

WHAT WE DID

Installed solar panels and a battery to a 3-bedroom detached house

USING SOLAR PANELS TO HEAT HOT WATER AND CHARGE ELECTRIC CAR

This family decided to add solar panels to their home to reduce their energy bills as well as reducing their impact on the environment. They also installed a 10KwH battery in their garage to store the energy generated so that it can be used when they need it.

'We have an electric hot water system and an electric car which both use the electricity generated by the solar panels. In the future we hope to install an air source heat pump which will also be powered by the solar panels. We have looked carefully at how and when we use electricity in our house to make sure we use the electricity we generate in the most cost effective way.'



INSTALLATION PROCESS

- 1.Planning permission was not required for installing the solar panels as the project complied with permitted development regulations.
- 2.The family used a local contractor they were familiar with.
- 3.The solar panels took 2 days to install. Scaffolding had to be put up.
- 4.The homeowners now manage the electricity generated through an app. This shows, in real-time, how much is being generated, used and stored. They can control exactly what happens, for example by setting the system so that the car does not start charging until the house battery is full.

WHAT ARE YOUR TOP TIPS FOR GETTING THE MOST FROM YOUR SOLAR PANELS?

- **See what changes to you can make to how and when you use electricity** - it is always most efficient to use the electricity in the daytime as it is generated, particularly on sunny days. Can you change when you put the washing machine on to match when the solar panels are working best?
- **Make sure you are on the best electricity tariff for you** - we use most of the electricity generated by the solar panels rather than exporting it to the grid. In the winter we don't generate enough power to fully charge the electric car. We have chosen a tariff that offers cheaper electricity at night which we use to charge the car. For us, this is more cost-effective than a tariff that pays more for electricity exported back into the grid.

WHAT IT COST

Solar panels (inc. scaffolding)	£10,282
Battery	£8,676

LONG TERM SAVINGS

The family's main motivation for installing the solar panels was to tackle climate change and reduce their carbon emissions. However, they have also benefitted from a four figure drop in their annual energy bills.

SHARING EXPERIENCE WITH FRIENDS AND NEIGHBOURS

Since installing the solar panels, the family have shared their experience with friends and neighbours. Three have gone on to install their own solar panels!

