



HUNGERFORD ENVIRONMENTAL  
ACTION TEAM

# HUNGERFORD ENERGY NEWS

*Bringing the Latest Home Energy Stories to You*

## SO-LAR SO GOOD!

Five years ago, John & Sylvia Downe decided to create an all-electric home, avoiding on-site fossil fuels and minimising climate-damaging emissions. They knew the house would require a lot of electricity, plus charging for their electric car.



The first step was to maximise the number of PV solar panels. This

meant a 3-phase grid connection was needed rather than the normal single phase. From experience, they knew how variable solar generation can be during a single day, from day to day and season to season.

To make the most of sunny days solar batteries were installed so that "spare" solar power can be used after sunset or during the next day.

If the house batteries fill up completely, surplus solar is then automatically used to charge the car.

In winter, the batteries charge from the grid at a "greener", cheaper overnight rate (20% of daytime cost) and run the house through the next day, supplemented by any PV generation. The off-peak tariff is also used to charge the car and run appliances overnight.

*"We're pleased that our PV system, battery capacity and the house + car consumption are in balance so that 40% of our energy comes from zero carbon PV, 90% of our grid use is high in renewables and 90+% of our PV generation is used onsite thus avoiding grid usage"* John says.

*"We believe that much of our 'electrifying' new-build story is equally relevant to many home retrofits".*