Actio$_2$n Surrey
SURREY'S LOW CARBON COMMUNITY

Solar Photovoltaic Panels

What are they?
Solar PV systems use energy from the sun to produce electricity using the photovoltaic effect. In most cases they are the most appropriate way for households to generate electricity.

What's involved?
Solar PV panels are installed on a suitable roof and connected to a device called an inverter that converts the DC (direct current) produced by the panels to AC (alternating current, the same as your grid supply). The inverter is connected to the distribution box in your house and provides power for your lights and appliances. Meters measure how much electricity you get from or send to the grid.

How do they work?
Each of the panels in an array contains a number of separate PV cells connected by fine wires to from an electrical circuit. The cells are made from very thin wafers of semi-conducting silicon that generate an electric current when exposed to solar radiation – they work best in direct sunlight but also generate electricity from the diffuse solar radiation we experience when it is cloudy.

At a glance

Annual Savings (for a standard 3kWp system)

Around £220

Around 1 tonne CO_2

Costs from £5,000

Did you know?

You can earn up to £620 a year from a standard 3kWp solar panel system.

Getting paid to produce electricity

The Governments Feed-in-Tariff pays homeowners with solar electric panels 14.38p for every unit (kWh) of electricity they generate, regardless of whether it is consumed or not.
The Export Tariff is 4.77p/kWh.

If you wish to find out more about solar panels or getting paid to produce please contact Actio$_2$n Surrey on 0800 783 2503

Actio$_2$n Surrey
SURREY'S LOW CARBON COMMUNITY