Energy Sparks

Helping schools fight climate change

Energy Sparks is a charity that offers a unique school-specific energy management tool and education programme.

Energy Sparks will help you:

- Save up to 40% off school energy bills
- Cut school carbon footprints
- Give pupils the knowledge and skills to cut energy waste at school

Overview of introduction slides

- Why are we using Energy Sparks at our school?
- Expectations of using Energy Sparks
  - Engagement expectations
  - School sustainability team
- Familiarising yourself with Energy Sparks
- Getting started using Energy Sparks
  - For office and estate staff
  - For teaching staff

Key messages

- Anyone can create meaningful change
- Simple energy saving activities can have a big impact
- We can work together to make a huge difference to our school and our planet

Why are we using Energy Sparks at our school?

For the school	For staff	For pupils

• To save money (average primary saves £3,000, average secondary saves £12,000 per year)
• To reduce carbon emissions
• To meet sustainability targets
• To support school community in understanding and reducing energy consumption
	• Identify quick wins for energy saving
	• Spot unknown issues with heating systems and electrical appliances, particularly outside of school opening hours
	• Prioritise energy saving action
	• Prioritise capital investment
	• Plan decarbonisation activities
		• Build skills in:
		  ○ Analysing data
		  ○ Monitoring, reporting and asking questions
		  ○ Taking action, problem solving
		  ○ Team working, communications
		• Alleviate climate anxiety
		  ○ Real measurable impact on climate change

Engagement expectations for schools

- Appoint at least three staff as Energy Sparks users
  - Member of SLT, site team, teacher
- Staff should receive weekly alerts and newsletters and are encouraged to attend training sessions
- Use Energy Sparks with pupils across the school year
- Complete at least one Energy Sparks programme over the year
- Carry out and record at least one adult action per long school term
- Nominate at least one named staff member to carry out a holiday switch off before each holiday

Energy Sparks
Helping schools fight climate change

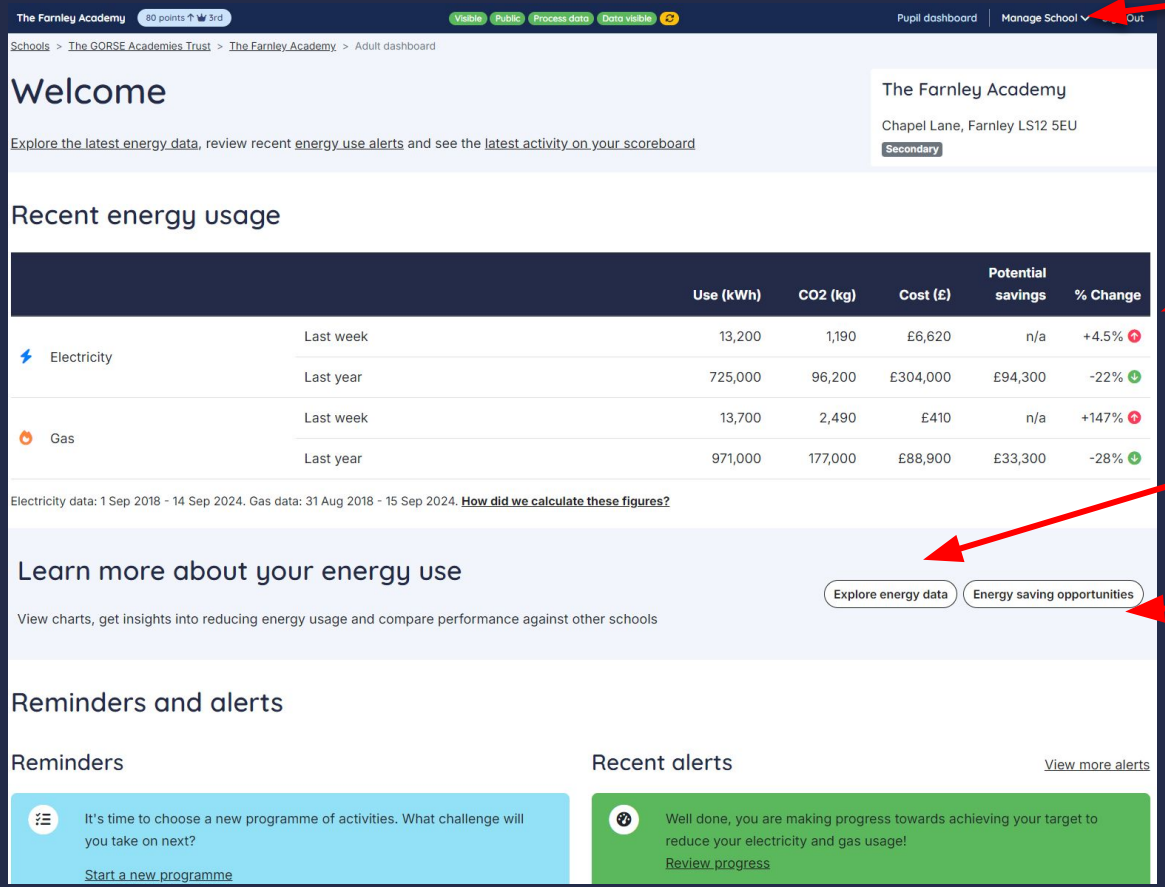
Sustainability works best as a team effort:

