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"Future growth in a subsidy-free solar PV market will largely be driven by the continued fall in installation costs and the increased availability of affordable and efficient solar-plus storage systems. For solar PV to become attractive without subsidies, there is also a need to unlock deployment on buildings in the commercial sector."

Claudia Preedy - B2B Analyst

# This report looks at the following areas:

- How has the UK solar panels market performed in recent years?
- How have the different types of solar panel deployment been developed over recent years? (roof-top, ground-mounted, etc.)
- How have changes in government policy shaped the development of the market?
- How have key players in the market performed in recent years?
- What are the prospects for the UK solar PV market in a post-subsidy world?

#### Definition

The terms of reference for this report concern the UK solar panels market.

Solar power is the conversion of sunlight into electricity, either directly using photovoltaics (PV) or indirectly using concentrated solar power (CSP). Concentrated solar power systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam. Photovoltaics convert light into electric current using the photoelectric effect. As of 2017, there are no CSP plants in the UK and none announced, with the market monopolised by photovoltaics.

PV cells are made from layers of semi-conducting 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. Groups of cells are mounted together in panels or modules that can be mounted on a roof.

The power of a PV cell is measured in kilowatts peak (kWp), the rate at which it generates energy at peak performance in full direct sunlight during the summer. PV cells come in a variety of shapes and sizes. Most PV systems are made up of panels that fit on top of an existing roof, but solar tiles are also available.

Solar tiles are designed to be used in place of ordinary roof tiles. A system made up of solar tiles will typically cost around double an equivalent panel system, though there is a further saving on roof tiles or slates. Solar tile systems are not normally as cost-effective as panel systems, and are usually only considered where panels are not appropriate for aesthetic or planning reasons.

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This report is part of a series of reports, produced to provide you with a more holistic view of this market



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British Photovoltaic Association

**Energy Networks Association** 

**Energy Industries Council** 

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**Energy Retail Association** 

SolarPower Europe (previously European Photovoltaic Industry Association)

European Solar Thermal Industry Federation

Micropower Council

Office of Gas and Electricity Markets (Ofgem)

Office of Gas and Electricity Markets - Scotland (Ofgem Scotland)

Renewable Energy Association

Solar Trade Association

Trade Exhibitions

All-Energy Exhibition & Conference Aberdeen

The Renewables Event

Solar & Storage Live 2017

Trade Magazines

Renewable Energy Focus

Solar Business Focus

Solar UK

Solar International