

Solar PV for FREE



A typical annual saving of **£400*** which will rise in line with your energy bills for the next 25 years.

*Figure equates to an annual projection based on a 4kWp solar PV system installed, south facing, indicating 100% usage.




STROMA[®]
SOLAR

www.stroma-solar.co.uk



Lower your electricity bill for FREE with a solar photovoltaic (PV) installation

The solar PV system is installed free of charge, with no hidden costs, whilst you gain free of charge electricity guaranteed for 25 years.

The system will be fully supported with maintenance, insurance and shall be installed by qualified MCS installation teams.



FREE OF CHARGE

- Survey
- Solar PV Installation
- Electricity Generation
- Maintenance for 25 Years

Solar Photovoltaic (PV)

Producing FREE electricity direct from the sun

Solar PV systems utilise the sun's free energy and use photovoltaic (PV) cell technology to turn the sunlight into useable electricity, which in-turn can be used to run electrically powered regular household appliances.

One of the main benefits to the UK renewable market is that you do not need direct sunlight to generate energy; the PV system has the capacity to produce electricity even in overcast conditions.

Photovoltaic panels (PV Cells) can be attached to your walls or roof depending on the optimum angle required for achieving the greatest energy return.

The cells are made up of double or single layers of semiconducting material which create electric fields when sunlight is applied, the greater the amount of sunlight hitting the material the more electricity (measured in kWh) will be produced, therefore increased financial savings.

The PV system will be fully supported with insurance and maintenance contracts for twenty-five years at no cost and shall be installed by qualified MCS installation teams.

The PV panels offer high efficiency and endurance levels for weather resistance plus a twenty-five years performance guarantee.

■ Reduce your electricity bill

The sun's energy is a free and renewable source, your electricity bill will significantly reduce with an annual saving of £400 each year, this saving will rise in line with your energy bills for the next twenty-five years. *(Based on a 100% usage, 4kWp solar PV system installed south facing).*

■ Reduction in your carbon footprint

Solar energy systems do not discharge any carbon dioxide (CO₂) into the atmosphere Plus it is estimated that a solar PV system installed on a typical residential property could save around 1tonne of CO₂ per annum. (Source: Energy Saving Trust).



High quality equipment, performance and monitoring

JA Solar photovoltaic (PV) panels

Stroma Solar use JA Solar, one of the biggest solar cell manufacturers in the world, succeeding in its brand of high quality and efficiency. The solar PV panels are optimally manufactured to meet the needs of the current market; scientifically designed module dimensions makes the installation straightforward, whilst continuous efforts in quality assurance system and certifications demonstrate the commitment to product quality.

The PV panels offer high efficiency and endurance levels for weather resistance and a 10-year quality guarantee.



- Microgeneration Certification Scheme listed under certificate number MCS PV0055/02
- High transmittance low iron tempered glass
- Monocrystalline cells deliver high efficiencies
- Conforms to PV Standards: IEC 61215:2005, IEC 61730:2004, UL1703

TECHNICAL SPECIFICATION	
Power Rating	200w
Module Efficiency	15.67%
Weight	15.5kg
Length	1580mm
Width	808mm

Fronius IG TL inverters

Stroma use Fronius IG TL inverters, primarily selected after research and compatibility testing – proving to be the market leading brand with 10-year warranties. The inverter system is a highly innovative inverter, unique in its class, due to the system monitoring as standard.

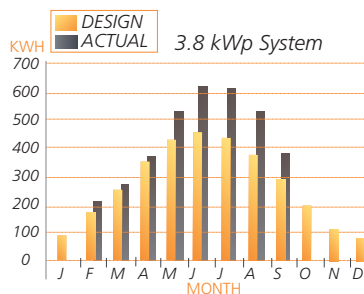


The Fronius IG TL is the most future-proof transformerless inverter, with monitoring that includes; string malfunction detection, detailed status codes and a direct signalling contact that immediately reports any problems throughout the entire system to Stroma Solar for resolution.

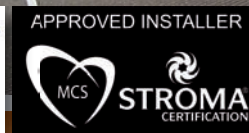
Online performance monitoring

A particular strength of Stroma Solar is the unique software packages, which provide users with real time generation data that raises awareness of energy usage.

Stroma provide online tools to track solar PV system performance, monitoring and evaluation. You can log in to see the performance of your solar panels, detailing; energy generation, CO₂ emission reductions and performance tracking against the predicted design calculations as outlined in the bar chart above.



