

Solar: Victim of its own success?

The UK's most dramatic renewables story to date has been solar photovoltaics (PV). Solar PV has arguably attracted the most media attention of any renewable technology, yet recent research shows most people don't know how much it costs.

By [David Thomas](#) 3 Sep 2012



(Image: Wikimedia Commons)

Research by energy efficiency experts, The Eco Experts has shown 92% of people are worried about rising energy costs and only one in five is categorically against installing solar panels. Almost half would definitely install solar if there was no upfront cost. Yet fewer than 30% know how much PV panels cost. It's clear that people are interested in solar and eager to get away from the big energy companies, yet suspicious about the cost.

For about 20 years solar PV was a fringe technology in the UK, but in recent years that has changed. Developments in technology, the spread of environmental concern, and rising energy prices have all made people reconsider how they feel about it. Solar is seen as a viable investment because it offers cheap energy and a good rate of return, but to some people its fluctuating tariff rates make it seem unstable. To understand the fluctuations you need a history of solar PV.

2010

To meet ambitious carbon emissions targets of 80% by 2050 the government encouraged the take-up of renewable energy. The solar market really took off in April 2010 when the feed-in tariff was introduced as an incentive, where consumers were paid for each kW of energy they produced. The solar feed in tariff was set at 43p/kWh (pence per kilowatt). Retrospectively this figure is seen as being too high as it caused the UK's solar PV bubble in 2011.

2011

2011 saw a huge uptake. New solar companies were formed at a rapid rate, and although it is difficult to be precise, the following approximate figures paint a vivid picture of the solar boom:

- There are around 5000 MCS accredited solar PV installers currently in the UK. There were just over 400 in 2009.
- REAL (Renewable Energy Assurance Limited) registrations leapt from 1,000 before the feed-in tariff, to around 5500 in 2012.
- An MCS membership graph shows around 300 PV companies signed up with MCS per month throughout late 2011 when the industry was at its most lucrative. Although not compulsory to join the Microgeneration Certificate Scheme, most solar companies opt in because MCS accreditation is a known mark of quality.
- A recent Solar Trade Association (STA) and Renewable Energy Association (REA) report estimated that 25 000 people are currently employed across the whole of the solar PV industry.

The court case

The government made the same mistake as teenagers who throw a house party and invite the whole school. They didn't have the budget to offer such a generous tariff rate.

Underestimating the take-up of solar PV was becoming far too expensive, so in December 2011 the government took action

and announced a cut in the feed-in tariff from 43p/kWh to 21p/kWh. They gave the industry just 6 weeks notice and the government was promptly taken to court by environmental charity Friends of the Earth plus solar companies Solarcentury and Homesun; the judge ruled that yes, the government had 'acted unlawfully'. The argument was never that the tariff rate should not have been cut, just that it should not have been cut at such short notice.

The government appealed, and lost. They appealed against the appeal, and lost again so the boom continued. In March 2012 the tariff rate was reduced to 21p/kWh, and reduced again to 16p/kWh in August.

The most prevalent solar news story throughout this time was - unsurprisingly - about the instability of the feed-in tariff, which was damaging to those trying to demonstrate its bankability to consumers.

After a few lucrative months, this negative press and perceived government interference represented solar's dark period. However, the market has recovered due to the price of solar panels also dropping. This means panels are more affordable and the investment is less expensive up front, so the return on investment (ROI) remains the same as during the boom.

What does the industry say?

During the court case earlier in the year I spoke to Chris Hopkins, MD of solar company Ploughcroft, about the tariff cut.

He told me: "I think the cut to 21p is the right thing to do. The further cut [to 16p]... is wrong." Chris believed that government had, "lost touch with reality, with regards to the global price of silicon."

Bob Chesney, MD at AbbeyRise Solar Power, says, "The various changes to the market happened all too fast. They've shaken the industry of those who jumped on the bandwagon, leaving behind a tougher, more intelligent market. I still think solar PV is a really good investment opportunity: you get a tax-free income, free electricity, and a green home."

Paul Barwell, chairman of the Solar Trade Association, says, "Compared to the returns you can get these days in banks and many other investments, solar provides a very solid and attractive return."

David Holmes, founder of Solar Guider, says, "It is a buyer's market out there at the moment so there has never been a better time to invest in solar electricity because systems are more affordable compared to what they were 12 or even six months ago."

The feed-in tariff today

The feed-in tariff is currently set at 16p/kWh for 20 years, giving tax-free and index-linked returns; the panels have a lifespan of around 40 years during which they give cheap energy. Although the FiT rate is lower than ever, so is the price of silicon which PV panels are made from. Once a 4kW system would have cost around £10 000, now it's possible to find one for under £7000. This means ROI is around the same at 7-10%.

For more information go to [The Eco Experts](http://www.theecoexperts.co.uk).

ABOUT THE AUTHOR

Hello, I'm David. I write about energy efficiency and about the solar industry for websites including [\[http://www.theecoexperts.co.uk The Eco Experts\]](http://www.theecoexperts.co.uk). Spoon whittler and collector of tomatoes.