Energy UK Response to the BEIS Consultation on the Smart Export Guarantee

5th March

About Energy UK

Energy UK is the trade association for the GB energy industry with a membership of over 100 suppliers, generators, and stakeholders with a business interest in the production and supply of electricity and gas for domestic and business consumers. Our membership covers over 90% of both UK power generation and the energy supply market for UK homes. We represent the diverse nature of the UK's energy industry – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership.

Our members turn renewable energy sources as well as nuclear, gas and coal into electricity for over 27 million homes and every business in Britain. Over 680,000 people in every corner of the country rely on the sector for their jobs, with many of our members providing long-term employment as well as quality apprenticeships and training for those starting their careers. The energy industry invests over £12.5bn annually, delivers around £84bn in economic activity through its supply chain and interaction with other sectors, and pays £6bn in tax to HMT.

Executive Summary

This consultation comes at a transformative time for the energy sector. 2018 was another record breaking year in the power sector with the low carbon share of generation rising to an all-time high of 53%, technical strides being made in the electrification of transport and the dramatic cost reduction of low-carbon technologies. The Feed-In Tariffs (FIT) scheme is one of a host of Government policies that have been responsible for initiating the transition to a low-carbon grid through incentivising the uptake of small-scale low-carbon generation and driving down the cost of these technologies. It is important that the transition from the FIT scheme to the Smart Export Guarantee (SEG) is recognised as a transition from a subsidy-based scheme to a market-based scheme. It should also be acknowledged that for larger generators there already exists a competitive export market through Power Purchase Agreements (PPAs).

We support the timely implementation of a FIT alternative

Energy UK supports the transition to a smarter, more flexible, low-carbon energy system and accepts the move from Government to create a route to market for small-scale low-carbon electricity through the SEG. In our response to the 2018 Government consultation on the FIT scheme we warned that a hiatus between the closure of the FIT and introduction of a replacement would remove any framework for reimbursement and incentives, potentially leading to significant associated impacts on deployment and supply chains. Therefore we support the timely implementation of an alternative to the FIT.

We warn of the unintended consequences of a prescriptive SEG

The design of the SEG will need to avoid mandating or restricting suppliers in such a way that they incur costs and are forced to implement systems that will later be redundant once decisions on programmes like market-wide half-hourly settlement have been made. We are wary of the potential unintended consequences that the SEG could bring forward. There is a risk that if suppliers are mandated to offer prices above the market price, they would make a loss, which would need to be recovered elsewhere. Such cross-subsidisation should not be imposed, implicitly or explicitly, without allowances elsewhere, for example in the price cap on default tariffs. If there is cross-subsidisation, there are also likely to be distributional consequences in favour of those who are on average financially better-off, driving socially regressive outcomes.
We believe the SEG should be delivered through a simple licence condition that applies to all suppliers.

We are supportive of Government’s view that small-scale low-carbon electricity generation should deploy in a system where competitive, market-based solutions are brought forward. We strongly believe the SEG should avoid placing excessive administrative burden on suppliers and that a simple obligation to offer export terms would allow room for the market to develop options promoting innovation and competition. This could be achieved through the insertion of a licence condition that requires all suppliers to ‘offer when requested export terms to all customers where that customer is smart enabled’. The SEG should not seek to mandate any further requirements on suppliers.

If the SEG is delivered in a simple manner with as minimal administrative burden as is required then suppliers should be able to deliver export offerings in to the market fairly quickly with little risk of regret spend. This approach would also support our view that all suppliers should be mandated to offer terms, in line with the no free riding principle[1].

Should you have any questions regarding this consultation response then please do not hesitate to get in touch via the details below.

I can confirm that this response may be published on the Department’s website.

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Response to Questions

1. Will the SEG as described provide a suitable and practical route to market for exported electricity?

The success of the SEG in providing a suitable and practical route to market for exported electricity will depend on the final design of the policy. In principle Energy UK accepts the proposed approach for the SEG and believe it should be introduced without creating any additional administrative burden to suppliers. The conditions of the SEG should not be prescriptive and should allow flexibility and innovation in the market to grow. The underlying principle should be to ensure that there are terms available to generators in the market who have a smart meter, without any additional rules on suppliers, such as having to raise an MPAN or settle energy, except where they wish to/or are already required do so through the BSC.

