

# Charlton Marshall – Low carbon measures for new village hall

Grant  
awarded:  
**£10,881.84**

Estimated  
annual saving:  
5 tonnes of  
CO<sub>2</sub> / £400

**Project cost**  
£27,204.61

**Estimated Saving**  
5 tonnes of CO<sub>2</sub> per year – 30% carbon footprint  
reduction, £400 per year

**Equipment / Installer**  
Hybrid Air Source Heat Pump (Matrod Frampton), Solar  
PV (Matrod Frampton), LED Lighting (EC Electricals)

## The Project

Charlton Marshall had a very busy, but very old village hall. Housed in a wooden building built in the mid 1930's, it was expensive to run, and not fit for purpose. So, they decided as a village to build a new low carbon one.

The new hall will have LED lighting throughout, better-than-needed insulation, an 8kW air-source heat pump to provide most of the heating, and a 6kW array of Solar PV Panels. These energy efficiency measures will far excel building regulations, and its carbon footprint is 30% smaller than the hall it will replace!

## Getting started

As part of fundraising for the new hall there was a requirement for public consultation. A major theme in the response from the village was that they wanted the new building to be low-carbon. With this in mind they set about designing the building with a local architect and contractor.



Once designed, Charlton Marshall got in touch with Low Carbon Dorset to seek funding for the hall's low carbon measures. Ideally Low Carbon Dorset would have been involved from the off to advise and shape the designs for maximum carbon savings. But we were still able to offer some additional energy saving recommendations, which included a 6kW solar array to power the hall's hybrid air-source heat pump, additional insulation, and LED lighting throughout.

The village were then able to apply for a Low Carbon Dorset grant to cover 40% of the costs of these measures.

### Hybrid Air-Source Heat Pump

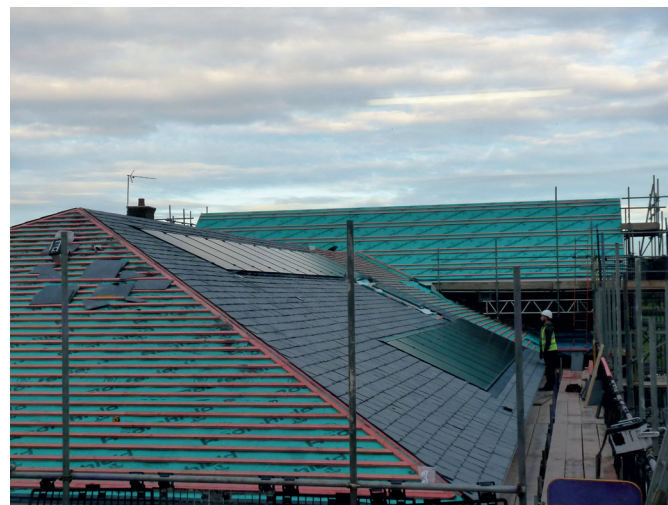
The building has been designed with a hybrid air-source heat pump (including a gas combi boiler). This will provide the under-floor heating throughout the building.

### Solar PV Panels

The 6kW array of Solar PV panels will take advantage of the sun on the hall's south facing roof. These panels will power the building's air source heat pump.

### LED Lighting

All of the lighting throughout the building is LED, which drastically reduces the energy output.



“Derek was excellent in working out the amount of grant we could apply for to cover the costs of the equipment needed. I found the grant application form straightforward and user friendly.”

Pam Higgins, Funding Co-ordinator Charlton Marshall Village Hall

