



Harvest the sunshine!

What are we talking about?

Solar Photovoltaic (PV) panels generate electricity from the sunlight that hits your roof. There is lots of information on how solar PV (and solar thermal) panels and how they work on the Smart Energy Islands Training Website – so do head over there, read the article and take the quiz to complete the training and gain recognition for your new knowledge! www.smartenergyislandstraining.net

If your energy survey report recommends you install solar PV, this article will take you through the next steps to install. It covers getting a quote, what to ask, and financial issues and funding.

The basics:

Depending on your site your installation might look like one of these three options:

Grounded mounted solar PV



If you have no suitable roof space, but lots of available land.

Roof Mounted Solar PV



If you have a south-facing roof which is not impacted by local planning or Duchy rules

Solar Tiles



On south-facing roofs if your location is impacted by local planning or Duchy rules

In all of these options the panels generate the most when **south facing, shade-free** and **at an angle** to the sky of around 35 degrees. Panels will still generate on south-east or south-west facing roof but not as much.

Rules Rules Rules

Installing solar PV is complex and requires a number of stages to be completed before you have generating electricity through the power of sunshine. Paying a bit of attention here can help smooth your way to your new PV system. You may need planning permission and will need to contact the council planning department to find out **01720 424455** You may also need separate permission from The Duchy of Cornwall depending on your property.

This sheet guides you through getting a quote, the questions to ask, the size of system, finding installers, maintenance and financing. There are links for more detailed information.

1. Size of system

Check your report to see what size of system is recommended for your property. In general, your system size will be 3.5 kW if you have a single phase meter, or 10.5 kW if you have a three-phase meter.

2. Getting a quote

You are advised to get 3 quotes from different installers before deciding which company to go with. If you know of other people who have had solar PV installed on the Isles of Scilly, ask them who they used, the size of their panels, the cost and whether they would recommend the installers – and the panels.

➔ Why not check to see if other people are planning PV installation, and organize visits for quote from the same company on the same day?



3. What to ask when getting a quote

The Energy Saving Trust (EST), British Solar PV association checklist and Which? have put together an excellent This covers what you need to do before, during and after a visit, and the questions to ask at each stage. Read it and print it out here: <http://www.bpva.org.uk/media/48807/solar-pv-checklist-pdf-269629.pdf>

4. Finding installers

The EST recommend you get at least two, preferably three quotes for your installation. Choose reputable companies to get quotes from, registered with both the Microgeneration Certification Scheme (MCS), and the Renewable Energy Consumer Code. To find a certified installer and products, search the MCS database at:

www.microgenerationcertification.org . View installers on a map:

<https://www.microgenerationcertification.org/consumers/installer-search/>

The aim of the Renewable Energy Consumer Code is to guarantee a high-quality experience for consumers wishing to buy or lease small-scale energy generation systems for their homes. Search their members here:

<https://www.recc.org.uk/scheme/members>. Read the Renewable Energy Consumer Code here:

www.realassurance.org.uk .

5. Council Funding

The Council is now accepting expressions of interest for their new Business Energy Efficiency Scheme (BEES). This is grant funding of up to 50% match fund to help businesses install low carbon technologies.

What can the BEES fund?

- The costs of purchasing, delivering and installing Business Energy Management Systems (BEMS) and/or Renewable Energy Solutions (RES) in the business premises.

- Additional Renewable Energy Solutions installed in the business premises with a direct impact on improvement to energy efficiency/production.

What can't the Scheme fund?

- 'Business-as-usual' operations or maintenance costs

- Projects that demonstrate no potential for increased energy efficiency or productivity as a result of the investment

- Retrospective investment (work already done or started)

- Working capital, supporting wages, stock or training (revenue) costs

Please contact the Council of the Isles of Scilly directly to obtain an expression of interest form or for more information. Or go to <http://www.scilly.gov.uk/sites/default/files/document/business/BEES-EOI-Form-Aug-2018%20v2.pdf>

6. Ongoing maintenance and future costs

- Solar panels are mounted at an angle, so are usually low maintenance as the rain washes any dusty residue away. Do check them every season though, and clean if necessary.
- The panels should last 25 years or more.
- The inverter is likely to need replacing during the 25 year period, at a cost of about £800 at present prices.



- Ongoing: Maximise your electricity savings by using electricity when the panels are producing energy, for example during sunshine hours around midday.

Recommended resources and links:

- There's a good 4 minute overview video here from the EST: <http://www.energysavingtrust.org.uk/renewable-energy/electricity/solar-panels>
- General resources can be found on the EST website here: <http://www.energysavingtrust.org.uk/renewable-energy/electricity/solar-panels>
- See British Solar PV association checklist - compiled with Which? : <http://www.bpva.org.uk/media/48807/solar-pv-checklist-pdf-269629.pdf>
- All the info about tariffs and FITs: See below
- <http://www.energysavingtrust.org.uk/renewable-energy/electricity/solar-panels/feed-tariffs>