



Department for  
Business, Energy  
& Industrial Strategy

# THE FUTURE FOR SMALL-SCALE LOW- CARBON GENERATION

A consultation on a Smart Export  
Guarantee

Closing date: 5 March 2019

January 2019

## Consultation

The consultation and Impact Assessment can be found on the BEIS section of GOV.UK: <https://www.gov.uk/government/consultations/the-future-for-small-scale-low-carbon-generation>

The Future of Small-Scale Low-Carbon Generation: A Consultation on a Smart Export Guarantee 2019



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# General information

In July 2018, Government published a call for evidence to identify the role small-scale low-carbon generation can play in maximising the advantages for the UK in the global shift to clean growth. Respondents highlighted that routes to market for exported electricity are currently limited and have an emphasis on larger capacity generators. Based on this evidence, Government believes there is merit in exploring possible arrangements for the small-scale low-carbon generation sector after the closure of the FIT scheme. To that end, Government is consulting on introducing a mandatory supplier-led route to market: the **Smart Export Guarantee (SEG)**. Under the SEG, Government would legislate for suppliers to remunerate small-scale low-carbon generators for the electricity they export to the grid.

**Issued:** 8 January 2019

**Respond by:** 5 March 2019

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**Consultation reference:** The Future for Small-Scale Low-Carbon Generation: A Consultation on a Smart Export Guarantee

**Territorial extent:** Great Britain

## How to respond

Your response will most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

**Respond online at:** <https://beisgovuk.citizenspace.com/clean-electricity/small-scale-low-carbon-generation-seg>

or

**Email to:** [futureofsmallscalesupport@beis.gov.uk](mailto:futureofsmallscalesupport@beis.gov.uk)

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Future of Small-Scale Support Team  
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A response form is available on the GOV.UK consultation page:

<https://www.gov.uk/government/consultations/the-future-for-small-scale-low-carbon-generation>

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will most useful it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

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We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

## Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: [beis.bru@beis.gov.uk](mailto:beis.bru@beis.gov.uk).

# Executive summary

The Industrial Strategy set out four Grand Challenges to put the UK at the forefront of the industries of the future. One of these Grand Challenges is maximising the advantages for UK industry from the global shift to clean growth.

Our electricity system is undergoing a rapid transformation and we are well on the path to decarbonisation, with a record 50.1% of electricity generated from low-carbon sources in 2017<sup>1</sup>; our electricity system is becoming more distributed as homes and businesses choose to generate their own electricity.

In his lecture, *'After the trilemma - 4 principles for the power sector'* the Secretary of State for Business, Energy and Industrial Strategy discussed the *"need to ensure that innovative businesses of the present and future can capture the system and network benefits of persuading customers to reduce their energy demand. Sometimes that will mean consumers becoming producers. Smart meters, data access, smart networks and the right rules and incentives are necessary for this transformation. The distinction between supplier and distributor may no longer hold in this new world"*<sup>2</sup>.

To support the vision outlined by the Secretary of State and facilitate the transition to a smarter, cleaner energy system we intend to:

- Ensure small-scale generators are compensated by the market for the value of their exported electricity;
- Establish a framework for the sector which still provides room for the market to develop options promoting innovation and competition, in particular the growth of aggregators and a digital marketplace;
- Enhance the role small-scale generators play in driving a smarter energy system, using smart meters and time of use tariffs, which will allow more consumers to benefit from location and time specific electricity prices.

Government policies including the Renewables Obligation, the Contract for Difference regime, and the Feed-In Tariffs (FITs) scheme have enabled substantial progress in our move to a low-carbon economy. Government support has created the climate for new investment and

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<sup>1</sup> Up from 45.6% in 2016, driven by an increase in renewables generation (nuclear generation decreased by 1.9%). Source: BEIS, 2018, *Digest Of United Kingdom Energy Statistics 2018*, available at: <https://www.gov.uk/government/statistics/digest-of-uk-energy-statistics-dukes-2018-main-report>

<sup>2</sup> The Rt Hon Greg Clark MP, 2018, *After the trilemma - 4 principles for the power sector*, available at: <https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

technological advances which has driven down the cost of low-carbon generation technologies and has laid the foundation of a successful renewables industry.

Following this success, it is Government's view that small-scale low-carbon electricity generation should deploy in a system where competitive, market-based solutions are brought forward. In line with this ambition, on 18 December 2018 Government confirmed closure of the current FIT flat rate export tariff to new applications from 31 March 2019, alongside the generation tariff. This decision supports our intention to minimise the financial burden on consumers and move towards greater cost reflective pricing.

In July 2018, Government published a call for evidence to identify the role small-scale low-carbon generation can play in maximising the advantages for the UK in the global shift to clean growth. Respondents highlighted that routes to market for exported electricity are currently limited and have an emphasis on larger capacity generators. Based on this evidence, Government believes there is merit in exploring possible arrangements for the small-scale low-carbon generation sector after the closure of the FIT scheme.

