



# SOLAR PHOTOVOLTAIC PANELS (PV)

## TURN DAYLIGHT INTO ELECTRICITY

Solar electricity systems use photovoltaic (PV) cells to capture the energy from the sun and convert it into electricity.

## DO I NEED PLANNING PERMISSION OR APPLY FOR BUILDING REGULATIONS

Local Authorities are sympathetic to reducing carbon emissions and would always look favourably on any application. You may require planning permission for conservation areas, areas of outstanding natural beauty and listing buildings. You will need to apply for Building Regulations.

## WHAT ARE THE BENEFITS?

- A basic 2 kWp system could provide around 40% of a households annual electricity
- Reduce your carbon footprint as solar PV is green renewable energy
- No maintenance costs with a life expectancy of around 50 years
- Will qualify for the Feed in tariff (FIT) so providing an excellent return on investment

## HOW MUCH IS IT GOING TO COST?

Please ask for prices as they are dependant upon your requirements, location and if you need the PV system to work alongside another renewable technology

## FEEDS IN TARIFF: F.I.T.

Pick up a leaflet on this new government incentive which was introduced on the 1st April 2010 and is a financial support measure to increase the uptake of renewable electricity generation which can be in the form of Solar PV, Wind or Hydro technologies and applies to MCS approved products and installers only.

## HOW DOES THE FEED IN TARIFF WORK

You are paid a fixed rate for all the electricity you produce through your solar photovoltaic panels from your utility company. You will also save on your utility bill by using the electricity you produce and anything not used will be paid for by your utility company. These rates are fixed at the time of installation for 25 years, are index linked and tax free for domestic installations. See our Feed In Tariff leaflet for more information.



**CALL OUR CUSTOMER HELPLINE ON FREEPHONE 0500 127005**

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## TURN DAYLIGHT INTO ELECTRICITY

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## WHY CHOOSE SOLAR PV?

If you have a roof or wall that faces 90° of south and is not overshadowed by trees or buildings then your property is suitable for the installation of Solar PV which generates electricity for use in your property and helps reduce your electricity bills and your carbon footprint.

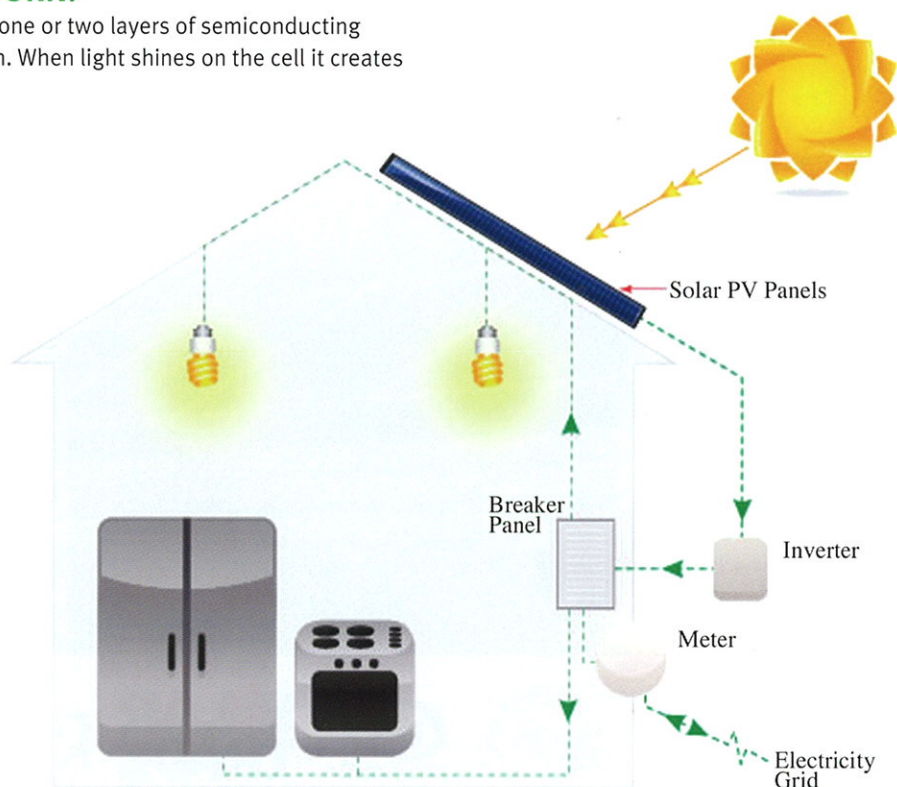
## HOW DOES IT WORK?

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. The stronger the sunshine, the more electricity is produced. The strength of a PV cell is measured in kilowatt peak (kWp) which is the amount of energy that the cell generates in full sunlight.

The inverter, a small control box converts the electricity from direct (DC) to alternating (AC) for use in the property. When the Solar PV system is producing more energy than you require, the energy is exported back into the grid.

PV panels are most commonly sited on your roof but can also be located almost anywhere such as walls, gardens, fields etc.



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