

# Doing Solar Business in the UK 2010

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The Charles Hotel -The Rocco Forte Collection,  
**Munich, 8th June 2010**

*Post Event Report*



## Doing Solar Business in the UK – Post-event report

June 17th London, UK

Doing Solar Business in the UK, held in Munich on June 8th, was a huge success and looks set to place the UK on the road to becoming a worthy player in the global PV industry. The conference was organized and presented by Photovoltaics International, the leading technical publisher in the solar industry, and showcased presentations and insights from a wide array of potential contributors to the future of the UK's PV industry.

The conference, which had institutional support from EPIA, the European Photovoltaic Industry Association, and the REA, the Renewable Energy Association, was held at the Charles Hotel in Munich.

This proved an ideal location for the conference, as illustrated by comments and suggestions submitted to us by the delegates attending the show. The keynote speech by Ray Noble, PV specialist for the REA and advisor to government on the feed-in tariffs, set the scene nicely, and the 18 presentations that followed depicted scenarios and optimism that could indeed set the UK up to become a major adopter of solar energy as a matter of course – despite the low insolation levels in the country.

With over 130 delegates from all over the world, the sold-out conference and the opinions of those attending were extremely encouraging. Ray Noble also announced the formation of the new Solar Power Group, an industry body that will represent the commercial interests of companies operating in the PV industry in the UK. The new group is a full division of REA and already has been accepted as a member of EPIA.

Overall consensus from the comments gathered at the end of the day suggests that the UK market for solar installations, if managed correctly, could reach 250MW in 2011. The launch of the new Solar Power Group is a positive step to ensure that this market is well looked after.

A further conference addressing the UK market has been scheduled for Oct. 18-19 in London.

*“Creating the first conference in Munich the day before Intersolar was an inspired choice,” said Ray Noble. “The key challenge for an accelerated UK market will be the ability of the UK to learn from the mistakes and successes from continental Europe and Germany, the market leader for PV adoption.”*

*“It is great to see how many people across the industry are interested in doing solar business in the UK. Since the introduction of the feed-in tariff in April, we have had high hopes for the market, yet to see this much interest and having to actually turn people away due to lack of room was overwhelming,” said David Owen, CEO of **Photovoltaics International**.*



**Save the Date:**  
**18-19 October 2010**  
**Solar Power UK**  
**2010 Conference**

The first official PV Conference of the Solar Power Group will take place in London, providing the perfect opportunity to continue the relationships forged in Munich and to create new business opportunities in the UK PV market.

Back row, left to right: Ben Hill - Trina Solar; Steve Pester – BRE; Martin Cotterell - Sundog Energy; Tom Paul – Kingspan; Jeremy Harrison – EON; David Owen – Photovoltaics International. Front row, left to right: Jonathan Scurlock – NFU; Mike Shiel - Scottish Development International; Ray Noble - Renewable Energy Association; Tim German - Cornwall Council; Florian Meyer-Delpho – pvXchange; Prof. Stuart Irvine - Centre for Solar Energy Research; Ash Sharma - IMS Research.

Organised by:

**Photovoltaics**  
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With the Support of:

 **EPIA**  
European Photovoltaic Industry Association  
 **REA**  
Renewable Energy Association

## About 'Doing Solar Business in the UK'

'Doing Solar Business in the UK' was a detailed conference first held in June 2010 at the Charles Hotel in Munich. It brought together 18 expert speakers and was sponsored by Kingspan, Trina Solar, System Photonics, Green Collar Futures and Scottish Development International.

## About Photovoltaics International

Photovoltaics International is the solar industry's first and most authoritative technical journal distributed internationally to over 12,500 decision makers and implementers responsible for producing solar cells, modules, thin films and utility-scale power plants. Its counterpart, PV-Tech.org is the number one source for in-depth and up-to-the-minute news and articles on the solar PV supply chain internationally. With five full-time editors based in Europe and North America, PV-Tech provides the most authoritative news, the busiest blog and proprietary product reviews to keep solar professionals informed round the clock. Now three-and-a-half years old, the website attracts more than 130,000 visits monthly and geographically the top 10 largest audiences are drawn from the USA, Germany, China, Taiwan, UK, India, Canada, France, Japan and the Netherlands.

