

Citizens Advice Response to BEIS's Call for Evidence on the Future of Small Scale Low Carbon Generation

August 2018

The logo for Citizens Advice, featuring the words "citizens advice" in white lowercase text inside a dark blue speech bubble shape.

**citizens
advice**

Introduction

The Citizens Advice service provides free, independent, confidential and impartial advice to everyone on their rights and responsibilities. It values diversity, promotes equality and challenges discrimination. On 1 April 2014, the Citizens Advice service took on the powers of Consumer Futures to become the statutory representative for energy consumers across Great Britain.

The service aims:

- To provide the advice people need for the problems they face
- To improve the policies and practices that affect people's lives.

The Citizens Advice service is a network of nearly 300 independent advice centres that provide free, impartial advice from more than 2,900 locations in England and Wales, including GPs' surgeries, hospitals, community centres, county courts and magistrates courts, and mobile services both in rural areas and to serve particular dispersed groups.

In 2017, Citizens Advice Service helped fix 163,000 energy problems through our local network and 61,000 through our Consumer Service Helpline. Our Extra Help Unit specialist case handling unit resolved 8,367 cases on behalf of consumers in vulnerable circumstances, and their Ask the Adviser telephone service handled 2,593 calls from other advice providers in need of specialist energy advice.

Since April 2012 we have also operated the Citizens Advice Consumer Service, formerly run as Consumer Direct by the Office for Fair Trading (OFT). This telephone helpline covers Great Britain and provides free, confidential and impartial advice on all consumer issues.

Executive Summary

Citizens Advice welcomes the opportunity to respond to the government's call for evidence on the future of small-scale low-carbon generation.

The government is currently proposing to close down the Feed-in Tariff scheme (FiT) and is canvassing for ideas on whether and how it should support small-scale low carbon generation in a post-FiT world. The government has expressed the view that "small-scale low-carbon electricity generation... should compete independent of direct subsidy and on its own merits on a level playing field with other electricity generation technologies through competitive, market-based solutions."¹

We broadly agree with the government's view, noting that the price of low-carbon microgeneration – especially solar PV – has come down rapidly and seems likely to continue falling apace. We believe that small-scale low carbon generation can survive without new subsidy but argue that some government support is needed to smooth that transition.

We are therefore proposing that – after closing the FiT generation tariff – **the government should extend a subsidy-free version of the FiT export tariff set at a discount to the wholesale electricity price.** This would provide a last resort market for electricity exported by small-scale low carbon generators after March 2019 and should serve to smooth the transition to market-based solutions, giving these more time to develop and allowing more of the enabling infrastructure to support those solutions (such as smart meters and half-hourly settlement) to be put in place.

We are also proposing that **to be eligible for this revised, subsidy-free export tariff, FiT generators should be required to accept a smart meter from their energy supplier.** This would end deemed export for all new FiT participants from April 2019 and help prepare them to access some of the new markets that will arise for the electricity they generate.

¹ Page 7 [Call for Evidence on the Future of Small Scale Low Carbon Generation](#) (BEIS, August 2018)

Our View

Citizens Advice welcomes the opportunity to respond to the government's call for evidence on the future of small-scale low-carbon generation.

Containing the costs of Low Carbon Levies

We share the government's concerns about containing the costs of low-carbon levies on domestic energy bills, and it is with some concern that we have watched the estimated costs of the Feed-in Tariff scheme in 2020 spiral from £440 million when the scheme was first established, to £1,600 million – nearly four times as much – today.² The FiT scheme has taken up a disproportionate share of the spending envelope established by the Levy Control Framework relative to the low-carbon capacity it has deployed, displacing other decarbonisation policies which represent better value for money. It also contributes to the forecast breach of the LCF spending limit, imposing additional unforeseen costs on consumers.