To that end Government is consulting on the introducing a mandatory supplier-led route to market: the **Smart Export Guarantee (SEG)**. Under the SEG, Government would legislate for suppliers to remunerate small-scale low-carbon generators for the electricity they export to the grid. Remuneration would be available to all the technologies currently eligible for the FIT scheme up to 5MW in capacity and would be based on the following design:

- BEIS mandates that larger electricity suppliers (>250,000 domestic electricity supply customers) offer small-scale generators a price per kWh for the electricity they export to the grid. Smaller suppliers can opt to voluntarily provide a SEG tariff but must adhere to the rules and guidance associated with the SEG;
- Suppliers would determine the tariff per kWh for remuneration, and the length of the contract;
- Suppliers would be obliged to provide at least one export tariff;
- Remuneration must be greater than zero and at times of negative pricing generators must not be required to remunerate suppliers for electricity exported to the grid;
- Electricity exported to the grid from eligible generators must be metered - for domestic installations we expect smart meters to enable this;
- No levelisation of costs is proposed but suppliers providing the SEG should be able to account for their administration costs in setting of the tariff levels;
- Suppliers must register eligible installations for the settlement process and settle in accordance with the requirements in the Balancing and Settlement Code (BSC).

The evidence gathered from this consultation will allow Government to decide on whether, and how, to proceed with the SEG.



# Chapter 1 - Introduction

The government wants to optimise the UK industrial opportunities from clean growth. The framework for achieving clean growth and affordable energy for businesses and households was set out in the Clean Growth Strategy<sup>3</sup> and sits at the heart of the Industrial Strategy.

- 1.1. A decentralised energy system has a role in improving the resilience and flexibility of our energy system. We are seeing more generation located nearer to people's homes, greater demand with the increased use of electric vehicles, the ability to store energy, and potential for avoiding investment in new generation assets through demand-side response (DSR) to manage electricity more flexibly. There is enormous potential for greater home energy management through smart meters, smart appliances and smart tariffs. As a result of these developments, we expect significant changes to patterns of supply and demand in the future as we move to a smarter, more flexible energy system.
- 1.2. In response to these exciting changes, new and innovative business models are appearing, which advance the digitalisation of our system and improve our ability to dispatch electricity at a time and location when they are needed.
- 1.3. In 2017 we published the Clean Growth Strategy in which we outlined the key policies and proposals to deliver clean, smart and affordable power. Government also published the Smart Systems and Flexibility plan in 2017, and an update in October 2018<sup>4</sup>, where we made a commitment to realise synergies between a smart energy system and future policy on small-scale low-carbon generation. A smart and flexible energy system could help save the UK £17-40 billion by 2050<sup>5</sup>.
- 1.4. To this end, in July 2018 we published a call for evidence<sup>6</sup> to identify the role small-scale low-carbon generation can play in maximising the advantages for the UK in the global shift to clean growth by understanding:
  - The challenges and opportunities from small-scale low-carbon generation in contributing to Government's objectives for clean, secure, affordable and flexible power; and

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<sup>3</sup> BEIS, 2017, *Clean Growth Strategy*, available at: <https://www.gov.uk/government/publications/clean-growth-strategy>

<sup>4</sup> BEIS, 2018, *Upgrading our energy system Smart Systems and Flexibility Plan: Progress update*, available at: <https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

<sup>5</sup> Carbon Trust, 2016, *An analysis of electricity flexibility for Great Britain*, available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/568982/An\\_analysis\\_of\\_electricity\\_flexibility\\_for\\_Great\\_Britain.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/568982/An_analysis_of_electricity_flexibility_for_Great_Britain.pdf)

<sup>6</sup> BEIS, 2018, *The future of small-scale low-carbon generation – a call for evidence*, available at: <https://www.gov.uk/government/consultations/the-future-for-small-scale-low-carbon-generation-a-call-for-evidence>

- The role for Government and the private sector in overcoming these challenges and realising these opportunities.

## Opportunities from small-scale low-carbon generation

### Smart meters and half-hourly settlement

- 1.5. The Government is committed to ensuring that smart meters are offered to every home and small business by the end of 2020. There are now around 12.8 million smart and advanced meters operating across homes and businesses across Great Britain<sup>7</sup>. Building on the functionality provided by smart metering, cost-effective elective half-hourly settlement has been in place since June 2017. Ofgem intends to take a decision on the approach to implementing half-hourly settlement on a market-wide basis in the second half of 2019.
- 1.6. Half-hourly settlement is expected to provide commercial incentives for energy suppliers to develop and offer innovations such as time of use tariffs which encourage consumers to use energy at cheaper times, utilising technologies such as storage, demand side response and small-scale renewables. This will help reduce the costs of the future energy system and so the costs for consumers. It would also help make the energy system more resilient as we move towards an increasingly low-carbon generation mix.

