

Solar panels

Imagine powering your home with clean, free energy from the sun - reducing your reliance on the grid, cutting your bills, and even adding value to your property.

Our homes are responsible for around a quarter of CO₂ emissions. With renewable energy, you can take control of your electricity use while helping to reduce carbon emissions.



Why consider renewable energy?

1. **Lower your energy bills** by generating your own electricity and reducing reliance on the grid.
2. **Add value to your home.** Buyers are increasingly looking for homes with energy upgrades.
3. **Become more self-sufficient.** You can enjoy greater energy independence.
4. **Reduce your carbon footprint.** A greener home means a greener planet.

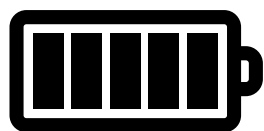


“My husband’s new hobby is watching the solar panel app registering our free electricity! It’s been amazing.”

Penny, Meon Valley

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Solar panels convert sunlight into electricity, helping to power your home throughout the day. If you're considering solar panels, there are a few decisions to make:

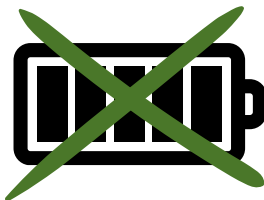


With battery storage

Allows you to store excess energy to use when the sun isn't shining.

Great for reducing reliance on grid electricity in the evening.

Increases your energy independence, especially if grid prices rise.



Without battery storage

Ideal for homeowners who use most of their electricity during the day.

Generates instant power which could run appliances, heat water or charge devices.

Any unused electricity can be sold back to the grid.

Diverters

If you have a hot water tank and aren't planning to install a battery, a solar diverter could be a smart, budget-friendly alternative.

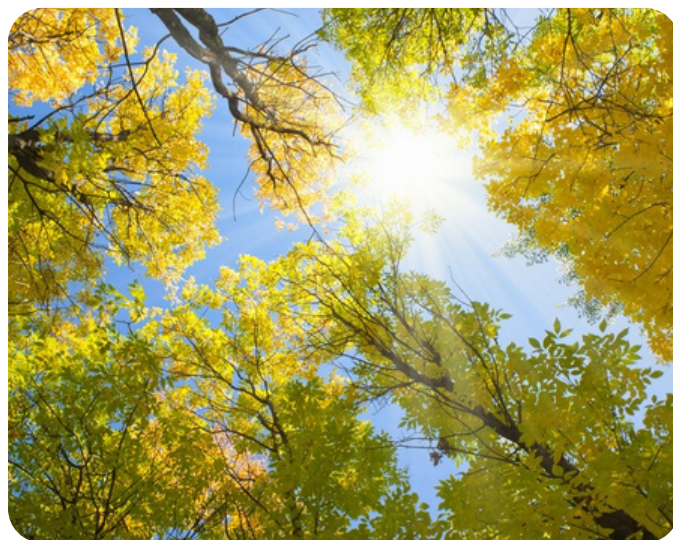
Solar diverters detect when your panels are generating more power than you're using, then reroute that electricity straight into heating your water.

Once your water tank is hot, any leftover energy will be automatically exported to the grid, earning you money if you're signed up to the Smart Export Guarantee.

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Optimisers

Shading from trees or neighbouring homes can impact the output of your solar panel system. Installing an optimiser can help boost performance in shaded conditions. This means that the amount of electricity produced by the other panels won't be affected, even if one panel is shaded.



Netting

Birds, particularly pigeons, can nest under solar panels, potentially leading to a range of issues. Their droppings block sunlight and can even corrode the panels over time, while their habit of pecking at wires can lead to system damage.

However, this is easily preventable with bird proofing. There are different types of bird proofing to choose from, like wire or plastic mesh around the edges to prevent birds from accessing the space underneath, or spikes to discourage birds from landing.

Not all properties will need netting, since birds don't nest on every roof. Chatting with neighbours who have solar panels can give you a good idea if birds have been a problem in your area. It's usually more cost-effective to add this at the same time as the panels are installed so you only pay for scaffolding once, and don't have to pay for clean up.

“We hardly use the grid during peak hours at all now and our electricity bills have substantially reduced.” Richard, Petersfield

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Helping solar work for your budget

Group buying can provide a cost-effective solution for a whole community of homeowners. Switch Together works with councils across the country to help residents access affordable solar panels and battery systems. Switch Together offers:

- **Expert advice at every stage**
- **Transparent pricing and no hidden costs**
- **A secure, stress-free process**

The four steps outlined on the Switch Together website are:

1. Register online - Submit information about your home and energy use

2. Receive a personal recommendation - See your estimated system size, savings, and installer details.

3. Roof survey - A qualified installer confirms your roof's suitability, type, orientation, and shading, to design the optimal system.

