



# Energy Sparks Case Study

## Storage heating control

Stanton Drew Primary School used Energy Sparks to help them reduce the electricity consumption of their storage heaters by 28%. They realised that their storage heaters were running during the weekend, and that by installing a 7-day timer costing £400 they could save £700 per year in electricity costs.

“Our school at Stanton Drew is a tiny village school of only 53 children and as such we need to look after spending carefully. I was aware that we had one of the highest per pupil spends on energy costs in the local authority so I was keen to look for savings.

I initially got involved with Energy Sparks as I thought it would *inspire the children to be more eco-aware*. Little did I realise back then how much we would be saving now!

Our initial visit from the Energy Sparks team identified installing 7-day timers on our night storage heaters as a way to save some money. For a small school such as ours a £400 outlay on timers seemed a lot at the time but *making the money back in savings in only 16 weeks* is much better than I expected.

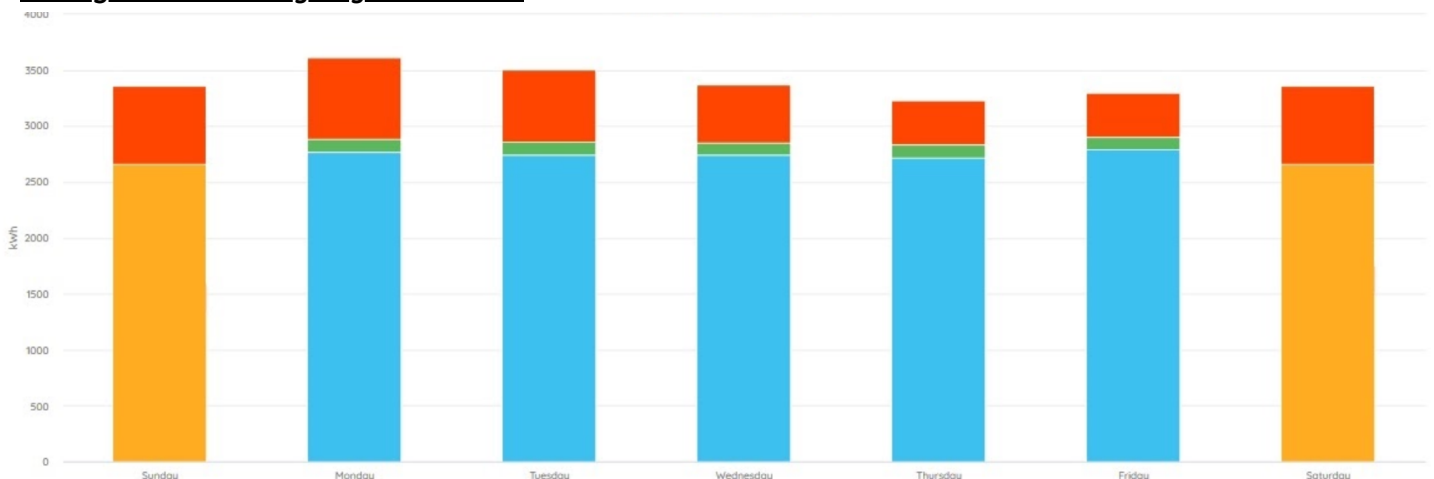
We should be able to *save £800 annually* so that's over £15 extra per child per year - all thanks to Energy Sparks. ”

- Andrew Marriott, Deputy Head, Federation of Bishop Sutton and Stanton Drew Primary Schools

Energy Sparks provides specific analysis for storage heaters. For Stanton Drew this showed that the storage heaters at the school were running at weekends.

Contextual advice at the bottom of the chart showed the potential energy saving opportunities, which for Stanton Drew were £800 per year.

### Storage heater use by day of the week



**Question** : Are there any differences between the days of the week - if so can you explain them?

**Question** : At many schools the storage heaters are left on at weekends because the timer doesn't understand days of the week (24 hour timer)? Are storage heaters left on at your school during the weekend? Installing a '7-day' timer which might cost the school £400 could save your school 6,800 kWh or £800 per year. Contact Energy Sparks [hello@energysparks.uk](mailto:hello@energysparks.uk) for advice on changing timers if you need help?

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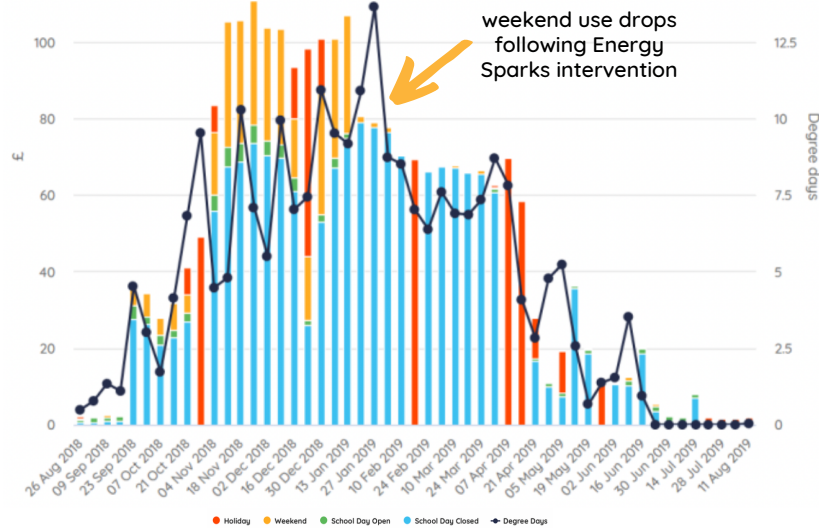
## Storage heating control

### The impact of installing a 7-day timer

Following our advice, the school installed a 7-day timer in December. This allowed them to automatically turn the storage heaters off at weekends. The installation cost £400, which was paid back in under 16 weeks.

The chart to the right shows the impact of this change. Energy Sparks charts specifically highlight weekend (yellow) and holiday usage (red) as reducing usage outside school hours is often the most effective way of reducing costs. If you look at the chart you can see the storage heaters are using electricity at weekends up until December but not in January.

Storage heater use over a year (kWh)



With a 7-day timer the school will still need to manually switch the storage heaters off over holidays if the school is unoccupied and frost is not a concern. Stanton Drew could have saved a further £300 by turning the heaters off during the Spring and Easter holidays.

Energy Sparks's 'Alert' system sends email or text reminders to turn heaters off. Alerts also remind school staff to turn heating off at the end of the heating season e.g. in May, by automatically checking the weather forecast and working out when it is warm enough to recommend turning the heaters off.

### Lessons learned

- Stanton Drew Primary School used Energy Sparks to look at their Storage Heater electricity usage and saved £800 in annual electricity costs for an investment of £400 – getting their money back on the investment within 16 weeks
- Over 10 years, this is a potential saving of £8,000 for an investment of £400
- However, further work on reducing Storage Heater usage over holidays has the potential to save up to an additional £300 per year. Responding to the Energy Spark's alerts would provide reminders of when to turn the Storage Heaters off