



The main entrance to University College Plymouth at Marjon where carbon emissions have fallen by 20%.

College Cuts Carbon With New LED Lighting

University College Plymouth at Marjon (UCP) Has Achieved a 20% Reduction in Carbon Emissions After Installing New Energy-Efficient LED Lighting.

The College

With a proud heritage stretching back over 170 years, UCP is one of the UK's leading third-level educational facilities. The college offers a wide range of foundation, honours and post-graduate courses to 5,500 students – all located on its single-site campus. UCP is best known as a leading provider of primary and secondary teacher training courses.

The Problem

In 2010 the governing board at the college authorised a review of energy consumption on campus to see if they could benefit from new technology developments.

The TM Group were appointed as consultants to carry out an energy survey. As part of the process, they looked at various energy-saving solutions including voltage optimisation, solar panels, as well as an additional biomass plant.

With a limited budget however and a project delivery deadline of July 2011, most of the projects initially considered fell short of the qualifying criteria. They were either over-budget, had long payback periods or couldn't meet the July deadline.

The Search

The energy survey carried out by The TM Group highlighted that 30% of electricity consumption at the college was used for lighting.

The TM Group therefore recommended that the college install energy-efficient LED lighting as it would give them energy savings of 70% compared to their existing fluorescent tubes.

LED lighting would also enable the college to shave 20% off their carbon emissions. And with the ability to retrofit existing light fittings, LED lights could be installed quickly allowing them to meet the July deadline.

The Solution

Finding suitable LED lighting for the college was the next task. For this the TM Group turned to Bamford Lighting. They were the only LED lighting supplier they knew who could deliver a proven solution at such short notice.

The Henry Burrows Building on campus was identified as the ideal place for an LED project. It was used every day which meant the lights were on a lot. And with 1,000 light fittings installed across the three-storey block, it was the right size for the available budget.

The Installation

The installation of new LED lighting in the Henry Durrows Building commenced in June 2011. The work was carried out by staff from the college's own internal maintenance department with assistance from a local electrical contractor.

It took a team of six people three weeks to complete the project. During this time they installed 1,000 2-ft and 4-ft LED tubes. They were also required to remove and dispose of the old fluorescent tubes and make minor modifications to the existing light fittings.

Occupancy and daylight sensors were also installed in the lecture rooms to give the college additional energy savings.

The Benefits

The installation of LED Lighting resulted in several important benefits for UCP including:

- Carbon savings of 20% which means the college is achieving the objectives of their carbon reduction strategy.
- Energy savings of £7,500 per year leaving the college with additional money to spend on other capital investment projects.
- Reduced maintenance costs of approximately £3,500 per year enabling the maintenance department to keep their budgets under control.
- Zero maintenance required on the LED lights which means a less interruption for lecturers, students and office staff.



Find Out More

To find out more, please contact Bamford Lighting on **0845 625 0515**.

You can also learn more about our range of energy-efficient LED Lighting solutions for industry and commerce at www.bamfordlighting.com