## About the Renewable Energy Association

The Renewable Energy Association (REA) represents renewable energy producers and promotes the use of all forms of renewable energy in the UK. The company represents the majority of accredited installers and distributors for solar products in the UK.

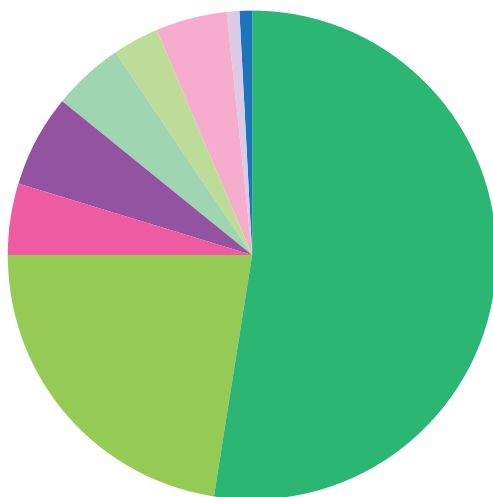
## About EPIA

The European Photovoltaic Industry Association (EPIA) is the world's largest industry association devoted to the solar PV electricity market. The association aims to promote PV at national, European and worldwide levels and to assist its members in their business development in both the European Union and export markets.

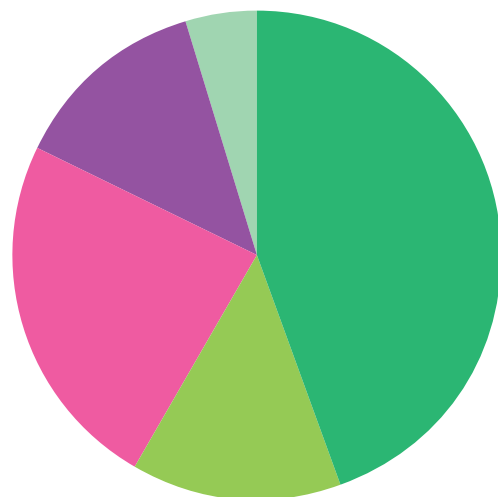
## Facts and Figures










Number of attendees: 130  
 Number of speakers: 18

Delegates Origin Overview



Delegates by Job Title



|                                                                                                     |       |                                                                                                 |      |
|-----------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------|------|
|  United Kingdom  | 52.5% |  Ireland     | 3.2% |
|  Germany         | 22.4% |  India       | 4.6% |
|  Spain           | 4.6%  |  Switzerland | 0.9% |
|  Belgium         | 6.3%  |  Australia   | 0.9% |
|  The Netherlands | 4.6%  |                                                                                                 |      |

|                                                                                                                                     |       |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|
|  C Level & Corporate Management                  | 44.7% |
|  Technology & Engineering                        | 13.8% |
|  Sales, Marketing & Business Development         | 23.8% |
|  Specialist Consultation, Research & Development | 13.1% |
|  Media Representatives                           | 4.6%  |





9:20 – 10:40

## Sizing the UK Market

**Eleni Despotou, Deputy Secretary General at EPIA**

Based on experience from countries such as Germany, Spain, Italy and France, the presentation will focus on the correct approach to setting appropriate boundary conditions in order to develop a sustainable market and industry in the UK.

