# Shropshire Green Doors 2023



## **Property Information Sheet**



## Name and Address

Alyson, Hill Cottage, The Bog, Minsterley, SY5 ONL

## **Property Description**

Detached, solid stone walls, slate roof, doubleglazed, insulated roof space, conservatory on north wall

Open 15th 21st 29th October 10 - 4

### What changes have you made to your home?

16 solar panels were installed on our barn in 2011 A ground source heat pump was installed in December 2021 with replacement radiators Zappi electric car charger installed 2020

Just installed a 6.5kW Growatt solar battery to take advantage of Octopus Go tariff of 10p/kWh to charge the EV for 3 hours at night

#### Why did you make these changes?

For environmental reasons

To use solar power to charge our electric car, and to replace our oil central heating boiler The Feed-in Tariff in 2011 was 43.3p/kWh

#### What were the approximate costs?

Solar panels, inverter, fitting, fixings & scaffolding £11,235 inc. VAT repaid by feed-in tariff payments by 2017

Ground source heat pump £30,000 incl. VAT

Ofgem RHI will pay back most of the cost of the ground source heat pump @ £988.20 / quarter until January 2029 (approx. £28,300)

### What have been the approximate energy savings?

Substantial savings on diesel by running electric car using solar power.

Too early to say on ground source heat pump, but £1000 per year in domestic heating oil saved (3 deliveries in 2020, total £946).

Need a full year to identify electricity usage by heat pump, electricity costs have escalated over this year.



#### Property Information Sheet continued...

#### What have been the effects on your home?

We think heat distribution in the house is more even, but we use a wood-burning stove in the living room in winter when needed and use an electric Aga in the kitchen from October to March where there is no radiator. New radiators are larger but better design.

Loss of storage space: outside toilet room taken over for heat pump and associated equipment, large hot water cylinder in back kitchen, although more space in airing cupboard with removal of hot water cylinder.

#### Who undertook the work?

Princes LHS Ltd., Ellesmere

UK Solar Services Ltd Stoke on Trent for the battery, can't recommend them highly enough

#### Would you recommend them?

Yes. There were some unforeseen issues, i.e. extra £2000 for sand to line trenches, because the subsoil is full of small rocks, typical of Stiperstones. Ecoforest heat pump had to be replaced by Stiebel Eltron pump owing to supply problems; Princes did not charge the additional cost. Engineers worked hard and although there were some communication problems between manager and the engineers, they were responsive to difficulties we raised.

#### What else would you like to do? And why haven't you done them yet?

Install batteries for surplus solar power and install connection to house. We're adjusting to increased cost of electricity before committing to further large outlay.

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

Solar water heating investigated about 5 years ago, but rejected as too little roof space.

#### Do you have any further comments?

Retrofitting meant we could not install under-floor pipe work (we live in a Radon area and need to have solid floors) and installing wall insulation would have been difficult in an extensively renovated building.

Our EPC is still only rated E.

#### Are there any access issues? Eg steep steps, lack of parking.

Limited parking, but The Bog car park is only a short walk away.