



A Solar Together Installation, Our Story So Far

In 2023 we had solar panels (more correctly known as solar photovoltaic panels or “solar PV”) fitted to our house, taking advantage of the “Solar Together” Berkshire and Windsor & Maidenhead group buying scheme. This account provides a brief description of what happened and will hopefully inform anyone looking at solar PV in the future. Although a slight sceptic I had always liked the idea of solar PV but was not quite motivated until the group buying scheme appeared.

We registered for the scheme in June and received a basic assessment and proposal, based on a “desktop” survey, in late July. The big decision was whether to continue and pay the £150 fee for a site survey. This was likely to be non-refundable (but deducted from the installation cost) unless our property was found to be totally unsuitable, although if that was the case it would probably have been weeded out already. We decided to go-ahead with the site survey.

A combination of delays, some being down to us, meant that a site survey did not take place until 8 November. The surveyor was helpful and friendly and explained that our circumstances were not ideal, as we had suspected; our quite large overall roof was made up of several sections, none particularly large and none facing due south. In addition, there are trees that obstruct direct sunlight some of the time. The options were how many panels and whether to add a battery or immersion heater feed. These second and third items would capture energy not used in the daytime when the panels were working. A smart meter would be needed to feed-in power to the grid (for payment) but not for simple home use of the power.

We went for a basic installation of 8 panels in two arrays (5 and 3) with a maximum output of 3.2kW and no battery, given that we are mostly in the house and using electricity during daylight, so storage was less important. A data logger on the AC output would provide both actual and historic information via the internet to a smart phone App. This type of installation needs to sense the mains voltage to operate and so is of no use in a power cut.



The basic cost of £3,974 (no VAT) seemed very reasonable. However, there was a sting in the tail because various extras were needed: an additional device for each panel to counteract the effect on the other panels of it going into shade; two sets of scaffolding each of which had to bridge obstructions; extra rubber tiles to support the brackets; and bird mesh was strongly advised to stop birds nesting under the panels. Friends with a solar PV installation said that the latter was vital. All of this took the total up by over 50% to a slightly more sobering £6,314. A battery would have added another £1500.

Nevertheless, encouraged by a recent premium bond win, we decided to go-ahead, at which time things happened quickly. A deposit of £1,000 was required before installation, with the balance payable on completion. It was intended that the scaffolding was erected on 21 November and the panels installed the next day. However, the scaffolders' lorry broke down. Being a tender-based scheme the contractors could be from anywhere and in our case the scaffolders were from Kent and the panel installers from West Sussex, which perhaps leads to a questionable carbon footprint for the work. The scaffolding therefore had to wait until the next day and happened at the same time as the panel installers were trying to use it, which caused some amusement. The electrician, to connect and commission the installation, arrived late the following day ("no matter, it's always dark in a loft") and finished the job the day after that. The scaffolding was removed after about a week. All the workers were courteous, friendly and efficient. A slight hiccup came later when we changed our broadband supplier and therefore the router. Re-programming the data logger took the combined efforts of three people including the supplier's helpline.

Of course, our solar PV was installed at exactly the wrong time of year, with short days, low sun and cloudy skies. To start with, the most we typically saw was 2-300W but this has now improved a lot, sometimes being over 2kW when the sun shines. On that point, it is sometimes stressed that direct sunlight is not needed for solar panels to work. That is true, but direct sunlight makes a big difference to their output. The system is now certainly offsetting most of our extended daytime loads, such as desktop computers, lighting (we always have some lights on in our house) radios and TVs, plus a proportion of washing machine and tumble dryer load. When have accumulated some more running time I will report back on the effect on our bills but we are not expecting a short payback time. A more ideally configured house with a single, unobstructed south facing array of panels would make for much lower installation costs and increased output.

Keith Benjamin

Do you have an idea for an activity or project that would help everyone cope with Climate Change? The Greening Group is *CHANGING* how we work. We hope to still run Swap Shops and other events but we want to support local projects from individuals and community groups who have great ideas to help all of us cope with climate change. The Group can provide support, help develop your ideas and even help with some costs such as poster printing etc. You will be able to use our logo to promote your activities. Get in touch with our chair, Richard Marshall to discuss ideas: marshallr@btinternet.com