



Why the sun is now an affordable source of energy

Solar power now represents the cheapest form of renewable energy generation available. It is highly scalable, ranging from a single photovoltaic (PV) panel through to fields of panels for grid-scale projects. A photovoltaic system consists of solar panels to absorb and convert sunlight into electricity, a solar inverter to change the electric current from DC to AC, and other electrical accessories. Concentrated Solar Power uses focused sunlight to generate electrical power by using mirrors to concentrate the sun's energy and convert it into heat and then electricity.

UK capability in solar

The UK is a world leader in the research and development of new and more efficient solar technologies. The UK has expanded its total solar PV capacity to 14 GW by installing up to 175 MW of capacity during the first quarter of 2021, capable of supplying around three million homes using renewable energy. The UK has several experienced solar developers that can deliver projects at all scales, with expertise in niche panels and the design and installation of off-grid systems.

UK companies with solar expertise exporting to the Middle East

Wood

Wood, a global leader in engineering and consultancy in energy, recently completed its role as owner's engineer on Oman Shell's first utility-scale, photovoltaic (PV) solar project in the Middle East. The development will supply renewable electricity to a large ferrochrome production facility, displacing the equivalent gas-fired power generation taken from the grid and saving more than 25,000 tonnes of CO2 emissions annually. The Qabas Solar Plant consists of more than 80,000 solar panels and is focused on improving the utilisation, energy efficiency, and carbon intensity of energy production, accelerating solar energy development and helping to meet the growing demand for cleaner energy.

Solar Water

British company Solar Water Plc has developed a game-changing, carbon-neutral, 24-hour operational, hydro-infrastructure project to purify seawater. The company's vision is to create an end to water scarcity with a solution that will also create a better future for our planet. The technology is being deployed at sustainable city NEOM in Saudi Arabia. The system delivers scaled supplies of freshwater with a planet-friendly, zero-environmental impact, green energy technology, using the concentrated power of the sun. With game-changing fifth generation solar concentrators and heat storage capability, the thermal energy processes seawater inside a steel dome, in an affordable and sustainable manner that helps mitigate climate change and solve water scarcity.

Learn more about UK renewable energy solutions for your business

Contact us