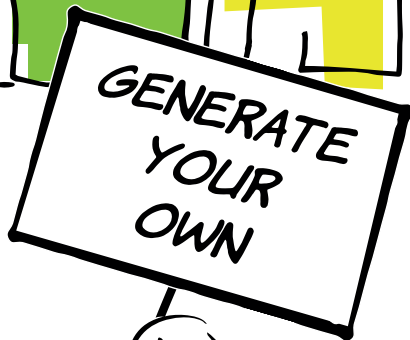
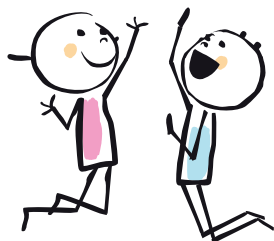
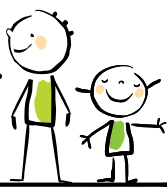
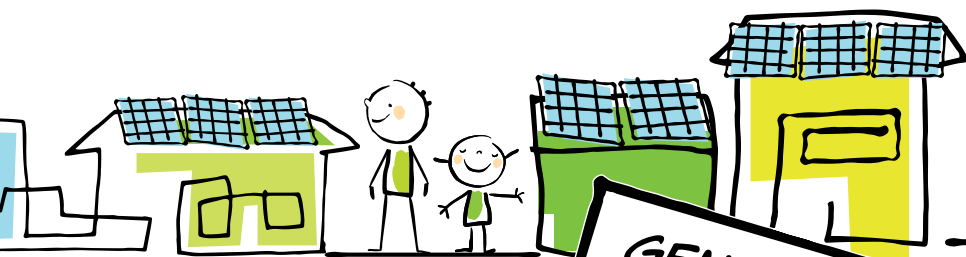
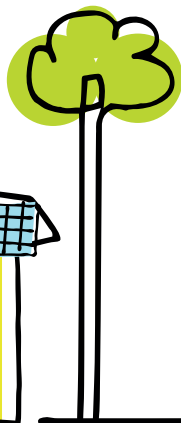
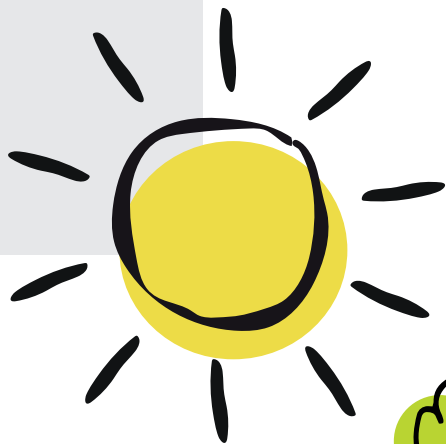


