Sparkenhoe Community Primary School
Whole site survey – LED installation

In 2016 Sparkenhoe Community Primary School took part in the Switching to Low Energy Programme through Salix Finance to identify energy saving measures across all three school sites.

The survey provided information about no cost savings such as behaviour change and reviewing timings on heating and cooling systems. Energy consumption and costs were analysed to benchmark against similar buildings. An energy audit was carried out to show consumption building by building.

Over 100 technologies were reviewed as part of the whole site survey and several Salix compliant projects were suggested. These included:
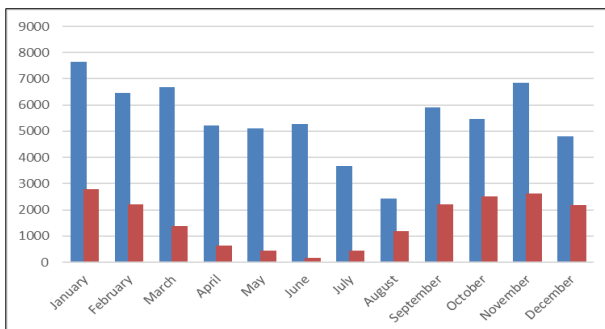
- Time switches to water heaters
- Locking of thermostatic radiators
- Automatic light controls
- Efficient controls of fan convector units
- Insulation of mechanical plant valves
- LED lights

LED lights replacements were highlighted as the best opportunities to make financial and carbon savings and were selected from the report.
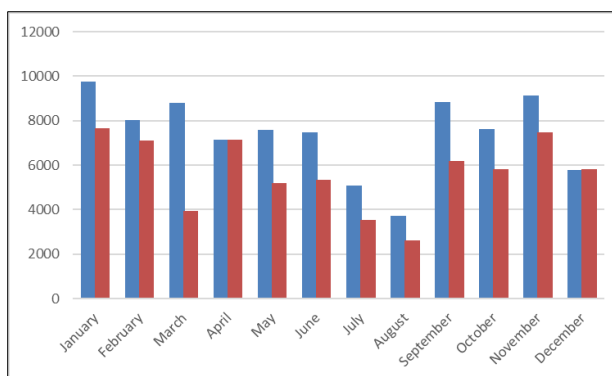
The school received quotes for LED lights and these were presented to the Governing Body. It was agreed to approve the Salix Loan based on calculations and payback (just over 6 years) provided by independent advice from Salix.

- **£10k saving per year**
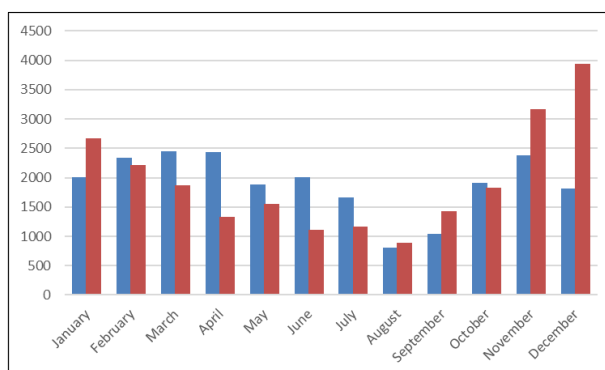- **7-year payback on project**
- **37 tCO$_2$ saving per year**

Gospall Building (72% electricity reduction)

Saxby Building (24% electricity reduction)

Ark Theatre Building (2% electricity increase)

Estimated savings were identified as **£10,041** prior to installation. The school set up agreed direct debit payments of **£8,907** per year over 7 years. Post installation analysis showed energy reduction in 2 buildings (dependent on bulb replacement type). An increase in Ark use was identified as a 50% increase in building use with only 2% increase in electricity.

The school was able to make higher than expected savings during the lifetime of the project and very pleased with the improved internal environment of the building.