- School leadership:
  - Business manager / head teacher
- Teaching staff:
  - Sustainability lead / eco team lead
- Estates staff:
  - Facilities manager / caretaker
- Pupils:
  - School council / eco team / classroom representatives
- Energy Sparks team:
  - support@energysparks.uk

Familiarise yourself with Energy Sparks

- Free online training: Training | Energy Sparks
- User guide videos: https://www.youtube.com/@energysparksuk
- Case studies: https://energysparks.uk/case-studies
- Adult dashboard for your school
- Pupil dashboard for your school

Familiarise yourself: Adult dashboard



Check and edit school details

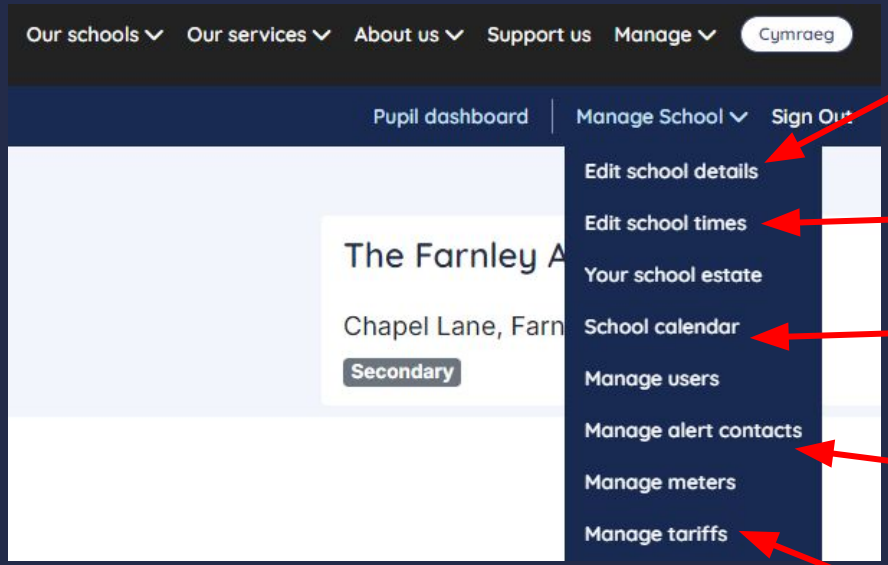
Summary of Annual usage

Find your energy use charts and detailed analysis

Biggest energy saving opportunities

Alerts

Familiarise yourself: Check school details



See and edit school details (contact us if school size has changed over time)

