

Case Study

Wootton Upper School and **Arts College**

- Customer:** Wootton Upper School & Arts College
- Technology:** Energys New Vision range of LED fixtures
- Outcomes:** Total annual saving of £37,700, 127 tonnes carbon savings and 3-year payback

**Arts College
lighting
upgrade
promises
127 tonnes
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and 3-year
payback**



EXTENDED PROJECT SCOPE

As Alex Manuel of CUBE recalls, the scope of the project changed over time as the School managed to secure substantial funding and it became clear that it would be possible to install more new fixtures than was originally thought. "The original outline called for new fittings in the main school buildings and retrofits in the newer, outer facilities, but once we got the costings back [about possible new lighting solutions] it became clear that the total expense was going to be much lower than anticipated. The result was that the proportion of new fixtures compared to retrofits increased," he says.

In line with standard practice, the demonstration of "the possible cost and energy savings [of new installations], and the way in which they will pay for the work over the period of the loan" was integral to securing the funding. Once this was in place, and, after a rigorous tender process saw CUBE

PROJECT OVERVIEW

In the latest in a long line of major academic installations, Wootton Upper School & Arts College has been equipped with highly efficient LED lighting supplied and installed by Energys Group.

BACKGROUND

With an impressive Ofsted score and a widespread reputation for its standards of academic excellence, Wootton Upper School and Arts College is one of Bedfordshire's top performing schools. Now, thanks to a comprehensive upgrade featuring Energys's New Vision LED lights, it has a first-rate lighting infrastructure to match.

The desire to achieve improved levels of brightness and an overall reduction in energy expenditure were among the priorities for the overhaul. The high expectations for the project saw the School engage CUBE Building Consultancy, which provides a full range of building surveying services for commercial, education and residential property occupiers and owners. CUBE was tasked with delivering 'best value and maximum outcomes' for the School throughout the project.

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Building Consultancy appoint Energys to deliver the lighting upgrade, “we were able to discuss how to improve the specification and expand the reach of the new set-up. But the selection of the actual fittings for specific areas of the school was very much the domain of Energys.”

A LITTLE (MORE) ILLUMINATION

The final installation relied heavily upon technology from Energys’s New Vision range of LED fixtures. A popular choice for school and corporate applications, among others, the New Vision product range of LED lamps includes new LED fittings, LED retrofit lamps, wall lights, downlights and a full suite of external LED lighting, all of them specified for very low energy consumption in order to deliver the maximum savings to the client.

“In the case of the main theatre, we needed to replace 250W metal halide lamps occupying an unconventional fitting whereby the light was both reflected and diffused,” says Energys Managing Director Kevin Cox. “Our original plan was to use our new 120W high bay panel, however, for various reasons we instead installed the standard 36W panel. The client is absolutely delighted by the light level and the comment I’ve heard is that it is ‘much brighter and better’ than before. It is really remarkable that we can go from 280W (including losses) down to 36W and yet achieve much more light.”

Indeed, this comprehensive project saw Energys draw on products from across its high-efficiency LED lighting

range, including 18W wall fittings in the corridors, toilets and changing rooms; downlighters in the reception and cafeteria; and emergency bulk head fittings in the classrooms and exit doors. The installation also entailed the specification of LED lighting in staff and study rooms, as well as multiple external areas.

RESULTS AND OUTCOME

“Working together with CUBE, the outcomes on this project have been numerous and impressive from the start. I am delighted to report that the overall result is a very happy client,” says Cox.

One might add ‘no wonder’ when the cost-saving implications of the new infrastructure – which also includes updated electrics and control technology – are taken into account. Energy consumption post-conversion is predicted to be 124790 kWh – down a massive 66% from 365738 kWh – whilst CO₂ savings of 127.70 tonnes per year are expected.

Financially, this translates to a total annual saving of £37,701.17, including a reduction in maintenance spend of £7,100, and a payback period of just 3.33 years – certainly no mean feat given the scale and scope of the project. In addition, the 5 year warranty means that the school will have recouped the entire project cost plus a substantial additional benefit before any future cost is incurred.

From the perspective of CUBE – for whom education is a significant contributor to its overall activity

levels – it’s a further case of a job well done. “We had good communication and full collaboration with Energys throughout the project, and the work was completed in time for the 1 September deadline,” says Alex Manuel. “The school’s staff were able to contrast the situation before and after the school holidays, and the improvement was obvious to see. The comments we’ve received indicate that, throughout the school, light levels and quality have improved considerably.”



CLIENT TESTIMONIAL

“Energy consumption is predicted to be 66% lower post-conversion”

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