

Property Information Sheet



Name and Address

Alyson Hill Cottage, The Bog, Minsterley, SY5 ONL

Property Description

Detached solid stone wall property with slate roof, double glazed windows, insulated roof space and conservatory along the north wall.

What changes have you made to your home / what green features did your home come with?

16 solar photovoltaic (PV) panels were installed on our barn in 2011. In 2020 we installed a Zappi electric vehicle (EV) charger. A ground source heat pump (GSHP) was installed with replacement radiators in December 2021. More recently a 6.5kW Growatt solar battery was installed to take advantage of Octopus Go Tariff at £0.10 per kWh. This has allowed us to charge the EV for 3 hours at night.

Why did you make these changes / choose a home with these features?

Mainly for environmental reasons. We wanted solar power to replace our oil central heating boiler and to be able to charge our EV.

What were the approximate costs of each of the changes you made?

The £11,235 cost, including VAT, for the solar PV panels, fitting, fixings and scaffolding was repaid by feed-in tariff payments by 2017. In total the GSHP approximately cost £30,000 including VAT. Ofgem's Domestic Renewable Heat Incentive (RHI) will cover the majority the GSHP's cost as roughly £28,300 will be paid back at £988.20 per quarter until January 2029.

What have been the approximate energy savings?

There have been substantial savings on diesel by running an EV using solar power. The GSHP has saved us roughly £1,000 a year on domestic oil heating. In 2020 we had 3 oil deliveries totaling £946. Electricity costs have escalated over recent years, so we need more time to identify our electricity usage.

What have been the benefits to you / your home?

We believe the heat distribution in our home is now more even. When needed during the winter months we do use a wood-burning stove in the living room and an electric Aga in the kitchen from October to March where there is no radiator. The new radiators are larger but are designed better with improved quality and efficiency. Have found some loss of storage space, the outside toiler room has been taken over by the heat pump and associated equipment and a large hot water cylinder in the kitchen. However, there is more space in the airing cupboard where the hot water cylinder used to be.

Who undertook the work?

Princes LHS Ltd. in Ellesmere installed the GSHP and solar PV panels. The solar batteries were fitted by UK Solar Services Ltd. in Stoke on Trent.

Would you recommend them?

Yes, we would. There were some unforeseen issues such as an extra £2,000 spent on sand lining the trenches because the subsoil was full of small rocks. The Ecoforest heat pump had to be replaced by a Stiebel Eltron pump due to supply problems, Princes LHS Ltd. did not charge for this additional cost. Their engineers worked hard and although there were some communication problems between them and their manager, they were responsive to the difficulties we raised. As for UK Solar Services Ltd., we cannot recommend them highly enough.

What else would you like to do?

We want to install further batteries for the surplus solar power generated and install a connection to our house. We simply are adjusting to the increased cost of electricity before committing to a larger outlay.

Have you considered any measures but rejected them? Please give details of what and why.

We did look into solar water heating several years ago but found our roof space to be too small to go ahead with it.

Any further comments?

We could not carry out any under-floor retrofitting as we live in an area affected by Radon, as a result we are required to keep solid floors. Installing wall insulation would have been difficult in an extensively renovated building so our Energy Performance Certificate (EPC) rating is only an E.

Visiting instructions / information

N/A