Containing the costs of low-carbon levies is especially important when these fall disproportionately on low-income and vulnerable consumers. Consumers who are on lower-incomes, who left education early, who are elderly, disabled or unemployed tend to be less engaged in the market and are therefore more likely to be on expensive standard variable tariffs.³ This effectively leaves these consumers paying a larger share of social and environmental policies relative to the volume of energy they consume. For this reason, we have previously called for the burden of low-carbon policies to be shifted, where possible, from energy bills into taxation where they can be funded more progressively (e.g. as the Renewable Heat Incentive currently is).⁴

² See page 11 [Consultation on the Feed-In Tariffs Scheme](#) (BEIS, 2018)

³ [Ofgem's 2017 State of the Market report](#) states, "Ofgem's Consumer Engagement Survey 2017 found that customers who have never switched supplier are those who can least afford higher prices (Figure 3.5). Nearly half of customers who are in semi-skilled or unskilled jobs or are unemployed (social grades D or E) have never switched, along with 40% of consumers living in households earning less than £16,000, compared to under one-third of other customers." Likewise the [CMA's Domestic Customer Survey](#) states, "We find that the groups of respondents who are least likely to have switched supplier in the last three years are those with any of the following characteristics: household incomes under £18,000 a year; living in rented social housing; without qualifications; aged 65 and over; with a disability or on the PSR"

⁴ See, e.g., our 2015 report [Generating Value](#)

In relation to the Feed-in Tariffs this cross-subsidy from the poorest consumers is even more worrisome, as the beneficiaries of FiT payments have tended to be more affluent households and businesses. While access to the scheme has been widened by the introduction of third-party financing and 'rent-a-roof schemes' which enable consumers who can't afford the high up-front costs of installation to benefit from reduced energy bills through self-supply, this benefit still only accrues to owner-occupiers and does not extend access to the private renters or social renters who also fund the scheme.

Ensuring consumers get value for money from low-carbon levies

A cross-subsidy to affluent households and businesses could still perhaps be justified where it delivered good value on decarbonising the UK economy. But the Feed-in Tariff has failed to satisfy that test. A report commissioned by DECC on the [Performance and Impact of the Feed-in Tariff Scheme](#) as part of its 2015 review found that, *"The current cost of carbon savings per £ spent will make the FIT appear prohibitively expensive."* noting that the "the cost of GHG emissions saved by the RO in 2013-14 was £105.38/tCO₂e" while the cost of GHG emissions saved by the FIT in the same year was five times as expensive at £525.79/tCO₂e.⁵ The UK could have made significantly more progress towards its EU renewable targets and its national 2050 climate target if more of the Levy Control Framework's spending envelope had been directed towards the Renewable Obligation and Contracts for Difference programmes – especially if those additional funds had been assigned to relatively mature technologies like solar and onshore wind. Alternatively, the UK could have achieved the same level of progress against its renewable targets and climate targets at significantly less consumer expense.

Closing the FiT generation tariff but extending and modifying the export tariff

In relation to the FiT it is important to distinguish between the generation tariff, which has made up the vast bulk of the subsidy, from the export tariff which has mainly served as a guaranteed route to market for electricity generated by FiT participants. While the generation tariff has helped to bring down the costs of small-scale low-carbon generation, it has not, in our view represented good value for money in terms of the volume of low-carbon power generated and the carbon emissions averted at consumers' expense.

⁵ Page 37-38 [Performance and Impact of the Feed-in Tariff Scheme](#) (DECC, 2015)

The cost of small scale low-carbon generation – especially solar PV – has come down rapidly, and seems likely to continue falling apace. For this reason, we tend to agree with the government’s view, as expressed in the Call for Evidence document, that, in time, *“small-scale low-carbon electricity generation... should compete independent of direct subsidy and on its own merits on a level playing field with other electricity generation technologies through competitive, market-based solutions.”*⁶ We believe that small-scale low carbon generation can survive without new subsidy, but argue that some government support is needed to smooth that transition.

