



# Power Up Your Energy Savings:

A Guide to  
Choosing the Right  
Solar and Battery  
Solution for Your Home



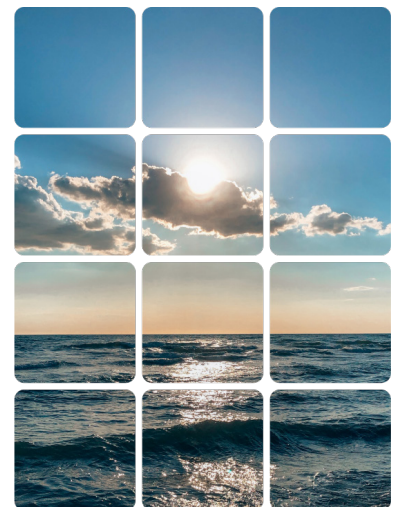
# The green energy revolution is here



More than one million people in the UK have invested in installing solar panel systems in their homes, and this demand for renewable energy only continues to grow.



The shift away from fossil fuel sources towards renewable sources is about creating a more sustainable future for generations to come. It's a chance for us all to make a real difference right from our own homes.



Imagine using sunlight to power your house, reducing your reliance on the grid, and saving money, all while reducing your carbon footprint. It sounds idyllic, but you can make it a reality.

# About The Little Green Energy Company

The leading installer of quality solar and battery systems in the South-East

We are an award-winning designer and installer of solar panel and battery storage solutions for families and businesses across London and the South-East.

Since 2010 we've worked with leading manufacturers to deliver bespoke, high quality renewable energy solutions for homes and businesses. Our transparent, expert and bespoke approach has won us awards and hundreds of 5\* reviews.

We install the best products in the business - we're a Tesla Premium Certified Installer, a SunPower Premier Partner and a SolarEdge Advanced Installer.

## WHAT WE SPECIALISE IN

Solar panel and battery storage systems for homes and businesses

Taking a consultative approach to help reduce energy bills

High quality products and fast installations

Bespoke designs for larger properties

Ground-mounted solar PV solutions





Why invest  
in renewable  
energy to power  
your home

## Save money on energy bills

Solar panels generate electricity from sunlight, which reduces your reliance on traditional grid power. This can lead to significant savings on your monthly energy bills - typically hundreds of pounds per year - allowing you to spend money on more important things.



## Reduce your carbon footprint

Sunlight is a renewable energy source, which produces no greenhouse gas emissions. By using solar panels combined with battery storage, you can reduce your household's carbon footprint and help combat climate change.

## Become more energy independent

A combined solar and battery system provides a degree of energy independence. You become less reliant on electricity from the grid, and with a battery with backup capability your home becomes more resilient to power cuts more resilient to power cuts.



## Get a return on your investment

If you're generating more power than you use, it doesn't have to go to waste - you can still get the full benefit of every unit of energy you produce. Through the Smart Export Guarantee (SEG), you can sell the solar panels' excess power back to the grid.

## Increase your property's value

With an efficient solar system, you can boost the value of your home. Many potential buyers are attracted to properties with installed solar panels because of the long-term savings they offer.





# How long does it take for solar panels to pay for themselves?

How long it can take for solar panels to pay for themselves or how much money you could make from them will depend on:



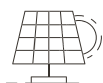
How much of the electricity you are able to use



If you can be paid for excess electricity generated with a SEG



Initial cost of your solar panel system



Whether you have a battery storage system installed



## 75%

According to a Which? survey, 75% of solar battery owners said that battery storage has helped them save money

The more of the renewable energy that you can use, the more money you will save.



★ ★ ★ ★ ★

"TLGEC is one of the most professional, friendly, considerate and competent companies I have ever dealt with. You can find plenty who are cheaper, but you only get what you pay for and I have no hesitation at all in recommending them without reservation."

David Cosham

# How to choose the right solar solution

## Is your home suitable?

Most houses are suitable for solar panel installation, although there are some exceptions. Here are some things to consider:

### The roof orientation

Ideally a roof would be south facing to maximise the amount of sunlight captured, although east through to west facing roofs can all have solar panels installed. Following that, the ideal pitch of the roof would be 30 degrees. These are perfect world scenarios, as there are other options available depending on your home and land available.

### The size of the roof

A single SunPower solar panel is one metre wide by 1.8 metres high. Most homes will have between four and twelve solar panels installed, so the roof needs to be large enough to house the panels.

