

## St Faith & St Martin Junior School – Active Labelling of Light Switches

### BACKGROUND

- 195 students from 7-11 years
- Normal teaching hours from 8:50 – 3:15
- SFSM has before and after school care provision
- Consumption 50,000 kWh of electricity at £5000 annually equivalent to 26 tonnes CO<sub>2</sub> emissions.

A typical classroom contains three or four separately switched circuits of twin-set 5ft T8 fluorescent tubes. Despite the ability to control the lighting rows individually and to have a selection on, whilst others remain off, it is usual for all lighting in classrooms and corridors to be switched on through the day. The Lincolnshire Carbon Ambassadors at [ST FAITH & ST MARTIN JUNIOR SCHOOL](#) identified that some of these rows of lighting do not need to be on under normal daylight conditions. They therefore implemented a programme to label light switches which enables active management; leaving off a proportion of the lights everyday unless it is a dark day and there is a need to override this strategy.

### CASE STUDY METHOD

The key issue was to assess which lighting circuits could be switched off whilst maintaining effective light levels in the rooms. The Lincolnshire Carbon Ambassadors audited the lighting levels in each room and corridor as part of their whole school energy audit. They completed their audit during the day to assess normal daylight conditions. The lights in each room were switched on and assessed for lighting level, switching arrangement and amount of windows/daylight.



A typical light fitting and tube at SFSM

After the assessment, excess lighting was labelled in every room throughout the school. Switches that should remain off were labelled with a red sticker.

The active labelling message is that the red marked switches indicate 'Do Not Touch', and are always left off to deliver the savings. If there is a visibility issue (e.g. early in the morning in winter, or on a particularly dark day) then the teacher can override this and switch all lights on.

The programme was communicated to all staff and pupils to ensure that everyone is aware of the method and that switches marked red should remain off. Jonny, one of the Lincolnshire Carbon Ambassadors at SFSM, wrote an eco-rap that was performed to the school. It covered the key actions and messages from their LCA training including to keep switches with red dots turned off.



Light switches labelled up with red dots – 'never switch on'

### SAVINGS

The results of the active labelling of lighting programme showed that 1.5 kW of lighting could remain switched off permanently. It is estimated that this initiative will save **£300** and **1.6 tCO<sub>2</sub>** per annum. This single measure delivers **6%** saving on the school's electricity bill.

Trish Dawson, School Administrator, has expressed her support for the initiative: "this has proved to be an extremely effective way to reduce electricity consumption, and will help to involve all pupils and to maintain the momentum of saving".