

## Consultation on a review of the Feed-in Tariffs scheme

URN 15D/435

### Response on behalf of the National Energy Foundation

#### The National Energy Foundation

The National Energy Foundation is an independent, national charity, and has been at the forefront of improving the use of energy in buildings since 1988. We aim to give people, organisations and government the knowledge, support and inspiration they need to understand and improve the use of energy in buildings.

We do this through:

- Delivering practical projects – using our experience and technical expertise.
- Inspiring action – providing building owners and occupiers with the encouragement, advice and real-life examples to achieve better performing buildings.
- Advancing knowledge - supporting collaboration to drive forward the frontiers of knowledge, innovation and practice.
- Identifying and addressing market failures using evidence, analysis and ideas.

#### Our response

The UK must wean itself off fossil fuels. We believe that encouraging small-scale renewable electricity generation is important if we are to meet our international commitments to combat climate change, and incentivising renewables enables us to meet this objective faster than would otherwise be the case.

PV has proved to be the most practical and attractive small-scale renewable energy generation solution. It has provided an accessible and successful platform for small businesses, householders and community groups to engage in both local energy generation and energy efficiency projects. The UK now has around 700,000 solar panel installations. For these reasons, The Foundation's response concentrates on PV.

**The Foundation believes that:**

<b>1</b>	<p>Any incentive scheme should be:</p> <ul style="list-style-type: none"><li>• Time-limited, as this provides the opportunity to review the scheme periodically, and address any market failures.</li><li>• Cost-effective from the Government’s perspective and not be too much of a burden to taxpayers and energy bill payers generally.</li><li>• Limited by a spending cap, and that this should be achieved by limiting the number of new applications.</li><li>• Secure, certain and have an element of longevity. Constant change and the ‘flip-flopping’ of policies makes for an insecure, uncertain and overly complex landscape, with damaging consequences to what is a strategically important sector. This has already been exemplified by the recent <a href="#">demise of Southern Solar</a>. Its owner spoke out in public about how he found it impossible to keep his PV business afloat in the face of an ever-changing landscape buffeted by changes in Government policy, schemes and requirements.</li></ul>
<b>2</b>	<p>The Government’s proposed cuts in tariffs are too far and too fast, with severe implications for the industry, especially following so soon after the abandonment of the Green Deal. Small-scale solar, for example, is faced with a proposed cut of 87%.</p> <p>We are happy with the concept of degression and, as explained in 5 below, believe that the PV FiT tariff could be cut by 36% now, and around 70% in 2018 subject to a further review in late 2017, with a view to still achieving grid parity (the point at which solar becomes cost competitive with other sources of energy) by 2020. This would retain the original FiT timeframe and would provide the stability and security the sector as a whole needs but especially investors, manufacturers and installers.</p>
<b>3</b>	<p>The Government’s revised tariffs would produce quite small savings for consumers; the <a href="#">Energy Saving Trust</a> estimates that it will be only £6 per year by 2020 – a figure recently <a href="#">confirmed by Andrea Leadsom</a> to Parliament. For this reason also, we believe that there is no need to cut the tariffs so drastically.</p>
<b>4</b>	<p>The solar sector should compete with other forms of energy - without subsidy – eventually. However, the sector is not yet ready to stand on its own feet. Hitherto, the industry has been working steadily towards achieving grid parity by 2020 - but moving the goalposts in the way the Government is proposing would be very disruptive and the sector would be hit hard, allowing little time for planning and restructuring. The loss of competition is likely to lead to higher costs for consumers, with a corresponding longer period for which FITs would need to</p>