### Aggregation

- 1.7. Aggregators can package up changes in consumption and export across multiple premises in order to access revenues in the energy markets. They are already well established in the industrial and commercial sector, and in the coming years there is great potential for aggregators to provide a similar role for domestic consumers. The Smart Systems and Flexibility plan set out actions to enable greater participation of aggregators, for example allowing independent aggregators to access the Balancing Mechanism directly, which will help to facilitate and optimise the benefits of demand side response, including from behind-the-meter small-scale low-carbon generation.

### Storage

- 1.8. Deployment of storage is increasing, and its costs are falling rapidly. National Grid's Future Energy Scenarios 2017 forecasts 1.5GW of small battery storage (domestic and commercial), around a third of total battery storage deployment capacity, by 2040. Storage, especially when combined with small-scale low-carbon generation, can enable consumers to self-consume and/or export their generation when changes in energy prices mean they could save, or indeed make, money. The Smart Systems plan included a number of actions focused on removing barriers for storage. In particular, Ofgem has set out how it can be co-located with existing small-scale low-carbon under the FIT scheme.

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<sup>7</sup> BEIS, 2018, *Smart Meter Statistics: Quarter 3 2018*, available at: <https://www.gov.uk/government/statistics/statistical-release-and-data-smart-meters-great-britain-quarter-3-2018>

## Competition in networks

- 1.9. Distribution network operators (DNOs) are transitioning to a distribution system operator (DSO) role. This involves actively managing networks to enable more competition for network services and encouraging greater coordination between the transmission and distribution boundary.
- 1.10. Through the transition, DNOs are expected to open up new network reinforcements to market competition so that technologies such as storage, demand side response (DSR) and small-scale renewables can compete with traditional network solutions. This is expected to deliver savings for consumers as traditional reinforcement can be costly and there is potential for large savings when this is avoided or delayed. Such changes are starting to take place, and this will offer revenue opportunities for energy resources connected at the distribution level, where they are able to turn up or turn down generation and demand in response to signals from network companies. Small-scale low-carbon will be able to participate in these markets, providing an additional revenue stream where they are the most cost-effective solution, whilst lowering the cost of the energy system.

## Energy Efficiency

- 1.11. In the Clean Growth Strategy, Government set out its ambition for all fuel poor homes to be upgraded to Energy Performance Certificate (EPC) Band C by 2030 and the aspiration for as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable. EPC ratings reflect the estimated annual cost of running a home. This means it will be dependent on factors such as how energy efficient the home is, and the cost of the fuel being used to power the home.
- 1.12. The Energy Efficiency (Private Rented Property) Regulations 2015 also establish a minimum level of energy efficiency for privately rented property in England and Wales. From April 2018, landlords of privately rented domestic and non-domestic property must ensure that their properties reach at least an EPC rating of E before granting a new tenancy to new or existing tenants. From 1 April 2020, these requirements will then apply to all private rented domestic properties in England and Wales, even where there has been no change in tenancy arrangements.
- 1.13. Small-scale low-carbon generation is playing a significant role in contributing to the achievement of these targets. On-site electricity generation reduces costs through lowering the amount of electricity that needs to be paid for from the grid, so can have a significant part to play in improving EPC ratings. This builds on the requirements in place under the current FIT scheme where solar PV installations have been required to demonstrate that they are attached to a building with an EPC rating of level D or above to access a higher tariff, promoting energy efficiency at a domestic and commercial level.

## Community Energy

- 1.14. Community energy is playing an important role in decarbonising local energy, helping achieve our goals for clean growth and emissions targets alongside delivering social and economic benefits at a local scale. As a result, the equivalent of 67,000 homes in England and Wales are now being powered by community energy, making a saving of 71,000 tonnes of CO<sub>2</sub> equivalent.

- 1.15. These projects are empowering communities, allowing them to participate in the energy market and continue the transition towards a fairer and smarter energy system. Those deploying under the FIT scheme will continue to receive revenues allowing them to reduce bills alongside providing an income to invest in social development projects, such as social care, local regeneration, energy efficiency projects and supporting those in fuel poverty.
- 1.16. Since 2013, the £15m joint Defra/BEIS Rural Community Energy Fund (RCEF) has offered feasibility and development finance for community-scale clean energy projects in rural England. Alongside this, we have funded the establishment of five new regional centres of excellence in local energy project delivery, driving the development, ambition, and scale of local energy projects.
- 1.17. Through developments such as Project SCENe (Sustainable Community Energy Networks), Government continues to foster innovative community energy projects that cut emissions, engage residents and create jobs. Funded by Innovate UK, this solar and storage project in the Trent Basin has brought forward the formation of a community ESCo (Energy Service Company) and the management of energy demand and supply on a community level.
- 1.18. The Government is considering our future approach and what measures might be taken to support the efforts of community organisations and education providers who want to invest in low-carbon energy installations. Question 7 seeks views on this.