Making the most of your solar panels

ecotricity



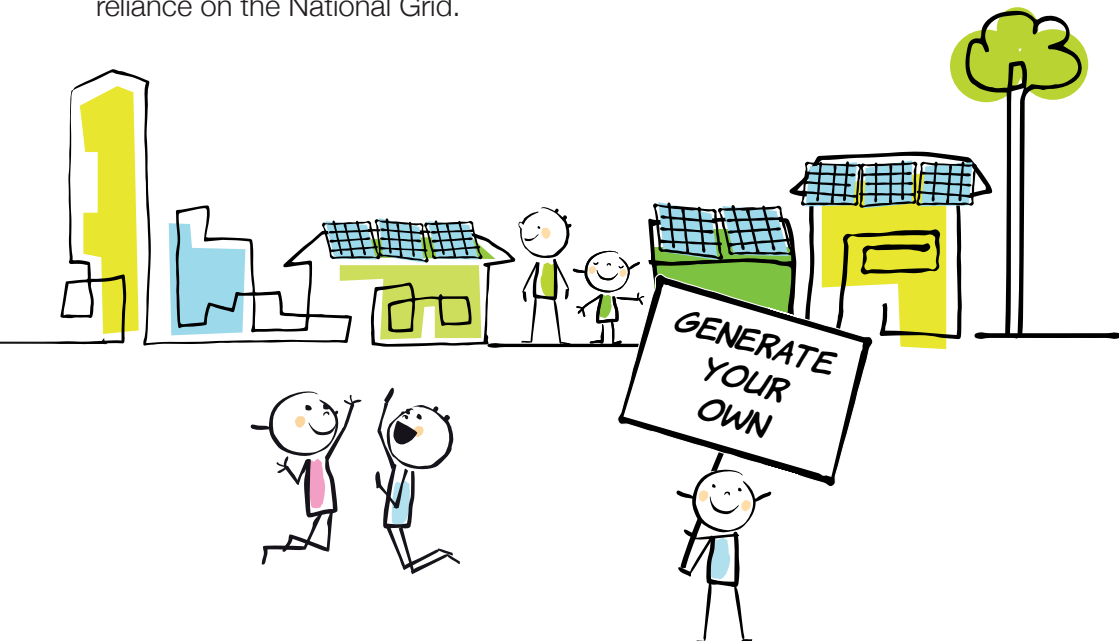
Making the most of your solar panels

Having solar panels won't just reduce your carbon footprint – they could help to reduce your electricity bills too.

If you rethink the way you're using the electricity produced by your solar panels, you could see a significant reduction in the amount of electricity you need to import from the National Grid – and a reduction in your bills as a result.

The savings you'll make depend on a number of factors including the size of your solar panel system, your electricity usage, and your lifestyle (whether you're at home during the day to use the energy your solar panels are producing).

Here you'll find some information and advice on how to adapt your electricity usage to make the most out of your solar panels – to help you use more of the electricity you're producing yourself, and to reduce your reliance on the National Grid.



How do my solar panels work?

Solar photovoltaic (or PV) panels convert energy from sunlight into electricity. This electricity is then fed into your home for you to use. You buy this electricity from us at a lower rate than you're charged for your normal electricity from your energy supplier.

If at any moment your solar panels are generating more electricity than you're using in your property, the excess electricity is exported to the National Grid, to be used by someone else.

Sometimes it's not sunny enough for the solar panels to absorb energy to create electricity, or you might use more electricity than your solar panels are producing. In this case, the extra electricity you need is imported into your property from the National Grid. This usage is charged to you by your energy supplier at the normal rate.

How should I use the energy generated by my solar panels?

The average Ecotricity domestic solar system is 3.5kW (3,500W).

At midday on a sunny day in June, your solar panels could generate up to 3,500W.

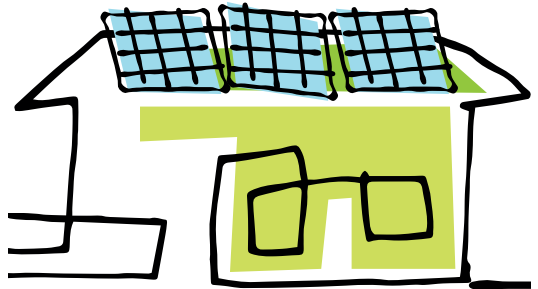
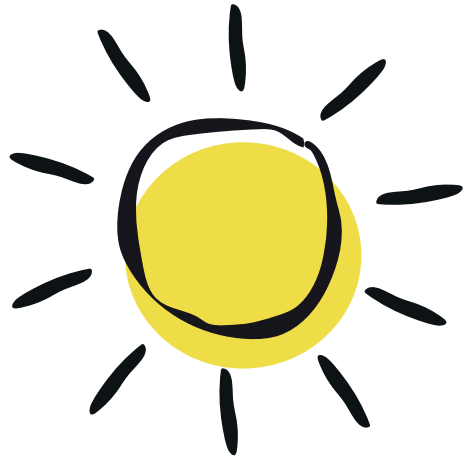
However, on a cloudy day in December, they may only generate around 200W.

