

# Energy Efficient Scotland: Area Based Schemes (EES: ABS)

## Solar panels & battery storage frequently asked questions

The purpose of this document is to provide information to householders in EES: ABS project areas who have the opportunity to take part in a solar panels & battery storage project. Householders included in the project will receive information mainly from our partner Home Energy Scotland, however there are other organisations involved in the delivery who may also write to you separately. If you have any other questions about the project, would like more information or would like to register no-obligation interest please contact Home Energy Scotland free on 0808 808 2282.

### What is solar panel electricity?

Solar panel electricity systems capture the sun's energy then convert it into electricity, which can be used to run household appliances and lighting.

### What are the benefits of solar electricity?

- **Reduce your electricity bills:** sunlight is free, so once the system is installed, your electricity costs should be reduced as you will not be buying all your electricity from the national grid. You will need to be careful you are not using more electricity than normal as the system will not cover all of this.
- **Reduce your carbon footprint:** Solar electricity is green renewable energy and does not release any harmful carbon dioxide or other pollutants. A typical home solar system could save around 0.9 tonnes of carbon per year

Please see the attached leaflet for further information on the benefits.

### What is battery storage?

A battery stores electricity generated by your solar panels which can be used when you need it, such as when the sun is not shining. The battery does not give you more electricity, but it allows you to use more of the electricity generated from your panels. Without a battery this unused electricity is exported to the grid.

### What are the benefits of battery storage?

- Reduce your electricity bill (if you do not start using more)
- Future proof yourself against electricity price rises
- Benefits the environment by using a cleaner source of electricity reducing carbon emissions

### How long will it take to install?

The installation of the solar panels and battery will take 2-3 days dependant on scaffold requirements and roof type. In addition to installation days there will also be a home survey and at least one more additional visit before the process is complete. These additional visits may be for quality assurance, electrical testing, monitoring and so on. But we will try to tell you about these visits in advance. Please also note that the scaffold may stay up for around a week. The actual process will not be intrusive, although there may be the possibility that he



contractor must drill a small (10mm) bore hole into your house. You can discuss this with the surveyor before the install begins.

### **When do solar panels generate electricity?**

Solar panels do not need direct sunlight to work, and they can still generate some electricity on a cloudy day.

### **How long do solar panels and battery storage systems last for?**

Solar PV systems typically have long-life spans, you should expect the panels to last for around 25 years.

### **Do I need to do anything?**

The installer will need access to your roof to install the solar panels so scaffolding may be erected while the installation is under way. Disruption will be kept to a minimum as much as possible. The installer will also need to complete a survey of your property to agree where to put the battery. It will likely be in a cupboard under the stairs or in the loft space. The battery storage system runs on a 'fit and forget' approach. Once installed, you do not have to adjust or manage the system, it works automatically.

### **Is there any maintenance?**

Solar panels and battery storage systems are low maintenance and generally self-cleaning. However, it is recommended that they are kept relatively clean, and serviced approximately every two years.

### **How can I make the most out of the new system?**

Please read our [article](#) on getting the best out of your Solar Panels and Battery Storage system.

### **How can I tell if the system's working?**

You can check if it's working by looking at the generation meter and app. This easily shows how much energy you are generating compared to your usage. The meter is small enough that it will be kept out of the way.

### **Will I still get my electricity bill as usual?**

Yes. The way you receive your electricity bill will not change.

### **Do I need to change supplier?**

No, you can remain with your own electricity supplier. You can contact your supplier to ask about time of use tariffs that might make your bills even cheaper.

### **What happens if there is a fault, or the system is damaged?**

In the unlikely case of something going wrong, please contact your installer who will advise on the next steps.

### **What if there is a power cut?**

All of the equipment will disconnect and switch off until it sees a healthy grid again, it will then and switch back on automatically.

### **Will the battery storage work in a power cut?**



No, the solar panel and battery system will not have this capability. To comply with grid safety codes, they must disconnect from the mains in a power cut to avoid back feeding to the grid.

### **How many solar panels will be installed?**

You will receive a 2KWp system consisting of 8-9 solar panels depending on the specific roof dimensions.

### **What if I have a pre-payment meter installed?**

This will not affect the installation and you will still benefit from the free electricity produced by the solar. There may be some restrictions on tariffs available to you that could provide even further benefits, this would be best discussed with your electricity supplier.

### **What if I am not able to clear out my loft?**

This will be discussed at survey.

### **Will I receive any documentation or instructions?**

You will receive a copy of the handover pack with details of the installation and safe switching on and off procedures.

### **What is an inverter?**

The inverter is a piece of electrical equipment that converts the DC electricity generated by the solar panels, to AC electricity and can be fed back into the grid and for use within your property. The inverter will also divert DC electricity to the battery when there is no load on site and there is spare storage capacity in the battery. This will be installed at the same time as the other equipment.

### **Will I need Energy Performance Certificate (EPC)?**

Yes, the installer will issue an Energy Performance Certificate before and after the installation.

### **How are Solar Panels attached to the roof? What if the roof is damaged?**

Specific roof hooks are used to attach the panels to the roof. Rails are then mounted to these hooks and the panels clamped onto the rails. Any damage caused by the installer will be repaired. The installer will ensure the roof is left watertight.

### **How much electricity will the battery store?**

The battery can store up to 4.8kWh of electricity at any one time. The amount of electricity stored in the battery will vary depending on how much solar energy is being produced and how much electricity is being consumed on site and the time of day.

### **How is the battery powered?**

The battery is powered by electricity generated by the solar panels.

### **Will I need to inform my contents insurance provider?**

*I own my home:* You should inform your buildings insurance provider that you are getting solar and battery installed, so it can be added to the building insurance policy. You should also inform your contents insurer that there will be a temporary scaffold in place.



*I rent my home:* If you rent your home, you should also inform your contents insurance provider that there will be a temporary scaffold in place.

Installer insurance covers scaffold, damage caused by the installer etc during the works.

**Is there anything else I can do to be more energy efficient/save money?**

Have a chat with an energy advisor at Home Energy Scotland on 0808 808 2282 for advice on ways to save energy and money in your home.