The “competitive market-based solutions” referred to by the government do not currently exist and may not be in place by April 2019 when the government proposes to close both the generation and export tariffs. We are concerned that there remain a number of complex technical barriers – currently including metering and data access – which will hamper the emergence of these solutions. We therefore recommend that a modified form of the export tariff should be extended until market-based solutions have had more time to develop and until more of the enabling infrastructure to support those solutions (such as smart meters and half-hourly settlement) is in place.

We recognise, however, that in its current form the export tariff can sometimes also operate as a subsidy when the actual value of electricity generated by FiT participants falls below the export price, especially when electricity is exported in periods of low demand. We therefore propose that the extended export tariff should be set at a level which reflects the wholesale price of electricity adjusted down to reflect reasonable administrative costs to suppliers. The aim would be to establish, in effect, a backstop power purchasing agreement, providing a guaranteed export payment for small-scale generators sufficiently high to attract investment but sufficiently low that it does not undermine the development of a private market for the electricity that generators produce.

We note that the absence of some form of remuneration for uncontracted, exported energy would create a competitive distortion between small and large generators, as the latter will ordinarily receive payments under the electricity imbalance arrangements for ‘spilling’ power on to the system even where they have not contracted to sell it. There is an economic value to the export of small generators, and the absence of a framework that recognises this may create a problem of ‘missing money’ that discourages investment in the sector in the absence of backstop arrangements such as those we suggest above. As we move towards a more flexible energy system, consumers will be encouraged to

⁶ See, e.g., our 2015 report [Generating Value](#)

participate (for example, through vehicle to grid charging and battery storage). We think that there is a risk that the premature removal of a backstop export tariff could damage consumer confidence that they will receive fair payment from such schemes, and have a detrimental impact on their willingness to sign up to such schemes in future.

The current export tariff can also act as a subsidy insofar as the volume of electricity exported by smaller-scale FiT participants is overestimated through “deeming”, which currently assumes that 50% of the electricity generated is spilled on to the grid. To address this, we propose ending deemed export for all new FiT participants from April 2019, and requiring them to accept a smart meter from their energy supplier in order to be eligible to receive the revised export tariff we outline above. We made a similar recommendation in our response to DECC’s 2015 review of the Feed in Tariff Scheme.⁷

We share the government’s belief that *“the introduction of smart meters and half-hourly settlement could enable suppliers to offer smart tariffs, such as time of use or time of export tariffs”*, and see that a mandatory requirement on new generators to accept smart meters, and energy suppliers to provide them, can help accelerate that market. As the smart meter rollout advances and mandatory half-hourly settlement is introduced, this last resort export tariff should become a time-of-export tariff and consideration should be given to making these cost-reflective of regional network pressures where appropriate.

Ensuring remaining funds under the Control for Low Carbon Levies are spent effectively

In the spirit of the recommendations on cost-effectiveness made above, we would like to see the government prioritise spending the £557 million of new Contracts for Difference (announced before the Control for Low Carbon Levies came into force) on those technologies which deliver the maximum level of low-carbon generation per consumer (or taxpayer) pound spent. This is likely to be Pot 1 CfD technologies, such as solar PV and onshore wind, as they are likely to require clearing prices similar to, or even below, the wholesale price of energy. We therefore support the National Infrastructure Commission’s recent recommendation that the new CfDs should be spent on Pot 1 technologies, with Pot 1 expanded to include offshore wind. We note the Committee on Climate Change has made a similar recommendation in its 2018 Progress Report.⁸ We

⁷ See Q.18 [Response to DECC consultation on the Review of the Feed-in Tariff Scheme](#) (Citizens Advice, 2015)

⁸ In its [2018 Progress Report](#), the CCC states, “Currently, [CfD] auctions are only open to ‘Pot 2’ technologies such as offshore wind, island wind and new bioenergy. The auction system should

also made a similar recommendation in our 2015 report 'Generating Value', where we argued that the two CfD funding pots should be consolidated and recommended that "the Government should allocate the majority of CfD funding to the most currently cost-effective technologies."⁹

Insofar as onshore wind and solar can achieve a discounted wholesale price in CfD auctions, this would be broadly equivalent to the support for small-scale low carbon generation offered through the extended export tariff we propose here.

be extended to include lower-cost technologies, whilst increasing transparency and being used more responsively." Box 2.1 Page 66

⁹ Page 36 [Generating Value](#) (Citizens Advice, November 2015)

Questionnaire response

1. Have we accurately captured all the opportunities and benefits that small-scale low-carbon generation can provide to the UK energy system over the short, medium and longer-term? Are there any that we have missed? Please provide evidence.

