FUTURE READY HOMES

Green Open Homes 2025

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Property Information Sheet

Name and Address

Rebecca and James
Glannant,
Trefonen,
Oswestry,
SY10 9DH

Property Description

A four-bedroom detached house. Probably started as a 1 up 1 down agricultural dwelling in the 1800s and has been extended 3 times, most recently in the 1980s.

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

Before renovation our house was not insulated (other than spray foam in the roof space) and was heated with electric storage heaters. It was EPC rating F. We added 170mm external wall insulation, 350mm rockwool insulation in the loft, 150mm insulation in the solid floor, and triple glazed windows. We installed a mechanical heat recovery ventilation (MVHR) system, a 10.125kw solar array with battery, a 9kw air source heat pump with underfloor heating downstairs, radiators upstairs and a hot water cylinder. We now have an EPC rating of A.

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

A few reasons: we don't intend to move again and we wanted to end up with a cosy and energy efficient home; we wanted the challenge of retrofitting and to show it could be done; and we're both passionate about lowering our carbon footprint as much as possible. We wanted to use renewable energy only. We did it with eyes wide open, knowing we would be spending more than the house would be worth at the end of the renovation. However, investment return in hard cash was not the reason for doing it.

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

External insulation and re-render - £30,000
Windows - £33,000
MVHR - £4,000
Heating (underfloor heating downstairs, radiators upstairs, air source heat pump, water tank) £21,000 (plus a government grant of £5,000)
Solar array with an 11kWh battery - £16,000

What have been the approximate energy savings?

Before renovation, the energy use would have been approximately 359 kilowatt hours per square metre (kWh/m2). We now use approximately 20 kWh/m2. In 2024, we used 2,490 kWh in energy for the house and 3,440 kWh to charge our car (5,929.05 kWh in total). We exported 4,560 kWh back to the grid. Our total annual energy bill (for house and car charging) in 2024 was £858.83 (after input-export). This year costs should be lower, as we are getting better at understanding how to maximise export rates and lower electricity import. We have saved approximately 13.59 tonnes of CO2 from the solar array alone.

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What have been the benefits to you / your home?

Apart from the energy savings, the house is without drafts, warm and dry. The MVHR means that fresh air is always circulating. The triple glazing means we can have large windows, which emit no cold, so you can sit right next to them and enjoy the view.

Who undertook the work?

Iheat installed the heating system.

Windows were made and fitted by Norrsken.

External insulation was by Insul8.

Mark and Robert at BCHN Architects.

Would you recommend them?

Would recommend them all. Iheat were really helpful and responsive. There had to be a site meeting between Norrsken and Insul8 to work out window/external insulation details, as its very tricky on a renovation rather than a new build. However, they did a great job. Aftercare from all of them has also been great.

What else would you like to do?

We would like to put in a car charger (currently running on a 3 pin plug), add more batteries and put a pergola on the front on the house to reduce solar gain in the summer.

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

We really would have liked to put grey water system in and use more carbon efficient external insulation, but the budget would not take it.

Any further comments?

N/A

Visiting instructions / information

Car parking on steep drive available for 3-4 cars, however if struggle with reversing down a steep drive, and are able bodied, or please park at the Barley Mow at the bottom of the village. It's a 10 minute walk from there. The post code will take you too far down the lane – we are 4th from start of the lane.