Energy Sparks
Helping schools fight climate change

User Guide

Energy Sparks is a charity that offers a unique school-specific energy management tool and education programme. Using a school's electricity, gas and solar data, Energy Sparks shows pupils and staff how much energy the school is using each day. The online tool presents bespoke analysis of the energy data with suggestions of actions the whole school community could take to save energy.

Energy Sparks has enabled schools to save up to 40% off their energy bills, cut school carbon footprints and give their pupils the knowledge and skills to cut energy waste at school, home and in their future lives. Energy Sparks focuses on no and low-cost energy saving opportunities, particularly cutting energy waste during the school holidays, weekends and overnight.

Your school's access to Energy Sparks' services includes:

- Separate adult and pupil energy management dashboards, tailored for each audience,
- School-specific energy analysis and prioritised recommendations,
- Interactive energy usage charts,
- Weekly emailed energy use alerts,
- Ability to set energy-saving targets and track progress,
- Benchmarking of energy use against similar schools,
- Unlimited user accounts,
- Webinar training and email support for school staff with energy management and sustainability education,
- Access to over 140 pupil activities with downloadable lesson plans, workshops and additional resources,
- Guidance on over 60 adult-led low and no-cost energy efficiency actions,
- Integrated solar data (if relevant)

This user guide is designed to give you an introduction to Energy Sparks,

highlighting the main features, functionality and resources so that you can get the most from the online tool and education programme.

If you need more help using Energy Sparks or have feedback to share please do contact us on support@energysparks.uk

"No one can take action towards net zero without data and Energy Sparks provides the data. It also provides this in a pupil accessible way that enables sustainability to be integrated into the curriculum. The best chance of fighting the climate crisis is by empowering the next generation and that's what Energy Sparks does."
The HEART Education Trust

Table of Contents

1. Get Started with Energy Sparks at your school **4**
1a) Introduction 4
1b) Where should my school prioritise our energy-saving efforts? 4
1c) Add additional staff users to your Energy Sparks account 5
1d) Attend an online staff training session with other participating schools 5
1e) Setting up an eco-team 6
1f) Setting a target 6
1g) Completing an activity programme 6
1h) Recording pupil activities and adult actions on Energy Sparks 6
1i) Carrying out a switch-off before each holiday 7
2. Dashboards **7**
2a) Pupil dashboard 7
2b) Adult dashboard 10
3. Pupil Activities and Scoreboards **12**
4. Energy Analysis **14**
4a) Overview 14
4b) Recent alerts 17
4c) Energy saving opportunities 17
4d) Individual advice pages 18
4di) Insights 18
4dii) Analysis 19
4diii) Learn more 19
5. Alerts **19**
6. Manage School **20**

1. Get Started with Energy Sparks at your school

1a) Introduction

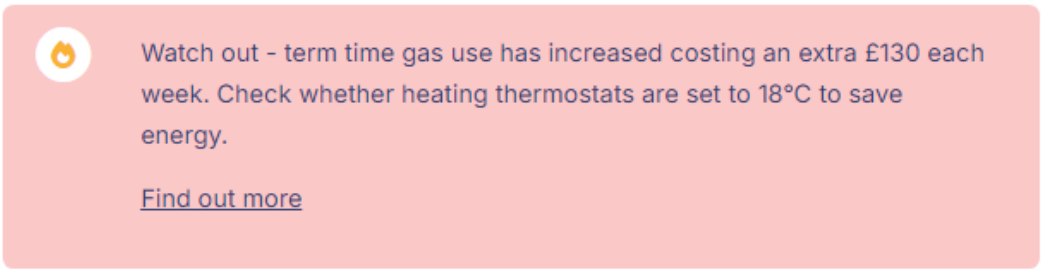
Using your school's smart meter data, Energy Sparks will show you how much energy your school is using each day. Our unique online tool presents bespoke analysis of this data with suggestions of actions you could take to save energy and reduce your school's carbon emissions. Pupils and staff can use this information to help your school to save energy, and help protect the environment.

Energy Sparks has over 140 energy related activities which pupils can participate in through eco-teams or class based learning. Schools gain points for completing activities and these contribute to a scoreboard where pupils can compete with other schools providing extra motivation to save more energy.

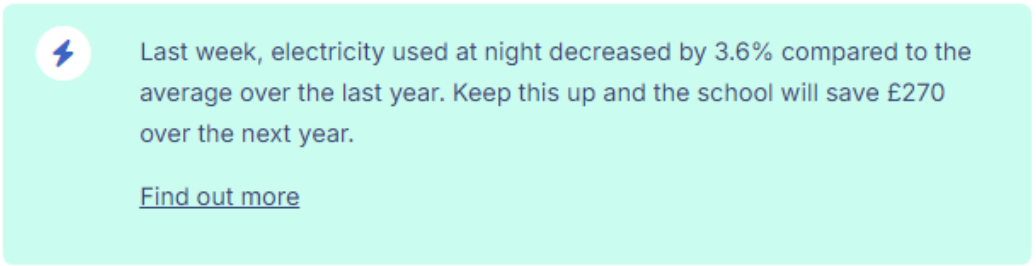
The average Energy Sparks primary saved at least £3,000 off their energy bill over the 2024/2025 school year and 6 tonnes of carbon dioxide, the average secondary saved at least £17,000 and 30 tonnes of CO2. You can explore case studies that showcase some of the ways that Energy Sparks schools have saved energy and improved their pupils' energy and climate literacy.

1b) Where should my school prioritise our energy-saving efforts?

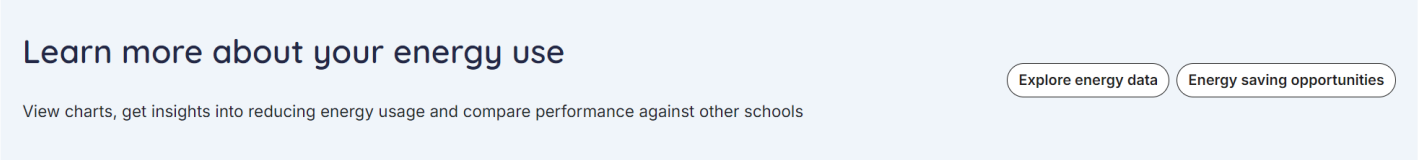
Take a look at the Energy Sparks adult dashboard for your own school to identify how you could cut your energy consumption. Your Alerts will highlight whether your energy use is high or low and flag some easy energy-saving opportunities.



Alerts can also flag up positive energy-saving progress:



You can explore more energy-saving opportunities by following the link on the dashboard.



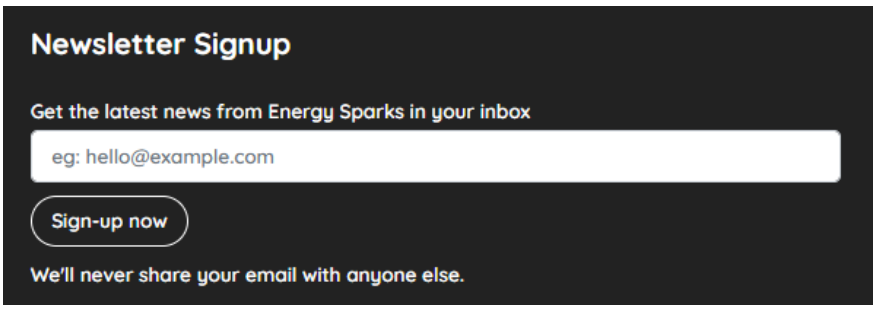
Usually, the most significant things to do are to reduce your electricity baseload (the amount of electricity required to power things that run all the time) and to reduce out of hours gas consumption (by improving heating controls).

1c) Add additional staff users to your Energy Sparks account

We expect all schools to have at least three registered staff users on Energy Sparks so that energy-saving becomes a community effort. These should include a member of the senior leadership team, site manager and a teacher. When staff leave the school, they should commit to hand over their Energy Sparks user role to another suitable staff member.

To encourage more colleagues to get involved with Energy Sparks, you can set them up with a user account on Energy Sparks. To do this, log into Energy Sparks, click on the Manage School menu in the top right-hand corner of the screen, select Manage users and then either click on New school admin account or New staff account. Enter their details and they will be issued with an account set-up email.

We encourage staff users to sign up to receive weekly Energy Sparks alerts so that they are updated about when the school's consumption changes and are kept informed about the cost and carbon implications of these changes and recommended actions to reduce energy usage. We also encourage staff users to sign up to the Energy Sparks newsletter which informs them about energy saving campaigns and best practice across schools. You can sign up to the newsletter via the link on the footer on any Energy Sparks web page.