BEIS appear to have captured the main benefits of small-scale low carbon electricity generation in the UK in Chapter 2 of the Call for Evidence document, e.g. that small scale generation:

- Can help to meet the UK's growing demand for clean electricity.
- Can, in combination with storage, help shift energy loads away from peak demand and help balance the electricity system
- Can reduce transmission costs by bringing generation closer to where electricity is generated
- Can help achieve fuel poverty targets through by improving EPC ratings in homes which self-supply electricity.

Additional benefits might include:

- strategic considerations that decentralised energy systems make their communities more resilient in the event of large shocks to the national energy system.
- A mature national market for microgeneration would potentially enable the UK to develop innovative products and services around these which it could sell into foreign markets.
- Democratising investment in the low-carbon transition by broadening access to individual consumers and communities rather than large businesses.
- Helping to promote the low-carbon agenda to ordinary citizens, by providing tangible examples of low-carbon generation in their local communities.

2. How can government help consumers benefit from small-scale low-carbon generation such as local communities, local authorities, and those in fuel poverty?

A first step to help consumers benefit is to ensure they are paying costs proportionate with the potential benefits they stand to receive from small-scale low-carbon generation. As we note in the preamble to our response, the costs of supporting microgeneration under the FiT scheme have not, to date, seemed proportional to the volumes of renewable electricity generated or the carbon emissions avoided. Meantime, the costs of the programme have tended to fall more heavily on disengaged customers who tend not to switch, a category in which low income and vulnerable consumers are over-represented, while the direct beneficiaries of the scheme have tended to be more affluent.

That said small-scale generators should be able to expect remuneration for the electricity they generate, and the government can help usher in and support that market by providing a last resort market for the electricity generated. Eventually this backstop price could become reflective of time-of-export when the smart meter rollout is further along and half-hourly settlement is made possible. For now, however, we are calling for an extension of the flat-rate export tariff for (smart-)metered exports – with the export tariff discounted below the wholesale price.

The government could also help by facilitating access of small-scale generators to the capacity and flexibility markets. The government is currently reviewing the capacity mechanism,¹⁰ as it does so it should make sure to give due consideration to how aggregated load (virtual power plants) can be supported and valued.

Where cost-effective, support for microgeneration could also be considered as part of measures to support fuel poor households, but further reductions in the cost of small-scale generation technologies and associated technologies (like battery storage) will probably be needed before this is the case.

Finally, the government could establish stricter planning rules concerning the EPC rating of new properties, and consider reinstating Zero Carbon Homes requirements which oblige developers to minimise the carbon footprint of new properties and/or pay for additional compensatory decarbonisation measures to take place elsewhere.

3. The introduction of enabling technology and systems such as the roll out of smart meters, and half-hourly settlement, will provide commercial incentives on energy suppliers to develop and offer

¹⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732546/CM_Review_call_for_evidence_final_4.pdf

tariffs. Will smart tariffs provide a viable route to market for small-scale low-carbon generation? If so over what time frame, and what are the possible barriers to these smart tariffs?

We expect that smart meters and half hourly settlement will, in time, encourage suppliers to develop smart tariffs, however this is expected to take some time to develop beyond the April 2019 date when the government is proposing to close both the generation and export tariff under Feed-in Tariff scheme.

We therefore encourage the government to extend the export tariff at a rate slightly below the estimated wholesale price to serve as a backstop payment until these smart tariffs can emerge (and set at a rate which does not undermine their development).

