SO IMPORTANT?

If your primary goal is to reduce costs, reduce consumption and reduce emissions, your most effective route is a robust energy efficiency strategy.

What is an energy strategy?

An energy strategy will provide a clear pathway that is tailored to your individual academy, helping you to manage energy spend effectively, incorporating it as part of the longer-term planning process and apportioning appropriate targets to reduce usage and improve energy efficiency year on year.

Implementing an energy strategy will significantly enhance visibility of your energy usage and energy efficiency will deliver maximum returns through reducing costs and carbon emissions, but only when adopted throughout your organisation. Regular measurement of kWh used before and after a significant load is drawn from the grid will help you to grasp when your peak usage is, which will in turn help you to avoid wastage or unnecessary overspend. In-depth reporting will mean that you will have the necessary evidence to comply with energy legislation such as ESOS and SECR, as well as achieving certifications such as ISO 50001 relatively simply.

Having a robust energy strategy in place puts you in charge of your energy spend and provides you with the intelligence to make important decisions.

This paper provides further information on how BCR Associates can help you to streamline energy usage and become more energy efficient.

What next?

The first step is to review and understand your current energy billing and the 'devil in the detail' terms and conditions of the contract, establishing how competitive the rates are and any restrictions that penalise a reduction in consumption. Next, you need to profile your consumption patterns, identifying any unnecessary peaks or times of the day that trigger a higher rate. We recommend that this exercise is undertaken to include both in and out of term times, providing comparative, reliable data. Data can be collected through the installation of "loggers" attached to distribution boards. These are inexpensive or can be provided free of charge by an energy consultant.

Along with other information held by the Trust, such as your Display Energy Certificate, building construction type and condition, on and off-site utility provision, data can then be collated and analysed, helping you identify, compare and assess options for energy savings.

Depending on your school assets and energy/ carbon awareness, actions arising from your assessment could range from; culture change seminars delivered to staff and stakeholders, interactive pupil workshops, right through to a comprehensive plan for renewable energy installations and introduction of clean energy tariffs.

ENERGY AS A STRATEGIC ASSET

There are a number of available technologies that can be brought together to operate in sync with the energy needs of your school estate. Reducing usage and dependency on grid energy is key to controlling costs, reducing risk and futureproofing emission levels. In addition to a wide range of efficiency measures, generating income from renewable generation could come as a secondary benefit and will help to offset initial investment.



1 Internal and external LED lighting control

2 High efficiency controlled heating, ventilation, and air conditioning

3 Controlling solar gain into spaces

4 Solar thermal feeding a thermal store

5 Roof mounted solar PV

6 Controlling heat, light and cooling automatically in working spaces

7 Metering and energy management throughout the site

8 Air source heat pumps - adding to thermal stores

9 Staff EV parking

10 Ground source heat pumps - adding to thermal stores

11 Appropriate visitor EV parking/charging

12 Data analysis and reporting

OUR ENERGY STRATEGY

We help academies to combat increasing pressure to become more energy efficient. Our strategy will help you to tackle cost reduction, carbon footprint, compliance with the latest environmental legislation and improving your school's sustainability credentials.

Our aim is to help academies to drive efficiency through the implementation of a robust energy strategy which focusses on the need to reduce carbon emissions, cut energy consumption and ensure sustainability.

Our Energy Consultants have unparalleled experience in developing comprehensive, long-term energy strategies tailored to each school's individual needs. We will work with your administrative team including the facilities manager and/ or bursar to understand your financial and strategic goals, where you can optimise your energy systems, implement relevant initiatives and assess their impact. We don't like to over complicate things and advocate using simple, uniform reporting methods to avoid inaccuracies.

We can facilitate installation, survey, design, maintenance and training in the following areas:

- Energy surveys and audits
- Electrical
- Lighting
- Control systems
- Heating, ventilation and air conditioning
- Compliance with legislation (ESOS, SECR)
- Infrastructure works
- Metering install/ management
- Visibility of energy usage
- Data analysis & reporting
- Site efficiencies
- Equipment support and purchase
- Renewables such as solar and wind

