

Great Dawley Town Council: Solar PV



Key facts

Location: Dawley Town Hall, New Street, Dawley, Telford TF4 3JR

Grant recipient: Great Dawley Town Council.

The roof mounted solar panels were installed in November 2021. However, the idea of going carbon neutral started back in April 2021, when Great Dawley Town Council declared a Climate Emergency acknowledging that they needed to act on the causes and impacts of climate change and wanted local communities to join in too. Since then the Town Council has been working with partners, including Telford and Wrekin Council to deliver energy efficiency measure including improving all of its community buildings by upgrading the windows, heating systems, installing loft insulation and LED lighting and moving to smart meters for energy usage.

The idea of making their most used community space, Dawley Town Hall, more sustainable for the future caused a lot of positive interest. A community consultation suggested that solar panels on the roof of the building would reduce energy bills and the money saved could be used for the community in different ways such as by making more building enhancements, keeping future hire costs to a minimum or even to fund further projects within the wider community to benefit local residents.

Website: greatdawley.org



Renewable energy installation: Solar PV

Solar PV: Solar panel electricity systems, also known as photovoltaics (PV), convert the sun's energy to generate electricity. These cells don't need direct sunlight to work – they can still generate some electricity on a cloudy day.

Additional capacity: 20 kWp roof mounted system

kWp is the peak power of a PV system or panel. The power is calculated under a standardised test for panels across all manufacturers to ensure that the values listed are capable of comparison.

Predicted energy generation: 18,500 kWh

A kilowatt hour (kWh) is the energy consumed by a 1,000-watt or 1-kilowatt electrical appliance operating for 1 hour.

CO₂ saving per year: 5.1 tonnes

Based on an emission conversion factor of 0.2773 of a kilogram of carbon dioxide per kilowatt hour.

Financials

System cost: £18,500

Funding: 50% Marches Renewable Energy grant; 50% from the Town Council.

Predicted payback time from energy cost saving:

Typical solar PV payback is 8 years. This was expected to be reduced to 4 years with the 50% grant.

For further information

Marches Renewable Energy (MarRE) is an ERDF funded grant scheme towards renewable energy projects in Herefordshire, Shropshire and Telford and Wrekin.

www.herefordshire.gov.uk/MarRE