1d) Attend an online staff training session with other participating schools

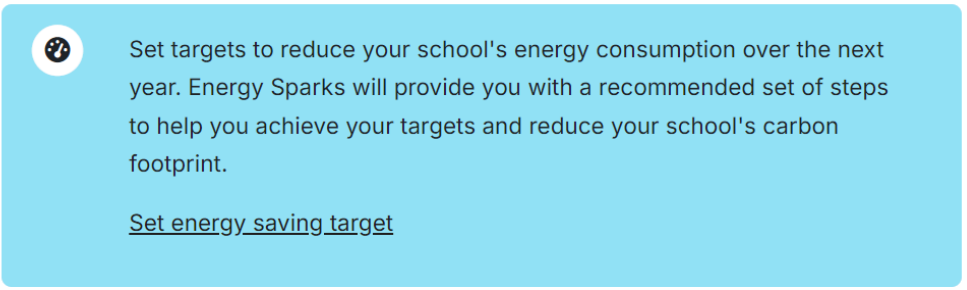
If you or colleagues would like to receive further training on how to use the Energy Sparks site, how to manage your school's heating system, or how to use Energy Sparks with your pupils, you can sign up to one of the virtual webinar training sessions. You can also watch short pre-recorded video guides on YouTube.

1e) Setting up an eco-team

Energy Sparks is designed to engage students so we expect schools to use Energy Sparks with a pupil eco-team or other pupil group throughout the school year. The Energy Sparks pupil dashboard is designed for pupils from KS1 to KS3. Older students may like to use a mix of the pupil and adult dashboards. For more information about setting up an eco-team, please check out this activity. The Energy Sparks YouTube channel provides some introductory videos for eco-teams.

1f) Setting a target

Set an energy-saving target for your school and use the Energy Sparks site to monitor your progress. To do this, go to the **Adult dashboard**, scroll down to the **Reminders** section and click on **Set energy saving target**.



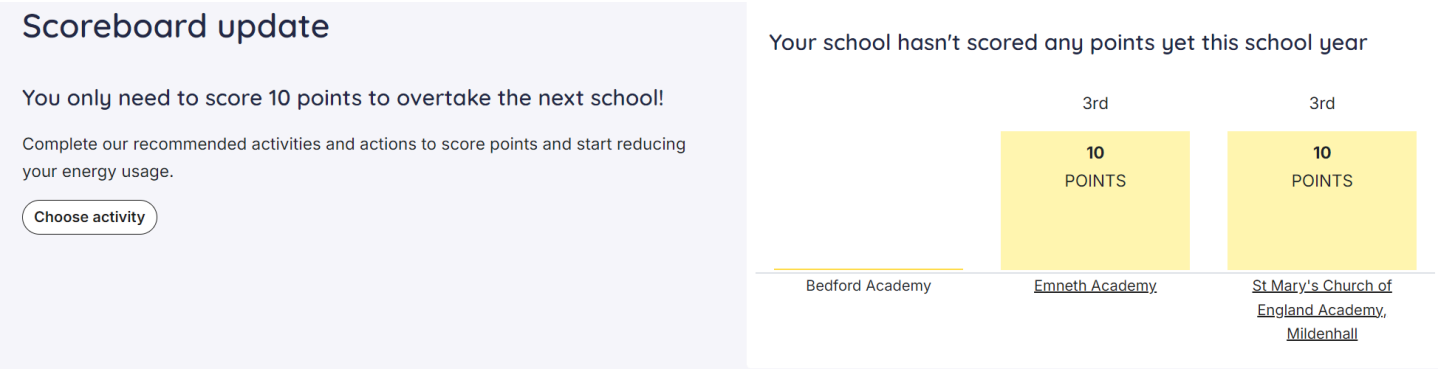
1g) Completing an activity programme

All schools should complete at least one Energy Sparks pupil activity programme per school year. Programmes support pupils to drive energy and carbon-saving action at your school by breaking down topics into step-by-step tasks. There are a wide range of programmes and we particularly recommend the Get Energised programme for schools at the start of their energy-saving journey.

1h) Recording pupil activities and adult actions on Energy Sparks

Once completed, please record pupil activities and adult actions on the Energy Sparks website. Every time you record an activity or action, you earn points for your school which go towards your position in the Energy Sparks scoreboard. **Schools scoring the highest number of points at the end of the school year could win a £500 prize to go towards a sustainability project at their school.** Read our case study about Harris Primary Academy Haling Park who was one of our recent scoreboard winners.

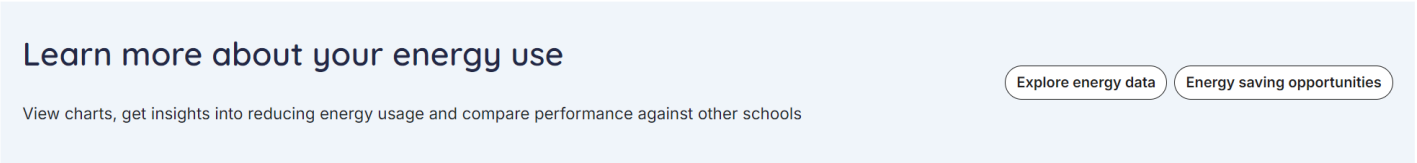
You can access your school's activity recommendations from your dashboards:



1i) Carrying out a switch-off before each holiday

Nominate at least one named staff member to carry out a switch off before each holiday. Many schools leave the heating running on full during all the winter school holidays, and too much electrical equipment running all year round. Switching the heating to frost-protection only during the winter holidays can save many schools £1000s. Further guidance on improving your heating control can be found on the **Advice pages** for your school.

The easiest way to access this guidance is by following the **Explore energy data** link from the adult dashboard.



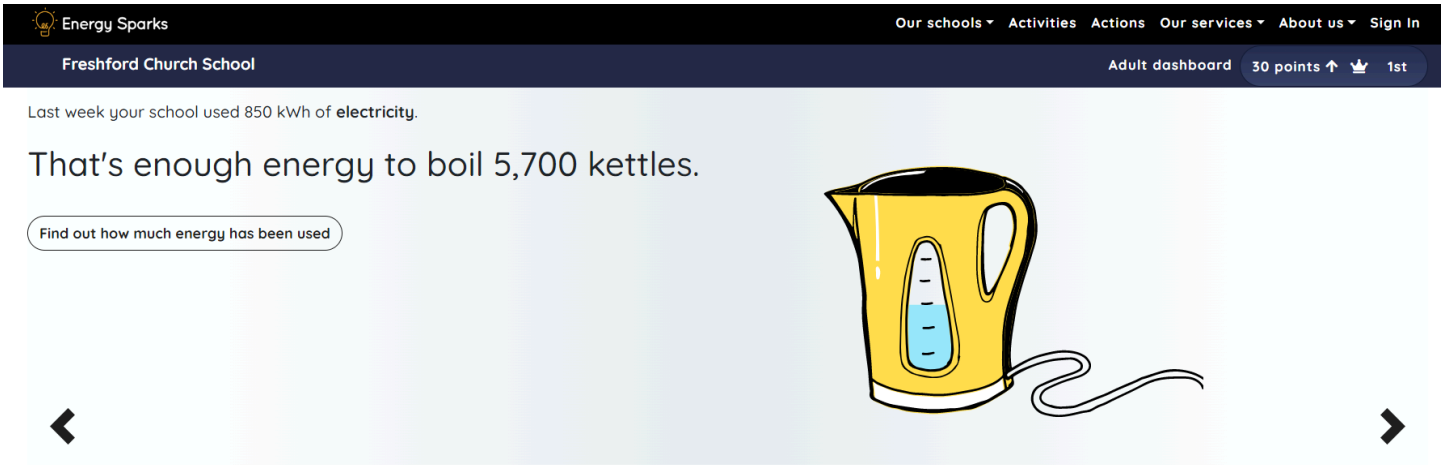
2. Dashboards

Energy Sparks has two dashboards to view a school's data and energy saving recommendations. Each dashboard is focused on a different user type: **Pupil** or **Adult**

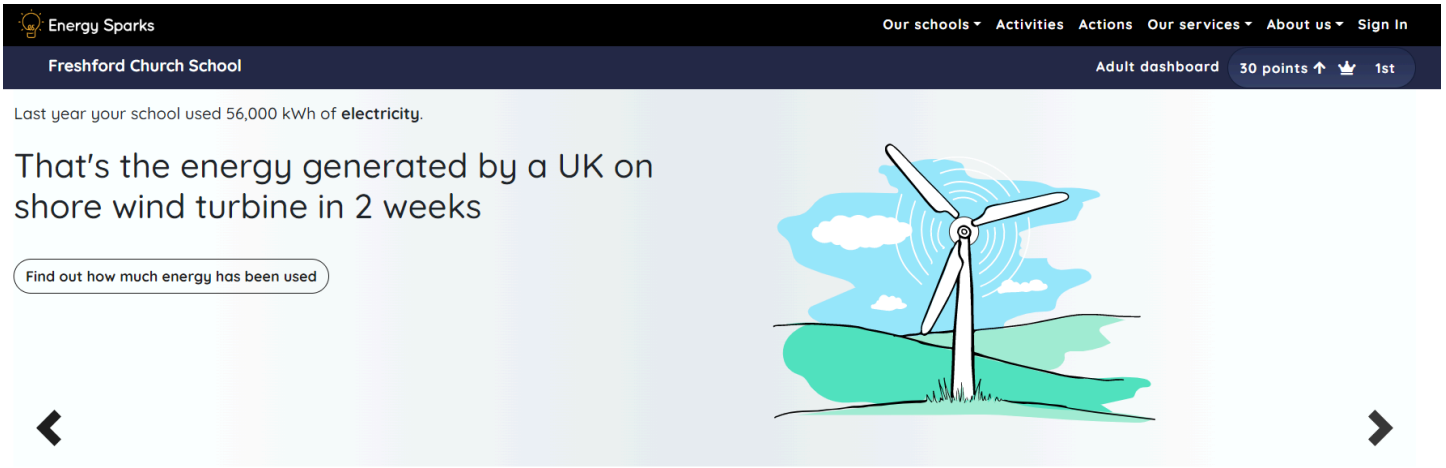
2a) Pupil dashboard

The **Pupil dashboard** is publicly available through the link on the school name menu bar, and is the default dashboard if pupils log in using a pupil password. This facilitates pupil engagement at home and promotes pupil led exploration of energy data for other participating schools.

