

REAA Response to BEIS Consultation on the Smart Export Guarantee (SEG)

Introduction & Context

The design of a replacement for the FIT scheme to support the smaller scale renewables sector is vital for decarbonising the UK energy sector and transitioning to a smarter, more flexible energy system, it comes, though, with a set of inherent, complex choices to be made.

We cannot stress enough that the grid charging reviews, as part of the TCR (Targeted Charging Review) and Access and Forward looking charges processes, are absolutely critical to the development of a successful industry and will loom large over the SEG so it is vital that these support, flexible, low carbon generation. The results of the grid charging review must not become a barrier to market, for if they do, the SEG will become purely academic in terms of its effectiveness.

The price per kWh and length of SEG contracts is critical to the market, and there are two main views on this and a multitude of factors to be considered - from the concerns of suppliers about workable solutions and not impeding the development of an open and innovative market, to developer, financier and generator requirements for index linked prices and fixed length terms as a minimum, to enable project financing and simplify consumer understanding of the policy. While the REAA is supportive of the innovative and progressive work of the challenger suppliers to open up the market and innovate, it is the majority REAA view that without a suitable minimum price/linked index and contract length then SEG tariffs will not deliver a route to market and are no better for generators, financiers and developers than trying to negotiate a PPA contract, which any project can already do and are not sufficient to deliver considerable additional capacity.

Given the pace and scope of change in the market, there could be scope for form of derogations for supply companies if they can be proven to be offering innovative, flexible generator offerings (such as financing and packaged '(renewable) energy as a service') that are in effect commensurate to or better than, the SEG minimum terms we are proposing to support for generator certainty. This could be determined by Ofgem on a transparent basis but such derogated offerings would need to deliver the same or better value for prosumers and generators, enabling new capacity to be delivered. As outlined, nothing in our proposals should prevent suppliers innovating and delivering new options which go further than the minimum standards as we know that challenger suppliers in particular have huge value to offer in this space and future market development.

REAA Priorities for a Smart Export Guarantee:

- The price to be paid for power in the SEG tariffs is paramount for all parties, especially in the light of ever changing grid charging frameworks, for example through the TCR and Access and Forward looking charges review, which must be reformed in such a way as to enable rather than block renewable and innovative solutions. The choice is as follows:
 - On the one hand the Government must maintain momentum in terms of renewable power generation as our overall 2020 renewable energy target remains at risk (which can be met by increased renewable power capacity), and safeguard the thousands of jobs in the small scale industry - an RECC/REA Survey last year showed there could be 6,000 jobs at risk. The drivers of this and requirements for leveraging project financing while not adding to consumer bills call for an index-linked tariff of fixed duration.
 - On the other hand, supply companies may simply put up energy prices if faced with a scheme that does not reflect their costs, defeating the policy aim of a mechanism designed to have no net-impact on energy bills. Innovative challenger supplier brands are ready to offer competitive rates and their capacity for innovation to benefit this nascent prosumer market space is considerable, which must be unlocked rather than stifled (albeit not all suppliers will take a similar approach).
- **On balance, after considering all of these factors, the majority view of the REA is for some minimum requirements regarding price and term**
 - The SEG must tackle the concern front and centre regarding enabling new renewable generation capacity from the outset and this is most effectively done by offering terms that projects can use to secure project financing. This requires:
 - mandating as a minimum index-linked SEG tariffs – which should be linked to a percentage of the System Imbalance Price, as reflective of the actual value of power to the market at any one time, averaged over a month and paid quarterly on exported power; and
 - a fixed term of 10 years (with the scope for suppliers to offer longer terms).
 - The above would become minimum requirements but would in no way prevent suppliers from offering better terms than these and innovating in the marketplace, but at least one of each eligible supplier's SEG tariff must offer these terms as a minimum.
 - A league table of the SEG tariffs on offer could also be published by a 'neutral' organisation on a regular basis, to provide some form of added competitive tension in the provision of the rates and improve market awareness.
- Fixed term contracts are necessary for generators, developers and financiers to enable project financing of new projects, of a minimum of 7 to 10 years, again with suppliers free to offer longer term tariffs should they wish. This is essential both for consumer clarity at the small scale, and providing a basis for investment at the 50 kW to 5MW scale. Payments should be made on a

quarterly basis rather than monthly, to minimise supplier and generator administration and costs. Again, our finance, developer and generator members inform us that this is essential for financing new projects;