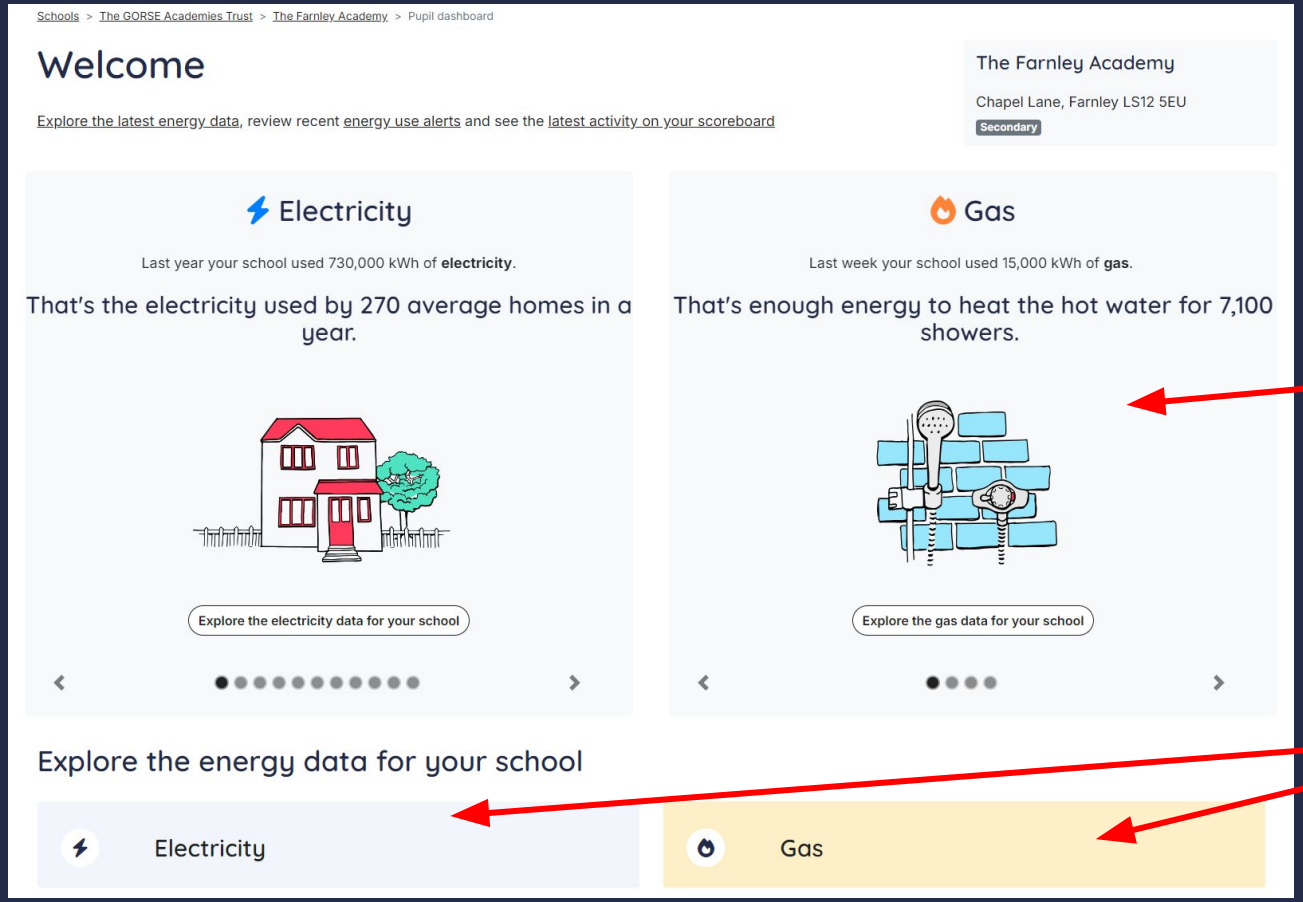
Edit school times and add community use times

Edit term dates and inset days

Add new users and change who is receiving alerts

Check and edit tariffs (these can also be managed at the group level)

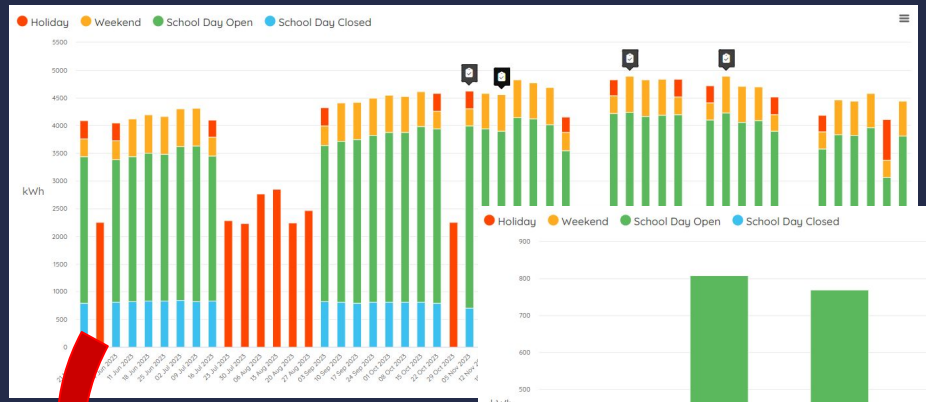
Familiarise yourself: Pupil dashboard



Energy equivalences: putting energy and climate data into context

Links to energy charts

Familiarise yourself: Charts



Click on charts to drill down and explore:
What does a normal day look like?

