

### Your complete solar purchasing guide

Welcome to Egg's solar purchasing guide! If you're reading this, you're officially off to a great start on your solar financing journey. Clean energy can be complicated to understand and even harder to transition to if you don't have the right information.

Well, guess what? This guide is a portal to everything you need to know about solar financing without the jargon.

Read on to find all the information, insights, and top tips you'll need to make a transition to green energy, on a budget - because clean energy shouldn't cost the earth.

Our guide covers the essential aspects of solar purchasing; from breaking down key terms to highlighting the different types of financing available. Learn how to choose the right solar option for your specific needs, including the importance of getting quotes, setting your home up for success, and finally, closing the deal with the supplier of your choice.

Let's get you ready for a more sustainable future!

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Naturally, we've made every effort to ensure that the information in this guide is up to date. Prices, government incentives, and other relevant information are all accurate as of October 2023.

### Introduction to Solar Panels

Let's talk about the basics of solar energy and what you need to know

Put simply, solar energy is one of the cleanest and most abundant renewable energy sources, harnessing the incredible power of the sun. Solar energy is produced by converting sunlight into electricity with two types of technologies:

### 1. Solar photovoltaics (PV)

Solar panels use photovoltaic cells which convert sunlight into energy. When the energy comes in contact with the cell's internal field, electricity flows!

### 2. Concentrating solar-thermal power (CSP)

CSP uses mirrors to concentrate sunlight onto a receiver. The sunlight heats fluid in the receiver, which can then be used to generate electricity or stored for later use. Generally speaking, this applies to industrial applications.



# Solar energy is expressed in kilowatt-hours (kWh)

A kilowatt-hour (kWh) is a unit of energy that measures how much energy you are using. No, it's not the number of kilowatts you are using per hour! It is simply the unit of measurement.

Sounds pretty confusing, we know. Here are some examples that can help you calculate your energy consumption easily.

One kilowatt-hour is the amount of energy you would use if you kept a 1,000 watt appliance running for one hour.

Your kWh usage is calculated by multiplying the wattage of each appliance by the number of hours you use it per day. For example, if you use a 50 watt alarm clock for 8 hours per day, it uses 400 Wh (watt-hours) per day. To convert watt-hours to kilowatt-hours, divide by 1,000. So, in this case, your alarm clock uses 0.4 kWh per day!







Different appliances use different amounts of energy, so it takes different amounts of time to use up a kWh.

- 1. A 2000 watt oven would use 1kWh in half an hour
- 2. A 100 watt light bulb would consume 1kWh if left on for 10 hours
- 3. An electric shower of 10,000 watts would take your usage up to 1kWh in just six minutes!

# How much energy does an average UK home consume in a week?

According to Ofgem, the average UK household consumes approximately 55 kWh of electricity and 225 kWh of gas per week. This is based on a household with 2.4 people living in it.

Did you know?
Solar Energy Edition



In 2021, solar PV systems supplied more than 4% of the UK's entire electricity demand.

Solar panels generate 30%-50% of their full potential on cloudy days and 10%-20% on days with heavy rain. So even on rainy British days, your solar panels are still working hard for you.

The amount of sunlight that hits the earth's surface in just 90 minutes is enough to power energy consumption around the world for an entire year! No wonder we're such big solar fans here at Egg.

Of course, it's important to note that energy consumption can vary widely from home to home and depends on a number of factors, including:

- The size and type of home you have
- The number of people living in the home
- The energy efficiency of your home and its appliances
- The climate
- Lifestyle choices

Don't worry, we'll get into each of these factors, and how they could impact you, in more detail below.



### How to use our solar guide



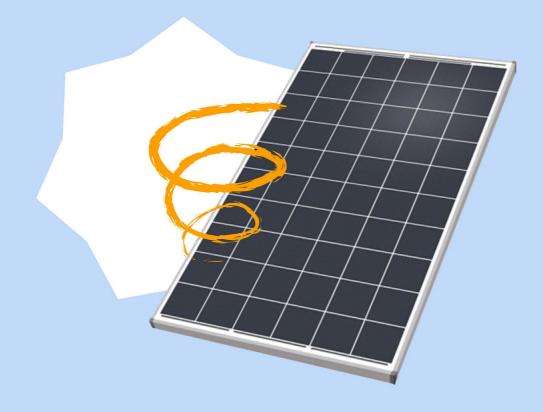
### Types of Solar Financing

Now for the most important part:

How can you finance solar panels?