4. Do you agree with the challenges we have identified? Are there any challenges small-scale low-carbon generation presents that you think we have missed? Please provide evidence.

BEIS appears to have captured the main challenges for small-scale generation such as ensuring that:

- generators who self-supply 'behind the meter' do not unfairly externalise their residual network costs on to other consumers – especially vulnerable and less affluent consumers.
- generators are visible to DNOs/DSOs so they can manage the network effectively.
- generators are not placing excess load on the distribution networks or exacerbating system balancing issues.

5. How would you propose the small-scale low-carbon sector, suppliers, off-takers, network/system operators, and/or government can overcome the challenges presented?

Ofgem's large-scale charging review across electricity networks will recalibrate the charging framework in a dynamic, flexible market. To date, this process has involved numerous stakeholders from across the industry including suppliers, network/system operators and Ofgem. A Significant Code Review is due to be launched at the end of 2018 with changes to codes planned by 2021.

Proposals include altering the connection boundary to reduce the upfront costs for generators connecting to the system. This will remove a large financial

barrier for new generators connecting to the distribution network, however it will have the effect of socialising network upgrade costs which will be passed on to consumers. Consumers should not carry additional risk on behalf of new generators, therefore it may be appropriate to ask developers to securitise the costs of the connection upfront as is the case at transmission.

It is important for Distribution Network Operators (DNOs) to know where generation units, including large batteries and Electric Vehicle chargers, are plugged into the network. Consideration needs to be given to the registration processes for small scale generation units and obligations that could be put on installers, but consideration also needs to be given to whether DNOs have (enough) monitoring equipment in place. We can also see a need for DNOs to be able to 'switch off' Electric Vehicle charging at critical peak times, although this will need careful consideration as to the implications and rights of network access for consumers under these conditions.

6. What are possible ways to track and monitor behind the meter installations (we would appreciate specific suggestions in relation to how information can be sourced (e.g. direct from businesses and households) and the method for sourcing it (e.g. an annual survey)?

To be eligible for the last resort market we describe in question 13, generators would need to register as a FiT participant, notify their supplier (or approach a FiT licensee) and be provided with a smart meter which monitors electricity exports.

7. What are the special considerations that should be made when attempting to track different kinds of behind the meter activity?

The availability and treatment of export data is an important consideration. Ofgem has said it considers export data from domestic properties to be personal data. Ofgem is currently consulting on access to export data as part of its work on Half Hourly Settlement. As this is personal data, we think access to export data needs to be considered as carefully as access to other smart meter data for settlement purposes.

8. How do we develop our tools to model and evaluate the system (including system costs and resilience) as decentralised generation and storage develop, specifically approaches to system modelling,

data capture, forecasting demand and evaluation of value for money?

[No response]

9. Are off-takers, suppliers, and aggregators able to lead the deployment of small-scale low-carbon generation currently? If so how will this occur, over what timescales, and what are the implications for deployment levels? How would deployment be supported by the capacity and ancillary services markets as well as the emerging corporate PPA market? Please provide evidence.

We do not believe that off-takers, energy suppliers and aggregators are able to lead the deployment of low-carbon microgeneration in time for the proposed closure of the FiT generation and export tariffs in March 2019. Without intervention, we therefore expect a significant drop off in deployment around that date, which would see many installers of small scale renewable generation exit the market. We believe that a market for small scale generation can develop over time but believe that the government should facilitate the development of this market by extending the FiT fixed-rate export tariff at a reduced rate, appropriately discounted below the wholesale price, which can serve as a last resort market. In the longer term, this export tariff could become more dynamic once the appropriate infrastructure is in place (i.e. smart meter rollout largely complete, half-hourly settlement in place).

10. What would be the impact on jobs, deployment, and the supply chain, if deployment were left to market forces beyond 2019? Please support your answer with clear evidence.

We would expect to see a substantial decline in deployment and an associated decline in associated jobs if the government terminated all support for small scale generation from April 2019, for the reasons we describe above in our answer to Question 9. However, we feel these adverse impacts to be diminished if the government establishes a last resort market of the type we describe in our answer to question 13.