The **Pupil dashboard** is focused on engaging KS1 to KS3 pupils. The first section of the dashboard allows you to compare your school's energy use with other energy consumers:



Or energy generators:

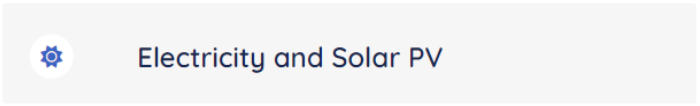


Or understand how much carbon dioxide is generated by your school's energy use:



Use the arrows to scroll between different energy equivalences.

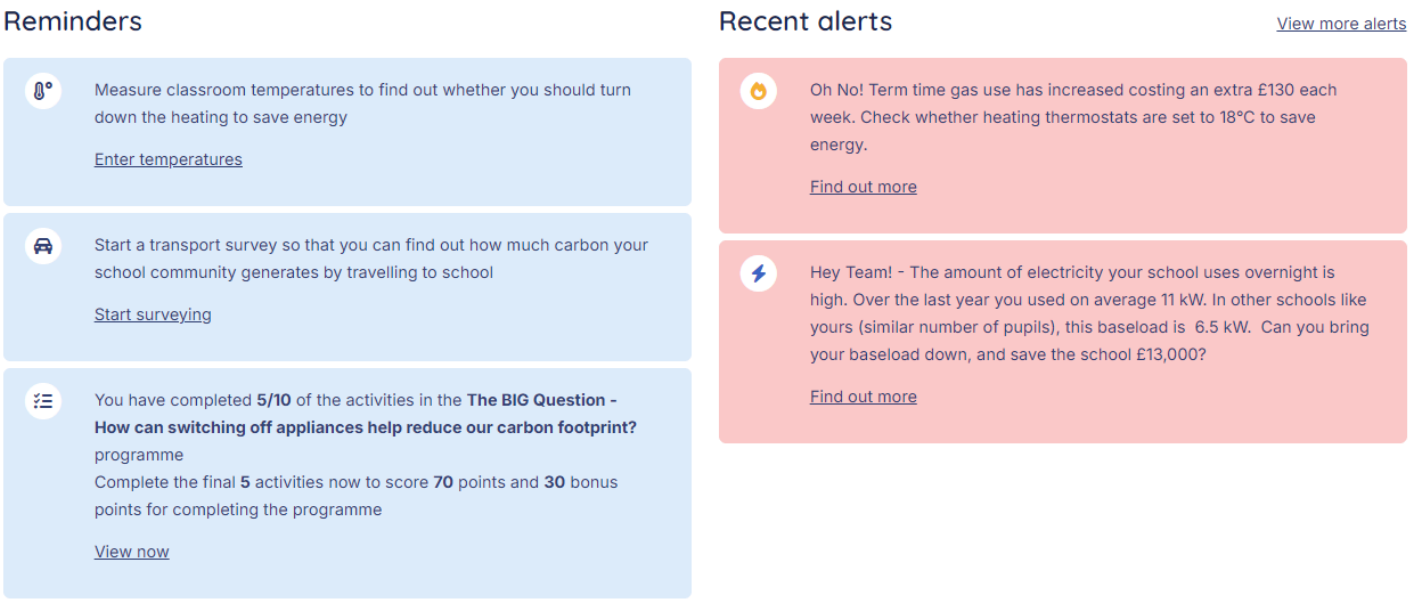
Now you can **explore the energy data** for your school in more detail. Choose electricity or gas to find out when energy was used, what it cost and how much carbon dioxide was generated. The data is presented in different ways to allow linking with curriculum topics on charts, graphs and tables.



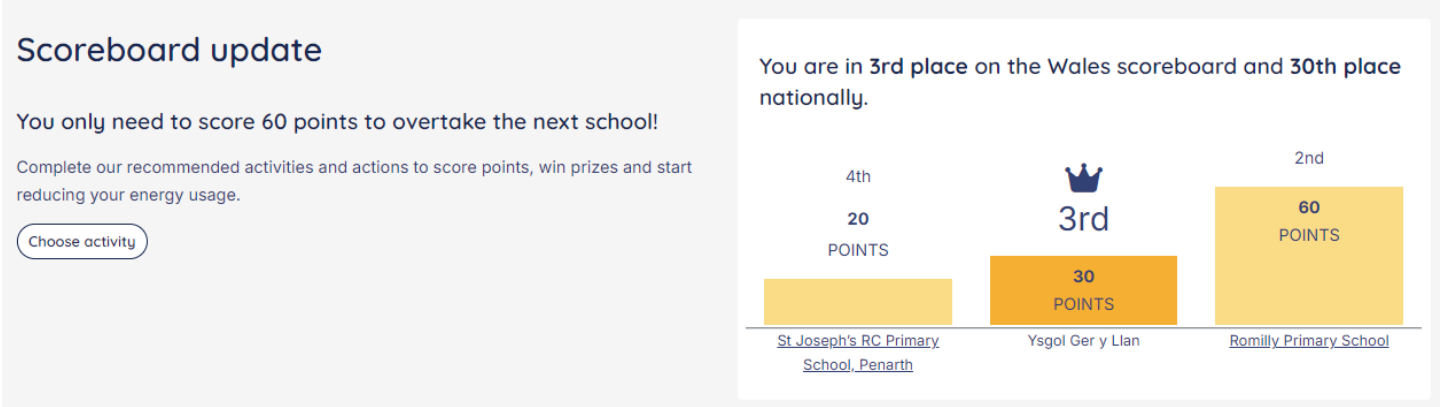
If your school has storage heaters you will see the electricity used to heat your storage heaters overnight split out from the rest of your electricity consumption.

If your school has solar panels, Energy Sparks provides details of the electricity generated by your solar panels, how much of that electricity is exported to the National Grid, as well as your electricity consumption.

Both dashboards provide you with **alerts** of changes in energy consumption and action prompts to help investigate and reduce your school's carbon footprint and reminders of **suggested activities** to try next:



The **scoreboard update** shows you where your school is on your **regional scoreboard** and prompts you to check the **recommended activities** for your school. We even share recent activities from other schools in your area!

