Wheatley Park School

Quick Guide to Your Solar Project

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Introduction

After months of collaborative work your School's solar PV installation is fully operational! You can now enjoy the benefits of clean, renewable energy for 20 years. It will also act as an inspiring focal point for the School and local community, contributing to the climate change challenge and reducing the School's electricity bills.

Using this quick guide

The purpose of this quick guide is to provide a summary of all the key aspects of the project, setting out clearly the responsibilities of the Low Carbon Hub and the School. As we continue to develop projects with other schools across the County, we welcome your feedback you on the handbook and our Solar Energy for Schools programme, so we can make improvements where possible.

Contact us

Please do not hesitate to contact us should you have any queries. Please state the name of the School/Academy you're calling from when you correspond:

Type of enquiry	**Email**	**Telephone**
Invoice related queries	accounts@lowcarbonhub.org	01865 246099
Technical support and any other queries	info@lowcarbonhub.org	01865 246099

Your web page

Information about your installation, including access to the monitoring data can be found here:
http://www.lowcarbonhub.org/projects/wheatley-park-school

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Overview of the installation

Specification and key numbers

Details	Maths	Media/Eng	**Total**
Size of solar project in kWp	18.75	30	**48.75**
Solar panels (Renesola 250 Watts peak capacity)	x 77	120	**195**
Inverter make: SolarMax Sputnik	x 2	x 2	**x 4**
Estimated annual solar electricity in kWh	17,200*	24,300	**41,500**
Solar generation used on-site (kWh, estimated)	12,380*	17,500	**29,880**
% of solar generated that is used on-site	72%	72%	**72%**
CO_2 saving per annum (tonnes)	7.6	10.8	**18.5**
CO_2 avoided during project life (tonnes)	153	216	**369**

* It is anticipated there will be a small, gradual degradation in panel output throughout the life of the system

Project duration and commissioning date

- Commissioning date: 11th August 2014;
- Project duration: 20 years;
- Project developer: Low Carbon Hub
- Installer: Joju Solar (commissioned by the Low Carbon Hub).

How the programme works

- A roof agreement was signed by the school to enable the solar panels to be owned and operated by the Low Carbon Hub for a period of 20 years (agreement available on request);
- The solar installation was installed at no cost to the school. The Low Carbon Hub raised the money to pay for the installations via a community share offer and receives the project revenues.

Project revenues

The income is received from three sources:

- **Feed-in tariff** – the Low Carbon Hub receives money for every unit of renewable electricity generated. This is part of a Government incentive scheme to help reduce carbon emissions and once installed, the payments will be honoured for 20 years;
- **Export tariff** – in some cases the Low Carbon Hub sells electricity back to the grid (for installations under 30kWp in size, this is assumed to be 50% of the amount generated. For installations above 30kWp, actual export data is used instead);
- **Sale of electricity to the school** – the Low Carbon Hub sells the solar electricity used on-site to the school at 25% less per unit than the school pays through their standard day-time electricity tariff.

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This revenue pays back the community shareholders their capital over time and the surplus is then split almost evenly three ways:

1. **The school** gets a discount on the solar electricity it buys (as mentioned above);
2. **Community shareholders** receive a fair return for their investment (5% internal rate of return projected);
3. **Community benefit** – the remaining surplus goes to the Low Carbon Hub to support further community energy projects. At the time of writing the projects include:
    - encouraging further schools to install renewable energy;
    - supporting energy efficiency projects (in our first year this included providing support to 20 householders in fuel poverty with external wall insulation);
    - helping a range of community groups to create their own local energy projects.

Sale of solar electricity to the school

The school continues to purchase grid imported electricity in the normal way from their usual electricity supplier. The 20-year agreement between the Low Carbon Hub and the School is about the solar electricity used on-site, and the Low Carbon Hub will invoice the School each quarter for this. For these solar units you have consumed, we will apply a 25% discount compared to the standard unit cost you are paying through your existing electricity supplier. To calculate your discount we need to know what your current electricity prices are.

If the school buys electricity through the central purchasing contract with Oxfordshire County Council, we will contact them directly to find out what your current unit cost is.