	support the market.
5	<p>Such severe cuts to the FiT will make solar PV an unattractive option, reducing the timeline on a householder's return on investment to an unreasonable length. The <a href="#">Energy Saving Trust</a> has calculated the financial effect of the Government's proposed reduced tariffs. Under the current tariff levels, installing a 4kWp solar PV system costs around £6,740 and should produce a revenue (including both FiT and bill savings) of around £13,800 (over 25 years). This provides a 10-year payback. However, if the same 4kWp system were installed under the new proposed tariff, the lifetime income from the panels (FiT and bill saving) would drop to £5,900. This means that even after 25 years, the system owner would still be £840 out of pocket.</p> <p>We have done some simple modelling based on our own slightly different assumptions on inflation, electricity prices (assuming that an RPI-x formula will apply) and suitable discount rates, using 5% as our central discount rate. Our conclusion is that an 8p/kWh feed-in tariff would produce a payback of 10 years and deliver a discounted break-even over 15 years. This seems to be not inappropriate given the risks involved and excludes any incremental maintenance costs.</p> <p>We are at a loss to understand though why small (sub-10kWp) and large arrays should have such a large reduction, yet medium sized arrays (10-50kWp) should get more than double the unit rate. Even if this reflects current market conditions (and we lack adequate exposure to medium and large installations to be sure) it seems to fly in the face of the economics of making such installations. We suggest that it might be simpler to accept that the market has historically been better at delivering small installations at scale, and to apply a flat rate across all sub-1,000kWp installations.</p> <p>We accept the rationale for lower levels for standalone installations.</p> <p>Consequently, we believe that the Government's proposals would result in a significant decline in uptake, with PV becoming a niche product and attractive to only those who:</p> <ul style="list-style-type: none"> <li>• Are either very passionate or committed to the concept.</li> <li>• Can afford the luxury of making a financial outlay with no expectation of a return over a reasonable period.</li> </ul>
6	<p>Cuts of such severity will have an adverse impact on innovation, installation companies, community projects, investment, jobs and overall confidence in the sector. Two recent studies estimate that up to <a href="#">20,000</a> or <a href="#">27,000 jobs</a> could be lost as a result of the Government's proposals. The effects have already begun to materialise, with four PV installers having closed</p>

	<p>in a matter of a few weeks – <a href="#">The Mark Group</a>, <a href="#">Climate Energy</a>, <a href="#">Southern Solar</a> and <a href="#">Zep Solar UK</a>. In addition, twenty-five small PV businesses reckon that hundreds <a href="#">more jobs will be lost</a> if the Government's proposed reductions go ahead. As noted above we think that this loss of competition will lead to at least a short-term reversal in the trend for unit costs to decline.</p>
<p><b>7</b></p>	<p>There should be more emphasis on encouraging consumers to install integrated solutions – ie: energy efficiency measures either before or at the same time as going for FiTs. This is the best way of reducing energy consumption and cutting carbon emissions, and could be achieved through the linking of incentives to a guaranteed high-energy efficiency standard of the house – for example, either a SAP rating or a higher minimum EPC rating, weighted to the building's age and possibly its built form. However, we regard the proposal to raise the threshold from EPC Band D to EPC Band C as too blunt an incentive and would suggest instead banding the minimum levels for eligibility by age:</p> <p>We suggest that:</p> <ul style="list-style-type: none"> <li>• FiTs should only be available to houses built since 1980 that have – or are being improved to reach – an EPC of Band B or better.</li> <li>• Houses built before 1980 should be expected to achieve EPC Band C, and those built before 1945, EPC Band D. Optionally, a reduced FiT at 50% of the standard rate could be applied to those houses achieving one EPC grade lower than the expected grade.</li> </ul> <p>We would generally not be in favour of making exceptions for fuel poor households (or community buildings), owing to problems in unambiguously identifying these and the need to focus on energy efficiency improvements as the primary way of reducing running costs. Bolting on PV panels to an otherwise badly performing home is unlikely to be the most cost-effective solution.</p> <p>We do not disagree with using the EPC bands for determination of eligibility, as opposed to having higher and lower rates, as at present, although recognise that this may lead to some inequitable outcomes near the borders.</p>