



Energy Sparks Case Study Boiler control

In their first week using Energy Sparks, Whiteways Primary School, Sheffield had saved 35% of their annual gas costs. They did this at no cost to the school, just by changing their boiler times.

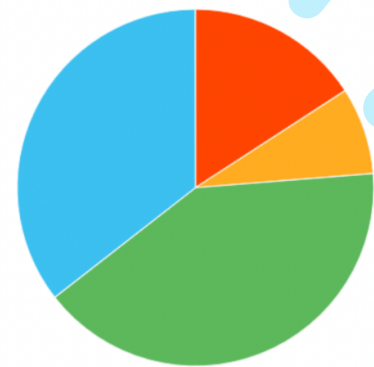
"I would highly recommend [Energy Sparks] to any other school."
- Jennie Nixon, Head of School

Analysis

Analysis of Whiteways Primary School's gas consumption started by looking at the breakdown of gas use by type of day/time.

For Whiteways this showed that 59% of the gas usage was when the school was closed – out of school hours during the week, at weekends and during holidays.

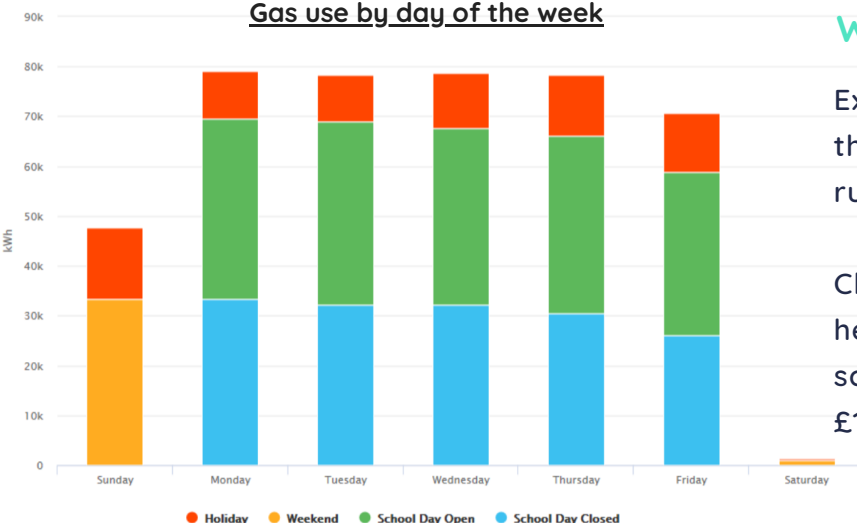
Breakdown by type of day/time - gas



● Holiday ● Weekend ● School Day Open ● School Day Closed

Time Of Day	kWh / year	£ /year	CO2 kg /year	Library Books /year	Percent
Holiday	68,795	2,064	14,034	413	16%
Weekend	34,213	1,026	6,979	205	8%
School Day Open	176,776	5,303	36,062	1,061	41%
School Day Closed	154,192	4,626	31,455	925	36%
Total	433,976	13,019	88,531	2,604	

Gas use by day of the week



Weekend usage

Examination of this in closer detail showed that the heating had been accidentally left running on Sundays.