2. Will the SEG support innovation towards the ‘smart’ energy transition and if so, how?

In principle, yes the scheme will support the innovation towards the ‘smart’ energy transition, however, the regulatory framework and the smart equipment has to be correct to do so. The network must provide the necessary infrastructure to facilitate the smart energy transition. If the infrastructure is in place and an effective market is created, then the SEG will support greater decentralised generation and consumer engagement.

In the longer term, with the implementation of the Market-wide Half-Hourly Settlement (MHHS) and the installation of smart meters, the ‘smart’ energy market will be enabled. In the meantime the SEG will encourage the development of export products at a small-scale domestic level (as there is already a competitive and dynamic market over the 1MW level).

3. Given the options set out above in Table 1, what type of SEG tariff would be appropriate at this point? Please provide justification for your answer.

If the intention of the policy is to place a requirement on suppliers to offer a tariff for exported electricity, it is our belief that any tariff calculation should be at the discretion of the supplier. The setting of the tariffs should not be prescribed by regulation as they should respond to the market and be influenced

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[1] Bristol Energy agree with the position in the consultation that there should be a threshold of 250,000 on the supplier obligation.
by this. This will ensure any SEG tariffs and structure requirements are kept simple, efficient and cost effective. Tariffs will develop that are appropriate to the prevailing market conditions. It is important that the transition from the FIT scheme to the Smart Export Guarantee (SEG) is recognised as a transition from a subsidy-based scheme to a market-based scheme.

4. Do you agree that Government should not take a role in price setting, e.g. through a fixed discount against a ‘wholesale price’, as this would detract from the objective of the SEG, for example by reducing location and time specific price signals?

We agree that Government should not take a role in price setting. If the SEG is to be successful in delivering a competitive market for small-scale low-carbon generation it should be entirely market led. We stress the importance that the transition from the FIT scheme to the Smart Export Guarantee (SEG) is recognised as a transition from a subsidy-based scheme to a market-based scheme.

5. Should the SEG have a fixed end date or not? Please provide justification for your answer.

If the SEG is successful in creating a competitive market for small-scale low-carbon generation, there is no need to specify a fixed end date at the outset. We do, however, believe that it is necessary to have a fixed review date to assess whether the SEG is still required and if it is delivering effectively and efficiently for generators and suppliers alike. A review will also provide an opportunity to identify improvements and changes required if the SEG is continued.

6. Will the SEG allow the market to innovate and bring forward additional routes to market, and create a competitive market to provide generators with the best tariffs?

In principle, yes the SEG should support the market to innovate and bring forward additional routes to market, and create a competitive market for generators. However, the infrastructure needs to be in place to allow the market to innovate. The long-term success of the SEG depends heavily on Smart and DCC readiness.

7. We are aware that whilst segments of the small-scale sector (e.g. commercial rooftop PV) are able to deploy without direct support, others, particularly some of the less mature technologies and more complex community developed schemes are still often marginal at best in delivering commercial returns. Do the proposed arrangements create additional challenges for certain segments, e.g. through reducing access to finance, and how can these be effectively mitigated through the SEG?

It is likely that the proposed arrangements will create additional challenges for certain segments, however, it should not be in the role of the SEG to mitigate these. If the Government is keen to support certain technologies, then specific arrangements should be put in place to do this.

8. How long will it take for suppliers to put the systems in place to administer the SEG, and what would the associated administrative costs of the SEG be? Please provide justification for your answer.

For more information on supplier timescales and costs for administering the SEG, please refer to our members’ submissions.

However, it should be ensured that no additional responsibilities or eligibility requirements are placed on suppliers to cause further cost and administrative burdens. The SEG should apply a simple design approach and no prescriptive requirements should be applied, to ensure practical application and effective implementation. The more prescription and compliance that placed on suppliers, the longer it will be for systems and resources to be in place. It is sufficient to require that a supplier (all suppliers) offer export terms to customers with a smart meter. Therefore, there should be not additional rules around how this is done or how suppliers implement this, for example requiring a MPAN to be raised or any consideration of settlement.

**In the longer term the key constraint on the delivery of the SEG will be Smart and DCC readiness. Our paper outlining some of the key challenges currently facing the FIT programme in this area has been submitted as an attachment to this response.**
9. We would welcome views on whether the SEG can and should be linked to any similar mandatory communications requirements.

