zenergi

Wellington School

Energy Audit identifies an annual reduction in energy costs of $\pm 5,000+$, representing a reduction in carbon of 15.3 tCO₂e and ROI within a year.





Wellington School in Timperley, Altrincham, is a secondary school with around 1,400 pupils who it aims to develop into happy and successful young people who fulfil their academic potential and develop the skills and attributes to live, contribute to, and work in tomorrow's global society.

Like many schools we visit, the building was originally constructed in the 1930s when energy use was not a consideration. To overcome this, the school had already begun a programme of replacing inefficient boilers with modern condensing boilers and replacing older light fittings with low energy LED units. To support the further realisation of energy savings, the school engaged Zenergi to undertake an energy audit to gain insight into the areas where cost effective energy, operating and carbon savings can be achieved. The aim was to identify opportunities for reducing carbon emissions through a strategic plan of works, while delivering immediate cost savings.

What did we find in Wellington School's two-day audit?

Our audit identified that the school has an opportunity to reduce its energy use by 34% through a combination of measures, including a number of low cost and no cost measures that would generate annual savings of £17,000 for an investment of £49,000 and return on investment in 2.8 years.

Some immediate savings were identified where payback is within one year, including reducing energy use through improved management around heating temperatures; adjusting heating times to match building occupation; better management of door and window openings; and energy awareness training to embed good practice around energy use/wastage. These measures would equate to annual reduction of £5,185 in energy costs for a capital spend of £2,000 and deliver a carbon reduction of 15.3 tCO.e.

Short term savings where payback would be seen within six years included repairs to thermostatic valves and further lighting upgraded to LED. These measures were estimated to deliver an annual reduction of £12,063 in energy costs for a capital spend of £46,800, delivering a carbon reduction of 16.7 tCO₂e.

Engaging pupils in energy saving

Wellington School has a highly engaged eco-committee and we were delighted to be invited to deliver the findings of our energy audit in one of their sessions. The school recognises the value in engaging the energy users of the future in the critical dialogue around energy saving for the protection of the planet and we were pleased to support the delivery of this message. The eco-committee are now actively looking at initiatives.

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The energy audit has been an incredibly valuable exercise for our school, and a perfect starting point in the development of our whole school approach to environmental sustainability. The audit has helped us to identify and prioritise our energy saving opportunities. The consultants from Zenergi have delivered a highquality technical report which not only serves our trustees and senior leaders, but can also be used as a powerful learning opportunity for our pupils. We are excited to see how our pupils will participate in the implementation of new energy saving measures.

Gemma Tunstall

Finance and Business Manager Wellington School