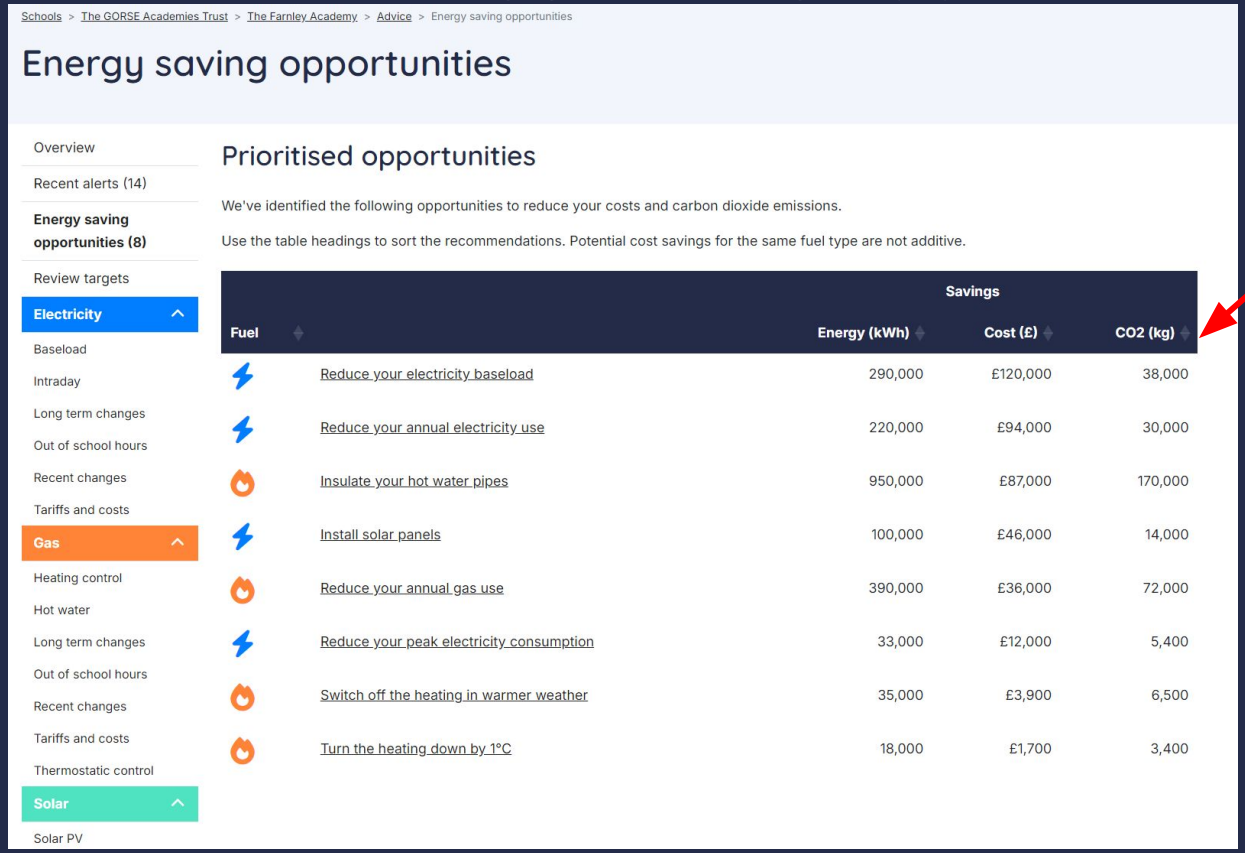
Familiarise yourself: Charts

Change units for different audiences

Toggle datasets on and off using legend

Explore different time periods

Getting started: Office and estates staff
Prioritised energy saving opportunities



Schools > The GORSE Academies Trust > The Farnley Academy > Advice > Energy saving opportunities

Energy saving opportunities

- Overview
- Recent alerts (14)
- **Energy saving opportunities (8)**
- Review targets
- **Electricity**
  - Baseload
  - Intraday
  - Long term changes
  - 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

Prioritised opportunities

We've identified the following opportunities to reduce your costs and carbon dioxide emissions.

Use the table headings to sort the recommendations. Potential cost savings for the same fuel type are not additive.