- SEG-eligible projects should also be able to choose between the SEG and CfD mechanisms at a TIC between 50kW and 5MW. To be clear, we are calling for this in terms of such projects accessing the existing CfD budget, we are *not calling for added resources from the Control on Low Carbon Levies*. This would only require a change to the CfD eligibility regulations. An added advantage to the CfD scheme would be an increase in competitive tension in the CfD auction mechanism as more capacity enters each allocation round;
- Allow for the replacement of broken equipment for unavoidable reasons, (ie without losing their accreditation as currently is the case in the FiT scheme);
- We agree with the proposal to also mandate suppliers with 150,000 customers and above to offer a SEG tariff and those with fewer customers able to offer voluntary tariffs;
- The SEG must encourage flexibility in the energy system. Standalone as well as co-located energy storage projects should be eligible for a SEG tariff, in addition to Vehicle to Grid (V2G) units. This could be achieved by altering the list of SEG-eligible technologies;
- We strongly oppose any moves which would open the scheme to peaker plants or diesel gensets gaining payments;
- There is also scope for other renewable technologies to be included in the SEG, ie CHP plants from bio sources such as waste bioliquids, which provide an important contribution to the Circular Economy. Again, any new technology must be renewable or 'clean tech' in nature and not be an opening to fossil fuel generation;
- We support the proposals on metering for energy storage regarding treatment of power generated on-site and from the grid, this is to enable the transition to a flexible energy system, which will enable more renewable power;
- There is a strong case for a separate support mechanism for the community renewable energy sector, who face unique constraints and challenges in developing projects;
- There should be a choice for existing FiT projects to transfer from the FiT export rate to a SEG tariff if they would like to. This could be a one-way 'gate' allowing one switch only. This would also have the benefit of providing an informal indicator of the market's view of the SEG tariffs on offer.

The very onerous mechanism to access this payment must also be made more efficient by allowing self-declaration (like the FIT scheme), but with meter numbers registered with Ofgem so they can be checked.

Further detail on the REA Proposals – Price and Term Length

Mandate suppliers offer prices at least pegged to a real-time value of power as a minimum (ie above 'less than £0')

- Many suppliers are introducing considerable innovations and driving forward the market and this innovation is essential and should not be impeded. However, in order to provide a backstop to support generators, eligible suppliers should be required to offer SEG projects a minimum real-time values-linked price (which they could go further than and innovate beyond) that is a fair exchange for the power they are receiving but without added cost to energy bills - the current wording would in theory allow uncommitted suppliers to offer a tariff of, for example, 0.001p/kWh fixed for a month and meet their regulatory obligations, even if the actual value of power procured was far above this, and this would not support the additional generation that the country requires.
- While innovative, challenger brands are likely to offer competitive rates, other suppliers might, due to competitive pressures, feel they could not offer much more than a nominal rate (as in the above example), to avoid losing competitive ground (though we are not suggesting every supplier would). This race to the bottom is clearly not what was intended, nor beneficial to the market or electricity prices in the longer terms as near-zero marginal cost renewables will reduce power prices in the long run.
- Alongside this, we understand BEIS concerns regarding any support accurately reflecting the actual value of power to the system at any one time and support this aim. To address this, the SEG minimum price should be linked to a suitable time-variable index and every supplier obliged to offer not less than that rate (but able to go above this) – thus the rate would reflect a fair value for power at any one time, while being fair to the generation projects.
- Our members see the System Imbalance Price as the best index to use for this purpose as it varies by time and day in line with actual volumes of supply and demand and has come to represent what is seen as a 'fair' price by generation projects, more or less in line with the current FIT export tariff rates but well below retail prices (c 3.4p/kWh) therefore allowing a supply company an appropriate margin. The actual minimum price could be set to 90% of the System Imbalance Price, to allow for some supplier margin.
- If this was seen to be an inaccurate index, this could be re-examined under the regular review of the SEG committed to by Ofgem under the proposals. It is important that whatever backstop minimum price is agreed is also time variable, to reflect the value to the system of the power at any one time and incentivise flexible solutions.
- The REA would be happy to provide anonymised direct member feedback showing the importance of having a backstop price/index in the new SEG contracts.