11. In your view, are small-scale low-carbon generators currently able to deploy independent of subsidy e.g. through the PPA market? Does this vary for differing technologies and capacities of small-scale

low-carbon generation e.g. domestic vs. commercial scale? If not, can you explain how long it will take for this market to emerge and if government intervention is required? Please provide evidence.

We believe that small-scale low-carbon generators can potentially deploy independent of subsidy, or will be able to do so in the near future; however we're also conscious that the PPA market for small and especially domestic scale generation is underdeveloped and will take some time to mature.

We therefore propose that the government should extend the export tariff to serve as a backstop PPA until the private market develops. To ensure this extended tariff does not undermine the PPA market, it should be a subsidy-free export tariff, which is offered at a discount to the wholesale electricity price and which is fully metered. We provide more detail on the potential design of this extended export tariff in our answer to Question 13.

12. What factors, including financial, affect your decisions to invest in small-scale low-carbon generation?

[No response]

13. Does government need to take regulatory intervention(s) to enable the development of competitive markets for small-scale low-carbon generation? If so, what and why? If these actions were taken, what benefits would this provide to consumers and the electricity system?

Yes. We believe the government does need to take regulatory intervention to enable the (timely) development of competitive markets for small-scale low-carbon generation.

Competitive markets for microgeneration, do not currently exist and may not be in place by April 2019 when the government proposes to close both the generation and export tariff. We therefore recommend that the export tariff should be extended until market-based solutions have had more time to develop and until more of the enabling infrastructure (such as smart meters and half-hourly settlement) are in place.

We recognise, however, that in its current form the export tariff can sometimes also operate as a subsidy when the actual value of electricity generated by FiT

participants falls below the export price, especially when electricity is exported in periods of low demand. We therefore propose that the extended export tariff should be set at a level which reflects the wholesale price of electricity adjusted down to reflect reasonable administrative costs to suppliers. The aim would be to establish, in effect, a backstop power purchasing agreement, providing a guaranteed export payment for small-scale generators sufficiently high to attract investment but sufficiently low that it does not undermine the development of a private market for the electricity that generators produce.

As this price would be designed to be below the wholesale price minus administrative costs, it should not impose a net cost on FiT licensees, and should not require the levelisation of metered export payments that the government is considering for incumbent generators. We note that the absence of some form of remuneration for uncontracted exported energy would create a competitive distortion between small and large generators, as the latter will ordinarily receive payments under the electricity imbalance arrangements for 'spilling' power on to the system even where they have not contracted to sell it. There is an economic value to the export of small generators, and the absence of a framework that recognises this may create a problem of 'missing money' that discourages investment in the sector in the absence of backstop arrangements such as those we suggest above. As we move towards a more flexible energy system, consumers will be encouraged to participate (for example, through vehicle to grid charging and battery storage). We think that there is a risk that the premature removal of a backstop export tariff could damage consumer confidence that they will receive fair payment from such schemes, and have a detrimental impact on their willingness to sign up to such schemes in future.

The current export tariff can also act as a subsidy insofar as the volume of electricity exported by smaller-scale FiT participants is overestimated through "deeming", which currently assumes that 50% of the electricity generated is spilled on to the grid. To address this, we propose ending deemed export for all new FiT participants from April 2019 and requiring them to accept a smart meter from their energy supplier in order to be eligible to receive the revised export tariff we outline above. We made a similar recommendation in our response to DECC's 2015 review of the Feed in Tariff Scheme.¹¹

As is already the case currently, FiT licensees (whether mandatory or voluntary) should be obliged to pay the export tariff when approached by a qualifying FiT applicant. Where a smart meter has not already been provided by the generator's energy supplier, the supplier should be obliged to provide the

¹¹ See Q.18 [Response to DECC consultation on the Review of the Feed-in Tariff Scheme](#) (Citizens Advice, 2015)

generator with a smart meter to measure the electricity exported to the grid. Some flexibility may be required in the arrangements for cases where consumers are not currently able to have a smart meter installed (e.g. where they need a smart meter with the alternative home area network). This would avoid a postcode lottery, in which occupants of certain areas/housing types are unable to participate in the scheme. We already have concerns that these households may be disadvantaged if they are unable to access flexibility markets.