### Placement of battery storage

Battery storage systems can be installed indoors or outdoors. For home use, the ideal placement would be in a utility room, or other room downstairs with adequate space. Or alternatives would be a garage, or on an external wall.







## **In roof/on roof solar panels**

Whether the solar panels sit within the roof tile versus on the roof is typically a question for those looking to install them in a new build home. If you're considering a new roof at the same time as a solar panel installation, in-roof panels may be a good option. For every in-roof solar panel you could save on the cost of up to 2m<sup>2</sup> of roof tiles on new build properties.

## **Space for ground-mounted systems**

If your roof or property is not suitable for roof-mounted solar panels, you can choose to have a ground-mounted system. This works well if you have space in a large garden or field that is south-facing.

## **The condition of the roof**

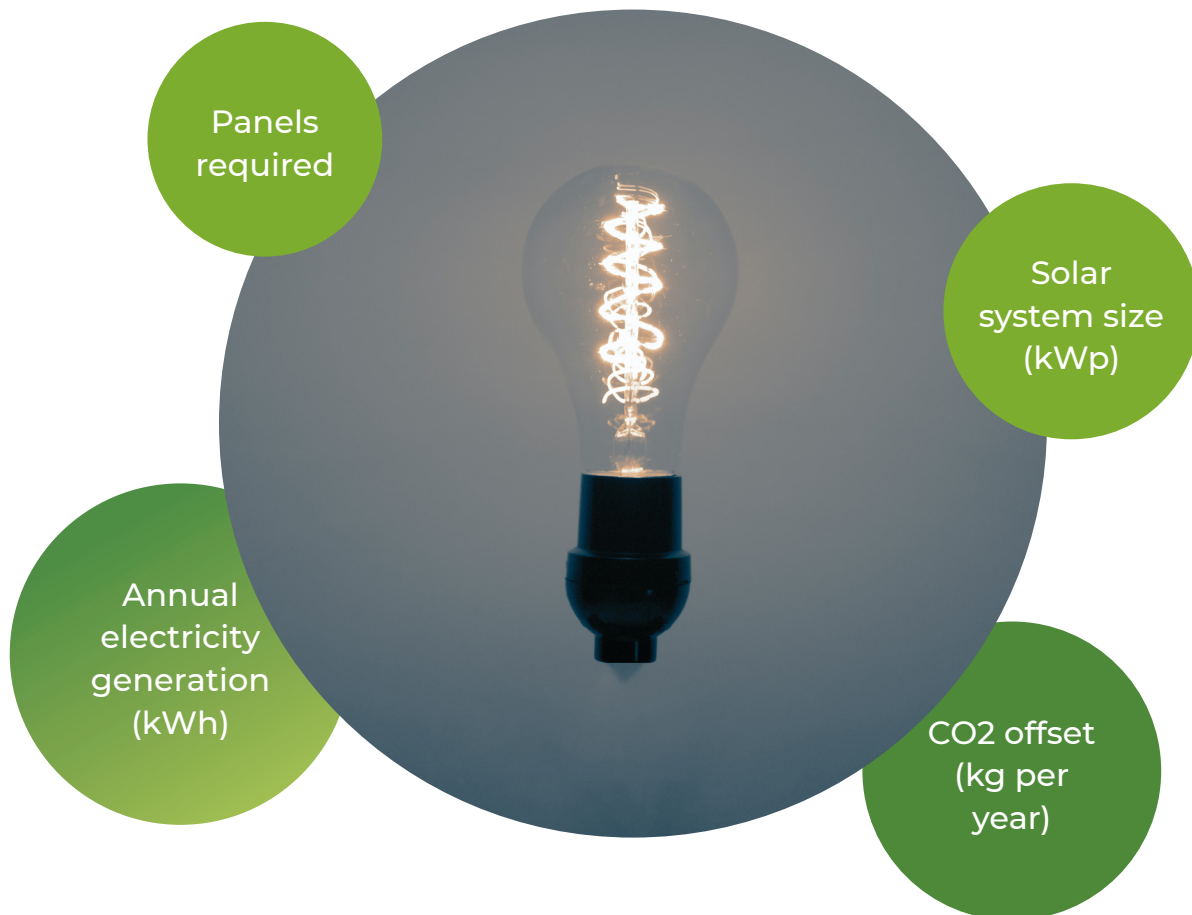
Your solar system is designed to operate for a minimum of 25 years, so the roof needs to be in a good condition to support the panels throughout their lifetime. Most reputable installers will do a full roof inspection before recommending the right options for your home.