We see no reason why the SEG should be linked to any other communications requirements. Nor do we believe that BEIS has made the case for any

10. Do you agree that appropriate guidance on the administrative arrangements that suppliers will need to consider in order to set a SEG tariff should be issued? Please provide your reasoning.

We disagree that there should be guidance issued on the administrative arrangements that suppliers will need to consider in order to set a SEG tariff. The reason being that the tariff should be so simple that no guidance is needed. It is also worth noting that there is no guidance issued on suppliers’ Duty to Supply.

11. What factors would suppliers consider when setting a SEG tariff, and what additional costs do suppliers expect might be incurred as a result of providing a SEG tariff?

Please refer to our members’ submissions for detail on this question.

12. Do you agree that an annual market condition report should be published for the SEG? Please provide your reasoning.

The publication of an annual report should be done by Ofgem in the same way they do for other markets via the State of the Market report.

13. Do you agree with our assessment of the impacts of the SEG on certain consumer groups such as those in or at risk of fuel poverty or energy intensive industries?

We agree that the SEG should not have a net negative impact on consumer bills and thus that there is no need to introduce support measures for consumers classified as being in fuel poverty to account for the impact of the SEG. However, this is only if this is implemented in its simplest form with no mandated prices and low administrative costs. If complexities are included, a more detailed Impact Assessment will be required to assess such issues.

14. Do you agree with the proposed metering requirements for the SEG? If you disagree with the proposal, please explain why and provide reasoning.

No. Suppliers should not be required to raise an MPAN. Suppliers should be able to decide how to ensure they meter as per wider rules to maximise the opportunities for innovation. However, it is welcome that this will only be available to those with a smart meter. The rollout of smart meters is crucial to making sure that the SEG operates effectively in the long term. We believe that we should avoid installing export only meters at a domestic and small business level as this is counterproductive to the smart rollout.

15. Are non-SMETS stand-alone export meters, with an ability to record half-hourly export, currently available on the market? Please provide information on the costs for stand-alone export meters, such as capital and installation costs.

We strongly believe that the settlement of SEG payments, should suppliers decide to do so, should be facilitated through export reads from SMETS-compliant smart meters. Given the national commitment to the smart meter rollout it seems counterproductive to install a non-SMETS export meter where a smart meter could be installed. Meter manufacturers will be able to provide further detail on the availability of non-SMETS stand-alone meters with an ability to record Half-Hourly export, if required.

16. Do you agree that installations entering the SEG should not be required to meet a certain energy efficiency standard? If you disagree with the proposal, please explain why and provide evidence.
Introducing a SEG eligibility requirement based around a particular EPC standard will have a limited impact on national energy efficiency standards and should be avoided. However, Energy UK firmly holds the position that the most efficient way to keep costs down in the long term is through the efficient use of energy and we believe that a Government funded national energy efficiency programme is the route to driving up energy efficiency standards.

There may be instances where a supplier could decide to incentivise uptake of their energy efficiency measures by offering EPC related terms to generators, however, any such terms should be offered at the suppliers’ discretion as part of a competitive market.

Regarding technology specific energy efficiency standards, it is envisaged that combustion based low carbon generation units would likely fall under the Medium Combustion Plant Directive, Specified Generator controls, Clean Air Act or even the Industrial Emission Directive (depending on the activity). Some of these do, or may in the future, place requirements on energy efficiency for power generation. Therefore, in these instances, there may be no need for implementing further efficiency measures. However, it is appropriate that requirements should be common depending on where generation is connected and who its “operator” is. This is required to ensure a level playing field for all generation types.

17. Do you agree it is the correct approach to allow applicants eligible for further local or regional support to also be potential SEG applicants?

We see no reason to restrict applicants eligible for further local or regional support from applying for the SEG.

18. Where storage is co-located with an eligible generation technology, should SEG payments be made on ‘brown’ electricity exported from storage or limited to exported ‘green’ electricity? Please explain your reasoning.

The answer to this question depends on the policy intent from BEIS underlying the SEG. We recognise that payment on ‘brown’ electricity will incentivise generators to install batteries and improve system flexibility, however, if the intention of the SEG is purely to promote small-scale renewable growth, payments should be solely on ‘green’ electricity.

