

Snowdonia hill farm PV installation

BayWa r.e. Solar Systems helps Welsh sheep farm diversification

Medium scale PV array installed in challenging conditions



924
Solar modules

240.24 kWp
System size

1,982.36
Tonnes annual CO₂ savings

A pair of nesting ospreys and flood plain location contributed to a demanding installation



BayWa r.e. Solar Systems Ltd worked with Dragon Power Ltd to install the 240.24 kWp ground-mount system as part of a diversification programme for a North Wales hill farmer. The system will be the first renewable energy technology installed at the farm, which meant an upgrade to the local electricity network was required as there are also plans for a high-head hydroelectric scheme nearby. The network upgrade will allow both technologies to run concurrently providing a secure power source and guaranteed Feed-in Tariff (FIT) income for many years to come.

The solar PV system consists of the first two Fronius Power Packages to be installed in the UK to date. Each Power Package consists of five 20 kW Symo inverters and an AC combiner box, pre-wired and configured by Fronius in their Austrian factory, which were then delivered direct to site to ensure a quick and easy installation. The PV array is located on a flood plain meaning additional mounting

posts and deeper pile driving was required to overcome the soft clay ground conditions. The equipment used and noise generated during the installation also had to be kept to a minimum to avoid disturbing a pair of nesting ospreys near the PV array location.

Dragon Power were able to overcome issues onsite due to their considerable expertise and mechanical engineering knowledge. The installation was completed on time and within budget, meeting very tight deadlines, ensuring the farmer is very satisfied with the performance of the system to date.

Furthermore, Adam Jackman at Dragon Power has gained yet more invaluable experience completing a complex installation in demanding conditions to an exacting standard.

BayWa r.e. Solar Systems Ltd are experts in the provision of suitable high quality PV products and provide on-site assistance for installers to complete similar challenging projects.

"Dragon Power Ltd worked tirelessly to overcome many complicated site issues. They installed in a tight timescale in order to meet the latest Feed-in Tariff cut deadline. Their mechanical engineering expertise contributed significantly to the success of this project and a very happy customer."

BEN ROBINSON
Business Development Manager,
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Contact

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FACTS AND FIGURES:

Industry sector:	Landowners
Customer:	Dragon Power Ltd
Location:	Gwynedd, North Wales
Installed capacity:	240.24 kWp
Inverter type:	2 Fronius Symo Power Packs
Mounting system type:	Mounting Systems Sigma II
Type of monitoring:	Fronius string level DC and inverter monitoring, sensor package (ambient temperature, module temperature, solar irradiation and wind)
Expected annual generation:	200 MWh
Expected annual CO₂ savings:	1,982.36 tonnes
Expected payback year:	Year 10
Method of finance:	Self-financed