# **The Schools' Energy Co-operative**

# Putting community owned solar panels into schools

Installing solar panels at a school can cut electricity purchased from the grid by up to one third, can save the school money and represents significant educational opportunities for students.

The Schools' Energy Co-operative installs community funded solar panel systems on schools free of charge, provides educational support to its member schools, pays all its profits to its member schools and works with schools and local community groups to maximise the environmental, educational and community impact of the solar installations.

The Schools' Energy Co-op is a social enterprise dedicated to supporting its school members and provides an alternative to the prevailing commercial rent a roof or leasing model. It gives schools access to renewable energy sources and helps them cut their energy costs with no up-front cost by installing solar panels (and potentially LED lights). It is supported in its work by PURE Leapfrog, Energy4All and Wey Valley Solar Schools.



The aim is to assist schools in their sustainability and educational work and to engage the local community. Central to this is our aspiration to retain as much as possible of the benefits for the school, its students and the surrounding community.

## What are we proposing?

We want to:

- Find schools that are interested in benefitting from solar panels;
- Manage the installation (in partnership with the school);
- Provide the finance and all the relevant legal documents; and,
- Ensure that the schools gain the maximum environmental, community and financial benefit.

# Financial highlights of our approach:

- 1. Up-front financial cost to the School is £ nil. The School allows the Co-op to install solar panels on its roofs. There is no cost to the School, no borrowing or leasing of panels by the School and no risk to the School. The Co-op pays for everything including the surveys. The panels are owned by the Co-op. There is very little work to be done by the School, which will be fully supported throughout.
- 2. Electricity generated by the solar panels and consumed by the School will be charged to the School typically at 6-7p per kWh which is currently about 40% less than the price schools typically pay for their electricity. The Co-op will invoice the School quarterly for its consumption. This price of 6-7p will be **fixed** for the duration of the arrangement (i.e. for 20 years). Electricity prices are anticipated to increase each year so the benefit to the School will increase each year.
- 3. Maintenance and replacement of broken parts will be paid for by the Co-op.
- 4. The only additional costs for the school are insurance of the panels estimates obtained for an example school indicate that the increase in insurance premium is nominal (£20 or £30 per annum), and business rates, if any. If schools have half hourly meters we will arrange for them to be reprogrammed to deal with the export of electricity not used by the School to the grid.
- The Feed-in Tariff and the income from the sale of electricity, both to the School and exported via the grid, will be retained by the Co-op to recoup the cost of the solar panels and to pay interest to its members.

- 6. Members of the public who invest in the Co-op are paid interest of about 5%, receive tax relief on their investment and their investment is repaid over 20 years. All the Co-op's profits after paying interest are shared between the Co-op's participating schools.
- 7. The School (or funds associated with it) is welcome to invest in the Co-op and receive interest and repayment of their investment on the same basis as the public. We hope they will do so and will undertake a fundraising activity to enable them to do so as part of maximising student and school engagement but this is not mandatory. Schools that have participated this way have benefited they have a stimulating project for interested students, particularly if the school has an eco committee; they have a live business example for use in business study classes; and the current generation of students undertakes a project to benefit a future generation.

After 20 years, the panels will be given to the School - they should have at least 15 years of life left in them at that stage.

## Educational, sustainability and community highlights of our approach:

### **Community**

For schools (and any corporate supporters) this scheme takes community engagement to the next level and delivers tangible benefits that will have a ripple effect as children take their experiences home with them.

#### **Investment**

Anyone can buy shares in the Co-op to help fund the installation. Investors support the school and receive a fair interest rate. The Co-op will promote the opportunity to buy shares in the locality of the school.

### **Simplicity**

The purpose of The Schools Energy Co-op and its supporting organisations is to make more projects happen and we will make the whole process simple, transparent and fair.

#### Security

We do things properly and will undertake a structural and electrical survey prior to installation.

#### **Ease of terminating the arrangements**

Schools can buy themselves out of the arrangements at any time if they need or want to without penalty fees.

### **Experienced team**

The Schools' Energy Co-op is run by the core team behind the successful Wey Valley Solar Schools Energy Co-operative. Wey Valley has now installed solar panel arrays at six schools, with a seventh imminent, including some highly complex installations. All installations are working well and the schools will provide references. The Co-op is supported by Energy4All on fundraising, project management and on-going administration.

### **Ethos**

Our primary goal is to support schools and their community. Investors are provided with a fair interest return but no one profits at the school's expense. The Co-op exists to enable its member schools successfully to install renewable energy and to support them in their environmental, educational and community work. It is not purely a financial arrangement.

#### **Education**

If at all practicable we will ensure that at least one part of the array is highly visible to students. We will install educational monitors showing generation and link the data to the school's intranet.

## **Sustainability**

Schools can make a massive reduction in their carbon footprint and demonstrate leadership in their community. The biggest solar panel system financially feasible will be installed, maximising environmental benefits, use of roofs and long term financial returns to the School.

Mr Hughes (Head of Science at Broadwater School) said. "The solar PV system will benefit both school and students. Students are fully aware of the problems with conventional fossil fuel power production; global warming, carbon footprints, acid rain and problems of energy reserves from their science lessons, so having this system installed at Broadwater will allow them to see first-hand the positive impact of clean renewable energy.

"They will be able to monitor the output and see the savings made both financially and environmentally. It is a fantastic opportunity to see renewable energy live instead of just hearing about it or watching video clips, and to be involved."

#### **Next Steps**

If your School is interested the Co-op will undertake a free feasibility study and will then make you a proposal based on the cost of installation and electricity generation anticipated. There is a straightforward agreement between the School and the Co-op (under which the School consents to the Co-op placing its panels on the School roofs and which sets out the other terms described above) which will be sent to the School for its consideration.

If you agree to work with us the Co-op will organise a local fundraising to raise the money required (as well as a national fundraising through Energy4All) enabling schools to engage with their community and publicise the project. We hope your school will help with this – for instance you could use it as an opportunity to contact alumni – but it is not mandatory to do so. The Co-op will also seek to work with community groups local to the School where practicable to help raise the funds, ensure that the proposal is known about locally and to expand the community engagement in the project.

The project delivers environmental, educational, community and financial benefits - there really is no catch!

#### References

References are available from schools who are members of our first project, Wey Valleys Solar Schools Energy Co-operative; or from the schools planning to participate in the Schools Energy Co-op.

#### Our supporters: Wey Valley, PURE Leapfrog and Energy4All - a quick introduction



Wey Valley Solar Schools is one of the two largest community solar co-operatives of its type in the UK and has, so far, installed substantial solar panel arrays at six schools, with a seventh school installation imminent; and has relit an eighth school with very low energy LED lighting. All Wey Valley school members are willing to act as referees. Wey Valley Co-op has installed panels on Academies, Foundation Schools, Community Schools and charitable state schools; its first installation on a church aided school is imminent.



**Energy4All** is a non profit distributing social enterprise that delivers and manages community owned energy projects, organising the community fundraising and then managing the ongoing co-operative. To date it has delivered 12 successful community energy projects and has raised over £25 million in community fundraising.



**Pure Leapfrog** is a charity which supports community energy projects by lending them money sourced from Big Society Capital and other supporters and by providing them with professional advice and support.

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