## Solar Energy in the UK - A Utility Perspective

**Jeremy Harrison, Innovation Consultant at E.ON Engineering**

Major energy suppliers such as E.ON face a number of key challenges in an evolving energy system. Three components of the so-called “energy trilemma” – namely security of supply, environment and cost of energy – require imaginative and courageous responses. E.ON embraces this necessary change and is committed to a low-carbon future including a diverse portfolio of energy options. Such options in the UK include large-scale (offshore) wind and marine power; work has already commenced on the Thames Array, currently the world’s largest planned offshore development at around 1GWe, and the novel Pelamis wave power device was launched in May 2010. Other components of our low-carbon vision include microgeneration options which engage individual consumers and empower them to produce their own electricity and heat from low-carbon and renewable sources. PV is perceived by many as a highly visible renewable technology which may act as an effective catalyst to deliver complimentary energy-efficient and low-carbon solutions to consumers. However, the economics of PV have thus far remained unattractive to consumers without substantial subsidies, and E.ON is therefore seeking to identify appropriate next generation PV technologies and work with partners to deliver a full range of cost-effective microgeneration options.

## The UK PV Market – Tapping the Fullest Potential

**Daniela Schreiber, Director at EuPD Research (Hoechner Research & Consulting Group GmbH)**

At a total installed capacity of approximately 22MW in 2008, the photovoltaic market in the United Kingdom has been characterized by slow development. However, while many European countries are in the process of cutting back their national incentives and promotion schemes for solar energy, the UK has decided to implement a very generous feed-in tariff (FiT) as of April 1, 2010 – the “Clean Energy Cashback” scheme. Without a doubt, the PV market in the UK is bound to experience drastic growth. EuPD Research has used this opportunity to assess the underlying potential of this uncapped market through a comprehensive market study. Findings of the study are based on secondary as well as primary research derived from semi-qualitative interviews with installers, distributors and manufacturers across the UK. “The UK PV Market - Tapping the Fullest Potential” will reveal preliminary results of this research.

## PV Road Mapping in the UK Covers Industry Supply Chain and PV Adoption

**Professor Stuart Irvine, Director for Solar Energy Research at Glyndwr University**

The UK has an established R&D infrastructure in photovoltaics but in the past this has not been closely coupled with the development of the industry supply chain. The UK FiT is providing the much-needed impetus for development of the PV supply chain that has, until now, been largely export driven. Road mapping in the UK has aligned along two different and complementary agendas. The first has been to establish the link between manufacturing industry and adoption of PV, led by the Welsh Opto-electronics Forum (WOF) as a lobby document for the Welsh Assembly Government and taken up as a UK-wide exercise by the Photonics KTN. The other agenda has been around R&D support for development of PV technology. Over the past 10 years, R&D has become more collaborative and more closely aligned to the needs for reducing cost and increasing efficiency of PV modules. Initiatives such as the PV Supergen project and the MatsUK Strategic Research Agenda will be described. Materials research has played a key part in this development and covers the complete range of PV products including crystalline silicon, thin film, organic solar cells and concentrators. A number of new businesses have recently emerged as spin-outs from R&D, while larger, established businesses are engaging in new product development. The talk will describe how emerging supply chain manufacture can benefit from the R&D base and a developing home market.



The CIS Tower, Manchester UK (Photo: Solarcentury)



PV glazing project on King’s Cross station (impression) (Photo: Sundog Energy Ltd)

11:00 - 13:00

## **The Anatomy of a 5MW Solar Park in the West of UK** **Tim German, Head of Low Carbon at the Green Cornwall Programme**

Cornwall Council represents one of the largest rural local government areas in the UK. Cornwall has over 250,000 homes, not all of which are occupied by full time by residents, with a steadily growing population of 530,000. The population increases significantly during the summer months, the peak tourism season. Tourism clearly has a significant influence on the area. However, Cornwall has many other influential sectors which are often overlooked, one of which is the environmental industry sector including renewable energy. Manufacturing makes up more than 10% of the local economy of which 30% is food and drink manufacturing, rooted in the farms for which Cornwall is so well known. There are strong sales in cheese, clotted cream, pasties and beer. However, Cornwall still has persistently poor earnings relative to national averages. It has therefore been receiving the highest level of European Structural funds since 1996. The current, and it is thought final, round of Structural Funds for economic development ends in 2013.

