

Further information

How does the Reach For The Renewables scheme work?

Reach For The Renewables has agreed highly competitive pricing on solar PV with Bristol-based installers Fuseland Renewables Energies. Reach For The Renewables is licensing this offer to Llangattock Green Valleys Community Interest Company, so we can pass these prices on to our members. The installations will be carried out in 'bundles', with fixed deadlines for applications. This means maximum economies of scale – and the very best prices for you.

If you choose to proceed with solar PV under this offer, the contractual relationship will be between you (the property owner) and Fuseland Renewables Limited (the installer). Please note that the prices advertised are subject to survey as each system is specified individually and aspects such as roof access and age and capacity of consumer unit will vary from property to property.

As this is a group-buying offer the emphasis is on working together. The scheme works as follows:

1. Customers complete the [Registration of Interest](#) form online by a set deadline. (You can also download the form to complete by hand, then either email it to Llangattock Green Valleys at solar@llangattockgreenvalleys.org or post it to Llangattock Green Valleys, Crickhowell Resource & Information Centre, Beaufort Street, Crickhowell, Powys NP8 1BN.)
2. After the deadline for each bundle, LGV checks all Registrations of Interest then submits them to Fuseland Renewables Limited for initial desktop analysis. This confirms the viability or otherwise of each scheme, taking into account orientation, shading issues and roof space available.
3. For viable schemes, LGV arranges a site survey and consultation by Fuseland Renewables Limited. There is no charge for this survey and no obligation to proceed once the survey has been completed. An energy efficiency assessment looking at insulation levels will be carried out at the same time by Exenergy Ltd. We strongly advise that you follow up any recommendations resulting from this assessment.
4. Customers receive a quote and supporting information from Fuseland Renewables Limited, valid for 30 days.
5. Customers wishing to proceed with their installation accept the offer formally and enter into a purchase agreement with Fuseland Renewables Limited. Customers pay a 50% deposit (by cheque, payable to Fuseland Renewables Limited), to be collected by LGV and forwarded to Fuseland Renewables Limited. LGV then arranges the installation date, allowing for a 7-day cooling off period from date of payment.
6. Systems are delivered, installed and commissioned, with the installations for each bundle taking place over a set period. Fuseland Renewables Limited issues customers with an MCS Certificate on completion, allowing them to complete their application to their chosen FIT provider. (Fuseland Renewables Limited can help you with this if you like).
7. LGV collects the remaining 50% cost of each system from customers (payment by cheque), then forwards to Fuseland Renewables Limited.

Prices

Prices are for guidance only and are based on a typical, straightforward installation. Each property is unique and therefore each requires a site survey and a bespoke quotation is provided only after the survey is carried out. There is no charge for this survey. Please note that prices are reviewed on a quarterly basis and may go up or down if wholesale prices change. Prices are based on a property with:

- A structurally sound roof in good condition.
- Minimum of 12m² area of roof available with no shading or obstructions.
- Average scaffolding cost with ease of access and straightforward installation, dependent on roof setup and tile type.
- Easy loft access (for installers and equipment).
- Space for inverter and AC/DC isolators, and capacity on the consumer unit to take solar PV.



In association with



REACH FOR THE RENEWABLES

FUSELAND Renewables Limited



Feed-in Tariffs

In April 2010 the Government introduced the Feed-In Tariff scheme (FITs) to encourage the small-scale deployment of a number of renewable energy technologies including solar PV, wind energy and hydropower. Over time the tariffs available to new users will decline, so there is a real advantage to investing before the tariffs drop.

For solar PV, the first tariff reduction will happen on 1 April 2012. However, once an installation has been approved to receive FITs, the Government has undertaken to maintain the initial tariff for a period of 25 years, increased yearly in line with the Retail Price Index (RPI). Income from the tariff is also free of income tax.

Domestic solar PV schemes sized under 4kW and installed on existing buildings before the end of March 2012 will receive 43.3p for every kilowatt hour of electricity generated by the system for 25 years. Commercial schemes sized great than 4kW and up to 10kW will receive 37.8p, while schemes sized over 10kW and up to 50kW will receive 32.9p. In addition all schemes will receive 3.1p for every unit of electricity exported to the grid. For domestic schemes this is formally estimated to be 50% of the generation.

And of course you can use any electricity your system generates, reducing the amount of power you need to purchase from your electricity supplier (which on average costs around 13p/kWh).

The financial return on investment over the 25 years is therefore made up of three elements:

- a generation tariff
- an export tariff
- and bill savings.

And the pricing that Reach For The Renewables has agreed with Fuseland Renewables Limited makes a good deal even better, cutting the payback time for your system and maximising your return on investment.

To help do the sums, visit the Energy Saving Trust's website and use their Cashback Calculator to find out how much you could earn and save, and see the payback times for the system of your choice.

Visit www.energysavingtrust.org.uk/Generate-your-own-energy/Cashback-Calculator

Frequently asked questions (FAQs)

What is solar PV?

