

Case Study 3: Storage Heater Control

Using Energy Sparks to reduce storage heater costs by 28%.
This saving covered the installation cost within 16 weeks



'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

Summary

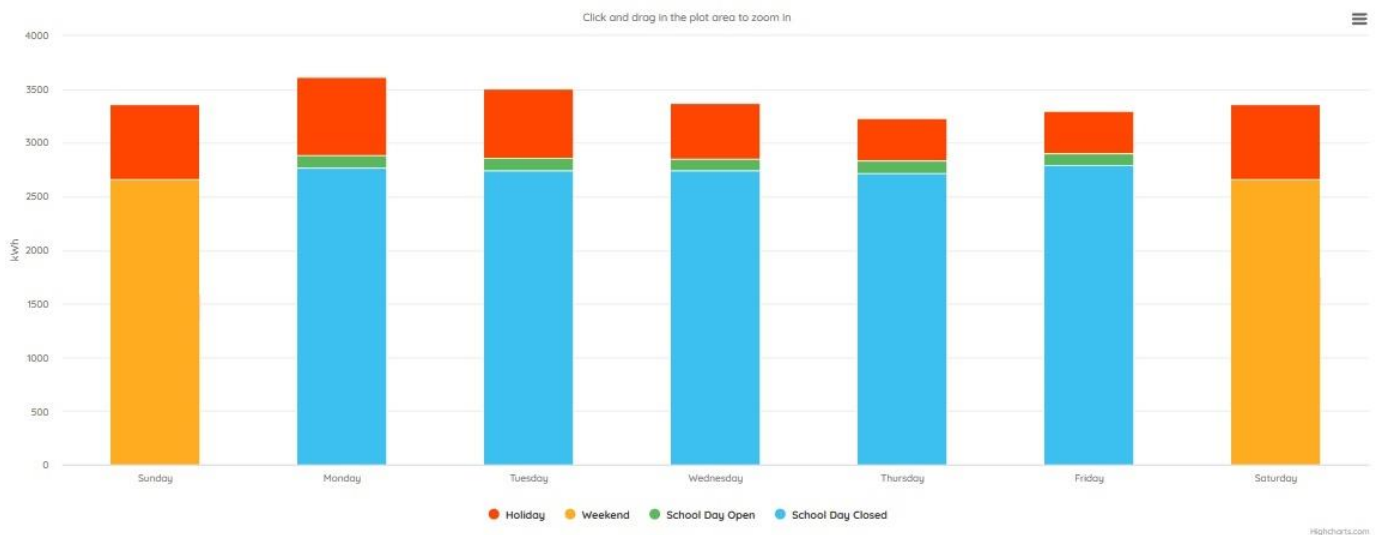
Stanton Drew Primary School used Energy Sparks to help them reduce the electricity consumption of their storage heaters by 28%. They realised that their storage heaters were running during the weekend, and that by installing a 7-day timer, costing £400 they could save £700 per year in electricity costs.

Analysis

Energy Sparks has specific analysis for storage heaters. For Stanton Drew if you look under Energy Sparks 'Learn more about your school's energy use' charts and advice, and find, the 'Storage Heater by Day of the Week' chart in the 'Storage Heaters' section:

Storage heater usage by day of the week

This chart shows the breakdown of the consumption of electricity by storage heaters 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 for advice on changing timers if you need help?

The chart shows that the storage heaters at the school were running at weekends, and the contextual advice at the bottom the potential energy saving opportunities, which for Stanton Drew were £800 per year.

Case Study 3: Storage Heater Control

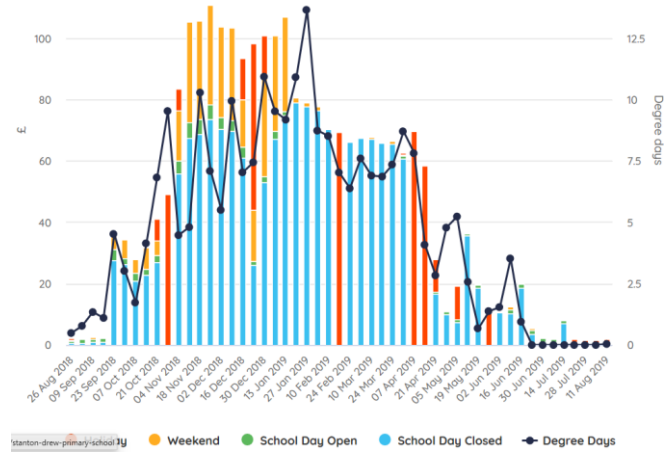
Using Energy Sparks to reduce storage heater costs by 28%.
This saving covered the installation cost within 16 weeks



The impact of installing a 7 day timer

Taking the advice on the Energy Spark's website the school installed a 7-day timer in December which allowed them to automatically turn the storage heaters off at weekends. The installation cost £400, which was paid back in under 16 weeks.

The Energy Sparks chart to the right shows the impact of this change. Energy Sparks charts specifically highlight weekend (orange) and holiday usage (red) as reducing usage outside school hours is often the most cost-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.



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 this year by turning the heaters off during the Spring and Easter holidays; Energy Sparks has an 'Alert' system which you can sign up to which will send you email or text reminders to do this. It also has alerts to remind you to turn heating off at the end of the heating season e.g. in May, by automatically checking the weather forecast for you 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 – which is a very good return
- However, further work on reducing Storage Heater usage over holidays has the potential to save up to an additional £300 per year by signing up to the Energy Spark's alert system which will provide reminders of when to turn the Storage Heaters off

If you have any questions about Energy Sparks please contact us: hello@energysparks.uk

www.energysparks.uk