Cornwall is making use of its natural resources for energy and is leading the South West counties in terms of renewable energy production, with eight currently operational wind farms, as well as a wide range of other renewable energy technologies. Cornwall also has a number of proposed renewable energy projects, which aim to harness wave energy and to build on pioneering research to extract heat and power from geothermal sources. In 2009 the Council decided that a low-carbon economy and greater energy sustainability through the further development of renewable energy is a key strategic delivery area for the next decade. The Green Cornwall Programme was created by the council in order to achieve its aims in carbon reduction, renewable energy and enhancing the living environment. The introduction of the FIT by the previous UK Government was a move supported by the current Coalition Government and has led to increased renewable energy activity by both the private and the public sector in Cornwall, especially in relation to the development of solar parks with an installed capacity of up to 5MW.

This presentation will show how the Council is aiming to lead the UK's public sector approach to the development of solar parks in a region which has the highest levels of sunshine in the UK. Nearly 20 PV parks are currently under consideration by private sector developers in Cornwall. This is in addition to Cornwall Council's own ambitious proposals, well in development, to own up to six solar parks with the aim of offsetting its own electricity use and supporting its own finances to ensure continued delivery of its services.

## **New Opportunities for PV in the Agricultural Sector** **Jonathan Scurlock, Chief Adviser for Renewable Energy & Climate Change at National Farmers' Union**

With 75 per cent of UK national land area in the agricultural sector (18 million hectares), farmers are well-placed to capture renewable natural energy flows, while maintaining our traditional role in food production. Government policy objectives such as low-carbon farming and national renewable energy targets are creating the right environment for investment in a range of clean energy technologies.

Agricultural and horticultural buildings are ideal platforms solar PV, while field-scale deployment presents new challenges on combining energy capture with livestock production.

Introduction of Feed-in Tariffs has resulted in a flood of interest in on-farm generation from farmers and technology providers, and substantial growth in an infant UK industry can be expected over the next five years. However, some details of guidance are still lacking for applicants to the scheme.

## **Roof Mounted Building – Integrated Solar Photovoltaic Systems** **Tom Paul, New Business Development Director at Kingspan Group**

This presentation provides an overview to how Kingspan's insulated panels and boards provide energy and CO<sub>2</sub> savings and also presents the range of opportunities that exist in expanding these products to provide building integrated PV roof systems. Discover the benefits of solar roof systems, an overview of the products available, product details and a description of their various applications.

## **Delivering PV in the UK – The Role of Housing Associations** **Nicholas Doyle, Project Director at Places for People**

The UK is committed to the large-scale roll out of low carbon retrofit of its existing housing stock. This has been supported by a range of funding initiatives, new policies and research on new financing mechanisms, which are broadly supported by the new government and do not require additional public financing. The first of these new approaches is the introduction of the UK's first Feed-in Tariff that will support renewable energy production for households. At the same time the research being carried out in the UK has shown that the biggest barrier to the large-scale roll out of further energy efficiency and renewables is the cost of capital and the length of contracts. The Social Housing sector could have a key role to play in addressing this and is already working on how the use of photovoltaics could be a vital first step in developing a much larger industry in the UK. The presentation will outline the background to the UK development of renewables, the key issues that social housing and photovoltaics will play in meeting national and international targets, and approaches to creating a large-scale integrated low carbon industry.

14:00 - 15:50

## **An Overviews of MCS Registration**

**Martin Cotterell, Managing Director at Sundog Energy Ltd.**

For many years, the UK has languished in the backwaters of the PV world. However, the market has changed with the advent of the UK's FiT. But while the UK has lagged behind on installed kWp, it has been active in the development of PV standards, both nationally and internationally. The international standards are familiar to suppliers but the UK's Microgeneration Certification Scheme (MCS) is less well known.