Solar electricity systems capture the sun's energy using photovoltaic (PV) cells. The cells convert the sunlight into electricity, which can be used to run appliances and lighting. PV cells work most effectively in sunshine but you can still generate some electricity on a cloudy day.

Solar PV systems should not be confused with solar thermal systems, which convert the sun's energy into heat, mostly to provide hot water.

Is the Reach For The Renewables offer open to properties outside the community of Llangattock ?

The offer is aimed at properties in Llangattock and the surrounding area, and is only available to members of Llangattock Green Valleys. Please contact solar@llangattockgreenvalleys.org or call 0800 206 1915 for information on how to join LGV, and to arrange a survey and quotation.

Why is LGV offering the Reach For The Renewables scheme? Are there any financial benefits to the organisation?

LGV is a community interest company, currently run on a voluntary basis. A small fee is built into the quoted prices to cover the running costs of the scheme, including general administration and marketing, and to help us develop current and future offers. LGV believes passionately in developing sustainable models for renewable energy that reduce our community's reliance on fossil fuels and our carbon footprint. By building a small but essential income into the pricing structure, we ensure that LGV is sustainable too.

We've worked hard to get the very best deal for our members. And we hope members will work together to get an even better deal, because the more people who take up the offer, the cheaper it becomes. So please spread the word: tell your neighbours, your friends and your wider family and everyone will benefit from the economies of scale.

Who is Fuseland Renewables Limited?

Fuseland Renewables Limited is an MCS-accredited firm based in Bristol. The company was formed five years ago as an offshoot of Fuseland Electrical, a large and long-established electrical contractors that works for national building contractors as well as smaller companies throughout the South West and Wales.

Fuseland Renewables Limited:

- is an experienced solar PV installer, having fitted systems ranging in size from 1.17kW to 200kW on homes, schools, colleges, agricultural buildings and multi-storey office blocks
- is MCS Accreditation Approved and offers the reassurance of being a NICEIC Approved Installers and a member of the REAL assurance scheme
- offers a high-quality product at a very keen price
- is committed to ongoing staff training and has pledged to take on at least two new apprentices a year
- has the ability to call on the resources of a parent company that has been trading for many years and is financially strong.

How confident can I be that I will get a quality product and service?

Fuseland Renewables Limited is accredited under the Microgeneration Certification Scheme, a Government-backed quality assurance mechanism that sets out standards for small-scale heat and power generating products and their installers. Fuseland Renewables Limited is also a member of the REAL Assurance customer code of practice, which provides specific byelaws that members undertake to abide by. The Code covers all the factors that contribute to overall consumer service, including:

- clear information on the systems and their performance
- any arrangements for installing and connecting the system
- the selection and quality of goods supplied
- details of the conditions of business that apply
- the standard of any installation and other on-site work
- guarantees, and any maintenance and after-sales services needed
- what action will be taken to deal with any problems.

Further information about the REAL assurance scheme can be found at www.realassurance.org.uk/pdf/consumer-code.pdf

What guarantees does Fuseland Renewables Limited provide?

Most polycrystalline solar panels come with a performance warranty of 90% of their rated (as new) output for the first 10 years following commissioning and 80% after 25 years. There is also typically a defects warranty of 5 years, which covers material and processing errors. These guarantees are supplied by the panel manufacturer, which in our case is Sharp. The inverter has a five-year manufacturer's guarantee. Inverters have an average life of around 10 years, so you should expect to change the inverter at least once during the first 25 years of your system. (The inverter typically accounts for around 10% of the initial system cost, depending on the system). In addition, Fuseland Renewables Limited provides a one-year installation guarantee.

What do I do if the PV panels do not provide the promised benefits?

Fuseland Renewables Limited sizes its systems and calculate their predicted outputs based on the standard assessment procedure (SAP) provided by the Microgeneration Certification Scheme, as do all other MCS-accredited installers. This is based on a Government assessment plus the past 5 years' weather data. It is of course impossible to predict exactly the amount of solar radiation (sunlight) at a specific location due to the variability of the weather, so the actual amount of power generated will be slightly different from the indicative figures. However, if your panels are seriously underperforming it is likely there is a fault in some part of the system. Contact Fuseland Renewables Limited.

Who is Exenergy Limited?

Exenergy is an Ebbw Vale-based heating, insulation and renewables firm, and we've chosen them to carry out energy efficiency assessments on homes and businesses as part of the site survey. Exenergy has:

- a wealth of knowledge about Government funding and energy saving grants, so they can guide customers towards the most effective energy solutions for their homes or businesses.

