



25%

Potential saving from
HVAC & Hot Water

<12

Months
Typical ROI

In a typical school, over 75% of the energy spend is HVAC, hot water, interior and exterior lighting. Up to 25% of this is typically wasted energy, so optimising systems, assets and in-particular the BeMS (Building energy Management System) that controls many of these assets can have a significant effect on energy usage and waste. The opportunity to optimise HVAC and Lighting through the BeMS exists in most schools, regardless of size, providing a quick payback period for the School, Trust or Operator paying the bills.

Energy costs are often the second highest expenditure in schools (behind the annual wage bill). On average, schools spend £6 on energy and water for each square metre of floor space in the UK. Energy costs per pupil range from £26.28 to £64.75 in secondary schools and between £16.46 and £51.87 in primary schools.

We work with School governors and/or Trusts providing consultancy, technology and expertise to minimise the wasted energy and ensure that your facilities are running as efficiently as possible with minimal capital expenditure and maximise returns.

Optimised Schools scale with the size of your facility or estate and the energy consumed, ensuring that fees are directly linked to savings achieved.

Operating the HVAC systems for 1 hour less each day will save between 5-10% of your energy spend

For every additional hour of occupation each day, the energy consumption can increase by as much as 10%. Incorrect time schedules and optimiser settings can be a large contributor to this additional usage. If extended periods are required for extra-curricular activities, ensure only the areas being used are energised by the BeMS.

Maintaining optimum internal temperatures for staff and students will improve comfort conditions which will help boost attentiveness and morale as well as minimise energy consumption.

Key Benefits

- Typical savings of around 15-20% of your total energy spend
- Typical ROI of <12 months if optimising existing assets (includes some repairs and controls works)
- Typical ROI of 24 months if BeMS controls require installing.
- Single supplier for all energy needs
- Start seeing savings from 4 weeks
- Experienced team of engineers and analysts who have worked on Secondary and Primary Schools
- Any BeMS system, regardless of manufacturer or age
- Remedial works can be undertaken by current FM, Controls and Maintenance Contractors.
- Optimisation will lead to improved comfort conditions which will boost productivity and morale for both Staff and Students.
- The improved environment will benefit from reductions in energy use and carbon emissions which will enhance school image.

Actions taken as a result of good energy metering and monitoring can save 5–10% of a school’s energy consumption.

Energy regulations, compliance, bill validation, market forecasting, procurement, energy efficiency, BeMS projects / maintenance and energy capital projects can be challenging, time consuming and somewhat daunting for school business management teams – our team of energy experts become your outsourced/partnered energy manager to take care of these on your behalf.

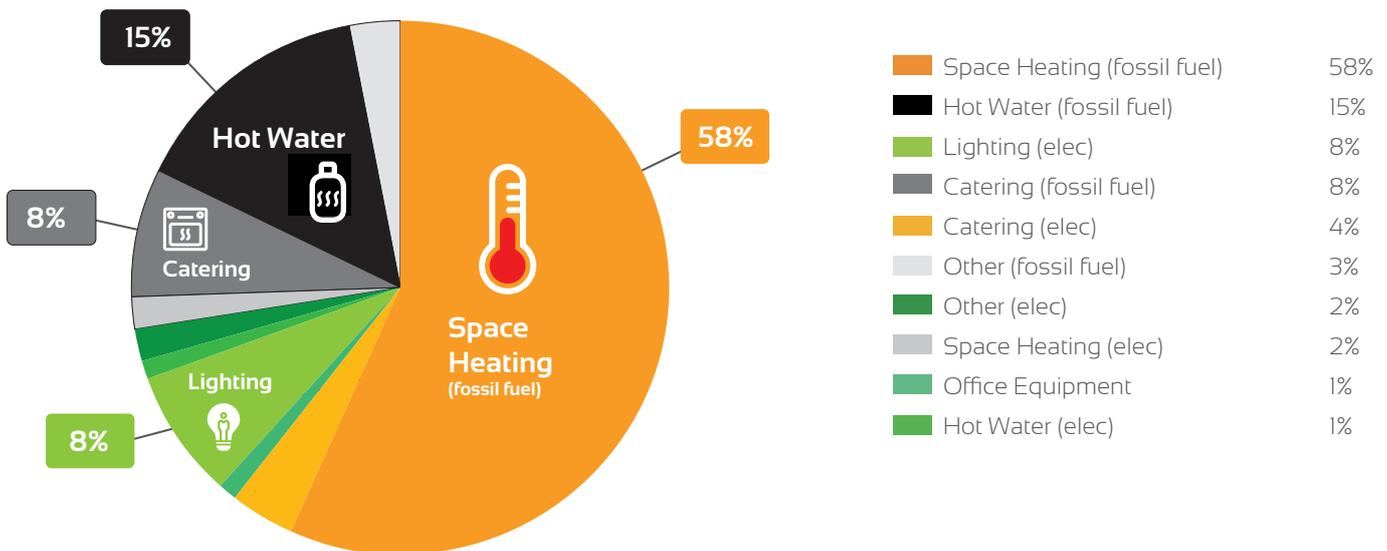
Energy is our business and ‘Optimised Schools’ wraps all things energy into a single proposition, based upon your needs. Providing you with a single supplier that can optimise the efficiency of the facilities, provide reporting on a monthly basis, address your legislation and compliance needs, ensure your bills are correct and get you the best procurement deal in the market. We do this with a joined-up approach that ensures you maximise the efficiency of each element, and that they don’t compromise each other through conflicting services and strategies.

Optimisation

Regardless of whether your facility has undertaken extensive energy saving initiatives or this would be the first, we are confident that the savings will exist.

We will review the BeMS operation including; time schedules, setpoints and control strategies along with energy consumption data that will help us identify where energy is being wasted. We will also review the physical HVAC plant, how they are integrated with each other, and identify area of savings from assets configured incorrectly, equipment in manual and areas that require maintenance or repair. All of which will then be turned into a strategy agreed with the client and documented to get your estate back on track.

Reducing the heating temperature in a school by 1°C can reduce energy consumption by as much as 8%.



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81%
 of energy in Schools
 is Lighting, HVAC
 & Hot water

10%
 of energy consumed
 is wasted