

PV Energy Community Case Study:

Ysgol y Bedol

Carmarthenshire, Wales



Ysgol y Bedol is a large Welsh-medium primary school in the Amman Valley in Carmarthenshire, Wales. The school is owned by the local authority and run by a board of governors.

Ysgol y Bedol is connected to the local distribution network, which is owned and operated by Western Power Distribution (WPD). In August 2014, a 50 kWp solar PV system was installed on the school's roof by a local solar PV Cooperative, Egni.



Aerial view of Ysgol y Bedol PV E.CO

Egni develops solar energy on community buildings in Wales by raising funds from its cooperative share offers to pay for the solar panels. Egni's main purpose is to generate clean energy, enable community projects to be more financially stable and engage the public through its share offers.

The system has a half-hourly export meter installed on the property and Egni have entered into a Power Purchase Agreement with a licensed electricity supplier for payment of the electricity exported to the distribution network. In addition to income earned through the Power Purchase Agreement, Egni receives the Feed-in Tariff generation payments for the electricity generated. Any electricity used by Ysgol y Bedol is used free of charge.

Batteries are not installed at the site and any electricity which is generated and not used by the school is exported to the local distribution network. Micro-inverters are fitted to the PV modules in order to optimise production and prevent them from being reduced to the weakest performing modules on the string.

Using Ysgol y Bedol to install a solar PV system shows how a community building can be used to harness renewable energy. Through using the energy it generates to help power the building, and exporting its surplus back to the local network, the Ysgol y Bedol system is a successful example of grid-integrated community solar.