- extensive experience working for private customers as well as the big energy companies, including British Gas, Swalec, npower and so on. It also works with housing associations and local authorities across South Wales and into the neighbouring English counties.
- has installed energy saving measures in well over 100,000 homes and businesses, and has an excellent record for customer service and efficiency.
- is a BBA-approved installer and CIGA-registered installer (cavity wall insulation), and a member of REAL assurance scheme (see above for details)
- is committed to helping people save energy and money and, like LGV, believes in working in partnership to deliver the best benefits. Find out more at www.exenergy.co.uk.

What are the components of a Solar PV system?

A standard Solar PV system comprises:

- PV panels
- an inverter that converts the DC (direct current) produced by the panels into AC (alternating current) for use in the home or business
- isolators to ensure that the system can be turned off safely
- a generation meter to show how much electricity the system has produced.

What equipment does the Reach For The Renewables offer specify?

- Sharp ND-R230(A2) polycrystalline panels:
 - MCS-accredited with full Energy Performance Certificate and 14% efficiency
 - 10-year performance guarantee on power output of 90%; 25-year performance at 80%
 - 5-year product guarantee
 - 1652mm x 994mm x 46mm
 - visit www.sharp.co.uk for more details
 (NB where roof space is limited, alternative panels may be used to maximise output).
- Aurora or GEFAN inverters: MCS accredited, with maximum efficiency of 96-97.8%
- Schuco or Schletter mounting system.

Does the PV system involve using batteries to store the energy?

No. The system is connected to the national grid, so any surplus electricity generated during the day is sold back to your utility company (at 3.1p/kWh). At night, or whenever the system is not generating enough energy for your needs, electricity is drawn from the grid as usual.

Will we continue to have power during a power cut?

No. Any grid-connected PV system is designed to switch off in the event of a power cut. This is a legal requirement and is a safety feature designed to stop electricity leaking on to the National Grid and harming workmen trying to repair the fault.

Does shading matter?

Shading is the No.1 enemy of solar PV systems! Even minor shading can result in significant loss of energy from the system. This is because the panel with the most shading determines the operating current of the whole series of panels to which it is connected. So even if only one panel out of 10 is shaded, it is the same as if all 10 are shaded. This is why it is so important to carry out a site survey and identify any potential shading hazards before designing the system.

What is the optimum orientation and pitch for panels in the UK?

The ideal orientation in the northern hemisphere is due south, with a tilt from the horizontal equal to the latitude of the property, minus 10°-15°. So 30° is the optimal tilt in South Wales, while in the north of Scotland it is almost 40°. That said, over 90% of the maximum annual energy can still be achieved at tilts of 10° or 50°.

How much electricity can I generate with PV panels?

Domestic solar systems usually provide around half of your home's electricity (depending on the number and

size of panels and their orientation, as well as how much energy you use). Your financial return is maximised if you are able to use the power as it is generated, ie during the daytime. So it pays to switch to running power-hungry devices such as vacuum cleaners, dishwashers and washing machines during daylight hours.

Do I need planning permission?

For domestic schemes, solar PV is now classed as 'permitted development', which means that in most cases planning permission is not required. However, if you live in a listed building or conservation area you should contact your local planning office. Commercial schemes, such as those on businesses, community buildings, schools and farm buildings, **do** require planning permission, so you will need to allow for this.

What do I need to do with regard to Building Regulations?

The rules on Building Regulations changed in October 2010, so Fuseland Renewables Limited can now self-certify their own installations. All electrical works will be carried out under Part P, so they are signed off in the normal way. Post installation, Fuseland Renewables Limited supplies customers with a Minor Electrical Works Certificate, a Building Regulations Compliance Certificate, and an MCS (Microgeneration Certification Scheme) Certificate.

Is VAT payable?

VAT is charged at 5% for domestic schemes and 20% for commercial installations. Prices for our domestic schemes include VAT.

Once the panels are installed, do they need maintaining?

When positioned at an angle of over 20 degrees, the panels have a level of self-cleaning, although it's still a good idea to clean them once a year if possible. Other than that, PV systems require very little attention, although some customers arrange inspections at 25 year intervals. The system specified through Reach For The Renewables offers an optional wireless monitor, so you can see how much electricity the panels are generating at all times.

Will my system's performance deteriorate over time?

The output of all polycrystalline photovoltaic solar panels deteriorate over time. A warranty of 80% of the new performance after 25 years is standard.

Is solar PV covered under home insurance?

Most insurers now cover solar PV as a standard part of your buildings insurance, but it's worth checking with your current insurer, and if you change insurers.

Are any grants available for solar PV?

Low Carbon Building Grants have now ended, with the Feed In Tariff scheme (see below) replacing grants. In Powys, you can take out an interest loan of up to £5,000 towards the cost of renewables through Powys County Council's Carbon Dioxide Initiative (CO2i). Call 08708 510 356 for details.

I'd like a survey and pricing for my property now. What should I do?

Email LGV at solar@llangattockgreenvalley.org or Freephone 0800 206 1915 (Monday-Friday, 9am-5pm).

We hope the above information answers your questions, but if not please email your query to solar@llangattockgreenvalley.org