Mandate suppliers offer fixed term SEG Contracts of at least 10 years

- At present, part of what makes the FiT programme attractive to consumers, generators, developers and investors is the fixed term duration of contracts. This allows non-balance sheet funded projects to secure project funding and consumers and small businesses to understand the mechanism. **Very few lenders are prepared to invest in a project with no guaranteed length of contract and no guaranteed minimum price, as revenue forecasting becomes next to impossible.** While some supply companies may offer fixed term SEG tariffs, a basic minimum term would ensure all had to do so - again this would not prevent suppliers going further and innovating, but would provide a guaranteed minimum.
- Similarly, community energy schemes will be unable to secure local investors without such basic backstops.
- Therefore suppliers should be mandated to offer SEG contracts of at least 10 years to overcome this problem.
- Providing the value of the tariff is set at the right level, and this does not add to consumer bills, as the policy intends, there should be no problem with such a change for Government or supply companies, which would benefit from not having to renegotiate such contracts on a frequent basis. 10 years is 10 years shorter than current FiT contracts and 5 years shorter than the more recent CfD (and new-build Capacity Market) contract lengths.
- The REA would be happy to provide anonymised member feedback showing the importance to consumers, developers, generators and financiers of requiring a fixed term for the new SEG contracts.

Allow projects between 50kW and 5MW the choice of applying for CfDs or a SEG

- AD, Hydro, Onshore wind and Solar PV under 5MW in capacity are currently excluded from the Contracts for Difference (CfD) scheme due to their eligibility for Feed-in Tariffs at this level. This was implemented due to concerns over double-subsidies and 'over-rewarding' projects. These clearly no longer apply after the closure of the FiT scheme to new capacity as the SEG is not a subsidy but a payment for power produced (as BEIS make clear).
- As the SEG purely covers a payment for power sent to the grid, once the FiT closes to new entrants it therefore follows that such projects (ie SEG eligible technologies below 5MW, and we would limit this to 50kW as a minimum), should by default become eligible for CfD support, and they should be able to choose between SEG and CfD schemes.
- To be clear, we are not calling for extra funds for the CfD scheme at this stage to enable this, as there is already a CfD budget allocated until 2021 – we are only calling for such projects to be able to access these funds.
- Industry would appreciate confirmation of this and we would be happy to discuss further. An added advantage to the CfD scheme would be an increase in competitive tension in the CfD auction mechanism as more

capacity enters each allocation round, therefore potentially pushing down clearing prices further and better utilising existing budgets.

Avoid the dangers of mis-selling

- Our subsidiary organisation is RECC - the scheme to prevent mis-selling of renewables and smart technologies, with over 1,700 members – as such **we welcome the proposal that some form of MCS is a requirement of future SEG support, but are seeking urgent clarity on the role for consumer protection bodies.**
- **RECC (or equivalent) membership must be a requirement of installers of new SEG projects at the microgeneration (<50kWp) level, mirroring the MCS requirements.**

Allow sites to make unavoidable equipment replacements without requiring re-accreditation

At present under the FiT scheme, plants which must replace their equipment or engines after the current unit has worn out or has broken down (through normal running and due to no fault of the operator) face having to re-accredit when installing a replacement piece of equipment. These restrictions on generating equipment/engine replacement under FITs are very concerning for all the technologies eligible for FITs and the future SEG- in particular the AD industry. The REA have also been contacted regarding this issue at solar PV sites, and can provide more information on this. The REA has been working on this issue with BEIS for some time and further consultations are expected on the issue in the FiT scheme.

We believe a solution to this issue should be built into the future SEG scheme at the outset, to avoid the same problems reoccurring as in the FiT scheme.

