

Financial benefits of your solar electric (PV) installation

Photovoltaic (PV) installations are very simple and robust, offering a consistent yield each year regardless of the weather. There are two core financial benefits to all PV installations:

1. Very low maintenance costs.

PV maintenance costs over 25 years are typically just one quarter of those encountered for an equivalent thermal-based renewables system. The 25 year, 80% performance warranty carried by most PV products is unique amongst renewable technologies. In reality, the panels are expected to last much longer the performance warranty.

2. Avoided cost of electricity purchases.

Any electricity that you consume from your PV installation replaces electricity that you would otherwise have to buy.

PV systems also qualify for Renewable Obligation Certificates (ROCs), which can either be collected directly by the owner of the PV system, or indirectly by signing your ROCs over to an electricity supplier in return for an elevated export tariff.

What are ROCs?

ROCs (Renewable Obligation Certificates) are awarded by Ofgem for renewably generated electricity. They are awarded for the total number of MWh (1000 units) of electricity generated by the system (not just electricity exported), with rounding to the nearest MWh. From April 2009, PV systems will be awarded 2 ROCs per MWh.

The income from ROCs is derived from selling them into the open market. ROCs are valuable to energy supply companies who are obliged to submit them as proof that a proportion of energy they supply has come from renewable sources. At the time of writing the ROC market price was around £50 so, at today's prices, the 2 ROCs available per MWh from April 2009 will be worth £100, or 10p per unit of electricity generated (whether exported or not).

Export Tariff – for small installations

If your system is under 5kWp, most of the utility companies will offer you an export tariff. This usually involves you signing over your ROCs to them in order to subsidise the tariff that they give you. At the moment, most clients prefer the Scottish and Southern Energy tariff that offers 28p/kWh exported, with the export meter installed at SSE's expense.

ROC aggregation – for larger installations

Alternatively, on larger systems, you can monetise the ROCs directly. If your system is under 50kWp you have two options:

1. Appoint an agent who will manage the relationship between you and Ofgem, and who will sell the ROCs on your behalf. A full list of ROC agents (the "agent weblist") is available from the Ofgem website: <http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx>
2. Manage the relationship with Ofgem yourself, and sell the ROCs you receive either through a bi-lateral contract with buyers in the marketplace, or via an auction site such as <http://www.e-roc.co.uk/intro.htm>

If your system is over 50kWp you will not be able to employ an agent and therefore will only have the second option.