Did you know? Over the last 10 years, the cost of solar has declined by a staggering 90%

While the cost of solar energy is becoming (a lot) more affordable, it's important to note that there are also various ways to finance your solar system, including upfront payments, loans, refinancing, and government grants. First, let's understand the costs incurred for a solar panel installation.



### Solar Panel Installation: The Costs

### How many solar panels do you really need?

There is no set rule for how many solar panels your home might require. This is because there are various factors at play when it comes to energy consumption.

We break down all the factors that determine how many panels you really need:

### Your energy consumption:



The more energy you consume, the more solar panels you will need.

### The amount of sunlight your roof receives:



The more sunlight your roof receives, the fewer panels you may need than if your roof is shaded or receives less sun.

### The efficiency of your solar panels:



More efficient solar panels will generate more electricity per panel, meaning you may need fewer panels.

### According to UKPower & Ofgem, this is the dual fuel (gas and electricity) bill and energy usage for the average household in the UK.



House type	Monthly bill	Annual bill	kWH usage	Panels required
1/2 bedroom house	£66	£795	2900	6-8
3/4 bedroom	£97	£1,163	4300	12
5+ bedroom house	£137	£1,639	6100	16



# Here are the costs associated with solar panel installation with features and battery included.

Solar system	8 panels	12 panels	16 panels
Solar Only	£6,317.00	£7,484.00	£9,108.00
Solar + Battery	£10,749.00	£11,971.00	£13,481.00

Shade Optimised	£7,000.00	£8,527.00	£10,506.00
Solar + Battery	£10,749.00	£11,971.00	£13,481.00

### Solar Battery Storage: Save a little egg-stra

An average of 50% of your solar power goes unused and is usually sold to and self-consumed by the grid. With a battery, that 'lost' energy is stored for later use.

Add a home battery to the system and you can expect solar self-consumption to increase from 50% to up to 90%, saving you as much as 90% on your energy bills. Amazing, right?

A battery can range from 2kWh to 15kWh sizes. But it all depends on how large your solar system is and how much power you are generating and losing.

# Personal Infinancing loans to fit Mortgage home or rethe cost of the cost of affordable of the cost o

### Types of financing

**Purchase upfront:** This is the simplest option, but it requires a bigger upfront investment. However, if you have the savings or cash to hand, this is a great way to go.

Financing with Egg: \*Watch this space\* We'll be offering financing solutions with competitive interest rates and terms soon. You'll have the peace of mind of knowing that you're paying off the cost of your solar panels over an agreed-upon term - while enjoying the benefits solar power provides.

Grants: The UK government offers various grant schemes to help homeowners with the costs of installing energy-efficient and renewable energy solutions. We always recommend keeping yourself up-to-date with all the latest Government updates to see if these grants apply to you.

Personal loans: In addition to upfront payments, grants and financing with us – there's also the option to explore personal loans to finance your solar panel installation.

Mortgage add-ons or refinancing: If you're buying a new home or refinancing your mortgage, you may be able to add the cost of solar installation to your mortgage. This spreads the cost over the length of your mortgage, making it more affordable in the short term.

# So which type of financing should you choose?

When it comes to financing, it's important to consider all the options available to you.

Below we've highlighted some additional resources that may be helpful.

### Government Grants & Schemes

The UK government is currently offering various other incentives to encourage people to switch to solar energy. These initiatives are all in line with the drive to make our country green! One such scheme is the UK government's decision to scrap VAT on solar panels and other renewable energy technologies (such as storage batteries if bought at the same time). This will save an average family with rooftop solar panels more than £1,000 on installation plus £300 annually on their energy bills. Talk about an incentive, right?

Some of the other schemes have specific eligibility requirements so just make sure to go check the criteria before you apply. Here are some of the most popular schemes you may benefit from:

### **ECO Scheme**

This is a pretty great one. You could save up to £14,000 on solar panels with the ECO scheme! You might be eligible if your household income is less than £31,000/year or if you receive certain benefits.