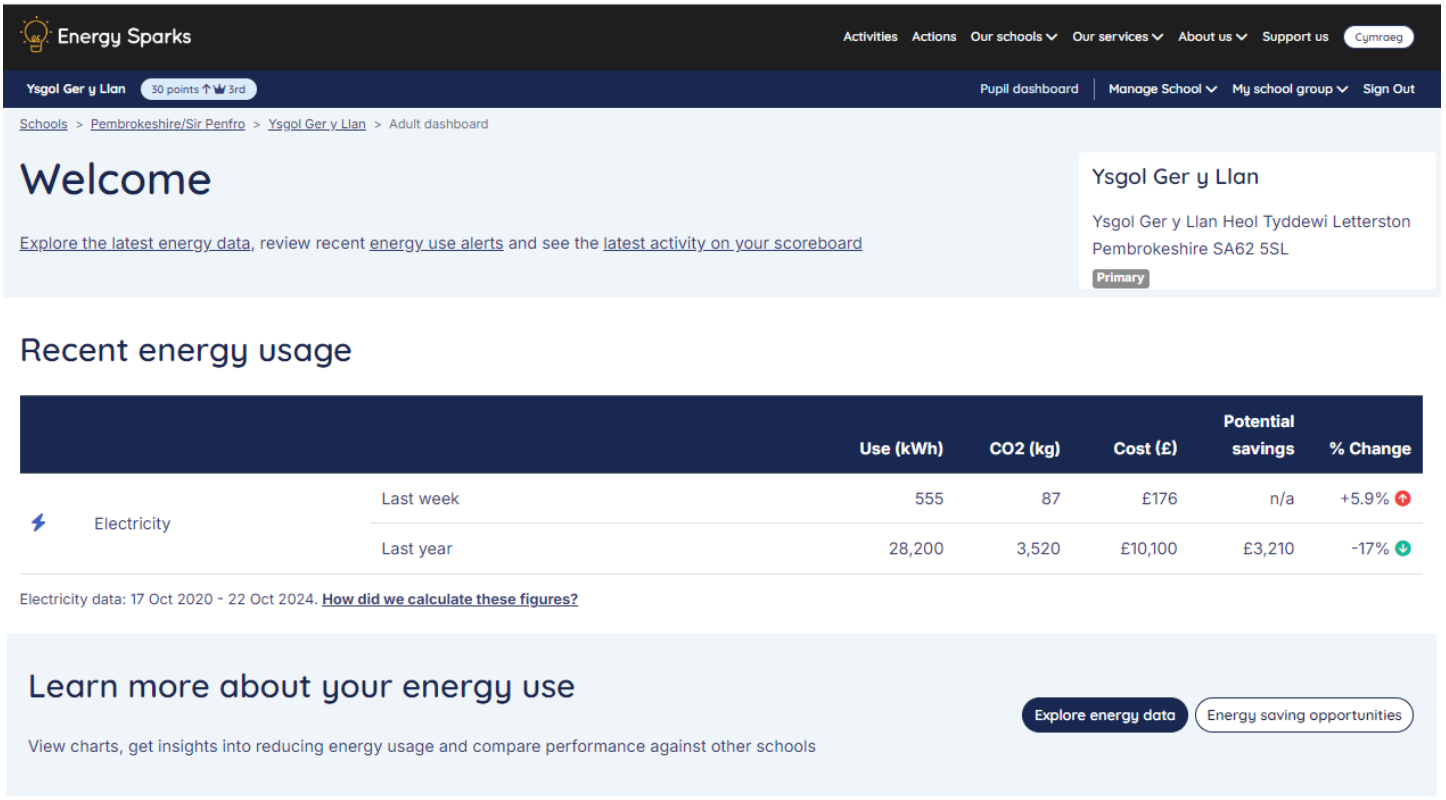


You will need to be logged in to see suggested activities for your school.

2b) Adult dashboard

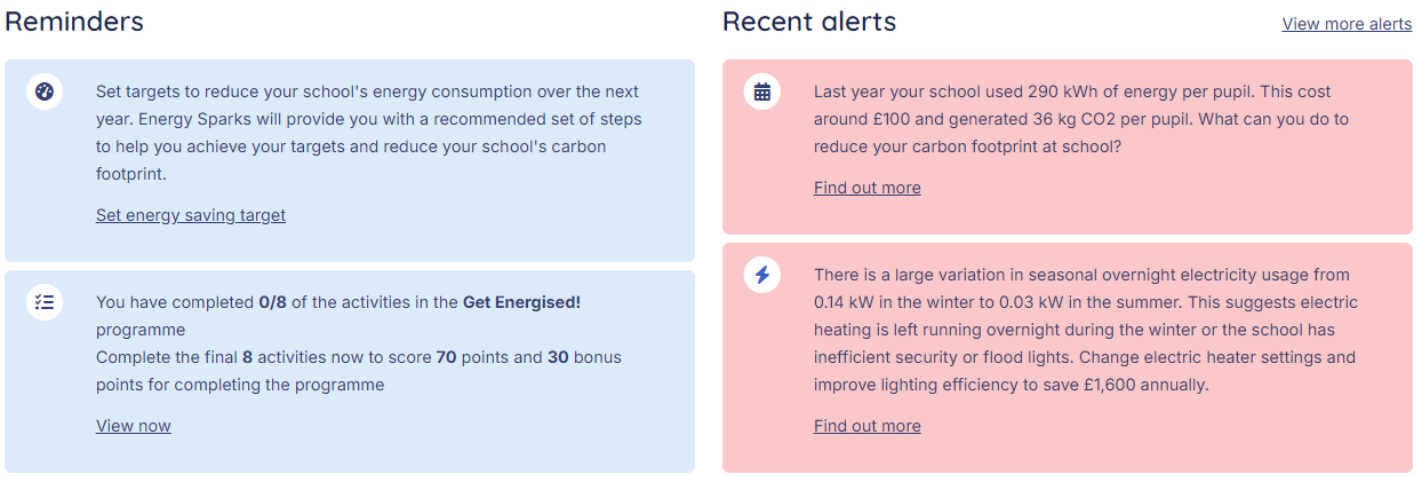
The **Adult Dashboard** is the default dashboard when you navigate to a school from the View Schools page, https://energysparks.uk/schools, and for any logged-in school staff or group users. The **Adult Dashboard** aims to summarise the school's annual energy use, its cost and both long and short term changes in consumption, and potential savings if schools match the most energy efficient schools.

The two buttons in the **Learn more about your energy use** section will take you to more detailed energy analysis where you can see **interactive charts** and gain insights into how you use energy as well as the best ways for your school to save energy

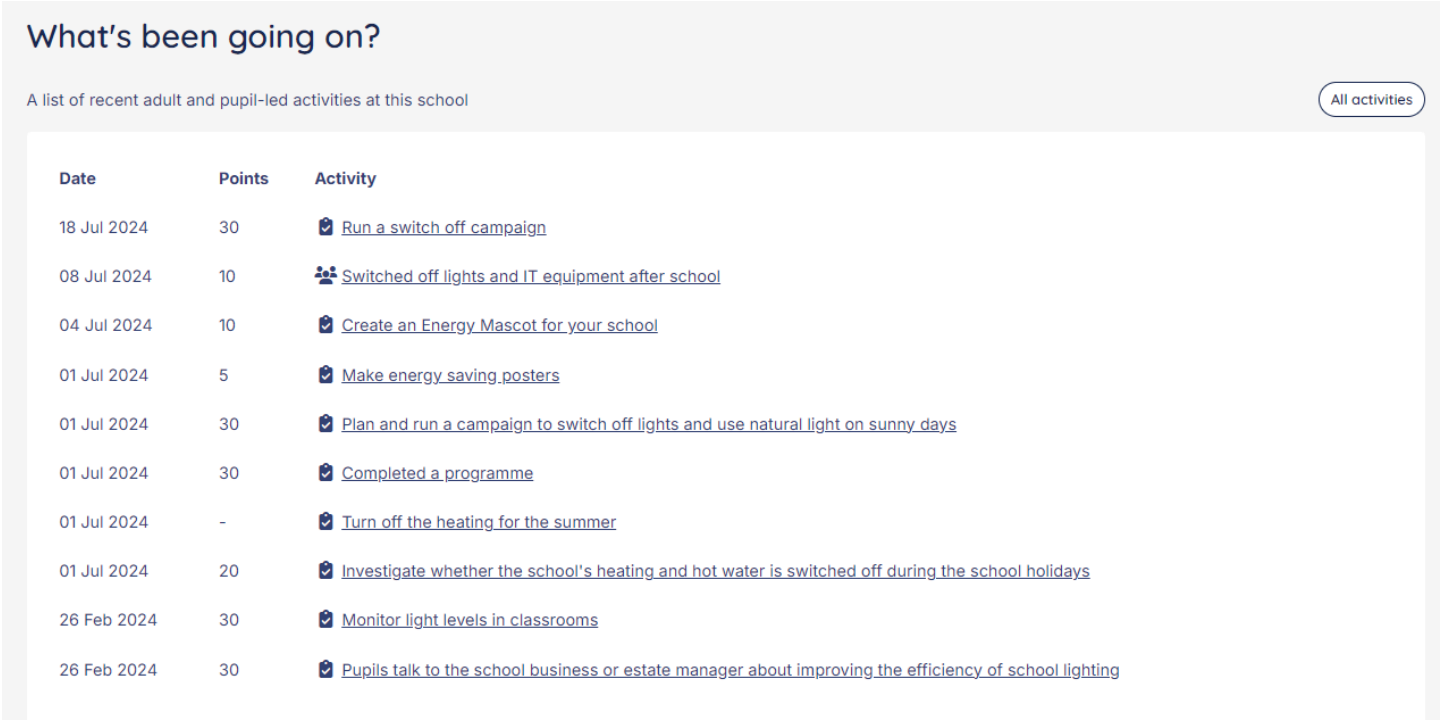


The **Adult Dashboard** presents reminders, which are Energy Sparks system prompts of account actions you need to take as well as prompts to record activities. For example, schools are encouraged to set a target to reduce their energy consumption. Once set, Energy Sparks will monitor progress against the target with activity recommendations to help meet your target.

Schools are also presented with **alerts** highlighting recent changes in consumption both positive and negative. Click the 'Find out more' link to learn more about the issue, possible causes and recommendations to cut energy consumption. Click on the "View more alerts" link to go to a list of all recent alerts for your school. Go to the Alerts section of this document to find out about the benefits of having these sent directly to you by email.



The **Adult Dashboard** ends with a timeline of recent activity at your school.