It is worth noting that this has also been an issue in the RHI scheme and has recently been satisfactorily resolved. From 1st October 2018 plants that generate heat under the RHI are able to be replaced, so long as it is a 'like-for-like' replacement, without losing RHI accreditation. Since the equipment used to generate heat at an AD plant under the RHI is part of the same CHP system, these AD projects wouldn't be able to replace such equipment either. A similarly common-sense approach in the FiT scheme would be very welcome, as well as logical, as many sites will be generating under both the RHI and SEG schemes. Newer engines tend to have higher efficiencies as improvements have been made over time. In addition, according to the engine manufacturers, less efficient engines will emit more emissions, in particular carbon dioxide, an air pollutant and major contributor to climate change. So this issue should also be a concern for Defra, given the current political focus on air quality and climate change mitigation.

Having raised this issue with BEIS since 2015, we have been very disappointed to see the slow progress on addressing the issue.

If this is not addressed as a matter of urgency, the impact on the AD and other sectors, will be significant. We have spoken with the two main manufacturers and distributors of Biogas CHP engines in the UK and they have provided very useful insight, summarised below:

- Generating equipment needs to be replaced at least once over the lifetime of the tariff. If faults or breakdowns occur, this may be more often.

- Engine life spans are 15 years and while an engine can be overhauled a second time for longing this, it is important to be mindful that the balance of plant (switchgear, controls, contactors etc.) will have an increased failure rate due to their age.
- In situation where engines are faulty or break down and were supplied by companies that are no longer in business, AD operators are increasingly requesting the manufacturers to replace parts of the engine, knowing that replacing the whole generating set would compromise their accreditation. However the manufactures are very reluctant to replace parts of engines (e.g. the engine part, but not the alternator) as it is challenging to fit an engine of a certain make with an alternator of another make. In most situations the most appropriate solution would be to replace the whole generating equipment. As highlighted earlier in this response, this means that an increasing number of AD plants may be re running their engines half of the time, and flaring gas off. Less efficient engines also result in higher emissions to air. *'We are a distributor of Jenbacher and as such we are not able to offer any service on other engine manufacturers which is also the case for other distributors, they cannot service Jenbachers'*.
- Most importantly from BEIS perspective, according to these manufacturers, a new engine may be marginally higher in efficiency (e.g. 1 – 2% more efficient), as engines are generally increasing in electrical efficiency as the manufacturers develop them.
- **Any concerns regarding such equipment replacement meaning extra generation to be paid for by energy users are irrelevant in the SEG mechanism, as the payments made are for the generation output, rather than a subsidy to be accounted for from the public purse.**

Conclusion

Getting the SEG proposals right is vitally important for the future of the small scale renewables sector and the replacement of the FiT scheme requires a fair minimum index (90% of the System Imbalance Price) for the power procured, and fixed term contracts (of at least 10 years) to enable project financing of new projects, otherwise they risk becoming almost worthless to the development of new capacity in light of such projects' inability to secure project financing without such backstops. Without such backstops having the SEG in place is no different to negotiating a PPA in the market as any generator can already do and will be insufficient to deliver new capacity. This policy is ultimately a transition to a world in which Government is not involved at all, but that is not yet the case and an interim 'bridge' to get to that point is urgently required. Our members majority view is that linking to 90% of the System Imbalance Price and a minimum contract term of at least ten years (with suppliers free to innovate and offer better terms than these) would deliver this transition.

SEG-eligible projects should also be able to choose between the SEG and CfDs between 50kW and 5MW - currently such projects are ineligible for the CfD auction due to previous eligibility for the FiT scheme – but as the SEG only covers the exported electricity it is different to the FiT and therefore projects should be able to choose between the two. This would only require a change to the CfD eligibility regulations and we are not calling for any extra subsidy for the CfD scheme, merely such projects being able to access the existing funds - we are not calling for extra funding for the CfD to pay for this. An added advantage to the CfD scheme would be an increase in competitive tension in the CfD auction mechanism as more

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capacity enters each allocation round, therefore potentially pushing down clearing prices further and better utilising existing budgets.

It is also important to allow for the replacement of equipment for unavoidable reasons at the outset, to avoid the problems in the FiT scheme. It is essential to deliver a scheme which will enable new capacity to be built and encourage flexibility in the system - Annex A outlines the impact of an inadequate replacement for the scheme, indicating around 6,000 job losses could be at stake.

REA, March 2019

Please note: This consultation response is the majority view of the REA members but does not represent the views of all members