

## Grasby All Saints CofE Primary School – Taking Control of your Heating

### BACKGROUND

- 100 students from 4-11 years
- Normal teaching hours from 9:00 – 3:30
- Teachers arrive before the start of the school day and run after school activities
- Consumes 115,000 kWh of gas at £3500, equivalent to 21 tonnes CO<sub>2</sub> emissions annually

### GRASBY ALL SAINTS CofE PRIMARY SCHOOL

noticed that their heating fuel bills were high and were aware that the heating control was poor. The school was overheating in certain areas whilst others remained cold. Often the school was very cold on some days of the week and they were not clear how to check heating time settings. The school decided to implement a heating management strategy. The key issue was to assess the current configuration and management of the heating system, and then match this effectively to the requirements of the building and its use.



**The boiler and heating control panel at Grasby All Saints**

### CASE STUDY METHOD

An engineer from the Carbon Trust visited the school and inspected the heating demand from the school. With the range of additions to the school building over the years, there are a variety of construction types to manage. The old part of the school building can be very hot in the summer, but also very cold in the winter. The

newer parts of the building can take a long time to warm up in the morning and then become too warm later in the day.

It was found that the boiler timer had been interrupted during a period of building works over the summer holiday. The heating system was firing over five days including the weekend and was set to 'weekend mode' on Mondays and Tuesdays.

The engineer re-set the time clock on the control panel, so that the boiler was operating on the correct days of the week. The frost set-point temperatures, the time settings, and the heating temperature set points we also adjusted to optimum levels.

The school found that the heating was much more reliable and needed less intervention to turn up or down. Classrooms had a more constant temperature during the day and the school was not cold on Monday mornings. The heating was also not coming on over the weekend, when the building was empty.

### SAVINGS

By establishing effective control of the heating system, it is estimated that this initiative will save **£160** and **1 tCO<sub>2</sub>** per annum. This single measure delivers **5%** saving on the school's heating bill.

June Richardson, Head Teacher, has expressed her support for the initiative: "this has proved to be an extremely effective way to reduce heating fuel consumption; we think this kind of support should be offered to all schools as a matter of course".

### LOOKING AHEAD

Lincolnshire County Council Sustainability Team are discussing various options with colleagues in Mouchel to include elements within caretaker training and premise advisor audits to catch and resolve similar control panel errors much more quickly in the future.