

Here comes the sun - 10 November 2010



The sun shone on the Festival site today as an excited crowd watched Michael Eavis officially switch on Worthy Farm's new solar electric array.

Michael said: "We now not only do the best festival in the world, we also have the best solar power system."

More than 1,100 solar photovoltaic (PV) panels on the roof of the "Mootel" cowshed can generate enough power for 80% of the farm's electricity demand and export excess to the grid. Saving more than 2,000 tonnes of carbon dioxide over its lifetime, the system is part of the Festival's environmental commitment to [Love The Farm – Leave No Trace](#).





Pictures by Matt Cardy (top two) and Laura Zaky (bottom two)

Here are some facts and figures about the Worthy Farm solar photovoltaic system:

- The largest private solar electricity-generating system in the UK.
- Generates enough electricity to meet the annual demand of 40 average households.
- Helps combat climate change by saving about 100 tonnes of carbon dioxide emissions each year.
- The system, installed on the roof of Worthy Farm's cow shed, contains more than 1,100 solar photovoltaic (PV) modules.
- The PV modules generate direct current electricity which is converted into alternating current by two large inverters. The power can then either be used in Worthy Farm's buildings, or, when there is more supply than demand, exported to the grid.
- With the benefit of the government's new feed-in tariff for renewable energy, the payback time for the system is expected to be about nine years. The system is designed to keep operating for at least 20 years.
- The installation was organised by Solarsense, based in Bristol.
- The modules were manufactured by Romag in County Durham.
- The grid connection was provided by Western Power Distribution.
- The inverters have been supplied by Swiss company Sputnik Engineering.
- A loan to enable the project to proceed was made available by Triodos Bank.

Technical specifications

Power output: 200.88 kilowatts peak (kWp)

Modules: 1,116 Romag modules

Inverters: Sputnik SolarMax

Inclination and orientation: Inclination 5°, faces south

Expected annual yield: 160,700 kilowatt hours (kWh)

Lifetime carbon dioxide saving: More than 2,000 tonnes
Area of solar PV array: 1,500 square metres