The monitoring system additionally sets data triggers so that Stroma are notified when system performance falls below expectancy, the Stroma monitoring team will be notified so that any issues can be identified and remedied at the earliest opportunity.



PV4FREE qualifying criteria

For a property to be deemed suitable for the installation of a PV4FREE system with Stroma Solar Ltd. the following criteria must be met. All criteria will be assessed free of charge by Stroma.

South, South-East
or South-West Facing



15m² or more
4.14m x 3.2m (10 panels)



Free from shading



The property must be

- A residential privately owned property
- 100% owned by the registered owner together with any Mortgagor

The roof must have

- A pitch of between 20° and 40°
- A south, south-east or south-west facing elevation
- Sufficient area to accommodate a 2kWp solar PV array (approximately 15m² as a minimum)
- Sufficient structural integrity to support the solar panel PV array
- A suitable sized area free from shading

The property must have

- A standard electric meter and suitable consumer unit

The property must not be

- A listed building
- In a conservation area (Stroma Solar shall discuss conservation area definitions)
- Subject to a Compulsory Purchase Order (CPO) or an unexpired Housing Act charge

The property must not have

- A pre-paid card or key meter
- A flying freehold affecting the property
- Any restrictions affecting the property in favour of a 3rd party
- Extended or frequent periods where the electricity supply is interrupted

Consumer protection

Warranties

Ensuring quality assurance and consumer protection is the essence of the scheme operation. Stroma Solar will bring together a number of insurance and warranties in order to provide peace of mind of the PV solar installation.

Competent Person Scheme (CPS)

All installations will be undertaken by appropriate Competent Persons listed within the Government approved CPS. Each installation will commence with insurance backed warranties for a minimum period of six-years.

Microgeneration Certification Scheme (MCS)

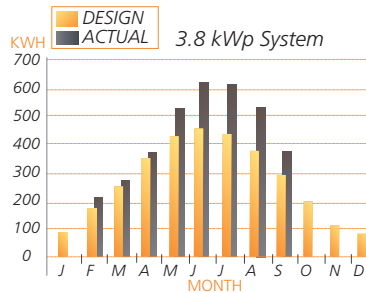
All products installed will include a twenty-five year output performance warranty for the PV panels. Furthermore, installers will be MCS certified in addition to CPS certified and shall provide Professional Indemnity for the design of the PV solution, as well as Public Liability for the physical works undertaken on the property.



CASE STUDY

System Size	3.8 kWp
Roof Orientation	South
Angle of Tilt	30 degrees
Shading	Little or none
Location	Harrogate, North Yorkshire
Design Output	3,262 kWh/year
Actual Performance vs Design	113%

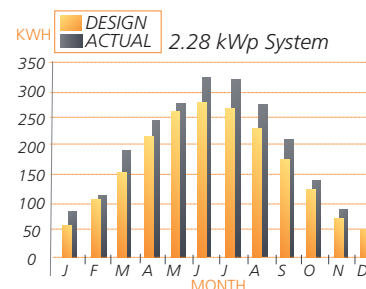
"I [Mr.R.Parker] have no hesitation in recommending Stroma Solar to anyone looking at PV, the entire team have been courteous and professional in all they have done."



CASE STUDY

System Size	2.28 kWp
Roof Orientation	South
Angle of Tilt	30 degrees
Shading	Little or none
Location	Skipton, North Yorkshire
Design Output	1,957 kWh/year
Actual Performance vs Design	117%

"The team of installers from start to finish, demonstrated consideration and efficiency, it has been a pleasure working with Stroma Solar" Mrs Carson



Frequently asked questions

Stroma Solar have taken many enquiries during the last few years regards solar panel installations, you will find below answers to many commonly asked questions.

However, should you have questions of your own please feel free to contact our customer support centre where we will be happy to advise.



You can also access further FAQ's on the website

www.stroma-solar.co.uk/pv-4-free/faq

Who covers the cost of the installed equipment and who retains ownership of it?

Stroma Solar covers the cost of the equipment in full, including the PV panels themselves and associated products such as the inverters. We therefore retain the ownership of the entire installation for the 25 year contract.

What happens if something goes wrong with the system after installation?

We remotely monitor each installation, it is 100% our responsibility to repair and maintain the system free of charge for the specified 25 year period. Solar photovoltaic systems are silent in operation, have no moving parts and require almost no maintenance.

If I sign up to 'PV 4 FREE' am I taking out a loan or hire purchase agreement?

Definitely not. Our offering of 'PV for Free' means you pay nothing for the products, installation or maintenance. There are no hidden costs and you will not be tied into any financial agreements. The only contract you sign is the 25 year agreement at that property.