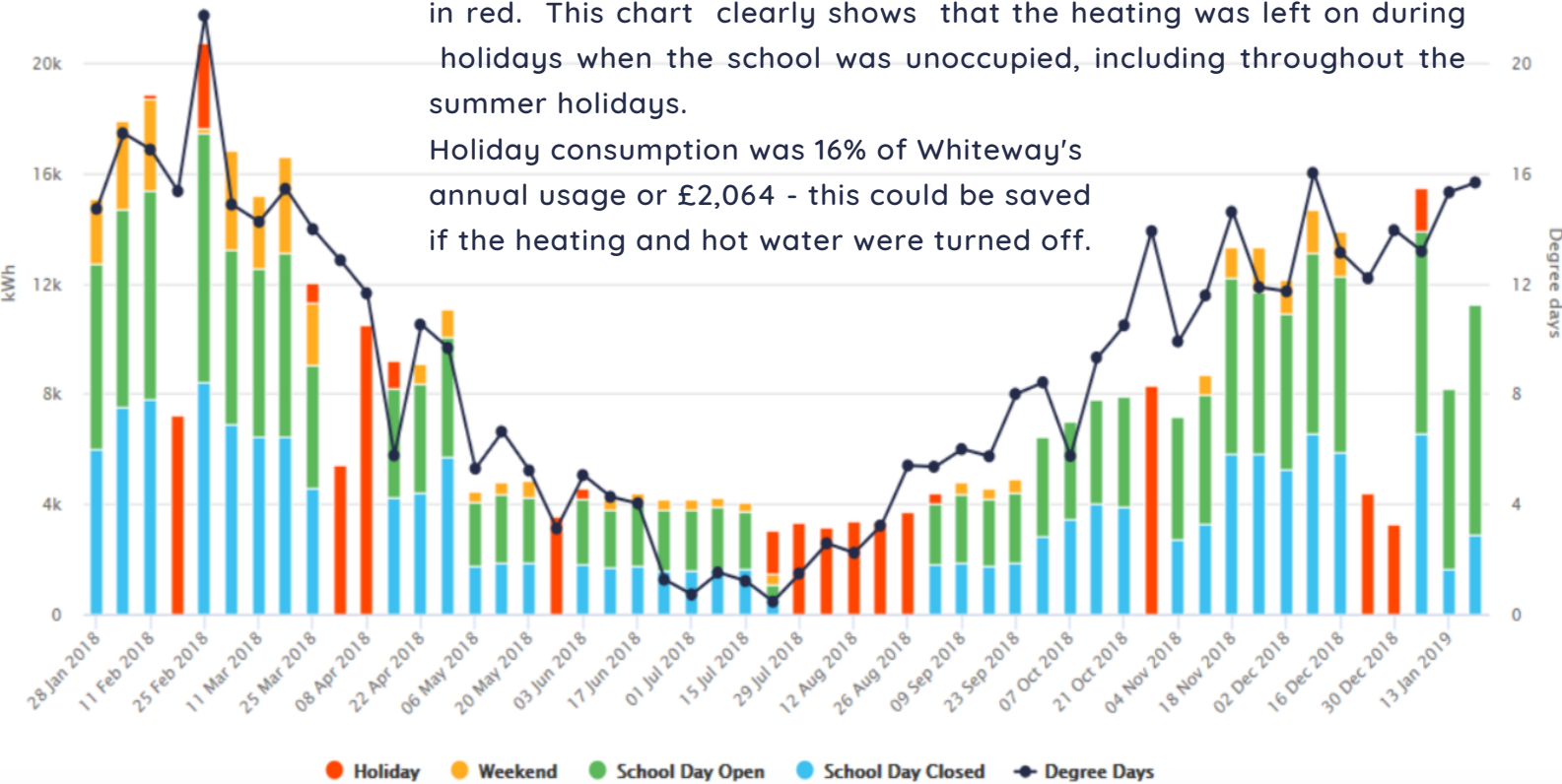
Changing the boiler control to turn the heating off on Sundays would save the school about 8% of their energy usage or £1,023 per year

Energy Sparks Case Study Alerts

Holiday usage

Throughout our website, energy usage during the holidays is coloured in red. This chart clearly shows that the heating was left on during holidays when the school was unoccupied, including throughout the summer holidays.

Holiday consumption was 16% of Whiteway's annual usage or £2,064 - this could be saved if the heating and hot water were turned off.



Gas consumption (by week)

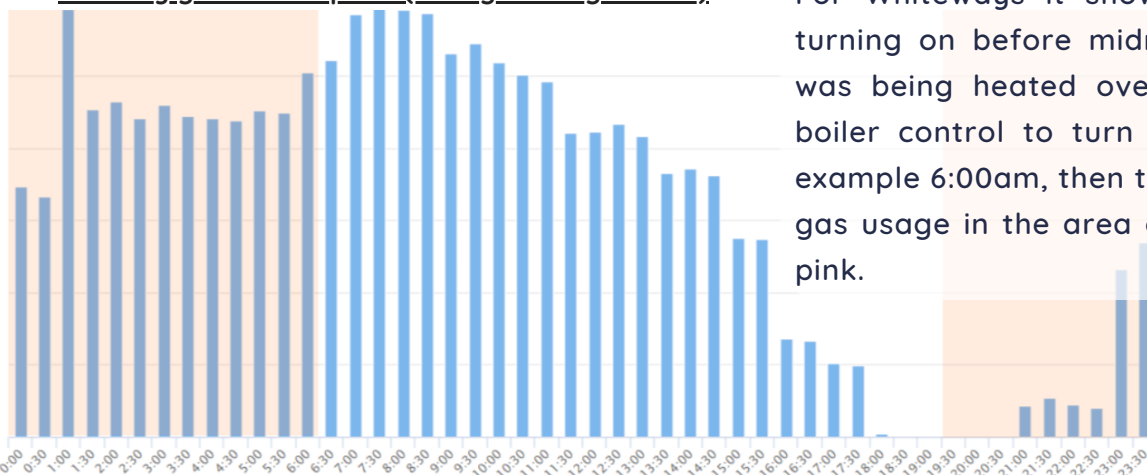
“Engaging with Energy Sparks has been a really worthwhile experience. Not only has the school saved money, the children have become more aware of the ways that they can help to reduce energy use.”

- Jennie Nixon, Head of School

Out of hours usage

Finally the Energy Sparks analyses include usage during the winter, aggregated by time of day.

Intraday gas consumption (during heating season)



For Whiteways it shows the heating had been turning on before midnight and that the school was being heated overnight. By changing the boiler control to turn the heating on later, for example 6:00am, then the school could reduce the gas usage in the area of the chart highlighted in pink.

“The website is a great resource for adults and children with activities and data which allow children to apply their mathematical and scientific skills and knowledge.”

- Jennie Nixon, Head of School