## **If you require planning permission**

Planning permission is not needed for on-roof, in-roof or flat roof installations to domestic properties with the exception of listed buildings and conservation areas. You also will need planning permission for ground-mounted systems, but a good installation company should be able to help you with this process.

[Learn more](#)

# Understanding your energy requirements



A reputable installer will discuss your requirements in detail and come to survey your home before designing a system, to make sure they recommend the best solution for your needs. Households which use a lot of energy generally see the fastest return from solar panels, but any home can benefit.

An installer will need to understand what energy tariff you're on, and how much energy your household

consumes on an annual basis.

This will help them calculate:

- Solar system size (kWp)
- Panels required
- Annual electricity generation (kWh)
- CO2 offset (kg per year)

They'll then be able to provide a total quote for supply and installation.

# How to choose an installer

Once you've decided to go ahead with installing a solar panel system, you'll need to choose a company to design and install it. There are so many available, so how do you decide who to go with?

## Technical expertise and certifications

To make sure you're getting a system that is good value for money, adequate for your needs and built to last, it's important to choose a company with qualified staff.

They should be MCS Certified, which is the industry standard, a certified Tesla installer, (you cannot install Tesla units without certification), a member of an approved Competent Persons Scheme (such as NICEIC), and preferably a member of a recognised health and safety scheme, such as CHAS.

## Highly experienced

For peace of mind, it's always better to work with an installer that is well established and has a track record of highly rated installations in the area.

## Reputation and quality of service

Check reviews and read testimonials from previous customers, and see if they're a member of Which? Trusted Traders and other credible schemes which verify their service quality.



# Choosing the best solar system for your home



## How solar panels work

Solar panels, also known as photovoltaic (PV) panels, capture sunlight and convert it into electricity. They contain many solar cells made from semiconductor materials, typically silicon. When sunlight hits these cells, it excites electrons, creating an electric current. This direct current (DC) is then converted into alternating current (AC) by an inverter.

## Using battery storage to harness more energy

When adding battery storage to your system, you can store any electricity that's been generated during the daytime but not immediately used. You'll then be benefitting from every kilowatt of energy your panels produce.

[Learn more](#)



## What products are available?

When considering which brand of solar panels for your home or business, balancing quality, output and cost are the key areas to focus on. High quality will often result in a higher energy output and larger cost savings in energy over time.

We work with the leading manufacturers in the world to optimise energy efficiency and output for our customers.

### **SOLAREEDGE**

SolarEdge's inverters are industry-leading. They include an intelligent design that optimises the way power is harvested and managed in a solar system.

[Learn more](#)



TESLA

### **TESLA**

The Tesla Powerwall empowers homeowners to store solar energy for use round-the-clock, incorporating all the smart technology you'd expect from Tesla. It comes with a 10 year warranty, provides protection from power cuts, and you'll also have access to their app which monitors your consumption 24/7.

[Learn more](#)

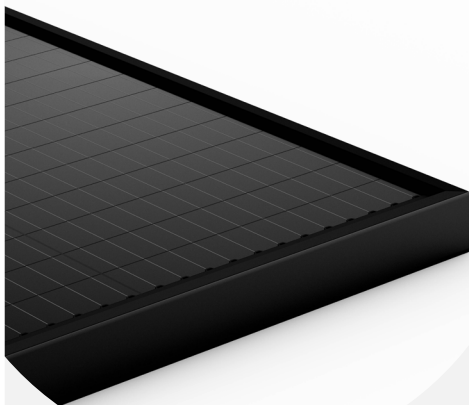
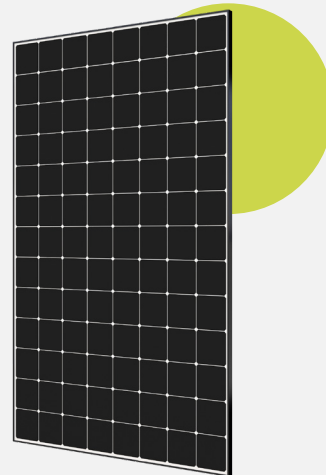
## SunPower

For more than 35 years, SunPower has been pushing the boundaries of innovation in solar energy. They offer one of the best warranties on the market - up to 40 years. Their range includes the SunPower Maxeon and SunPower Performance panels.

SunPower solar panels produce 60% more energy in 25 years than other leading manufacturers.