We are also aware that there are concerns from industry about the processes for smart metering of FiT installations. This includes complexity around the creation of new export MPANs when smart meters are installed, which must be completed to enable recording of export through DCC-enrolled smart meters. There are also issues whereby access to export data through the DCC is currently restricted to the import supplier only. This could have a particularly detrimental effect on the emergence of new commercial models, which will need easy access to export data. Similar concerns have been raised in recent work for Ofgem on future supply arrangements.¹² These issues will need to be resolved in order to transition existing FiT installations to metered export, and for this export to be settled on a half hourly basis. As such this represents a significant barrier to new competitive markets for generation to emerge in future.

We share the government's belief that *"the introduction of smart meters and half-hourly settlement could enable suppliers to offer smart tariffs, such as time of use or time of export tariffs"*, and see that a mandatory requirement on new generators to accept smart meters, and FiT licensees (or the relevant supplier, where different) to supply them, can help accelerate that market. As the smart meter rollout advances and mandatory half-hourly settlement is introduced this last resort export tariff should become a time-of-export tariff and consideration should be given to making these cost-reflective of regional network pressures where appropriate.

We would expect (and recommend) that the obligation on FiT generators to use MCS accredited installers and equipment to continue with this backstop export tariff so as to protect customers from mis-selling, and sub-standard goods and services. Some sector representatives have advised us that MCS accreditation could become unattractive to responsible installers if there was no longer a FiT market which required it, which could potentially cause the certification scheme to collapse. This could also help ensure networks have good data on deployment

¹²https://www.ofgem.gov.uk/system/files/docs/2018/07/retail_research_-_report_on_supply_disintermediation.pdf (page 13)

of small scale generation, as it is the installers duty to inform the network of the installation.

Finally, for domestic consumers and microbusinesses to have confidence in commercial propositions routes to sell their generated electricity, they need access to simple and straightforward redress when things go wrong or disputes arise. This exists currently through the Ombudsman Services: Energy (OSE), which can consider FiT licensee issues as part of its terms of reference. Similarly, a simplified and effective redress process related to microgeneration installations, with access to Alternative Dispute Resolution (ADR) was a key recommendation from the Each Home Counts Review.¹³ Voluntary arrangements, such as Renewable Energy Consumer Code (RECC) have been in place for a number of years.

A market-based approach could see the entry of unlicensed commercial entities, who are not required to be members of OSE. Consumers signing contracts with these providers would face greater risks in relation to the ongoing contracts for their generation. For example, they could face lengthy and complex legal routes to redress if the company failed to pay them properly for their export, or attempted to change the terms of the contract. It could also result in an uneven playing field between licensed suppliers contracting for generation and unlicensed intermediaries carrying out the same activity, which could make it difficult for licensed suppliers to compete. It is vital that BEIS consider how consumers can maintain their current level of protection and be equally protected, regardless of which type of organisation they contract with.

14. How can we encourage and unlock private sector finance to enable market-led deployment?

We feel that a last resort market of the type we describe in our answer to Question 13 would help facilitate the transition to market-led deployment.

Obligations on developers and landlords to meet minimum EPC Energy Efficiency Rating bands could help to drive uptake of small scale low carbon generation as prices come down further and these obligations become increasingly stringent. Additional planning restrictions concerning greenhouse gas emissions, such as Zero Carbon Homes, could drive additional uptake of small-scale generation.

¹³<https://www.gov.uk/government/publications/each-home-counts-review-of-consumer-advice-protection-standards-and-enforcement-for-energy-efficiency-and-renewable-energy>

15. How would a guaranteed route to market operating at a discount to the market price impact the transition of small-scale low-carbon generation to competitive markets? Please provide evidence to support your answer.