This means that you need to be careful about what appliances you're using, how much of the electricity being used has been generated by your solar panels, and how much is coming from the National Grid.

We'll assume that your solar panels are generating a steady 1,500W of electricity.

Of this, 150W will be used by the fridge, and 150W by the freezer.

This leaves 1,200W for other appliances.



Let's look at the typical power ratings for some normal household appliances:

Washing machine – 2,500W

Microwave – 750W

Laptop – 150W

Fridge/ freezer – 150W

Low energy light bulb – 15W

So you could use the microwave and your laptop, and still have 300W of solar energy left to use.

Remember – all of the appliances so far are being powered by electricity produced by your solar panels, so you're paying a lower rate for this usage.

If you now put the washing machine on, this'll mean that you're using more electricity than your solar panels are producing.

The excess electricity needed to power your washing machine would be imported from the National Grid, which you pay for at your energy supplier's normal rate, rather than the lower rate you pay for the electricity generated by your solar panels.

So, you can see that if you rethink how and when you use your electricity, you'll begin to see some of the benefits of your solar panels.

How can I check if my solar panels are generating electricity?

That's easy to find out. Just take a look at your solar electricity meter – if the LED light on the bottom is blinking on and off, then you're currently generating electricity.

How can I check if I'm importing or exporting electricity to the National Grid?

Take a look at your normal electricity meter. If it's a digital meter, and the LED light is blinking, then electricity is being imported from the National Grid for use in your home.

If the LED light is solid, this means that electricity generated by your solar panels is being exported to the National Grid for use in other homes.



If you have a spinning disk meter, the disk might go backwards or stay still if you're exporting electricity to the National Grid. If you notice that your meter is running backwards, we'd recommend contacting your electricity supplier, as this can sometimes mean that your meter needs to be replaced. Your electricity supplier will be able to look into this for you.

What's an inverter, and how do I use it?

All solar panels come with something called an inverter. An inverter shows you how much electricity is being generated by your solar panels at that particular moment in time. It also converts the electricity which has been generated into the same form used by your appliances.

This makes it easy to see exactly how much electricity your solar panels are producing for you to use in your home at any point.

If you know how much electricity your appliances use, you can use your inverter to choose what appliances to run in order to make the most of the lower rate of electricity. It may even be worth having a list of the power ratings of your appliances next to your inverter display, to help you decide quickly which appliances to use.

Remember – the inverter will tell you how much electricity is being generated at that specific moment, but this can change very rapidly depending on the weather conditions.

Some inverters are installed somewhere out the way – up in a loft, for example. If this is the case at your property, it might be worth investing in an energy monitor as an alternative way to keep an eye on your electricity generation and consumption.



Top tips

Here are our top tips to help you make the most of your solar panels...

- Stagger usage of your appliances, especially energy-hungry appliances - this will help you to avoid using more electricity than you're generating
- Set timers for your appliances to come on at peak times – on average, your solar panels will be at their most productive between 10am and 4pm
- Charge any electrical items during the day – such as phones, electric toothbrushes, rechargeable batteries
- Upgrade older appliances to newer, more efficient ones
- Make sure that any trees or plants over-hanging your solar panels are pruned back so that your solar panels can absorb as much sunlight as possible
- During the day, use your microwave where you can to prepare food instead of using your gas hob – try heating your baked beans in the microwave instead of on the hob, for example
- Save up your washing for sunny days – your solar panels will be generating plenty of electricity to power your washing machine, and you can avoid using the tumble dryer by hanging the washing outside to dry
- Mow the lawn when it's sunny, using an electric lawnmower rather than a petrol one
- If you have an electric cooker, try and cook hot meals in the daytime rather than in the evening – or try using a slow cooker as an even more efficient alternative!

By following this advice, you should be able to make the most of the electricity produced by your solar panels, and even see a reduction in your electricity bills!

If you've any questions, call us on **01453 761 475**, or email us at **energysaverplan@ecotricity.co.uk**.