### Warmer Home Nest Scheme Wales

If you live in Wales, you might have just hit the jackpot. You could get free solar panels from the Welsh Government! You may be eligible if you own or privately rent a home that's expensive to heat, and you or someone you live with receives a means-tested benefit or has a chronic health condition.

### **Home Upgrade Grant**

You can get up to £10,000 towards solar panels from your local authority. Of course, there are some t's and c's, and criteria that you've got to meet. For the Home Upgrade Grant you must have a total household income of less than £30,000/year and your property must have an EPC rating of E, F, or G to qualify for the scheme.



# How to choose the right purchasing option for you



Set Clear Goals: We recommend defining your objectives for installing solar panels. Are you primarily interested in reducing your electricity bills? Supporting renewable energy? Or maybe looking to achieve energy independence? Perhaps all of the above! Having clear goals will help you determine the best financing option as it relates to how many panels you will be required to install.

Get more solar savvy: Learn about the benefits of solar energy and the important environmental benefits of solar - that's where we can help. Check out all our <u>Egg guides and blogs</u> to understand the benefits and everything else you need to know about solar.

Evaluate Your Energy Usage: Review your past energy bills to understand your energy consumption. This can help you determine the size of the solar panel system you might need. Don't worry, we're on hand if you'd prefer to chat through your questions! Our carbon footprint calculator Eggonomics is a great tool to get an idea about your total energy consumption. You'll also get tips to reduce your emissions and energy bills based on your consumption patterns.

We know that creating a plan to afford solar panels can be a bit of a minefield, involving careful financial consideration and strategic planning - that's why Egg is here to help. Solar panels can be a significant investment, but they can also save you a lot of money in the long run, help you become more sustainable and they have incredible environmental benefits. If you're anything like us, you'll love a good plan!

Here's our step-by-step strategy to help you afford solar.

Budget and Savings: Creating a monthly budget for solar will help you afford solar energy much faster. Solar can be expensive if you want to pay upfront which is why saving can be your best friend when it comes to installing solar panels at home.

Pssst...get a <u>free quote</u> today with Egg to calculate the cost of your solar installation, set a budget, and get expert advice from our team.

Explore Financing Options: If you would rather not pay for solar panels upfront, consider financing options like those outlined above.

Optimise Energy Efficiency: Before installing solar panels, we recommend making your home as energy-efficient as possible. After all, there's no point in getting solar panels just to see your heat escape through draughty windows and doors.



# Common mistakes to avoid when financing solar

**#1 Not shopping around:** We recommend getting multiple quotes from different solar installers before making your decision. This will help you ensure you're getting the best possible product, service and price.

**#2 Overestimating savings:** While solar panels can save you money over time, it's important to be realistic about your savings estimates. Factors such as energy production, future electricity prices, and system efficiency degradation can all affect your savings.

**#3** Neglecting maintenance costs: Solar panels require minimal maintenance, but inverters may need to be replaced after 10-15 years. It's important to factor in these potential maintenance costs when budgeting for your solar panel system.

#4 Being misled by high feed-in tariffs (FiTs): Before the Feed-in-tariffs (FiT) scheme ended in 2019, some people signed up for solar panels without fully understanding the terms. Post-FiT, the Smart Export Guarantee (SEG) offers payment for exported energy, but rates vary between suppliers. It's important to understand the terms of any feed-in tariff or export scheme before signing up.

**#5** Not understanding financing terms: If you're financing your solar panel system, it's important to read and understand all of the terms of the loan agreement. This includes the interest rate, payment structure, and terms and conditions

#6 Overlooking energy efficiency: Before investing in solar panels, it's important to make sure your home is as energy-efficient as possible. Improving your insulation or upgrading your appliances can help you reduce your energy usage, which can lead to cost savings on your solar panel system. Work smarter, not harder.

#7 Failing to check installer credentials: Not all solar installers are created equal. It's important to choose an installer who is licensed and certified. You should also check the installer's references and reviews before making a decision.

