

Making your roof space or spare land FIT for purpose

By Michael Pitcher, Managing Director, BFC Solutions

By installing solar cells on the UK's 4,000sq.km of available roof and building facades, we could generate 460TWh of electricity – equivalent to 116% of the UK's current consumption.

In April, the UK Government introduced the new feed-in tariffs (FITs) to encourage households and businesses to install renewable energy systems such as solar PV. The FITs determine that utility companies will pay users cash rewards: anything between 29p and 41p for every kWh generated, depending on how much energy is produced in total, and £0.03 for every kWh that is feed back to the grid.

As the forthcoming UK PV Conference will highlight, there is now a solid foundation for solar PV to take off in the UK, and consultants like IMS Research are already predicting that by 2011, the UK market will see new installations reach 250MW, compared to just 22MW in 2009.

Fast growing market for residential and community installations

Benefits for the household market are well documented; the FITs will be paid tax-free for 25 years together with RPI increases, so PV owners will receive a significant return on capital and realistic paybacks, as well making vital carbon savings. Rattery Village Hall in South Devon installed an 18kWp system on its roof as part of extensive energy saving measures to reduce its running costs. The system produces 16,500kWh of electricity each year, saving nine tonnes of CO2 from being generated and offering an estimated payback period of eight years.

Cut fuel poverty

For many, the emphasis is on saving money and reducing energy bills to cut fuel poverty. Housing associations, social landlords and local authorities are showing greater interest in PV as in some cases, it can reduce their tenants' heating bills, helping them to stay warmer for longer.

New business opportunities

It's not just the domestic market that can benefit from the introduction of FITs. Our experience of how other countries have responded to FITs suggests that PV entrepreneurs will take advantage by focusing on establishing solar parks and integrating PV into buildings, whilst utility companies see PV technology as making an important contribution to meet their 'Renewable Obligation' (RO).

Solar parks

As the FITs are state assured by law and with most PV panels lasting up to 40 years, investors could earn guaranteed returns by generating up to 5MW of electricity from ground mounted PV panels. In Newquay, the County Council is planning to build a 40 acre solar park and estimates it will produce a profit of £30m over its 25 year lifespan according to Green Cornwall.

Building-integrated PV (BIPV)

With tightening building regulations and the Department of Energy and Climate Change's ambition to have all new homes be carbon neutral by 2016, there is an increasing market pull for on-site energy generation. The introduction of the FITs will lead to substantial growth in the construction industry, as UK architects and property developers take advantage of this growing market by becoming specialists in using PV as part of the fabric of buildings.

Meeting the RO

Under the RO, UK utility companies must source a proportion of their electricity from renewable sources. According to Ofgem, from April 2009, utility companies must present 0.097 ROCs

(Renewable Obligation Certificates) per MWh of electricity supplied. Failure to do so will result in substantial fines. However, by embracing the FITs and actively promoting the benefits of renewable energy, utility companies can fulfil their obligations, while potentially acquiring new customers and generating additional revenue streams by forming partnerships with PV installers.

The emerging UK market

Having seen the solar market prevail across Europe, we're confident that the UK will be successful in its widespread adoption of solar PV, and present a range of compelling business opportunities. However, to boost PV in the UK it's essential that we create new 'green' jobs along the supply chain to help build the infrastructure and support the growing low carbon economy.

The UK PV Conference (www.ukpvconference.com) will bring stakeholders together to discuss how we can achieve this, and to identify the opportunities for UK businesses to profit from investing in PV.

The conference takes place at Central Hall, Westminster, London on 22 June 2010, and is being organised by Solarplaza.

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About the author

Michael Pitcher is Managing Director of BFC Solutions and a PV industry expert. Previously he was Director of European Corporate Accounts and UK General Manager of BP Solar.

Michael has over 28 years of specialist experience and expertise as a pioneer and ambassador in the renewable energy industry, developing and marketing innovative low carbon state-of-the-art solutions in over 100 countries worldwide. BFC can show organisations how the latest low- and zero-carbon technologies can transform the way they work, reduce their carbon footprints and improve bottom line performance.

Accompanying images



Figure 1: Large PV covered roof in Germany

Download image here:

<http://www.resonates.net/MediaPacks/Solarplaza/German%20large%20PV%20roof.JPG>



Figure 2: Another PV installation in Germany

Download image here: <http://www.resonates.net/MediaPacks/Solarplaza/german%20pv%20roof.jpg>



Figure 3: PV power plant

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<http://www.resonates.net/MediaPacks/Solarplaza/PV%20plant%20with%20blue%20sky.JPG>



Figure 4: Solar PV panel

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Figure 5: Ground mounted solar PV panels

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