We believe that a guaranteed route to market, such as the type we describe above in our answer to question 13, would help facilitate the transition the transition to competitive markets. By obliging FiT licensees to purchase electricity at a backstop price which is below the wholesale price of electricity the government sets a floor on the market price that can prevent a collapse of the microgeneration sector in the UK, while still making Power Purchase Agreements attractive to small-scale generators and potential offtakers.

16. What innovative solutions would be required in the PPA market to bring forward small-scale low-carbon generation? Please provide evidence to support your answer.

[No response]

17. A guaranteed route to market would require costs to be robustly controlled for consumers, as outlined in the Control for Low Carbon Levies. How could this best be achieved, without creating 'boom and bust' cycles for the small-scale low-carbon generation sector?

The cost to consumers of a guaranteed route to market could be robustly controlled by ensuring that the electricity price offered was for metered export only and was lower than the wholesale price of electricity. In doing so, this would not constitute a subsidy, and would not be restricted by the Control for Low Carbon Levies. In the longer term, once half hourly settlement is introduced, these payments can be made even more reflective of the value of the energy produced by reflecting the wholesale price at the time the generation happened.

18. What would be the general challenges (including technical challenges) of designing a guaranteed route to market that offers a time of export tariff to support the aim of developing a smart and flexible network?

The main challenge at the moment is that the technological infrastructure to support a time-of-use export tariff (namely smart metering and half-hourly

settlement) is not yet in place. Future challenges will include determining how the wholesale price is to be calculated for the purposes of determining the export tariff, and deciding how to calculate discount level to that chosen wholesale price.

19. How long would a guaranteed route to market need to run for to help the development of competitive markets?

The intention of the backstop export payment would be to soften the cliff-edge that would otherwise exist when the current guaranteed export payment ends in April 2019. Over time, as the scale of the small scale generation market grows and suppliers start developing and delivering commercial products that reward consumers for their export, we would hope that the backstop would steadily become redundant as consumers access those better value alternatives. But it is too early to make a confident prediction on how long this may take. It may be appropriate for BEIS to schedule a review after these arrangements have been in place for 18-24 months to understand how the market is evolving and whether the backstop needs to be continued, tweaked, or discontinued.

If the electricity price offered by the last resort market was sufficiently far below the (dynamic) wholesale price of electricity, it could potentially run indefinitely as a backstop to the competitive markets.

20. How could future regulations or other interventions be designed in order to capture the benefits of storage combined with small-scale low-carbon generation? If specific technical requirements are needed, please specify those as well.

A time of export tariff (with half hourly settlement) would capture the benefits of combining storage with small-scale generation. The current export tariff, and our proposed extension to that tariff, could not achieve this.¹⁴

Ofgem's Targeted Charging Review and proposed review of Access and Forward looking charges are important enablers to realising the benefits from these technologies.

¹⁴<https://www.ofgem.gov.uk/electricity/transmission-networks/charging/targeted-charging-review-significant-code-review>

21. If implemented what effect would the actions you outline have on the small-scale low-carbon generation sector and the benefits this sector brings to UK consumers?

We believe that the measures we have outlined would help ensure that small-scale generators were receiving some minimum compensation for any excess electricity they exported to the grid, rather than that value being captured by energy suppliers. This subsidy-free export tariff would help to soften the 'cliff-edge' the sector currently faces when the current subsidy regime under the generation tariff and the current export tariff comes to an end in April 2019. By keeping this backstop payment low, PPAs should still be attractive, and innovative markets should still be able to develop in a way that the former subsidy regime stymied. By requiring registration, and smart metering of exports, it would also help DNOs/DSOs to keep track of where small scale generation was being deployed, helping them to manage networks effectively. These measures would also help regulators to recognise that domestic and microbusiness generators need additional protection to participate confidently in a market for their generation, and ensure that simple and effective redress is available, including through Alternative Dispute Resolution.

ENDS