To gain FiT payments, systems of up to 50kWp need to utilise MCS certified products installed by an MCS certified installer. As the FiT scheme progresses, MCS may apply to larger schemes and some UK financiers are already looking to MCS as a tool for assessing MWp-scale projects.

The aim of MCS is "to evaluate microgeneration products and installers against robust criteria providing greater protection for consumers". MCS certification of PV installers requires compliance with MCS standard MIS3002, which is about ensuring quality control as defined in the MCS standard MCS001, in short:

- ▶ Say what you do (have written procedures)
- ▶ Do what you say (follow your procedures)
- ▶ Prove it (MCS inspection and assessment by approved MCS certification body).

MCS and FiTs are key to doing solar business in the UK. Prior to the launch of FiTs, Sundog Energy secured a landmark 0.24MWp PV glazing project on King's Cross station in London – set to be one of the biggest installations in the UK. It is now only a matter of time until the first 5MWp project (the maximum fundable under the FiT scheme) is started.

## **UK Government Policy and the Feed-in Tariff**

**Rhiannon Lewis, Business Development Manager at United Kingdom Trade & Investment**

Energy is a very high-profile issue in the UK, driven by a number of potentially conflicting issues. As the UK is moving from a situation where it has been self-sufficient in energy (via the North Sea oil and gas reserves) to one where 60% of energy will need to be imported by 2020, energy security is paramount. The UK also has ambitious targets for reducing greenhouse gas emissions and CO<sub>2</sub>, and energy is the largest contributory factor to emissions. The government also needs to ensure that sufficient generation capacity is secured. Much of the current coal and nuclear capacity is due to come to the end of its life before 2020, and will need to be replaced.

There have been a number of policy papers addressing these issues. Amongst the most significant are:

- ▶ The Low Carbon Transition Plan, which sets out the UK's comprehensive plan for transitioning to a low carbon economy, addressing every sector from power generation and heavy industry to homes and communities.
- ▶ The UK Renewable Energy Strategy, which outlines how the UK can meet its legally binding obligations under the EU's Renewable Energy Directive to produce 15% of its energy from renewable sources by 2020. Given that the current level is below 3%, this represents a significant challenge.
- ▶ The UK Low Carbon Industrial Strategy, which shows how the UK can benefit from taking a leading role in the development and deployment of low-carbon technologies.

## **Passing MCS for PV Installers**

**Steve Pester, Principal Consultant at the Building Research Establishment (BRE)**

This presentation highlights some of the key issues for PV installers to address in order to pass MCS certification. The Microgeneration Certification Scheme (MCS) has been operating in the UK since 2007 and has been shown to be raising quality levels of renewable energy installations. It is used by Government and other grant-giving bodies as a quality mark on which to rely when approving financial incentives for renewable energy installations. To achieve this raising of standards, the scheme has to be robust, which means that becoming certificated is not a simple box-ticking exercise – it drills down to the fundamentals of how your installation business operates, as well as assuring a high level of technical competence. The information in this presentation is based on the experience of contributing to the MCS technical standards, helping to set up MCS for the UK government, followed by three years of going out to visit installers and their PV installations as part of the assessment process. The requirement to operate a Quality Management System represents one of the biggest cultural changes for some companies, and this is explained, along with key technical points and general scheme requirements.

## **Breaking the Bottleneck, PV Training Strategy for the UK**

**Paul Robson, Managing Director at Green Collar Futures**

The UK market for PV systems is expected to grow very rapidly over the next few years. It is vital that the UK economy gets the full benefit of this growth, generating new local opportunities for employment whilst helping to meet national carbon reduction and renewable energy targets. However, if appropriately skilled labour is not available in the right place and on the right employment terms, there could be a serious bottleneck. Through the provision of appropriate training opportunities, and by making skilled labour available on an agency basis, Green Collar Futures is currently working to help ensure that the effects of this bottleneck will be minimised. The company is developing a national network of training centres that will prepare unemployed people for jobs in the PV installation and related occupations.

