



Time to go self-sufficient: *what you need to know about home solar in 2020*

David Stevenson, Mole Energy



We couldn't start this article without acknowledging the unprecedented global challenges that we are all facing right now. However, we want to share some practical and positive news, to help restore some balance.

Since January, many of our enquiries have been from people who had considered solar for their home or business and were now wanting to take the next step. For them the time was right. Panels and batteries have come down in price; technology has improved and they made the decision that solar is the perfect way for them to reduce reliance on expensive energy providers.

Here are the answers to some key questions you are likely to have when thinking about moving to solar energy.

How has Mole Energy adapted to the current global pandemic?

In light of the current situation, we understand that customers may be concerned about visitors to their homes. With this in mind our specialist surveyors can provide you with a bespoke quote over the phone, with no need for a home or business visit – unless of course you would like one. This will help our company to reduce our carbon footprint too! And if you do decide to go ahead with an installation, we can discuss practical solutions, in terms of health and safety on site to help reassure you about any concerns you may have.

Do I need a south facing roof?

Not necessarily. South facing panels offer the best performance

but installations facing east and west come a very close second – generating only 15% less energy than those facing due south.

We also install panels on outbuilding roofs and on the ground, so your property may offer other installation options.

Do I need bright sunlight to generate power?

No! Solar technology reacts to daylight, not sunlight. Our country's overcast weather is well-suited for solar, as it also offers the ideal operating temperature. Today, London generates the same amount of solar power as Madrid and the UK is Europe's fastest-growing adopter of solar energy!

Do I need planning consent?

Roof-mounted solar installations count as 'permitted developments' and so don't need planning consent, unless your home is listed. Ground-mounted systems do require planning permission.

Our team will guide you through every step of the planning process. At Mole Energy, we also 'self-certify' your new system with your local building control and Western Power. These documents are important so we handle all the administration for you.

How long will my installation take?

Most home solar systems take just one day. Our team conduct detailed surveys before your installation, using our technical expertise to plan each step of your installation well in advance. If you enquire now, your panels could be installed in time for the summer.

How many panels do I need?

A typical Solar PV system for the home is made up of 12 solar panels producing about 4,000 kWh's of free electricity per year (*a kWh is a unit of electricity). Most of our customers use between 4,000 and 6,000 kWh's per year in their home.

Today's solar panels are much more efficient. In 2010 you would have needed 20 panels to produce the same power as can now be achieved with just 12.

How much could I save?

This question used to be just about money. Today, however, many of our customers are more interested in their system's environmental impact.

This differs according to your system setup and the amount of energy you use on a daily basis. Over 25 years the average home solar system offsets the same amount of CO2 as recycling 16 tonnes of domestic waste or driving a family car for 112,745 miles. That's the same as driving around the Earth 4.5 times.

Then there's the cost saving. Depending on their system and home energy habits, our customers typically save between £200 and £650 on energy bills each year – figures which increase as home energy bills rise. The more solar power you use, the more you save!

Can I install a battery retrospectively if I already have solar panels?

Many of our existing customers are choosing to add a battery to their system, to cut their energy bills further and achieve more value from their investment. It's perfectly possible to 'build' your home solar system over time, adding components like car chargers and hot water systems as your needs evolve.

Can panels charge my electric car?

Yes! More and more customers have already bought an electric car or have plans to do so when they replace their current vehicle. Many of our home solar systems include intelligent technology that 'talks to' car chargers. These systems ensure your car battery maximises free solar energy gains. Free petrol!

What about battery storage?

Adding a battery to your solar panels will enable you to store this power, helping you to meet virtually all of your home energy needs in the summer months. The falling price of technology means that around half of all homeowners we work with choose to add battery systems.

Batteries store any excess power generated by the panels during the day and which would otherwise be 'fed back' to the National Grid. Your home will then draw power from your battery, at night, making it possible to power your home with free energy, day and night and even when there's a power cut!

Our largest battery - the Tesla Powerwall 2.0, stores 13.5kWh of power. That's about 2kWh more than the average UK home uses every day. These batteries can be installed indoors or outdoors and are controlled by smartphone or tablet. They can even draw power from that National Grid, at night, (when electricity is cheap) to generate additional power during the day (when it's more expensive), if required. We also offer a range of smaller units, to accommodate the range of customer needs.

How much will it cost?

An average home solar system will cost between £5,000* and £7,000, installed, depending on your site and choice of solar technology. A Tesla Powerwall 2.0 battery unit will cost an additional £7,395** installed (exc VAT). We have researched the wider battery market and have found that the Tesla is the best value for comparable reliability and cost effectiveness.

Today's technology is cost effective, simple to install and promises huge rewards for planet and pocket.



Port Waterhouse - Case study

Crispin Waterhouse runs Port Waterhouse Moorings in East Portlemouth, leasing moorings and pontoons and hosting formal events at his boathouse on the beautiful Salcombe estuary in South Devon.

Crispin commissioned Mole Energy to install Solar PV at his business premises in 2018. We asked him Why?

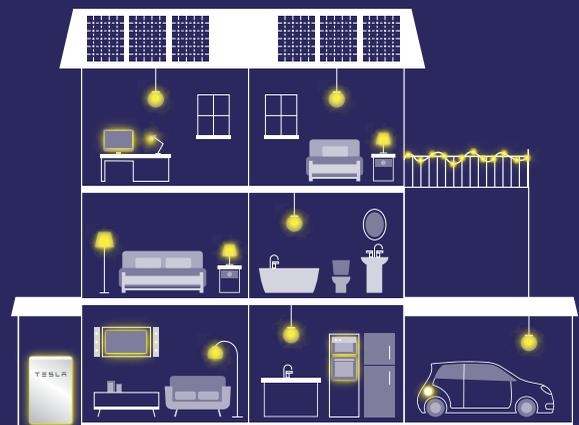
"I contacted a couple of local suppliers before Mole Energy came to have a look at the site".

And while our quotes were largely similar, he told us that our knowledge and passion stood us apart from the competition. When Tim visited Crispin to offer a free survey and quote, he impressed with his 'can do' attitude. "Tim had lots of answers, he was very capable and really seemed to know what he was doing".

"You were able to do things in parallel with our building project, so it wasn't a stress to get the solar panels put on and there were no additional costs. I was able to have discussions with the team on a technical level, so I always felt confident that I was doing the right thing."

"I have already recommended Mole Energy to other businesses" says Crispin; "you're easy to work with, with a great level of technical know-how and you delivered with no problems."

Self-power your home with battery storage



A TESLA POWERWALL 2.0 BATTERY UNIT WILL COST AN ADDITIONAL £7,395 INSTALLED (EXC. VAT)