



Energy Efficiency Lighting Scheme

Background

Rauceby Primary School provides education for approximately 182 children between the ages of 5-11 years. The school operates normal teaching hours but is managed by a caretaker who opens the site at approximately 07:00 and closes at around 18:00. The lights in the school were a mixture of switch start T8 fluorescents which are left on for prolonged periods during both lessons and cleaning. The site uses approximately 97,473kWh of electricity at a cost of £9,747pa.

The recommendation was given to replace the existing fluorescent lighting with the new generation of LED lighting which can reduce lighting loads by up to 75%.

Process and Benefits

On a selected afternoon a lighting survey took place, where both the head teacher and finance manager walked around site with lighting contractors. This enabled the contractors to understand the workings of the site and lighting usage profiles. Each of the three contractors then submitted a quote for works, which was awarded by Envtec Services.

The project consisted of removing and disposing of all old fittings and lamps in accordance with the WEE Directive, installation of the replacement LED units, functional testing and hand over including instructional and technical documents.

The installation of LED revitalises existing dull environments as it is daylight balanced, and creates a brighter cleaner light than traditional fluorescents. Additionally it does not flicker or hum, and holds a greatly reduced health and safety risk in comparison to fluorescents as they do not contain any potentially dangerous substances.



Finance and Savings

This project was jointly funded exercise by both the Lincolnshire County Councils Salix revolving fund and capital investment by the school.

Project cost	£13,250
Expected energy savings	17,080kwh
Expected cost savings	£1,911pa
CO ₂ savings	8.96 tonnes

An added saving comes in the form of reduced maintenance as new LED's have between 3-4 times the life of fluorescents.

The schools CO₂ emissions have also been reduced, which additionally enhances their 'Green' credentials within the local community.

