



# Energy Sparks

Helping schools fight climate change

## Do you want to make a difference in the fight against climate change?

We are seeking a Developer for [Energy Sparks](https://energysparks.uk/), a charity helping young people to reduce their school's carbon footprint.

This role needs an experienced full stack Ruby developer to support our charity to make a real mark in the fight against climate change.

We are looking for a highly motivated, dynamic individual with excellent problem-solving skills; a self-starter who enjoys working in an agile environment. Someone who is as excited about Energy Sparks' potential as we are and who will work with us to develop a sustainable energy management and education platform for schools.

Salary: circa £49,000 pro rata dependent on experience

Initial 0.5 FTE 6 month contract with the opportunity for an extension and additional hours subject to ongoing funding. Hours can be worked flexibly.

Will consider remote developers across the UK, but with a preference for developers located in the South-West to allow monthly in-person meetings in Bath.

### Application deadline:

### About us

Energy Sparks (<https://energysparks.uk/>) is an online energy analysis tool and energy education programme specifically designed to help schools reduce their electricity and gas usage through the analysis of smart meter data. Energy Sparks helps pupils and the wider school community to reduce their school's carbon emissions, and make a real contribution to addressing the 'climate emergency'. Energy Sparks started in 2017 in Bath, and is now working with over 220 schools across the UK. All staff work remotely with the core staff team based in the Bath area.

As the headteacher of one of our participating schools said:

*'Energy Sparks has enabled children at Freshford to investigate how energy is used in different parts of the school and devise strategies to reduce the school's consumption. The children's enthusiasm was kick-started by the competitive element and they've worked effectively with staff and the local community to think innovatively about what we can do to reduce our impact on the environment and reduce costs. The children developed and presented evidence-based initiatives to the school's business managers, securing installation of energy-efficient lighting and kitchen equipment, movement-sensor-switches, and a solar-panel campaign.'*

*'The Energy Sparks resources are inspirational, powerful and transformational tools for all schools that will enable them to reduce their CO2 footprint, save money and help children to develop a powerful can-do attitude towards the challenges of global warming.'*

Energy Sparks is a Ruby on Rails web application that uses a Postgres database deployed within a managed infrastructure (Amazon AWS, using ElasticBeanstalk, RDS, Lambda and S3). The front end uses JQuery and customised Bootstrap styles, while the backend integrates with a variety of third-party APIs.

Our software is fully open source. Further details can be found at:  
<https://github.com/Energy-Sparks/energy-sparks/wiki>

## **Developer Role**

1. Work with the CTO and other Energy Sparks team members to scope, design and deliver new application features, according to project budgets and milestones
2. Design, build and maintain the front and backend code that makes up the Energy Sparks application, including integration of external APIs and data feeds, and provision of charting and data presentation functions
3. Take responsibility for identifying and fixing bugs and operational issues that are highlighted by our users, other team members or our reporting systems
4. Work with the CTO to help scale and tune the service to support scaling up Energy Sparks to more schools across the UK
5. Help maintain and improve code quality and test coverage to ensure we deliver a robust service to our users
6. Document Energy Sparks software to facilitate maintenance and use by other team members, and to ensure future sustainability
7. Support the operations of the Energy Sparks platforms, by carrying out application releases and helping to monitor the live service
8. Work with the rest of the Energy Sparks team to respond to user feedback to improve the Energy Sparks application to maximise user engagement and carbon emission reductions at participating schools.

## **Required experience:**

### **Essential:**

1. Full stack Ruby on Rails developer with >2 years of experience across the following areas
  - a. Ruby and the Rails framework
  - b. AWS (or equivalent cloud environment) for hosting and deploying web applications
  - c. Javascript / JQuery
  - d. Writing accessible HTML and CSS
  - e. Git and Github for version control
  - f. Standard ruby test frameworks, including Rspec and Capybara
2. Experience of agile, iterative test-first development
3. Experience of both building and maintaining web applications
4. Lean approach, delivering work iteratively providing value as soon as possible
5. Ability to work on own initiative, to prioritise work effectively, to be a creative innovator and problem-solver, and to work under pressure to meet deadlines
6. Ability to work with domain experts to turn outline requirements into a full design and implementation
7. Interest in sustainability and supporting children and young people to fight climate change.
8. A clear commitment to personal and professional development

### **Nice to have experience:**

1. Experience with designing and building data-centric applications, that display rich data sets to users
2. Experience of data analysis and modelling, particularly of energy data
3. User experience design and user research
4. Experience with building or maintaining multi-lingual Rails applications

### **Benefits**

1. Salary £49,000 pro rata dependent on experience
2. 12% employer pension contribution
3. 30 days annual leave plus bank holidays pro rata
4. Flexible working hours
5. The opportunity to really make a difference reducing carbon emissions and helping young people to live sustainable lives.

### **Application deadline: 14th February 2022**

Please send the following by email to [hello@energysparks.uk](mailto:hello@energysparks.uk):

- A full curriculum vitae including two references with their full contact details
- A covering letter setting out your reasons for applying and how you consider that you meet the person specification for this post.

Applicants are encouraged to find out more about Energy Sparks at <http://www.energysparks.uk>

For an informal discussion about the role, please contact, Leigh Dodds, Energy Sparks CTO on [leigh.dodds@energysparks.uk](mailto:leigh.dodds@energysparks.uk)

To be considered for this role, all applicants must currently have the right to work in the UK or will have secured the right to work in the UK by the date of commencement of employment.

Energy Sparks is an equal opportunities employer and welcome applications regardless of race, sex, disability, religion/belief, sexual orientation or age.

### **No agencies**