If your school arranges its own electricity purchasing, you will need to provide us with a copy of your last quarter's electricity bill before the end of the current quarter. In the first instance, if this hasn't been received your electricity will be charged at the previous quarters prices. If a bill hasn't been received by the subsequent quarter electricity will be charged at the full rate until we receive a copy of your electricity bill. We are happy to receive scanned copies of bills by email, please send them to accounts@lowcarbonhub.org.

If you change your electricity procurement arrangements, please let us know so we can keep our records up to date.

Key dates [Payment terms 14 days]:

Period	Price information to be received by	Billing date
December to February	End of February	Early March
March to May	End of May	Early June
June to August	End of August	Early September
September to November	End of November	Early December

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Other important things to know

Key documentation

If you require copies of any key documents, for example the lease (legal) contract – we are able to provide copies. Please let us know.

Insurance and system maintenance

The Low Carbon Hub is responsible for insuring the panels and for maintaining solar installation for 20 years.

Solar generation monitoring

The Low Carbon Hub will be closely monitoring the performance of the solar installation. However, the school also has access to monitor progress. Please contact us and we can show you how to do this.

Usual electricity supplier

The school has agreed to take such steps as are reasonably practicable to ensure adequate security of the Property and the Buildings being no more onerous and at no additional cost to the Landlord as currently provided.

Sunlight!

It is obviously important that sunlight is allowed to reach the panels. The school has agreed to manage the growth of trees in the vicinity of the buildings where the panels are installed so that there is no shading of the solar panels.

Further solar electricity panels

Should the school consider installing further solar panels to the same Meter Point Administration Number (MPAN), please discuss this with us. This would require the consent of the Low Carbon Hub as there may be implications for our programme.

Roof repairs

Should the school need to make repairs or modifications to the roofs where panels are located, it is a contractual requirement that the School plans the works with the Low Carbon Hub. Please contact us.

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Broader benefits of the scheme

Educational benefits

In addition to the monitoring information, we can help connect you to relevant educational resources. If you want to arrange for someone to visit the school to discuss the technology, or explain the project in more depth, we can also help to organise this.

Other resources and opportunities

The Low Carbon Hub is talking to a range of local organisations on how to make Oxfordshire schools more sustainable. We will keep you posted of any relevant opportunities and resources you may find interesting. Equally, if you are aware of any resources or opportunities you feel could benefit other schools, please let us know.

At the time of writing, we are working with:

- Oxfordshire County Council (Stark metering and schools energy advice);
- EiE (energy management training);
- Groundwork (supporting eco school programmes);
- Friends of the Earth Run on Sun campaign;
- Community Action Groups (CAG's).

  To find out more, please go to our online listing at www.lowcarbonhub.org/SchoolSolar

About the Low Carbon Hub

The Low Carbon Hub is a social enterprise that is championing community energy for Oxfordshire. The Hub is spearheading the development of a new energy system with communities at the heart. We do this by developing renewable energy schemes with schools, businesses, the public sector and communities to put local power in the hands of local people. Oxford City and Oxfordshire County Council have an appointed Director on our Board, and we work together in partnership with these shared aims. To find out more, visit our website at http://www.lowcarbonhub.org

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Acknowledgements

A huge number of people have worked with the Low Carbon Hub to help Oxfordshire schools install renewable energy. In particular, we would like to thank:

- ***You!*** Without the time and effort of key school staff and governors, this project would not have been possible;
- ***Oxford North Community Renewables****, including St Barnabas and The Cherwell School* – ONCORE volunteers as well as governors and staff at The Cherwell School and St Barnabas were very generous with their time and enthusiasm, helping us to learn from their experiences;
- ***Oxfordshire County Council*** and their partners – a wide range of departments were involved to scrutinise, and facilitate this programme – covering areas such as energy and the environment; facilities; surveying; asbestos and the legal team;
- ***Oxford City Council*** – in 2014, the City Council took the courageous decision to help the programme to build projects in a timely fashion by offering access to a short-term construction fund – protecting the scheme from utilising much higher commercial lending rates;
- ***Community shareholders*** – without the community shareholders, it would not be possible to fund the programme of school solar installations;
- ***Community groups*** – many introductions to the school have come through local community groups;

  In addition, we received huge support and encouragement from a number of other organisations including: Community Action Groups; Groundwork; Environmental Information Exchange (Oxford Brookes); Friends of the Earth (both local and national); Climate Outreach and Information Network (COIN).

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