## **The Role of Electrical Contractors**

**Giuliano Digilio, Head of Technical Services at Electrical Contractors' Association (ECA)**

This presentation will focus on the role held by electrical contractors in the design, installation, commissioning, service and maintenance of photovoltaic installations. Electrical contractors have the core competencies for realising electrical installations, and photovoltaics is a new microgeneration technology that will now become part of many installations in the future. Electrical contractors will have to be prepared and competent to deal with these types of installations as they become more and more widespread.

16:10 – 17:40

## Manufacturing in the UK

Mike Shiel, Head of ICT and Enabling Technologies at Scottish Development International

The UK – and Scotland in particular – has a long tradition in large-scale semiconductor manufacturing. Part of Scotland was actually known as Silicon Glen due to the concentration of these and associated industries. As a result, the country has the necessary skills, infrastructure and cost profiles to enable it to be the ideal location for photovoltaic manufacturing and assembly. This presentation will touch on the history of Silicon Glen and previous patterns of investment. Existing infrastructure such as utilities and transport logistics with the rest of the UK and Europe will be covered, while the academic research base and initiatives to encourage collaboration with industry will illustrate the supportive environment. Government incentives and the existence of on-the-ground support mechanisms as well as examples of potential locations will be provided, while an overview of operational costs in Scotland will be illustrated by a relevant example.

## Module Supply – Focus on Bottlenecks

Ben Hill, Vice President for Europe at Trina Solar

The presentation takes a closer look at module demand and the current bottlenecks that the industry is now facing. Content-wise, the presentation is divided into four sections: a brief company overview is followed by a synopsis of global PV supply/demand figures. The speaker will then provide a review of some current bottlenecks that this industry is facing, concluding with an overview of the current UK situation and reasons in support of supplying the UK market.

## Status & Trends in the Global Solar Inverter Market – Implications for the UK PV Market

Ash Sharma, PV Group Director at IMS Research

In the past, inverters have often been an overlooked part of the solar PV supply chain – probably because they account for only a small proportion of PV system costs. Recently, however, inverters have become critically important, because their poor availability delayed the connection of hundreds of solar installations at the end of 2009. IMS Research is the leading commentator on the PV inverter industry and this presentation will provide some in-depth information on the status of the PV industry, the current supply issues facing the industry and the likely future trends. It will provide a background into the supplier base and explain why this shortage has occurred, how bad an issue it really is, what's being done about it and when the situation will ease. A discussion of the demand likely to come from the UK will be included and the types of inverters likely to be consumed will also be examined. An objective analysis will also be included on the effects this shortage will have on a new emerging PV market such as the UK. Much of the presentation will rely on data and information using primary research that IMS Research has obtained from its close links with major PV inverter suppliers and its knowledge of the component vendors.

## Challenges of Inventory Management and Pricing Under Tight Market Conditions

Florian Meyer-Delpho, Sales Director at pvXchange

pvXchange is a global B2B portal for PV professionals with more than 6,000 users worldwide, targeting installers, resellers, manufacturers and EPCs. Since 2005, the traded volume as well as the number of platform users has been continuously increasing. pvXchange's main business area is trading: on our proven online trading place, suppliers and prospective buyers meet directly and face-to-face. In addition, we offer individual and tailor-made agreements, as well as consulting and know-how. Furthermore, our PV Price Navigator, an online up-to-date market monitoring tool, shows trade statistics for the most popular PV modules of selected manufacturers.



Integrated solar PV on a new build in south Scotland (Photo: Sundog Energy Ltd.)



Mindrum Farm installation, UK (Photo: Solarcentury)

For any queries please contact Joy-Fleur Brettschneider;  
[jbrettschneider@pv-tech.org](mailto:jbrettschneider@pv-tech.org)

**Save the Date: 18-19 October 2010**

**Solar Power UK 2010 Conference**

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