Fuel		Savings		
		Energy (kWh)	Cost (£)	CO2 (kg)
⚡	Reduce your electricity baseload	290,000	£120,000	38,000
⚡	Reduce your annual electricity use	220,000	£94,000	30,000
🔥	Insulate your hot water pipes	950,000	£87,000	170,000
⚡	Install solar panels	100,000	£46,000	14,000
🔥	Reduce your annual gas use	390,000	£36,000	72,000
⚡	Reduce your peak electricity consumption	33,000	£12,000	5,400
🔥	Switch off the heating in warmer weather	35,000	£3,900	6,500
🔥	Turn the heating down by 1°C	18,000	£1,700	3,400

Sort by cost or carbon

Follow “Energy saving opportunities” link on the adult dashboard

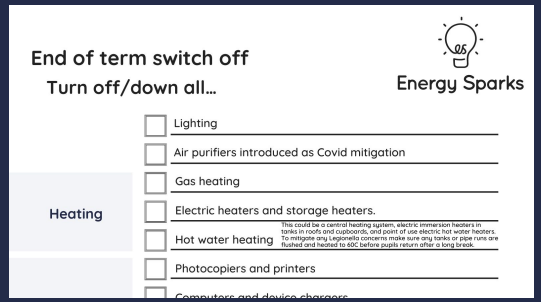
Getting started: Office and estates staff

Reduce baseload

Electricity baseload is the electricity needed to provide power to appliances that keep running at all times.

Create and maintain holiday switch off list

Reduce number of things that are left running, test and improve efficiency of things that must be left running


End of term switch off
Turn off/down all...
Energy Sparks

	Lighting	
	Air purifiers introduced as Covid mitigation	
Heating	Gas heating	
	Electric heaters and storage heaters.	
	Hot water heating	This could be a central heating system, electric immersion heaters in tanks in roofs and cupboards, and point of use electric hot water heaters. To mitigate any Legionella concerns make sure any tanks or pipe runs are flushed and heated to 60C before pupils return after a long break.
	Photocopiers and printers	
	Computers and device chargers	

Reduce out of hours gas use

Review your out of hours gas consumption - it's very common for boilers to be on at unexpected times

Switch off heating at weekends

Change heating operating times

Change heating set temperatures

Switch off heating for summer - don't rely on the thermostat

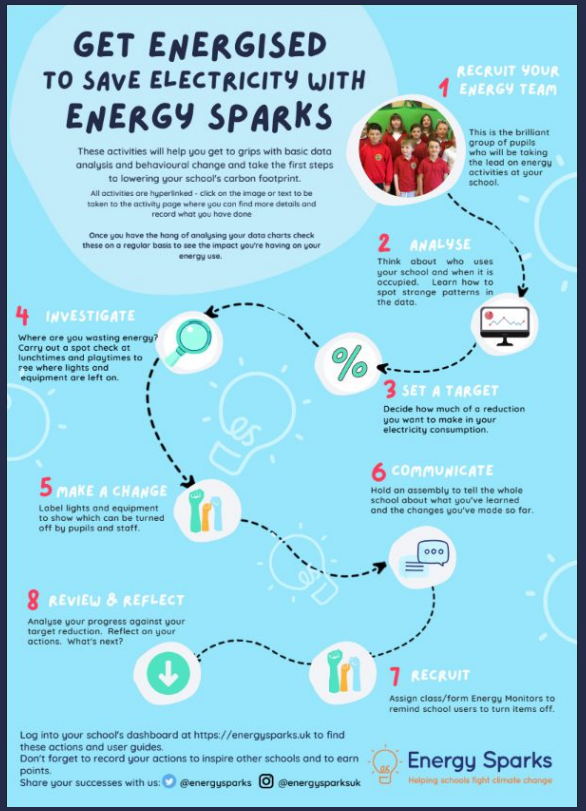
Switch off hot water at weekends

Don't forget: students can play their part in this work

Getting started: Teaching staff

Introducing Energy Sparks to your students:

- Video introducing Energy Sparks
- Explore the pupil dashboard with them
- Focus on out of hours consumption: Is this a surprise? What could they do to help?
- Explore recommended activities for your school
- Use programmes of activities to get started
- Extended project brief



Get Energised is a really good programme to start on

Questions:

How can Energy Sparks help you further?

If you have any questions about Energy Sparks, need help?

- support@energysparks.uk

They also offer 1:1 online and on-site energy audits as well as educational workshops. Book here:

- https://energysparks.uk/energy-audits
- https://energysparks.uk/education-workshops