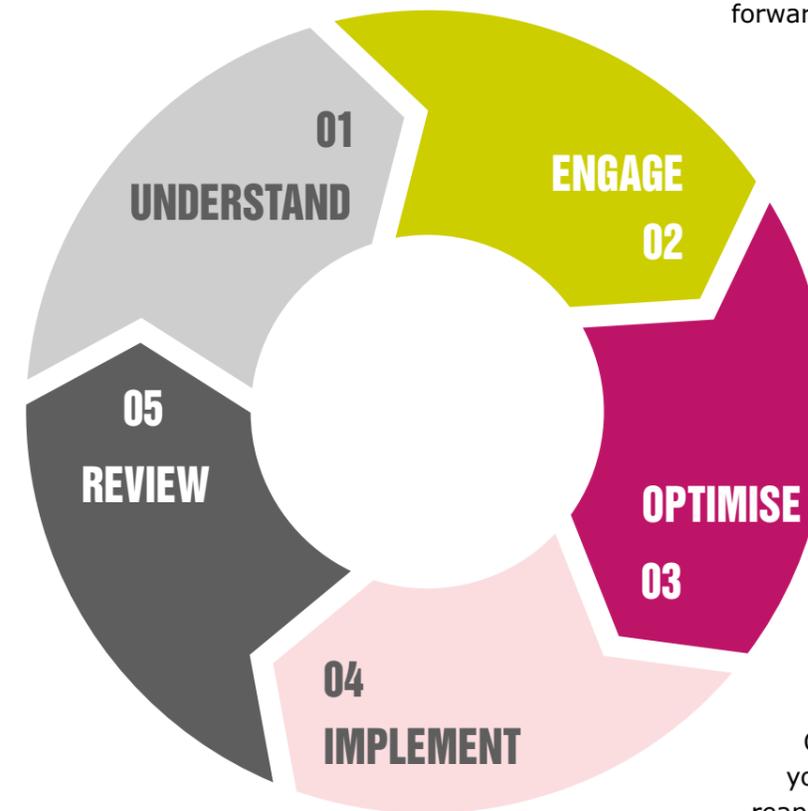


1. UNDERSTAND AND MEASURE

We take time to understand the rationale behind your need to improve efficiency and the steps required to achieve your goals, whether this is an increased focus on CSR, re-forecasting your energy budget, or a requirement to become more energy efficient. We analyse your existing functions and consumptions to establish a baseload for comparison.

2. INVOLVE AND ENGAGE

The next stage is to involve all stakeholders in the strategy and gather any ideas they may have. We can help you to translate an existing generalised energy strategy policy, and to instil the new values within your staff and pupils. We encourage you to engage with staff and pupils throughout the school on the subject of energy efficiency, providing them with targets, rewarding ideas and assigning divisional 'leaders' to drive the strategy forward.



3. OPTIMISE

Prior to looking at implementing any energy saving initiatives, it is important to optimise your existing infrastructure and resources. We can help you to establish quick, low-cost wins which will provide a more relevant figure for any schemes that require an ROI measurement.

4. PRIORITISE AND IMPLEMENT

Our Energy Consultants will help you prioritise which systems might reap the most reward for the smallest investment, and those that are most appropriate for your academy and staff. We can also provide guidance on the provision of renewables and other low carbon and assistive technologies that will make your strategy a success.

It is important to implement any new energy initiatives with careful consideration for your procurement strategy, making sure you do not breach any supplier terms and conditions. We suggest that your energy and carbon consumption is carefully forecasted and planned for year-on-year reduction benefits.

5. REVIEW

The final stage is an ongoing review of the schemes that have been implemented to gauge their success. We suggest you record all initiatives, the ROI and levels of carbon reduction achieved, this will allow you to set future efficiency targets and plan further projects based on these accomplishments. It is also key to communicate the successes to the board, your staff and pupils to demonstrate an ethos of continuous improvement and maintain engagement.

BCR ASSOCIATES ARE DELIGHTED TO BE WORKING IN COLLABORATION WITH WARNEFORD CONSULTANTS

As a multi-service procurement consultancy who specialise in streamlining costs and improving efficiencies we feel that the concept of optimising the school estate goes hand in hand with what we do. Click below for a whitepaper on how Warneford Consultants can help you to maximise your school estate to generate vital income for reinvestment:

[DOWNLOAD WHITEPAPER](#)



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Developing The Trust

Joining the Dots:

Hear from Kevin Yardley, Director of Income Generation on helping estates yield substantial revenue streams as well as Steve Bolt on increasing efficiency and rationalising procurement costs to optimise resources and maximise potential in the education sector.

Click to listen to Tim's Podcast

[LISTEN](#)