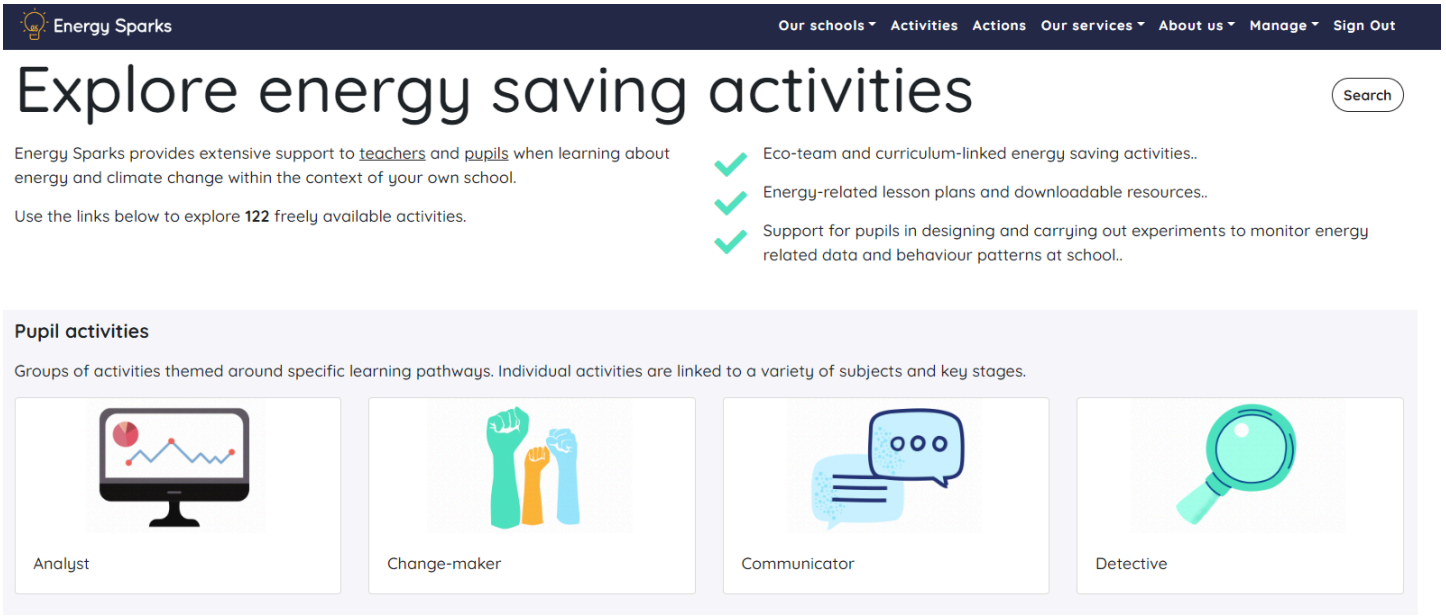
Logging activities and actions taken by your school is really beneficial for several reasons:

- Each logged activity or action will earn points for your school towards termly or annual prizes.
- It reminds you what actions have been taken for annual reporting or Eco Schools applications.
- It helps track which actions have impacted energy consumption - Energy Sparks even adds a record to your school's charts when actions are logged.
- It helps Energy Sparks to track which actions make the biggest impact and share success stories and advice with other schools.

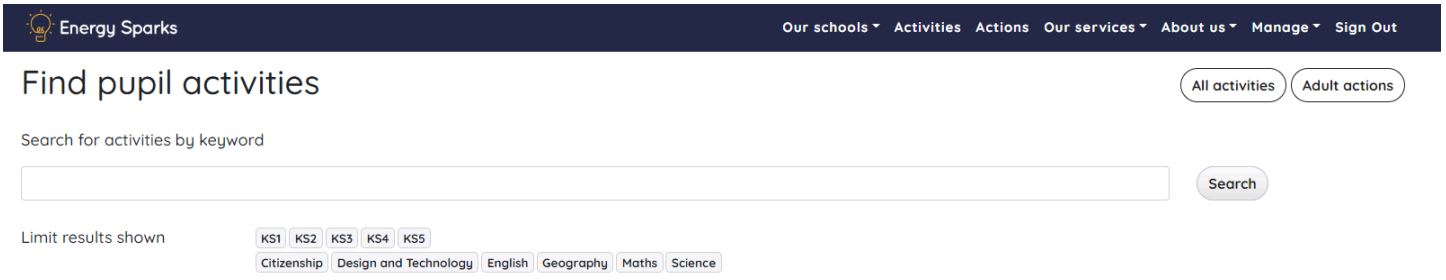
3. Pupil Activities and Scoreboards

Energy Sparks pupil **activities** are available to all users of the site via **Activities** on the main menu bar.

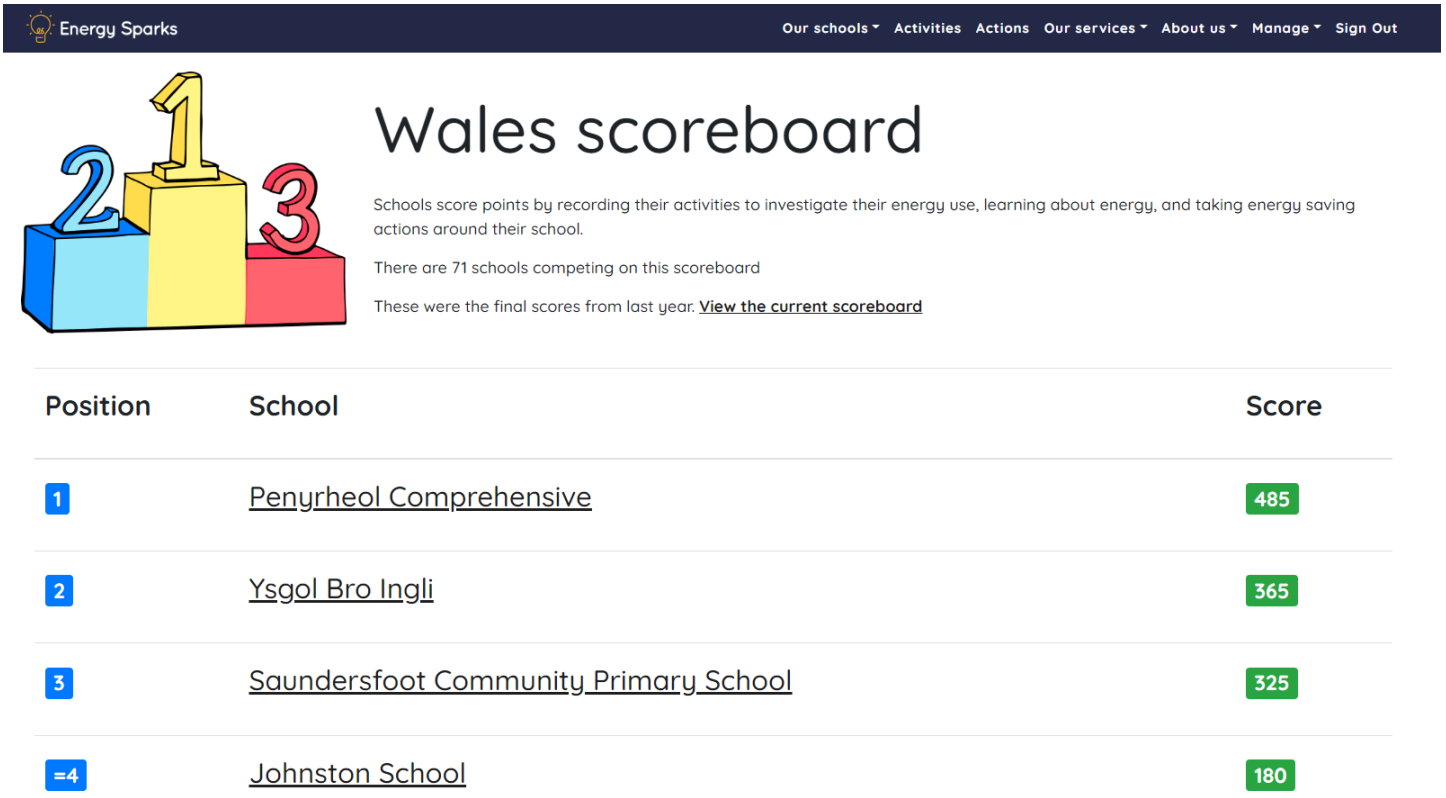
Energy Sparks activities are sorted into six categories: Analyst, Change-maker, Communicator, Detective, Explorer and Home Learning.



The activity search feature allows you to find activities by keyword, and filter by key stage and subject.



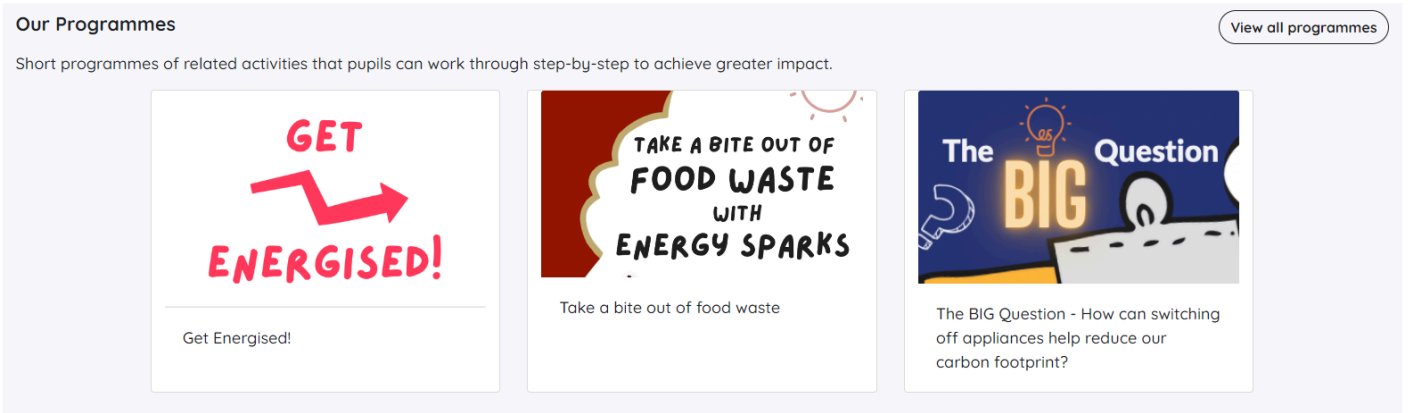
Recording an activity on the Energy Sparks website earns enrolled schools between 5 and 75 points depending on how long the activity takes to complete and its impact. Points automatically go towards your school's position in the **Energy Sparks scoreboard** nationally and for your region:



Energy Sparks activities include **downloadable lesson plans, activity plans, and pupil worksheets**.