A key consideration is that the operators of generation or storage assets that are greater than 1 MW capacity are likely to have the commercial capability to manage the import and export of electricity from their sites, in response to real time electricity market prices. Consequently, these operators could take the opportunity to arbitrage, by importing brown electricity at times of low market prices and exporting the power through the SEG at a the higher tariff for ‘green’ electricity at a different time. Operators of assets less than 1 MW capacity are less likely to have the capability to set up import and export arrangements and the volume of electricity will be relatively low at this scale, so for smaller generation arbitrage is less of a concern. The SEG should not be a vehicle for arbitraging brown power, so to ensure that this does not occur a 1MW threshold should be introduced, above which brown electricity cannot be exported via the SEG.

Suppliers should not be responsible for the verification of the system set up to ensure that brown electricity cannot be exported via the SEG. Verification should be the responsibility of the generators themselves, with Ofgem checking on sampled basis.

Energy UK advises that for payments on ‘brown’ electricity the metering arrangements should be set up so as to be able to distinguish between ‘green’ and ‘brown’ power exported to the grid in order that suppliers are able to declare the source of their electricity in line with current Fuel Mix Disclosure obligations.

19. Do you agree with the metering arrangements when co-locating storage with generation technologies eligible for the SEG? If you disagree with the proposal, please explain why and provide reasoning.

We agree that there is a risk that the practical implications of limiting SEG payments to green electricity might be disproportionate at the domestic scale given the complex metering arrangements and potential
restrictions on the functionality of the storage unit. However, as noted in Q18 it is worth considering that suppliers will need to be able to distinguish between the sources of their electricity if they are to comply with Fuel Mix Disclosure.

20. If SEG payments were to be made on ‘brown’ electricity exported from a co-located storage device, are there any opportunities for gaming? If so, please provide details.

There is potential for gaming if payments are made on brown electricity if the generator is able to procure the electricity at a lower price that they are able to sell it back to the system. Whilst the opportunity for this is small due to the presence of system costs on an import price, there is still an opportunity for generators with innovative solutions.

We believe owners of storage assets could “cycle” electricity from the grid at times of negative pricing and export at times of positive prices. This activity is more likely to take place in the non-domestic sector. Such exporting activity should not be considered as illegitimate in its own right – it represents value through delivering system flexibility, and is consistent with the wider objectives of the Government’s Smart System and Flexibility Plan (SSFP). We do, however, consider it inappropriate for there to be an obligation on suppliers to offer an export guarantee for storage based exports, particularly where such a guarantee is not cost reflective and represents an explicit subsidy for higher-carbon generation. Hence we propose that for sites >1MW the metering needs to be able to distinguish between export from an eligible technology and that from a non-eligible technology.

21. Should the SEG make provision for installations where an eligible technology is co-located with a non-eligible technology and/or storage? If so, what would the necessary metering arrangements need to be?

The need for provision for installations where an eligible technology is co-located with a non-eligible technology and/or storage depends on the scale of the installation. We propose that for sites >1MW the metering needs to be able to distinguish between export from an eligible technology and that from a non-eligible technology.

22. Do you agree or disagree that AD installations newly accredited under any future arrangements to support small-scale low-carbon generation should be subject to the same sustainability criteria and feedstock requirements as AD installations under the FIT? Please provide your reasoning.

The policy intent behind the SEG is to create a route to market for small-scale low-carbon electricity. Therefore, we agree that AD installations applying for the SEG should be subject to the same sustainability and feedstock requirements as AD installations under the FIT to ensure that carbon emissions are reduced and the biomass is sourced sustainably. Suppliers should not, however, be required to carry out verification of the accreditation requirements.

23. Do you agree that the current FIT reporting requirements and administration process, including the arrangements for payment adjustment for ineligible electricity, would be appropriate and practical for the SEG? Please provide evidence for your answer.

No, if the purpose of the SEG should be to simply require a supplier to offer export terms, there should be minimal reporting and administration processes. For the SEG to be successful the administration burden on suppliers should be minimised so that all suppliers are able to administer the scheme and the impact on consumer bills is minimised.

24. Do you agree with the proposed obligations and functions on each of the other parties involved in the SEG – BEIS, Ofgem, and suppliers – including the enforcement action required by suppliers and Ofgem? If not, why?

