EnergyCare
KEEPING BRITAIN WARM GROUP

Solar PV Systems

Clean Renewable Energy

www.energycaregroupltd.co.uk

Green Deal

Green Deal explained

The Government Green Deal scheme enables consumers to install Solar Photovoltaic (PV) to their homes without paying for the privilege. The cost for the works is paid back from the savings the installation produces via your Energy bill. (Please see the golden rule below).

The Green Deal Golden Rule

The 'Golden Rule' ensures that the savings created by the new Solar Photovoltaic (PV) system must ALWAYS exceed the repayments applied to the annual electricity bill. This means that once the improvement has been installed, your dual fuel bill will be no higher than before the improvement was carried out. If the savings are not enough to cover the full install you will be able to take out a Green Deal personal top up plan for the remainder. The EnergyCare surveyor will explain.

Criteria

The Green Deal option is available to all homeowners, Landlords, Privately renting tenants, Schools and commercial properties with an electricity supply.

The agreement remains with the property, rather than the individual, so if you come to move, the repayments are continued by the new occupier.

Soft credit checks are required, you can pay off the remaining sum early if desired and there is no tie in with any utility provider allowing you the option to seek the best rates and deals for your energy over the term of the agreement. There is no minimum or maximum amount of work you can apply for at any one time, and you are free to revisit the scheme and add further energy-saving measures as often as you wish, but the Golden Rule must always be adhered to.

The benefits of solid wall insulation

- **Earn/save up to £780 per year**
- **Cut your electricity bills**
- **Sell electricity back to the grid**
- **Cut your carbon footprint**

What is Solar Photovoltaic (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 household appliances and lighting.

How do Photovoltaic (PV) cells work?

PV cells are panels you can attach to your roof or walls. Each cell is made from one or two layers of semiconducting material, usually silicon. When light shines on the cell it creates an electric field across the layers. This electricity is then transferred to the house where it is plugged into the property's electrical supply, supporting or replacing external electricity. PV cells come in a variety of shapes and colours, from grey "solar tiles" that look like roof tiles, to panels and transparent cells that you can use on conservatories and glass. The strength of a PV cell is measured in kilowatt peak (kWp) – which is the amount of energy the cell generates in daylight.

The benefits of solar electricity

- **Cut your carbon footprint:** solar electricity is a green, renewable energy and does not produce any harmful carbon dioxide or other pollutants. A typical home PV system could save around 1200kg of carbon dioxide per year – around 30 tonnes over its lifetime.
- **Cut your electricity bills:** sunlight is free, so once you have paid for the initial installation your electricity costs will be greatly reduced. A typical home PV system can produce around 40% of the electricity a household uses in a year.
- **Sell electricity back to the Grid:** if your system is producing more electricity than you need, or when you are not using it, someone else can use it – and you can earn income from it. See overleaf for more information.
- **Planning Permission not required:** PV systems do not usually require planning permission when they are fitted to existing buildings.

Earn Extra Income...

while being kind to the planet

With electricity prices continually rising, solar panels are a sound investment, and the environmentally friendly way to generate your own electricity, reduce energy bills and CO2 emissions and earn tax free income. We can help you calculate how much you stand to save and how quickly you can expect your installation to pay for itself.

The Government's Feed In Tariff scheme rewards homeowners and organisations for generating their own electricity from renewable sources and for any excess electricity they 'export' to the National Grid. The rate you receive will be set for 20 years, increasing annually to account for inflation. This incentive only covers installations of MCS certified equipment carried out by MCS accredited installers like ours.

Step by step guide to installation

FREEPHONE **0800 783 7946** 24hrs 7 days a week

Why Choose InstaGen?

InstaGen is part of the InstaGroup which has been dedicated to insulation systems, energy efficiency and environmentally friendly solutions for over 30 years. The solar PV systems that InstaGen supplies and installs are high performance roof top or ground based installations for all sizes of residential properties, public and commercial buildings and agricultural locations. InstaGen high quality monocrystalline photovoltaic modules deliver exceptional performance and, even on cloudy days, produce significant levels of electricity.

InstaGen solar panels are of the highest quality and are combined with inverters from reputable, MCS-accredited suppliers. This ensures that your system will generate the maximum levels of electricity possible from the available daylight, even on dull or cloudy days and in early mornings and late evenings.

Exceptional product backing

InstaGen provides outstanding product warranties and performance guarantees that match or exceed any others offered throughout the industry.