So FREE actually means FREE?

Absolutely. Every aspect of our offering is completely free of charge to you. There are no hidden costs or administration charges levied by Stroma.

What happens if I move house?

Should you decide to move house the agreement will be transferred to the new occupiers of your property. They can then continue making savings on their energy bills for the remainder of the 25 year agreement.

How long does it take to install the systems?

Our installations typically take two days to install. We can fit your installation within four weeks of receiving your signed acceptance.

Do I have to change to a specific energy supplier and will I still receive a bill?

No you can stay with your current supplier or change to whoever you like, whenever you like; we place no restrictions upon you. Your bills will be reduced by the level of your PV systems generation.

If I am not in the property, what happens to the electricity my panels produce?

Whenever your panels are producing more electricity than your home is using, it will feed back into the national grid. It cannot be stored locally.

Once installed do I need to read a meter like a conventional system and provide the detail to Stroma Solar?

This is done remotely so you do not have to worry about taking readings from your system.

Do the installed products come with any guarantees or warranties?

All panels come with a 25 year performance warranty, the installation comes with a 5 year warranty so you can be sure your service will be of the highest standard.

How do I know that I am using electricity produced from the installed panels?

You will automatically use electricity generated by the PV panels first when they are producing energy. At night time or during periods when the system isn't producing enough for your usage, the national grid will top-up your requirements automatically.

Shall I inform my buildings insurer and mortgage provider before committing to an installation?

Stroma Solar covers the insurance cost, however, we recommend you inform both of these.

Can I purchase the solar panel system?

At the end of the twenty-five years the solar panel system transfers ownership to the homeowner.

However, there are options to purchase the system at any time, this also means that you can try before you buy.

The following table outlines the list prices for purchasing over the twenty-five year period:

Years 1 to 10 = £3,000 per kWp

then decreasing in £150 per kWp per year:

Year 11	£2,850 per kWp	Year 16	£2,100 per kWp	Year 21	£1,250 per kWp
Year 12	£2,700 per kWp	Year 17	£1,950 per kWp	Year 22	£1,000 per kWp
Year 13	£2,550 per kWp	Year 18	£1,800 per kWp	Year 23	£750 per kWp
Year 14	£2,400 per kWp	Year 19	£1,650 per kWp	Year 24	£500 per kWp
Year 15	£2,250 per kWp	Year 20	£1,500 per kWp	Year 25	£0

Therefore, should you choose to buy out your FREE of charge, installed solar panel system you can expect to pay after:

two years - £6,840

twelve years - £6,156

sixteen years - £4,788

costs are estimated for a 2.28 kWp system, correct at time of print.

Additionally, should you wish to extend or alter your property which is in the vicinity of the solar PV system or any conduits serving the solar PV system during the twenty-five year period, then you may do so provided that such alterations or additions will not interfere with the operation, efficiency, productivity of or access to the PV system. Stroma Solar will provide assistance upon contact.

How can Stroma Solar offer PV4FREE?

On the 1st April 2010 the Government introduced the Feed-In Tariff (FITs) scheme to encourage small scale low carbon electricity generation.

Therefore, every unit of low carbon electricity produced receives a tariff. The value of the tariff is index linked to the Retail Price Index (RPI) for 25 years from the date of notification and is regulated by Ofgem.

Which means that Stroma Solar as the owners of the solar panel PV system, earn an income from the electricity generation, whilst, you enjoy the benefits of free of charge electricity and maintenance whilst supporting the Renewables Obligation (RO).

Stroma are well known within the construction industry and have gained a reputable standing for providing building sustainability and compliance.

The group of companies run several governmental approved energy assessor schemes, competent person schemes and the Microgeneration Certification scheme, additionally providing market leading and award winning software solutions, which ensure all calculations, are provided to the national calculation methodology standards.

Stroma are perfectly placed to offer customers with an unrivalled, secure and trusted solution, whereby you can guarantee that all installations shall be carried out by industry approved experts that conform to rigorous government standards.





If you are interested in a renewable technology solution for your property, please contact your local Stroma Network surveyor and arrange a no obligation survey free of charge to determine your requirements and suitability.

Please also visit www.stroma-solar.co.uk for further information.



For further information please contact the Stroma Solar team on **0845 621 11 16** or email solar@stroma.com

Stroma Solar Distribution Centres:

Bristol

South London

South Yorkshire

West Yorkshire (Head Office)

Stroma Head Office

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