We do not agree with the proposals to require suppliers to assess generators for eligibility, beyond those situations where they have concerns that the generator is breaching the terms of the contract with the supplier. Ofgem or an independent third party should take on the role of assessing eligibility against MCS certificates and auditing of this process, with a remit to inform the supplier where eligibility
has been breached. This process should be made simple for generators and suppliers by providing a unique identifier that will provide suppliers with comfort that they legitimately hold the relevant MCS. We also disagree with the proposal for a threshold for mandatory SEG suppliers of 250,000 domestic customers. The SEG should apply to all suppliers.

Otherwise we agree with the proposed obligations and functions on each of the other parties involved with the SEG.

25. Do you agree with the review process proposal for the SEG? If not, what alternative approach would you suggest?

We agree with the review process proposal for the SEG and recognise that it is important to assess whether small-scale low-carbon generators are able to effectively sell exported electricity to the grid. We welcome the recognition that low uptake of the SEG would not necessarily signal a negative outcome if the market was providing suitable alternatives.

The review process should also include an assessment of the extent of carbon reduction achieved through the additional low carbon generation achieved, and an assessment of other environmental impacts of this switch (such as changes in emissions to air).

26. Do you agree that the threshold for mandatory SEG suppliers should be set at 250,000 or more domestic electricity customers? If not, what alternative threshold would you suggest? Please provide any useful information or evidence to support your suggestion.

If the SEG is to honour the no free riding principle, all suppliers should be obligated[1]. If the SEG proposes that suppliers are required to set one tariff and the terms will be simple, practical and easy to adhere to, the SEG should not apply an unreasonable burden to any size of supplier, however small. We believe that this is achievable.

Furthermore the introduction of a threshold will create issues if a supplier either loses its licence or goes into administration.

27. Do we need to set out arrangements for the event in which a supplier either loses its supplier licence or goes into administration? If so, what provision needs to be made?

Where a supplier ceases to operate then any SEG contract should be nullified and the generators free to seek a tariff/contract from a new supplier. It is important to recognise the reasons behind the existence of SoLR in the domestic market, it exists because the import of electricity is an essential service, the same is not true of export.

28. Do you agree with our preferred approach to help ensure consumer protection? Is it practical and are there other factors that should be considered and why?

The stated approach to consumer protection appears to be practical. We cannot identify any other factors that should be considered.

We agree that standards should be set to ensure that generators can have confidence in the assets they are purchasing and that suppliers can be satisfied that generators are eligible for the SEG. However, we do not agree that suppliers should take on the task of assessing eligibility. Generators should apply to Ofgem or a suitably qualified alternative organisation to assess eligibility against MCS standards. Once this has been attained the generator would be free to provide the confirmation to the supplier of its choice and apply for a SEG contract and tariff. The more requirements there are for suppliers to assess compliance of generators, the greater the cost that will be incurred, which in turn will have an impact on the costs for consumers and the terms offered.

29. This policy is focused on power generation, however increasingly we anticipate that installations will be integrated with battery and vehicle-to-grid technologies. What additional technical challenges might we need to consider, for example relating to installation standards, and how would this effect the development of the market?

1 Bristol Energy agree with the position in the consultation that there should be a threshold of 250,000 on the supplier obligation.
We do not hold specific views on this, however, we recognise the need for sufficient consumer protection and installation standards similar to those of the Microgeneration Certification Scheme (MCS).

30. Is the process for applying to the SEG practical, and will it ensure only eligible generators are able to participate in the SEG?

The success of the SEG application process depends on the guidance issued to generators and the legislation. If both of these are simple and clear on eligibility then we do not foresee any issues.

31. Should deployment of installations through the SEG be submitted to a central register administered by Ofgem?

No, we see no reason why it is needed. A central register will be incomplete as all the installations that get an export tariff/terms that is not a SEG tariff will not be registered. Therefore, it would be a fruitless exercise to attempt to create a central register. However, we do believe that all installers should be mandated to register installations with DNOs.

32. Are our proposals for the treatment of settlement practical for suppliers to implement, and compatible with the Balancing and Settlement Code? If not, please explain why.

Please refer to our members’ submissions for detail on this question.

33. Are there any other issues you would like to explain as part of your response to this consultation?

Our key concern in the longer term to establishing a market for export in the domestic market is the readiness of the DCC to support remote export reads. In response to this we include an attachment that sets out Energy UK’s preferred way forward on the challenges faced by electricity suppliers in measuring electricity exported to the system where an export capable meter is fitted for the purposes of FIT compliance (See Section C and Section I 2&3).