

A LiveWest Guide to Photovoltaic (PV) Panels

What are PV Panels?

PV panels, also known as solar panels, are the most common form of renewable energy technology installed onto new homes.

These systems capture the sun's energy and convert it into electricity that can be used in the home.

How do they work?

A solar panel consists of many cells made from layers of semi-conducting material, most commonly silicon. When light shines on this material a flow of electricity is created.

The panels do not need direct sunlight to work. They generate electricity using daylight which means they work on sunny, cloudy, and rainy days. However, it is worth noting that the stronger the sun the more electric energy is produced.

As the electricity generated by the panels is direct current (DC) an inverter is installed to convert this electricity to alternating current (AC) so it can be safely used in the home.

Benefits of solar electricity

Solar PV systems are good for the pocket and good for the planet.

Reduce household bills

The electricity generated from PV panels is free.

As the PV panels will be working at its peak during daylight hours, it's a good idea for customers to run electrical appliances, such as washing machines and dishwashers, during the day so as much of the electricity generated by the PV panels can be used whilst this electricity is being generated.

This will enable our customers to gain the maximum benefit of the system and reduce their home energy costs.

Cut carbon emissions

Solar PV panels are a renewable energy technology. The electricity generated from PV panels has no carbon emissions, meaning a typical home PV system can save around one tonne of carbon per year.

