

Farm Scale Solar PV Co-operative

Support to access low cost renewable energy

LOCAL
ENERGY
SCOTLAND

Act now to save with solar

To reduce the cost of small scale solar development across Scotland, Local Energy Scotland¹ has introduced a Farm Scale Solar Co-operatives scheme, supporting group purchasing of panels and installation services, benefiting from economies of scale so minimising costs for the wider group.

Farmers can currently be paid for the electricity their system generates through the UK Government's Feed-in Tariffs (FiTs). To make the most of this opportunity you need to act fast as FiTs are due to close to new applicants at the end of March 2019.

What are the benefits?

Solar photovoltaic (PV) panels can provide a low cost, reliable source of green energy, and the Farm Scale Solar Co-op will allow farms to make savings by getting together to make a bulk purchase of panels and installation services.

Under the Farm Scale Solar PV Co-operative Scheme, installers have quoted very competitive prices.

An average 30kW system would:

- **cost £20,130.**
- **pay for itself in around 5 to 6 years**
- **Earn a lifetime benefit of over £75,000**

For further detail see our worked example on the following page.

Across the last 5-10 years the cost of solar PV systems in the UK has dropped dramatically. Local scale solar electricity generation can provide significant profits in Scotland when combining the highest available Feed in Tariff with high onsite use.

The most profitable installations are between 10 & 50kW, connected to electricity systems with high daytime load, coupled with lower installation costs through cooperative bulk buying. They can be simpler and lower risk than large scale solar developments with reduced development costs, grid connection fees and planning works. The economic benefits are maximised by sizing the system to best suit the on farm demand.

How does it work?

Interested sites will be clustered together and supported as a group to receive bids from high quality solar installers. Local Energy Scotland have an open invitation to all installers to join in by responding to our invitation to participate. These responses are then assessed to ensure they provide the best offer and, if successful, are listed on our website here: www.localenergy.scot/farm-scale-solar-co-op

¹ Local Energy Scotland administers the Scottish Government Community and Renewable Energy Scheme (CARES). CARES has been established by the Scottish Government to encourage local and community ownership of renewable energy across Scotland and to help maximise the benefits to communities of renewable energy systems - whether commercial or community-owned. The scheme provides advice and support to develop renewable energy schemes or to secure and manage income from renewables.

Support throughout

The Local Energy Scotland team will be on hand to give farms advice and support throughout the process, to help maximise the generation potential of these systems. Local Energy Scotland will facilitate the group procurement process, but interested farms will need to source funding for their own system.

You could work together with other local farms so that your area can benefit from this exciting offer.

Interested?

To start, all you need to do is either fill out a [project enquiry form](#), call **0808 808 2288** or email info@localenergy.scot quoting "Solar PV Co-operative" and we'll take your details, send you further information and help to join, or even start, a low cost solar PV co-operative scheme in your area.

30kW Solar PV System – worked example

Under the Farm Scale Solar PV Co-operative Scheme, a 30kW system would cost around £20,130, and generate upwards of 23,000 kWh of day time electricity annually, for at least 20 years

This provides the farm with fixed price day time electricity for 20 years, offsetting thousands of kWh of electricity purchased from your electricity supplier.

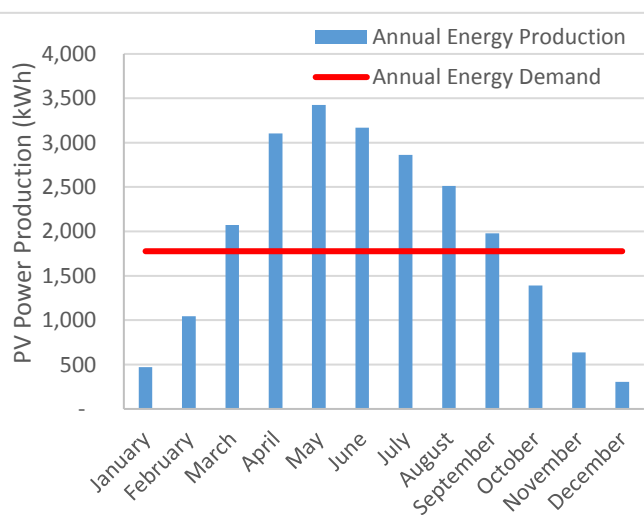
Farms with high daytime electricity use can benefit the most by replacing electricity bought at high retail prices with cheap, clean, renewable energy generated on site.

In addition to bill savings, until April 2019, Government supported Feed-In-Tariffs remain available, which provide an additional revenue of over 4p/kWh for everything generated and just over 5p/kWh for anything not used on site and exported back into the grid.

This example installation earns over £3,300 in annual benefit, split between bill savings and direct income through the FITs which automatically increase each year. The graph shows typical annual performance of 30 kW solar system.

The FITs available to new schemes change from quarter to quarter, so early uptake is beneficial.

Annual Cost Benefit:			
	South	Central	North
Area	Dumfries	Fife	Inverness
20 Year Benefit	£85,165	£81,543	£77,530
Payback	5.3 yrs	5.6 yrs	5.8 yrs
Onsite Use	75%	75%	75%
First year Generation*	26,100	24,990	23,760
System Overview:			
Scheme size	30 kW		
Roof Span	192m ²		
Number of Panels	120		
Estimated Installation Cost	£20,130		
Annual Maintenance Cost	10% of Income		



* Figures based on a current 11.5p/kWh energy supply price, FITs Tariff of 4.03p/kWh and an Export Tariff of 5.24 p/kWh. Capacity factor based on Energy Saving Trust Solar Calculator annual generation figures and benefits include inflation at 2.5% and accounts for generation loss with system age.