### SUNPOWER MAXEON

The highest efficiency panel you can buy with unmatched reliability and maximum production. The unique design of the solar cells eliminates 86% of the reasons that conventional cells fail.



### SUNPOWER PERFORMANCE

The Performance panels combine conventional solar cell technology with SunPower's specialist expertise. This means they surpass the performance, reliability and aesthetics of conventional panels.

[Learn more](#)

# Installation and maintenance

## The installation process

If you choose to work with The Little Green Energy Company, we will make sure the installation process is as straightforward and smooth as possible:

1

### **SIGN UP**

Your surveyor will review your project and make sure that everything is ready to get underway.

2

### **PROJECT HANDOVER**

A project manager will now take the lead on your project to make sure it can be planned and delivered to a high standard. They will get in touch with you and will be your point of contact throughout the rest of your journey with us.

3

### **DESIGN**

A member of our design team will check that everything is good to go ahead of installation and to ensure the system you are getting is the best solution for you. The design team will also apply for approval to connect to the national grid on your behalf.

4

### **PROGRESS CHECK-INS**

As the grid connection approval process can take up to 12 weeks, your project manager will be in touch periodically to update you on progress and to answer any questions you may have.

5

### **APPROVALS AND SCHEDULING**

Once we have approval to connect to the grid, your project will be reviewed by our design and installations teams and your project manager will arrange installation dates with you.

6

### **INSTALLATION**

Our installation team will be with you to get your new system fitted with safety and quality in mind. On the last day of our work on-site, a member of the team will need you on-hand to run through everything you need to know.



### **FINAL STAGE: HANDOVER AND AFTERCARE**

When your project is completed, our admin team will send across all of the paperwork you need. We're here to help with any aftercare queries you may have.

## How much maintenance does the system need?

Generally speaking a solar system needs little maintenance. However, like all installations, regular maintenance will ensure they keep producing energy efficiently every year.

Things to consider include:

- Have your solar panels been cleaned in the last 12 months?
- Do you know what condition the wiring is in? All electrical systems should be checked for safety and efficiency periodically.
- Do you have peace of mind that your investment is protected, that it was installed correctly and is producing what it should?

## Customer for life

At TLGEC we don't fit and forget. We see our customers as customers for life. There shouldn't be any problems with your system after it's been installed, but if you have any questions or concerns, we'll be here to help.



"The scaffolding went up a few days in advance, while the installation itself took just two days, with the system commissioned and working on the second day. All paperwork was sent the following week by email and we were also exporting energy within one month of the installation. Everything was done well and has continued working since. What impressed us most was the organisation in advance that meant on the installation days everything went smoothly."

Duncan, East Sussex







# What makes us different



## One of the most experienced installers in the country

Founded in 2010 - old by industry standards - we've completed thousands of projects.



## Which? Trusted Trader for 10 years

Since 2014 we've been certified as a Which? Trusted Trader. This means we continue to pass their standard assessment checks, and gives our customers additional peace of mind and confidence when buying from us.



## At the forefront of new technologies

We work closely with leading manufacturers and we were the first to install the Tesla Powerwall in the UK. We're proud of our innovative mindset.



## Honesty and transparency

We guarantee to install the best system for your money and if a particular technology is not viable for you, we will tell you.



## Expert technical knowledge

We communicate in a meaningful, clear way without confusion, leaving you to make an informed decision.



## Fully in-house team

From design and specification, through installation to commissioning, we organise our installations in-house so we take full responsibility for projects.



## Proudly independent

Our recommendations are based purely on the merits of a given system for what you need.

By working with us, you'll not only be helping to reduce your own environmental impact, you'll be helping the ocean too. We donate money to ocean conservation causes for every solar system we install.



## Supporting ocean conservation

We launched the Big Blue Ocean Foundation to help fight plastic pollution in our oceans, creating a cleaner, greener world for future generations.



[Learn more](#)



TESLA  
POWERWALL  
CERTIFIED INSTALLER



★ ★ ★ ★ ★


"I could not ask for better service. Everything went to plan, great installers who listened to my requirements and carried out my wishes to the letter. A fantastic, neat job with no mess."

Alan S, Kent

## Contact us for a free home survey

See what potential your home has to help you make the shift to greener energy.

 [tlgec.co.uk/contact-us](http://tlgec.co.uk/contact-us)

 01622 832 834

 [info@tlgec.co.uk](mailto:info@tlgec.co.uk)