#8 Ignoring system size and placement: When choosing a solar panel system, it's important to consider your energy needs and the layout of your roof. Installing a system that's too large or too small can reduce your cost savings. If you're not sure what you might need, chat with our Eggsperts on 0113 815 5366, Monday through Friday, 9 am - 5:30 pm.

#9 Overlooking battery storage: Solar batteries can be a great way to store excess solar energy for use at night or on cloudy days. However, solar batteries can be expensive, so It's important to weigh the pros and cons of battery storage before making a decision.

### #10 Not staying updated on government incentives:

Government incentives for solar panels can change frequently. It's important to stay up-to-date on the latest incentives to ensure you're taking advantage of all available savings.

By avoiding these common solar panel installation mistakes, you can ensure you get the most out of your investment and save money on your energy bills for years to come.

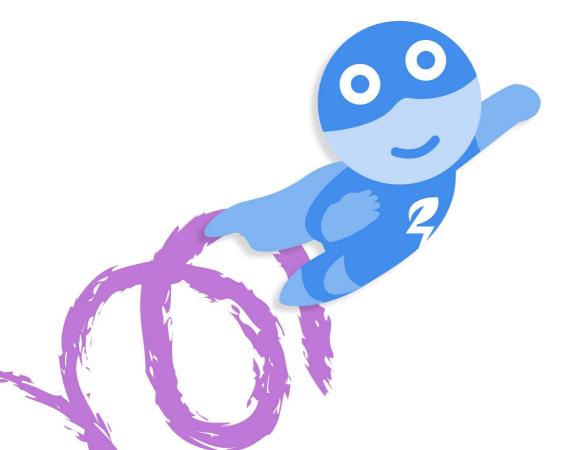
If you are unsure which direction is best for purchasing your solar panels, you can consult a solar installer (like Egg). Our Eggsperts are always happy to help! Book a consultation with them <u>here</u>.

## Getting quotes from a solar installer

Seems like we go the egg-stra mile after all.

Egg customers rated us 'Great' on TrustPilot with an average rating of 4.0 stars!





We recommend against choosing the cheapest quote, as this often leads to using cheap components and installation methodologies that will not last. A solar installation is an investment, and the equipment installed needs to last long enough to generate returns on your investment.

This is why Egg only works with reputable, high-quality, brands and recommends a solution bespoke to your needs. We may not be the cheapest in price, but we are confident that our reputation, knowledge, and state-of-the-art products are worth the investment - it's why our customers recommend us to their friends and neighbours.

"A very smooth experience all the way from the initial purchase to installation. Very easy, and I like that I can get all my smart energy products from one place - EV charger, solar PV and battery, with finance too.
Would definitely recommend it."

-Rik Temmink 11th September 2023



### Here are some other factors to consider when purchasing and installing solar panels:

#1 Product warranty: Make sure to check exactly what product warranty you are getting, who this warranty sits with (manufacturer or installer), and what it covers. Many warranties on the market are parts-only warranties and may not cover call-out fees.

For many things in your home, this can be an unexpected cost, but not too costly. When the component that needs replacing is on your roof, providing scaffolding and call-out costs for Electricians can become very expensive.



**#2 Remote monitoring:** Some solar panel installers offer remote monitoring services. This allows them to see what is happening with your solar panel system without having to come to your property. Remote fixes can be quick and easy, especially if your installer has access to a suitable platform.

The best installers can even proactively resolve issues and notify you of any work that needs to be carried out, often before you're even aware of them!

**#3 Solar panel insurance:** It is also worth considering solar panel insurance to protect yourself against unexpected costs, such as damage to your installation from bird strikes or other events.

Top tip: When in doubt, use the Experience-Price-Review method to evaluate a solar supplier. New brands might not have the experience and expertise required to give you smooth installation and aftercare support. Some companies might offer cheaper prices which might tempt you into getting more panels installed. In the long haul, this could mean more future expenses if the quality of products is subpar. Reviews (beyond the company's website) are another great way to gauge if a supplier is truly reliable. Check if a supplier meets all three criteria to ensure you're selecting the best suppliers according to your needs.

### Leave it to the Eggsperts

Ready to switch to solar? Here's why you should consider us.

### **Tailored Solutions:**

Every home is unique and so, we design our solutions to meet your specific needs. When you sign up, our Solar Specialists will do an on-ground consultation with you to find out exactly what your home needs to cut your bills and meet your energy efficiency goals.