4. Installation and support - Certified installers fit your system, with full warranties and aftercare.

Tip!

When you register, you'll need to enter information about your roof, including its size and orientation.

For more information, visit www.switchtogether.co.uk

Depending on your household circumstances, you may also be eligible for funding to support you installing solar panels at home. Contact a My Home Made Better adviser on 0800 804 8601, or [get in touch online](#), to find out more.

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Timing is everything: Using energy when it's free

Changing the way you use electricity can help you get more out of your solar panels, especially if you haven't got a diverter or battery installed.

Solar panels typically generate the most power in the middle of the day, though this can vary depending which way they are facing. Shifting your electricity consumption to the best time of day for your panels will help you get the most value from your system.



Simple changes can make a big difference, like running your dishwasher, washing machine or tumble drier during daylight hours. Remember to do this efficiently – think fuller loads, lower temperatures, and eco settings where possible.



It's best to use appliances that require a lot of energy one at a time to make sure they run on solar power, rather than importing from the grid. For example, starting your dishwasher after the tumble drier's finished can help keep your energy use solar-powered.



If it's safe to do so, you can also use appliance timers and smart monitors to control the running of appliances while you're out during the day.



If you have a smart phone and your solar panel system includes a monitoring system, you should be able to see how much energy your system is producing in real-time and since the system was installed, via an app.

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Selling your electricity

The Smart Export Guarantee

The Smart Export Guarantee (SEG) is a government-backed scheme that enables you to be paid for any renewable electricity you export to the grid.

To get started, you'll need to apply to a SEG tariff provider. Ofgem lists the [energy suppliers currently offering SEG tariffs](#) on its website. Your SEG tariff provider doesn't have to be the same as your energy supplier, so it's a good idea to look around at different tariffs. They will vary in rates of payment, for example, some will have peak and off-peak rates.

How do I access it?

To qualify, your solar panel system needs to be installed by a business certified by the [Microgeneration Certification Scheme \(MCS\)](#), or meet the equivalent requirements set by Ofgem. You may be asked for an installation certificate to demonstrate this when applying to your SEG tariff provider.

You'll also need a meter that can send readings every 30 minutes, typically a smart meter. Your solar panel system also needs a total installed capacity of no more than 5MW. Household solar panel systems easily fit within the upper size limit for the SEG scheme. You can find more information about eligibility on the Ofgem website.

What happens next?

If you can access an app to monitor your solar panels, as well as viewing your real-time and historical energy generation, you may also be able to monitor how much you've exported.

Once your system is generating energy and you're signed up to a SEG tariff, you'll start to receive payments at regular intervals set by your tariff provider. This could be monthly, quarterly or once per year.

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Solar panel myth busting

✗ Solar panels don't work on cloudy days.

✓ While sunny days are optimal, solar panels generate electricity even when it's overcast. That's because they draw energy from daylight, which includes light that can pass through clouds. Rain can even improve performance by clearing away dust and debris that could otherwise reduce efficiency.

✗ Solar panels are too expensive; it's not worth the hassle!

✓ Installing solar does require an upfront investment. Installation costs vary, depending on your installer, the size of your system and add-ons like batteries and diverters. But solar energy is one of the most affordable long-term ways to power your home, with estimated bill savings of £190-£350 a year (Energy Saving Trust, 2025).

✗ Most companies are scammers

✓ There are many certified installers operating in our area. It's important to find a trusted, suitably accredited tradesperson, registered with the [**Microgeneration Certification Scheme \(MCS\)**](#). You can use our online [**Supplier Directory**](#) to connect with accredited tradespeople operating in Southampton, Hampshire and Portsmouth.

✗ A solar panel system is hard to maintain.

✓ Once installed, solar panels don't need much looking after, as they're designed to withstand tough weather. It's important to check for dirt, debris or damage, and clean them with water if you notice any dirt build-up (either professionally, or by yourself).

✗ Solar panels make it harder to sell your home.

✓ We recommend doing what's best for your individual home and circumstances. It's worth noting that analysis shows improving your home's energy efficiency can increase its market value. Solar panels are often seen as a future-proof investment – especially as energy prices continue to rise.

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Got more questions?

If you're considering solar panels but aren't sure if they'd work for you and your home, we're here to help.

The Environment Centre (tEC) is an independent, environmental charity specialising in home energy.

We provide residents across Southampton, Hampshire and Portsmouth with an impartial and bespoke home energy advice service.

Whether you're struggling to keep up with energy bills, or you're keen to invest in home energy upgrades but don't know where to start, our friendly team of energy advisers will point you in the right direction.



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