

ICEPT letter to DECC Ministers on the pace and scale of change to the PV Feed in Tariff, 2011.

Icept consultation response

December 2011

Dr Robert Gross (Robert.gross@imperial.ac.uk)

Dr Chiara Candelise (c.candelise05@imperial.ac.uk)

Rt Hon Chris Huhne MP

Rt Hon Gregory Barker MP

Rt Hon Charles Hendry MP

Dr Robert Gross, Centre for Energy Policy and Technology, Imperial College London.

Letter on the pace and scale of change to the PV Feed in Tariff

06 December 2011

You know me in my capacity as director of the above centre at Imperial and are aware of my contributions to energy policy research. I am writing today with my colleague, PV specialist Dr Candelise, to express concern about the proposed changes to the feed in tariff for small PV systems.

Our expertise is at the interface of policy and technology. In the PV area we model PV costs, monitor technology developments and analyse the potential for cost reduction. We assess policy impacts and review global policy developments with regards to consumers, investors and innovation. This letter is based upon this expertise. Each point derives from the research evidence base. We are profoundly concerned about the scale and *speed* of the tariff reductions the government is proposing. This is incompatible with established principles of good policymaking and damaging to both the PV industry and wider low carbon agenda. We urge you to note the following:

The impact of the PV FiT on consumer bills is extremely small. Based on the installation data for September, we estimate the total cost of supporting PV through FiTs to be less than £4 per household per year; less than a tenth of the cost of the RO or ETS. Over time this burden will grow unless the tariff is reduced or the scheme is adapted to include a volume cap. We accept the need for action on a months-to-years timescale. But even at rapid rates of market growth the FiT burden cannot grow so fast that it provides justification for a 50% cut in tariffs with just 6 weeks' notice.

Supporting PV provides considerable benefits: These include reduced installation costs, potential benefits for poorer consumers, a contribution to global 'learning' and the development of a UK installer industry and supply chain. It also assists in the development of a 'constituency of support' for renewables, of value in the wider low carbon policy agenda. We visit each point briefly below.

Market resilience increases with maturity and the UK PV market is still nascent: The international evidence is that high tariffs have almost always been needed to kick-start an installer industry. However, once a market is sufficiently well established it becomes more adept at accommodating policy change and responding to the rapidly moving international module price. Competition reduces margins, innovation accelerates, and skills build. The UK market is still nascent; the proposed changes risk preventing it from maturing by encouraging exit, reducing competition and undermining the perceived viability of the sector. The development of the 'national system of innovation' for PV will be

set back. The effect could be to leave the UK with a small, shallow market with high costs and a less resilient, more policy sensitive character. This could make it more difficult to establish a tariff regime for the long term that can respond effectively to global prices. By contrast, a little perseverance at this key stage could yield a mature market well placed to deliver sustained cost reductions over time and able to absorb policy changes with relative ease.

Market growth is essential to cost reduction. Some commentators suggest that the UK should wait until global module prices decline. We believe ongoing R&D is essential and that PV has the potential for remarkable cost reduction through innovation. Our research also indicates that learning in manufacturing, materials utilisation, efficiency and other factors is intimately bound up with market growth. It is difficult to isolate the effects of R&D from ‘learning by doing’. Both are essential. As global market growth is what counts, a growing UK market directly contributes to reducing the cost of PV. The ‘wait and see’ approach amounts to free riding.

UK companies are active in PV. Our research also indicates that the notion that UK companies share little of the value associated with a domestic PV industry is misplaced. The module supply chain (like most supply chains) is global, regardless of the country in which modules are finally assembled. UK companies are active in advanced cell development, provision of advanced materials such as high purity metals, advanced glazing/substrates, and in module manufacture. Considerable value also accrues in system design, architectural services and installation. We are not arguing that a UK market is essential for UK companies to thrive in the manufacturing supply chain for PV, since many UK players are exporters. However the view that ‘there is nothing in it for Britain’ because modules are made in China is inaccurate and unhelpful.

Innovative social finance schemes can help the least well off benefit from the FiT. Our research indicates that the existing tariff has the potential to permit the least well off to share in its benefits, through sharing FiT revenue as well as reducing bills. The work also provides an indication of how policy might best encourage this. Cutting tariffs to levels that make debt finance almost unworkable for most investors removes this potential, and greatly reduces scope for the least well off to benefit from the FiT. Radical tariff cut risks making PV investment the sole preserve of the ‘altruistic rich’.

The FiT is our chance to change attitudes. Social science research across several countries indicates the importance of supportive constituencies in facilitating efforts to promote renewable energy and enable innovation and change. Providing sections of the public with the opportunity to benefit directly from renewable energy policy effectively creates champions for renewables able to provide a counterweight to ‘NIMBY’ type opposition. The evidence is that the UK failed to do this, mainly because the RO and NFFO were too complex. The FiT scheme is the UK’s main means to change this legacy. The way this tariff change is being handled will make potential supporters suspicious of the government’s intentions and undermine the potential to create a larger constituency of support for the government’s plans for energy.

Investor confidence is fragile. In addition to compromising the benefits above, the proposed changes carry an additional disbenefit. The FiT ushered an industry into being just two years ago. The scheme promised stability but this is not being delivered. The UK is generally viewed as handling regulatory risk very responsibly. Whilst the changes fall short of retro-active they certainly risk stranding the inventories of companies anticipating a pipeline of work, particularly SMEs less able to renegotiate with suppliers. Rushing through changes to tariffs will greatly undermine the viability of the PV sector.

It also risks undermining confidence in the wider set of investors that the government wishes to attract into the UK energy industry. It runs completely contrary to the risk reduction goals of EMR.

In all, we agree entirely that the FiT scheme needs to be reworked to allow for more timely adjustment to tariffs and to provide for a link between volume and price. However we believe that the rapidity and depth of the tariff adjustment are inappropriate and disproportionate and may be counterproductive in the medium and longer term. We understand the pressure created by the Treasury targets, but there is a wider picture, and neither imputed tax take or the scale of the impact on bills should be exaggerated. Both are very small. Good policy and an understanding of the PV sector should be the basis for a timely and considered approach to tariff adjustment.

Yours sincerely

Dr Robert Gross

Dr Chiara Candelise

Imperial College London