If you log into the site, then you also have the opportunity to access activities with **embedded Energy Sparks charts**, which can make it easier to explore the Energy Sparks data with pupils.

Some activities are incorporated into **Energy Sparks programmes** which are designed to guide teachers and pupils through a sequence of activities in order to maximise their energy saving engagement and impact.



4. Energy Analysis

The Analysis pages are designed for adult users of Energy Sparks or older pupils. Much of the analysis should be accessible to KS3 to KS5 pupils. Some of the more advanced analysis options such as Boiler Control are most relevant to Building or Site Managers. If you need help using the Energy Sparks analysis please contact us on support@energysparks.uk. The Analysis pages can be accessed via the **My School** quick links in the top menu bar, or via '**Explore energy data**' on the **Adult dashboard.**



This takes you to the **Energy efficiency overview** section, which helps your school to identify and prioritise energy efficiency improvements that your school can make. There is a navigation bar down the left hand side of the page and there are five distinct areas: Overview; Recent alerts; Energy saving opportunities; Review targets and the individual advice pages below.

4a) Overview

This area gives a summary of the more detailed analysis that is available for your school. The overview charts show consumption for the last 12 months; the navigation bar shows links to the individual advice pages.

Scrolling down, there is a table giving a brief description of what is covered in each page and a red / amber / green rating to tell you how your school is doing against those benchmarks compared to our most energy efficient schools. Green means that your school is in line with the best performing 17.5% of Energy Sparks schools, amber means your school is in line with the best performing 30% and red means that your school is outside the best performing 30% and therefore has good scope for improvement.

Energy efficiency overview

Review overview charts, explore our detailed analysis, start reducing energy use and see how you compare against other schools

- Overview
- Recent alerts (9)
- Energy saving opportunities (7)
- Review targets
- Electricity
  - Baseload
  - Intraday
  - Long term changes
  - Meter comparisons
  - Out of school hours
  - Recent changes
  - Tariffs and costs
- Gas
  - Heating control
  - Hot water
  - Long term changes
  - Out of school hours
  - Recent changes
  - Tariffs and costs
  - Thermostatic control
- Solar
  - Solar PV

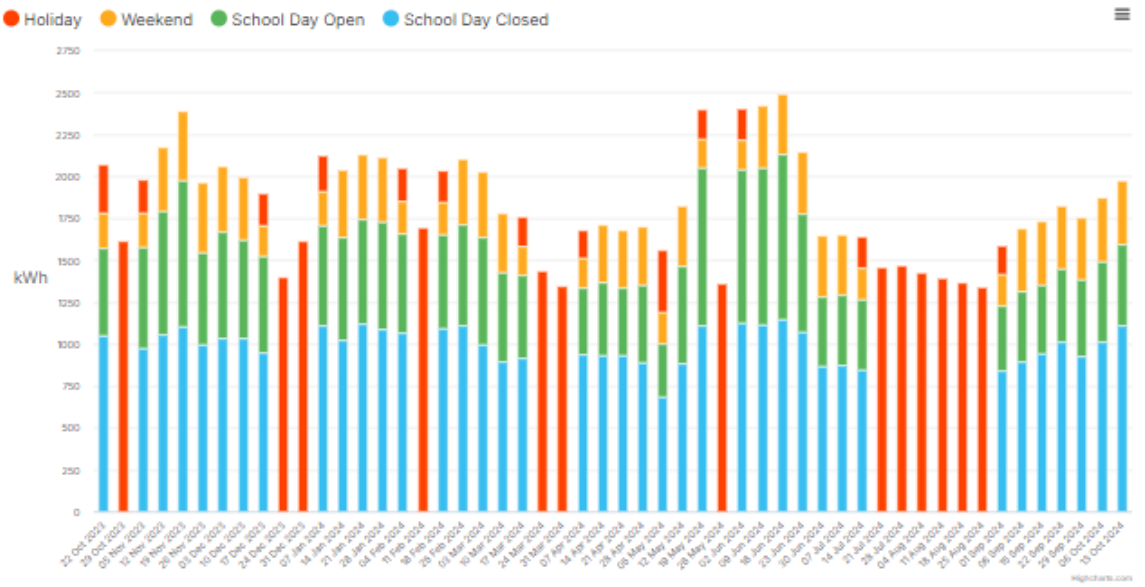
Overview charts

Use the tabs to switch between charts. Click on a chart to drill down into the data.

Electricity overview | Gas overview | Solar overview

Change units kWh £ CO2

Explore Back 1 year | Up to period view | Forward 1 year



Your energy use explained

These pages provide more insights and analysis into the ways your school uses energy. Areas that need improvement or where you are doing well have been highlighted.

Electricity

Baseload Action needed
Understand how much energy your school uses to keep appliances running all the time — Find out more

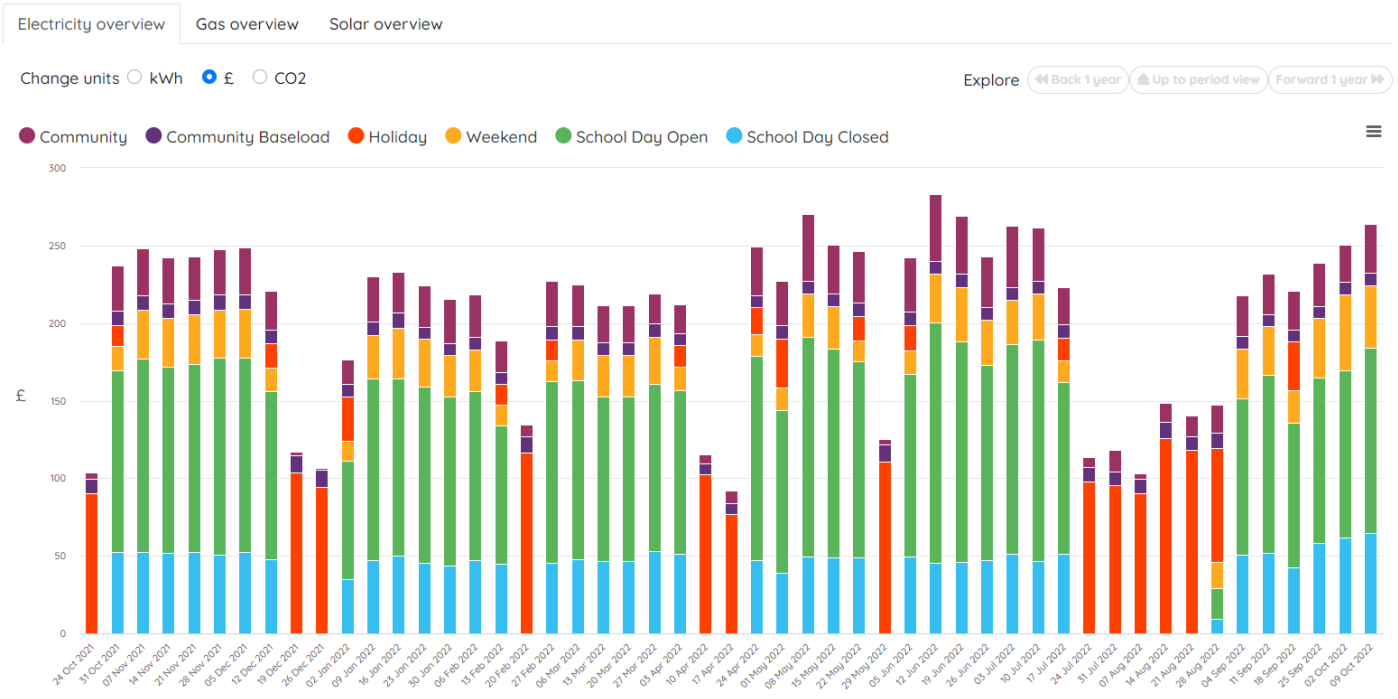
Intraday Exemplar
Explore how your electricity use varies during the day — Find out more

Long term changes Exemplar
See long term trends in your electricity use — Find out more