Warranty and Guarantees

- 10 year product warranty
- 25 years guarantee on minimum power output
- 10 year performance guarantee on 90% power output
- 25 year performance guarantee on 80% power output

All InstaGen products are also covered by appropriate certification and quality assured standards.

Certification and Quality Assurance

- MCS certification
- CE
- IEC 61215, IEC 61730
- ISO9001 Standards for quality management systems
- ISO14001 Standards for environmental management systems

The InstaGen

Comprehensive Solution

- **Consultation:** Whether you are a private homeowner or a commercial business, we will start with a consultation to discuss your particular requirements and expectations. Our head office technical support team will help to facilitate your project and, if you are a commercial client, oversee the planning applications and any appeals and contract negotiation work.

  We also work in partnership with Waldon Energy to offer a full package of survey, planning and installation services for building and landowners in the commercial and public sectors.

- **Survey and Quotation:** Once we have carried out a site survey to assess the potential of your property and the opportunities it presents, we will provide you with a clear, decision.

- **System Design:** If you decide to go ahead, we will design a microgeneration installation to meet your specific needs. We can also provide advice on energy efficiency and, if necessary, install additional insulation in your premises, to ensure you will benefit fully from the energy you generate.

- **Installation:** We provide full installation by trained operatives who have also undergone instruction at the Renewable Training Academy to ensure their skills are up to the highest standard.

  EnergyCare are members of a nationwide consortium, the Snug Network, as well as being MCS-certified, members of Renewable Energy Consumer Code (RECC) (which securely protects your investment with us). Warranty is now held by QANW for a period of 5 years.

- **Aftercare Service:** We can offer after-sales servicing, to ensure that your microgeneration equipment continues to work efficiently, making the most of your investment. All installations are quality assured and fully guaranteed.

If you are interested in generating your own green energy, please contact us on

FREEPHONE **0800 783 7946**
24hrs 7 days a week

InstaGen 260w Solar Panels

Monocrystalline Photovoltaic Modules

InstaGen

- High quality monocrystalline photovoltaic modules, which deliver exceptional performance and yield
- Perfect for large, medium or small sized residential, commercial and agricultural systems
- Easy Installation with all universal mounting systems

Product Features

- High performance in low light conditions, allowing the module to operate in mornings, evenings and cloudy days
- Positive power tolerance of 0/+3 ensures that the 260w output is always delivered or exceeded
- High performance cell efficiency of 18.1%
- MC4 connector
- Anodised aluminium alloy frame, which is strengthened to avoid freezing or warping
- InstaGen black frame and panels for a sleek appearance
- Certification approved for Salt and Ammonia Testing

Electrical Characteristics

All specified parameters are at STC 25°C ambient, 1000W/m2 irradiance and AM 1.5

Type		IGM260BL-UK
Max-Power	(Pmax)	260Wp
Optimum Operating Voltage	(Vm)	31.20V
Optimum Operating Current	(Im)	8.34A
Open-circuit Voltage	(Voc)	38.82V
Short-circuit Current	(Isc)	8.71A
Cell Efficiency	(%)	18.10
Module Efficiency	(%)	15.98

Mechanical Specifications

Solar Cell		Mono-crystalline 156*156mm
Output Tolerance	(Pmax)	0 ~ +3%
Number of Cells		60 cells in series
Module Dimension		1640*992*35mm
Weight	(kg)	18.8
Max. System Voltage		1000V(TUV)/600V(UL)
Max.Series Fuse Rating		15A
Output Cable PV 4mm^2		
Cable Length		90cm±5
Number of bypass diodes		6
Temperature cycling range		(-40°C ~ 85°C)
NOCT		47°C ±2°C
Temperature coefficients of Isc		+(0.053±0.01)%/K
Temperature coefficients of Voc		-(0.35±0.001)%/K
Temperature coefficients of Pmax		-(0.40±0.5)%/K
Load Capacity		300 pcs/20'GP 868 pcs/40'HQ

EnergyCare
KEEPING BRITAIN WARM GROUP

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For any queries before or after installation,
or to arrange a no-obligation survey,
please call us on **0800 783 7946**

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NATIONAL INSULATION ASSOCIATION
GREEN DEAL APPROVED
snug network
REAL RENEWABLE ENERGY ASSURANCE LIMITED
APPROVED INSTALLER MCS
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