

Solar Photovoltaic (PV)



Solar PV has become the most popular of all renewable power technologies. It is easy to install and maintain. Solar PV is a method of generating electricity from the power of the sun. These are solar panels which are usually installed on roofs.

HOW DOES SOLAR PV WORK?

Solar Photovoltaic cells convert daylight into usable electricity, which can be used throughout your property instead of taking electricity from your energy supplier. It does not rely on endless days of summer sunshine (although this clearly improves output) - instead it takes the solar energy from daylight, meaning the panels continue to generate power even on cloudy days.

HOW MUCH ELECTRICITY CAN I GENERATE?

A typical solar PV panel can generate around 250 watts of energy at full capacity, therefore a typical domestic installation of between 10-16 panels could generate between 2.5kW and 4kW of power. A commercial installation of 40 panels could generate around 10kW of power.

WHERE CAN SOLAR PANELS BE FITTED?

Solar PV panels are usually installed on roofs however they can be mounted on a wall or at ground level on A-frames and are just as effective when positioned correctly.

Some local authorities do require planning permission prior to installation and you should check with your local planning officer.

WILL IT BE SUITABLE FOR MY PROPERTY?

Solar PV panels are most efficient on south facing roofs, where they receive most direct sunlight, although east to west facing roofs are also suitable. Roofs which are north facing or shaded by buildings or trees are not recommended.

Futurum will carry out a full structural roof survey and all Futurum domestic installations benefit from a 10 year roof structure warranty.

HOW MANY PANELS WILL I NEED?

This will vary depending on the size of the roof and space available, but generally a domestic installation will range from 10-16 panels. Clearly the more you install, the more energy you generate, earn and save.

COST, SAVINGS & MAINTENANCE

Costs for installing a solar electricity system have come down considerably in recent years with a quality system now costing between £6,000 - £8,000 (including VAT - which for domestic installations is just 5%).

Return on investment is around 8-10% on a solar PV system and a typical 3kW system could generate over £400 per year. A 10kW system could generate over £1300 per year. The savings start the moment the system starts working with the Feed-in-Tariff (FiTs), which is a government incentive that pays you for every unit of electricity generated AND for any surplus energy exported, continuing to pay for up to 20 years from the date of installation.

As solar PV panels produce their electricity during daylight hours any unused electricity can be exported back to your energy supplier for which you will be paid an export tariff.

Most power generating technologies require very little on-going maintenance - perhaps an annual check and clean - to maintain optimum generation levels. Our team can provide you with this service - either as an integral part of a new installation or to support any existing technologies you may have.

* Based on a fully south facing unshaded roof in South East England

ARE THERE ANY RESTRICTIONS TO THE FiTs PAYMENT?

To qualify for the FiTs payments the system you install must be certified under the MCS (Microgeneration Certification Scheme) and the installer must also be MCS registered. MCS are the regulatory body which ensures consistency and quality. Your property must also have an energy rating in band D or above. Your Puragen representative can provide you with a FREE energy performance certificate.

HOW CAN YOU BE SURE OF THE QUALITY OF THE INSTALLER AND PRODUCTS?

All Futurum installers are registered and where required certified under the Microgeneration Certification Scheme (MCS) and we are bound by the REAL Assurance Consumer Code which is your guarantee of best advice and high standards of service. Details of these requirements can be found at www.realassurance.org.uk

If you have any further questions or queries please contact the Futurum team on **01305 755700** or email us at sales@futurumltd.co.uk