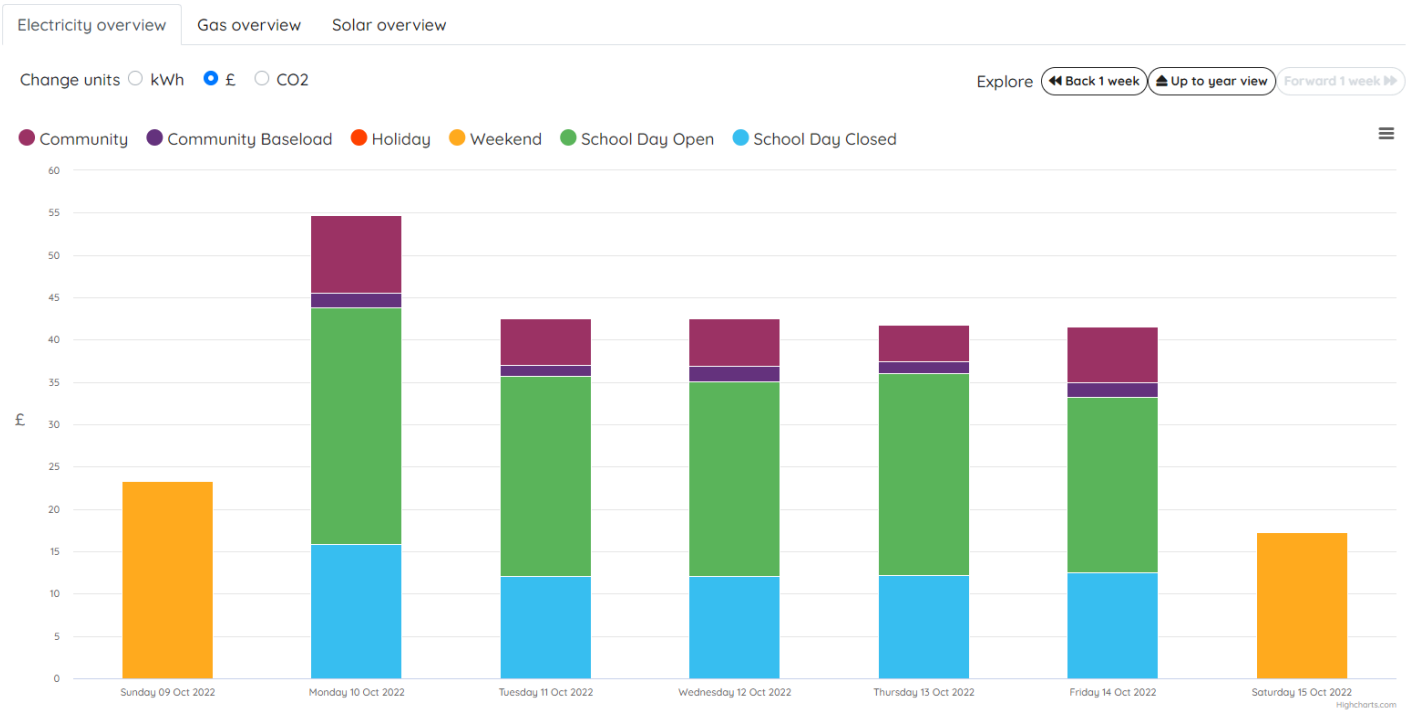
Meter comparisons

Energy Sparks
Helping schools fight climate change

The overview charts present your school's energy use over the last year. If several years of data are available you will be able to scroll back a year. The different tabs allow you to view data for electricity, gas, solar and storage heaters if relevant for your school. The colour coding allows you to see when you consume energy. You should be aiming to minimise consumption during the school holidays, weekends and overnight when the school is closed.

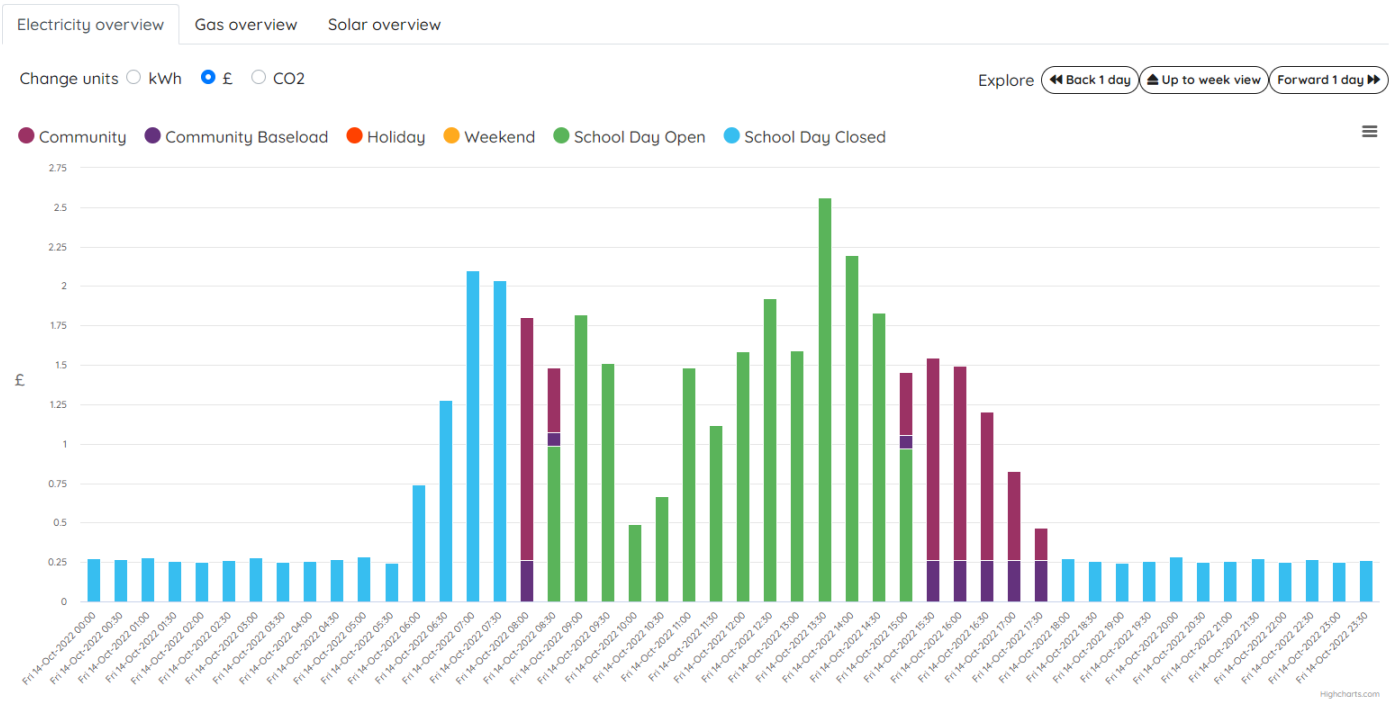


You can drill down to view data on a day basis by clicking on the bar for the week of your choice:



You can change units to view the data in kWh, £ or kg CO2 and click on any part of the legend to switch that category on or off.

You can drill down again to view data on a half hourly basis by clicking on the day of your choice:



4b) Recent alerts

Where the dashboard gives three or four alerts, this page lists all of the recent alerts for your school. They are organised into Priority alerts; Recent changes in your energy usage; Comparison with other schools; and Long term trends and advice. We recommend school users to also sign up to receive alerts by email. However, group users may wish to be able to view alerts for each school without receiving alert emails for every school.

4c) Energy saving opportunities

This page shows prioritised energy saving opportunities for your school. The table is automatically sorted with the action that saves the most money at the top. The table can also be sorted to prioritise the highest CO2 savings by clicking on the CO2 table heading.

There are other things to think about when prioritising actions. Electricity is more expensive than gas so reducing electricity consumption will save the most money for your school. Gas consumption causes more CO2 emissions per unit than electricity, so reducing gas will have a bigger impact on your school's carbon footprint. On the whole, gas can be reduced relatively simply, by one or two people making changes to boiler settings, whereas reduction in electricity will often require more effort from more people.



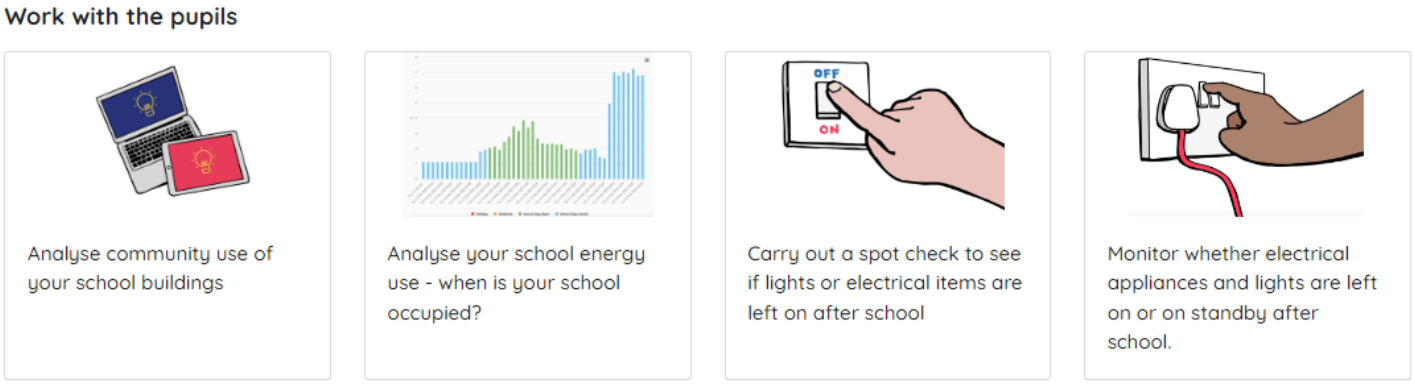
4d) Individual advice pages

Down the left hand side there are a number of links to pages. Each page provides a different view into your electricity or gas consumption, along with benchmarks that indicate how well you are performing in that area. Each individual advice page also has three tabs and all follow the same layout.

