

CASE STUDY

Project: Grid connected systems
Country: UK
Project value: £ various
Year: 2012
Product: MCS Grid connected inverter and solar modules



Sollatek[™]



Sollatek is gaining a foothold in the UK grid-connected market for solar-powered electricity generation

Within its complete range of solar products, Sollatek has a solar power system which is targeted at the 'grid-connected' market. The system can be installed at any domestic or commercial premises, subject to local planning approval.

It generates DC electricity which, once converted to AC, can be consumed by the household or occupiers of business premises, or be fed into the national electricity network – resulting in the twin benefits of reduced electricity bills and lower CO₂ emissions.

Sollatek's system is scalable, from the lowest end of the generation spectrum at around 2.5KW to the more substantial requirements of 30KW and beyond. There is no upper limit on the level of generation that can be achieved.

What's in it for the consumer?

For some there are 'soft' benefits, i.e. the contribution solar energy makes to reducing CO₂ emissions, and therefore an attractive proposition for growing numbers of UK consumers who care deeply about the planet.

But there are also 'harder', measurable financial advantages.

A potential return on investment in excess of 10%, depending on the level of subsidy available when the system is installed,

The availability of what is known as the Feed-in Tariff (FIT), a UK government subsidy initiative to stimulate wider uptake of grid-connected systems and to encourage the generation of electricity from renewable sources.

The FiT rewards householders or business owners by paying them for every kWh generated, plus an additional premium if unused energy is exported to the national grid. But accurately quantifying the value of this incentive is proving difficult, because the goalposts keep shifting. This year alone the level of government subsidy has been reviewed three times.

continued overleaf

Based on certain assumptions, eligible Sollatek grid-connected systems will generate the following revenues:

PV generator size	Tariffs (as at 30/6/12)	Period	Annual Production (kWh)	Annual revenue/savings	Revenue over 25 years
2.4kWp	21p/kWh	25 years	2,361	£672	£16,822
30kWp	15.2p/kWp	25 years	29,517	£2217	£55433

Assumptions: FiT tariff valid as at 30/06/12; Electricity saving: 50% used at 0.12p/kWh; Electricity exported to network: 50% of production at 0.03p.

The technology

For its installation, Sollatek recommends the multi-crystalline solar modules 240Wp 24V, which provide optimum cost efficiency and maximise the return on investment. The solar modules are installed on a lightweight, non-intrusive, aluminium, rail-mounted structure, that can be fixed on tiles or galvanised corrugated roofs.



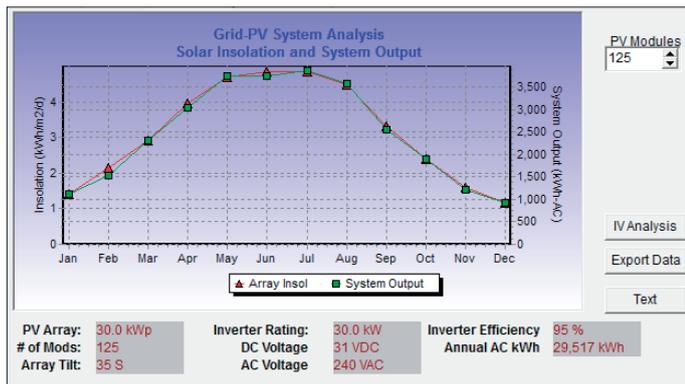
Plug-in systems make it easy to connect the solar modules together, and also to the controller.

The systems are MCS (Microgeneration Certification Scheme) approved, and once they have been installed by our approved partner, the system qualifies for the PV (Photovoltaic) Feed-in Tariff.

Once installed, solar modules require very little or no maintenance, as they are washed by the rain. However, it is important to ensure that trees don't overshadow them.

A typical commercial 30kWp solar system installed in the London area will generate about 29.5MWh, on a South facing roof of 35 degrees with no shading.

A typical domestic 2.5kWp system can generate about 2,500kWh of electricity a year, and will save over a tonne of carbon dioxide every year.



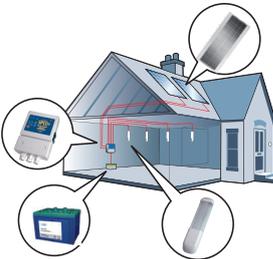
Other Sollatek Solar products



Solar Energy Systems



Solar Lights



SLK (Solar Lighting Kit)



Solar Street lighting



Charge Controllers



SolarModules



Solar Batteries



Glowstar Solar Lantern