

Solar PV & Battery Storage

How do solar panels and battery storage work?

You'll have an array of solar PV (photovoltaic) panels that capture the sun's energy which is then converted into electricity for your home using an inverter. Your home will use this power as it's being generated, and any excess will be stored in your battery storage system allowing you to use spare electricity you generate during the day to power your home at night. This means you should not have to use as much electricity from the grid.

The PV panels do not need direct sunlight to work, they can work on a cloudy day. However, the stronger the sunshine, the more electricity generated.

Essentially, installing solar panels allows you to generate your own renewable electricity.

Benefits of solar electricity

- **Cut your electricity bills**

Sunlight is free, meaning once you have solar PV and battery storage installed you should see a reduction to your electricity costs.

- **Cut your carbon footprint**

A 3.5kWp system in Scotland can generate about **2,850 kilowatt hours** of electricity a year – that is the same amount of electricity it takes to turn the Falkirk Wheel 1,900 times. This saves approximately **0.8 tonnes of carbon dioxide** every year¹.

- **Potential savings**

You can potentially save up to £220² per year.



¹ <https://energysavingtrust.org.uk/advice/solar-panels/>

² Figure from Energy Saving Trust website, figures based on Stirling where the property is occupied all day.
<https://energysavingtrust.org.uk/advice/solar-panels/>

Solar panels maintenance and cleaning

Solar panels are mostly self-cleaning, but we do advise you check and clean them annually.

Solar PV needs little maintenance. However, keep an eye on nearby trees to ensure they don't begin to overshadow them.

The installer will leave written details of any maintenance checks that you should carry out from time to time to ensure everything is working properly.

Will my solar panels be covered by a guarantee?

We offer a range of warranties, some up to 25 years, that come with all the solar products we offer.

Funding available

There is potential for the installation of solar PV and battery storage at your home to be fully funded, subject to eligibility and home survey.

There are 2 sources of funding:

- Scottish Government Energy Efficient Scotland: Area Based Scheme (EES:ABS) grant – this fund is based on property eligibility criteria
- Energy Company Obligation (ECO) Funding – is based upon occupants meeting the eligibility criteria detailed below.

Eligibility criteria

- Property is Council Tax Band A, B or C (Band D is eligible where the EPC rating is E, F or G)
- Your home is privately owned or privately rented – it must be your main resident and cannot be a second home or B&B
- ECO funding is based on household income and meeting other qualifying criteria, full details can be found online

https://www.highland.gov.uk/downloads/file/20976/eligibility_criteria.