4di) Insights

The Insights page is split into four sections:

- Definition (for example “What is baseload”) - this gives a brief explanation of what we’re trying to measure on this page.
- Your current performance (for example “Your current peak electricity use”) - this gives figures for how your school is currently performing in this measure. If appropriate, this will also show whether performance in this area has got better or worse in the last week or year, rather like the summary table on the adult dashboard.
- How do you compare? - this section defines the red / amber / green ratings for your school. These ratings are calculated for each school type - primary, secondary, special etc. For electricity, all ratings are calculated on a per pupil basis and for gas, they are calculated on a floor area basis.
- What should you do next? - this section gives some top priority activities and actions for students and staff to do.



4dii) Analysis

The analysis tab is where you can really dig into the energy efficiency performance of your school. Each page will contain charts and explanations for things to look for in the charts as well as some commentary on potential improvements and savings your school could make.

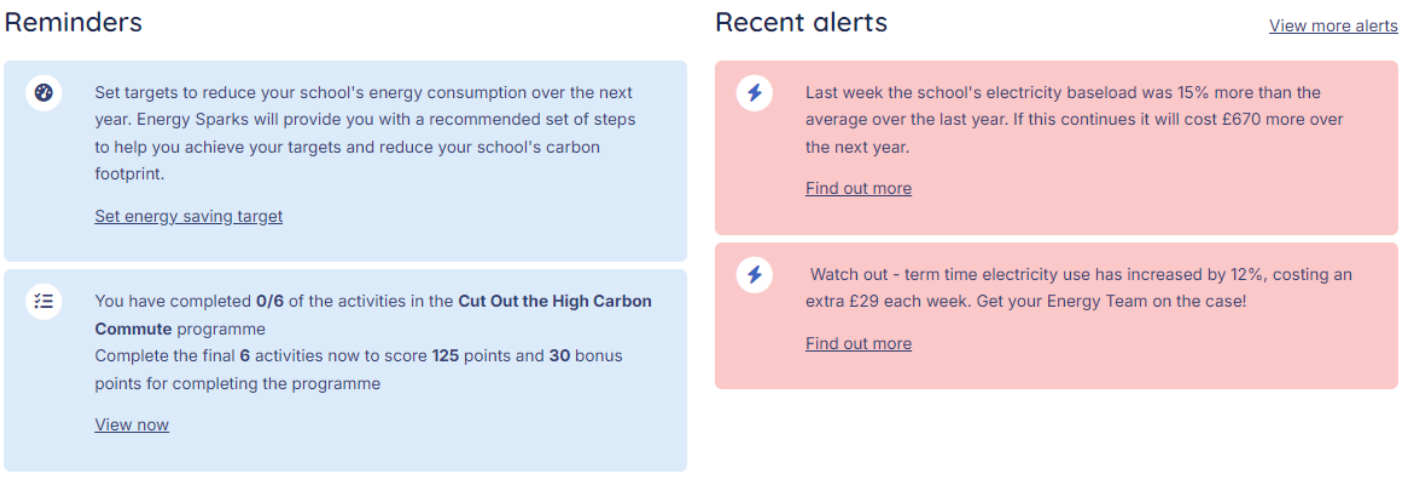
4diii) Learn more

This tab is the same for every school. It gives a more detailed explanation of what the pages are showing, things to look out for in your data and ways to improve your school's performance against this measure.

5. Alerts

Energy Sparks **alerts** appear on all dashboards providing:

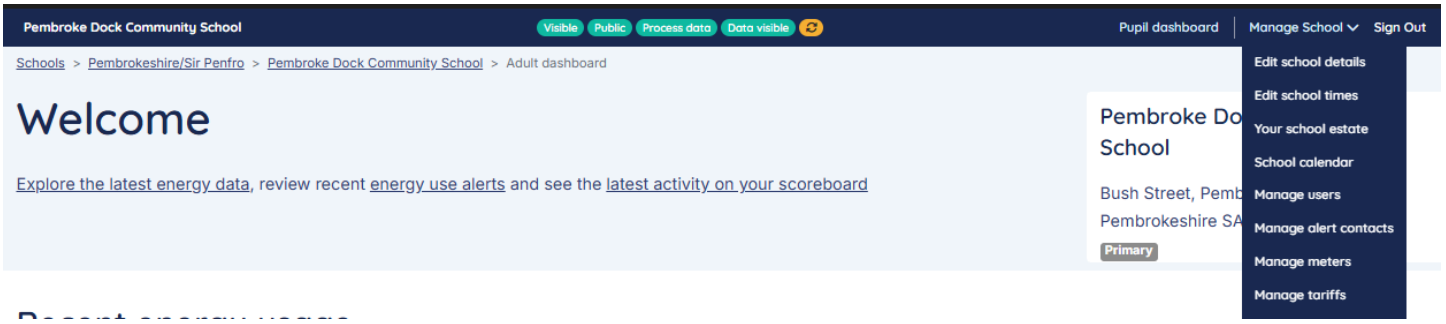
- warning of changes in your school's energy use
- highlight long term problems with your energy consumption with focused recommendations to save energy
- let you know if you are doing well compared to other schools and your past performance.



Click on the **Find out more** link to learn more about the alert and get suggestions for activities to reduce your energy use. Click on the **View more alerts** link to go to a list of all recent alerts for your school.

The alerts can also be sent to people with an Energy Sparks account by **email on a weekly basis**. We strongly recommend that each school has at least one member of staff receiving Energy Sparks alerts by email so that you are prompted to address unexpected changes in consumption promptly to minimise waste.

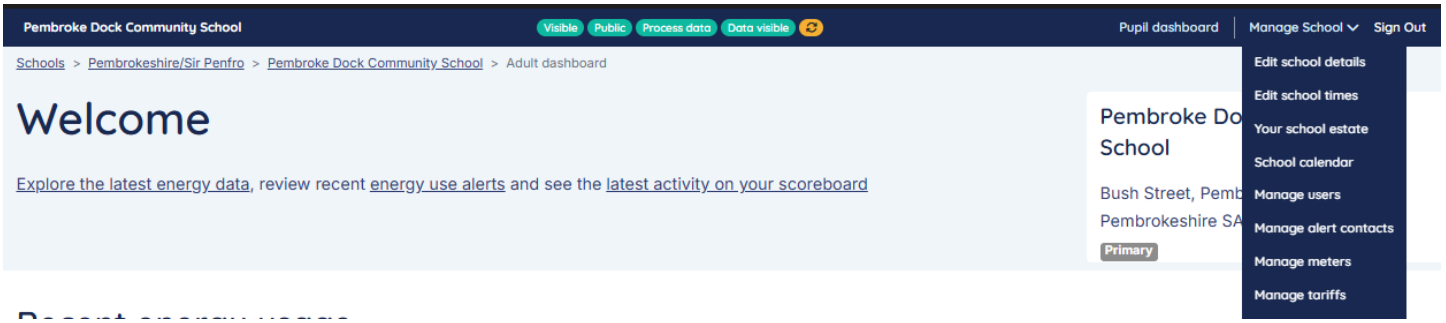
Email and text alerts can be set up as part of your initial Energy Sparks account set up, or alert contacts can be changed, added or removed via the **Manage users** or **Manage alert contacts** page accessed through the **Manage School** drop down list.



6. Manage School

The **Manage School** functionality is accessible to the **Energy Sparks School Admin** account holder (normally the person who set up the Energy Sparks account), and allows the **School Admin** to edit their school details such as their **pupil numbers and floor areas** which are used for comparing your school's energy performance against other schools of a similar size. The **School Admin** can also update the **school calendar and opening times** which are used by Energy Sparks to label your energy use within and outside school opening times. If you have lettings or community use of your school premises, we recommend that you add these times to Energy Sparks so that we can highlight energy consumption by external users of your premises.

The **Manage Users** functionality allows the **School Admin** to **add or remove users** to the school's account and **add new alert contact**s for email and text alerts. Finally, **Manage tariffs** allows school admins to make changes to the tariffs displayed for the school. See Tariff Editor User Guide for more information.


Pembroke Dock Community School
Visible
Public
Process data
Data visible
Pupil dashboard
Manage School
Sign Out
Schools > Pembrokeshire/Sir Penfro > Pembroke Dock Community School > Adult dashboard
Welcome
Explore the latest energy data, review recent energy use alerts and see the latest activity on your scoreboard
Pembroke Do
School
Bush Street, Pemb
Pembrokeshire SA
Primary
Edit school details
Edit school times
Your school estate
School calendar
Manage users
Manage alert contacts
Manage meters
Manage tariffs