### **Certified Solar Eggsperts:**

We are MCS certified and an NICEIC approved contractor so you have complete peace of mind during the installation process.

### **Affordable Transition:**

Clean energy shouldn't cost the earth and at Egg, we make sure it never will. With our affordable solutions, your transition to cleaner energy is not only good for the planet - it's also great for your bank balance.

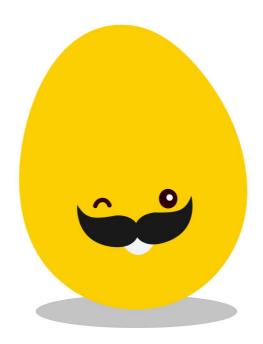
### Simple & Hassle-free:

We keep it simple. No jargon, just straightforward advice. And you're in control at all times!

### The Egg Promise

At Egg, we're outrageously serious about cracking clean energy. That means doing a lot more than just offering solar solutions. We're also considering the quality of our products, all of which come with 5-25 years of warranty depending on the product. Then, we make sure that you're cushioned with a certain level of dust and water protection. With an IP65 rating, your solar panels, battery and inverter are protected from total dust ingress, and low-pressure water jets from any direction (meaning your panels will be fine, come rain or shine!). If for any reason your panels or other solar products need to be repaired or replaced, we'll be with you every step of the way, with our prompt customer success teams ensuring a smooth and quick resolution process.

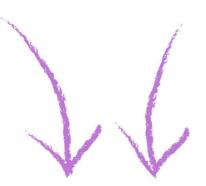
Pssst, we also have Aftercare Packages and Egg Financing coming soon! Keep an eye on our website to find out more.



### Warranty Information

Product	Brand	IP Rating- Indoor/outdoor	Warranty
Panel	Trina	Located outdoors	15 year product workmanship warranty/25 Year power warranty
Panel	Longi	Located outdoors	Limited Product Warranty-Repair or Replacement within 12 years / Supplier provides power output* loss assurance within 25 years as of Warranty Effective Date.  *Power output loss is calculated by comparing with the minimum "module nominal power under standard testing conditions" (short as nominal power) marked on the nameplate with the actual power output under standard testing conditions.
Battery	Tesla	IP65 Protection Level	10 years
Inverter	Solaredge	IP65 Protection Level	12 years, extendable up to 25 years
Battery	Solaredge	IP55 Protection Level	10 years
Optimiser	Solaredge	Located outdoors	25 years
Battery	BYD	IP55 Protection Level	10 years
Inverter	Fronius	IP65 Protection Level	7 years
Inverter	Solis	IP65 Protection Level	5 years
Optimiser	Tigo	Outdoor Rating IP68	25 years
Inverter	Solax	IP65 Protection Level	Solax inverters come with a warranty of years, but it can be extended to 10
Battery	Solax	IP65 Protection Level	10 years
Inverter	Alpha	IP65 Protection Level	5 years (it is required that all systems have internet connection for monitoring. Systems that are not connected to the internet will have their warranty reduced to 3 years.
Battery	Alpha	IP65 Protection Level	5 year product warranty and a 10 year battery warranty.

### Resources for you: Find the latest and most credible information on Solar



### **Egg Cracking Energy**

Our website offers various helpful resources on all things solar and electric vehicle charging. This includes a free carbon footprint calculator which you can use to reduce your emissions.

Website: <u>crackingenergy.com</u>

### The Energy Saving Trust (EST)

A leading and trusted organization that provides comprehensive advice on energy savings, including solar PV.

Website: Energy Saving Trust

### Solar Trade Association (STA)

Represents the UK's solar industry. The website offers resources on solar energy, battery storage, and associated technologies.

Website: Solar Trade Association

### Which?

Offers independent consumer advice on a wide range of topics, including solar panel installations.

Website: Which? - Solar Panels

### The Smart Export Guarantee (SEG)

Provides details on how homeowners with solar panels can be compensated for exporting electricity back to the grid.

Website: SEG Guide

### **GOV.UK**

The <u>GOV.UK</u> website is the best resource for up-to-date information on government schemes.