## Future arrangements for small-scale low-carbon generation

- 1.19. To date, Government policies, together with global investment, have enabled substantial progress in building a successful renewables industry as part of our move to a low-carbon economy, and have driven down the costs of low-carbon generation technologies. The FIT scheme was instrumental in achieving this objective at both a domestic and small-scale commercial level for small-scale low-carbon generation. The FIT scheme gave the public a stake in the transition to a low-carbon economy and in turn fostered reductions in energy costs for households, businesses and communities that generate electricity. Since its introduction in 2010, the FIT scheme has supported the installation of 830,471 installations, a total of 6.09GW of generation capacity<sup>8</sup>.
- 1.20. On 18 December, Government confirmed that the FIT scheme flat rate export tariff would close to new entrants from 31 March 2019, alongside the generation tariff<sup>9</sup>. Government took this decision because the fixed and flat rate export is no longer fit for purpose. It does not align with the wider Government approach to move towards fairer, cost reflective pricing and the continued drive to minimise support costs on consumers as set out in the Control for Low Carbon Levies. It also does not support the vision set out in the Industrial Strategy and Clean Growth Strategy, pledging 'to meet our climate change commitments at the lowest net cost to UK taxpayers, consumers and businesses. As a result, the FIT scheme will close in full to new applicants after 31

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<sup>8</sup> BEIS, 2018, *Sub-national Feed-in Tariff Statistics - September 2018*, available at:

<https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics>

<sup>9</sup> <https://www.gov.uk/government/consultations/feed-in-tariffs-scheme>

March 2019, subject to the time-limited extensions and grace period set out in the previous FIT Government response.

- 1.21. However, Government's view is that small-scale low-carbon electricity generation, where it is beneficial to Government's objectives and the electricity system, should deploy in a system where competitive, market-based solutions are brought forward. In this system, the private sector can innovate and invest, and technologies can compete on their own merits, bringing value to the system which can be captured. The call for evidence sought to understand whether there is a need for government intervention to enable these competitive market-based solutions, or whether the market itself can lead deployment.
- 1.22. We received 194 responses to the call for evidence from generators, trade bodies, distribution network operators, consumers groups, energy suppliers and members of the public.
- 1.23. Set out below are the central themes raised by respondents to the call for evidence:
  - They welcomed recent developments in the creation of new markets from both the Government and the electricity sector;
  - They expected there to be a market for exported electricity for small-scale low-carbon generation in the future, particularly as the uptake in smart technology enablers increases, (including the smart meter roll-out and market-wide half-hourly settlement). However, most respondents believe that this market has not yet fully developed;
  - They raised concerns that routes to market for exported electricity are currently limited and mostly limited to larger capacity generators;
  - Many felt that a form of Government support is required in the short-term to enable the purchase of exported electricity, particularly at smaller capacities;
  - There was a call for a clear policy framework to provide the sector with a long-term trajectory;
  - They expressed an aspiration for a system which ensured that costs and benefits of a decentralised energy system were spread equitably; and
  - There was a desire for a range of additional policy interventions to assist the sector, including: preserving an export tariff, taxation measures, and other regulatory reforms.
- 1.24. Government recognises that innovative markets for small-scale low-carbon generation are still emerging. Many respondents to the call for evidence believed that as the system becomes 'smarter' and more flexible, for example when the smart meter roll-out concludes, and market-wide half-hourly settlement is in place, then the market for this electricity will develop at pace. As such it is likely that consumers will, in future, be offered a range of innovative services and bundled smart offers by market participants,

including aggregators, which could support the integration and optimisation of on-site low-carbon generation.

- 1.25. Given the opportunities from small-scale low-carbon generation and the evidence submitted as part of the call for evidence, Government believes there is merit in exploring possible arrangements for the small-scale low-carbon generation sector when the FIT scheme closes and while these markets develop. Future arrangements should aim to level the playing field for all small-scale low-carbon technologies and capture the value small-scale low-carbon generation brings to the system. However, any future arrangements should ensure that those who use the grid pay their fair share of network costs. Ofgem recently published a 'minded to' decision on network charges in its 'Targeted Charging Review' for consultation<sup>10</sup>, with responses requested by 4th February 2019.
- 1.26. To support the transition to a cleaner, smarter and more flexible energy system our intention in this document is to consider future arrangements that would facilitate:
- **A route to market** - which supports small-scale low-carbon generation of electricity;
  - **Market innovation** - Government has identified innovation as a central tenet of its Industrial Strategy;
- Lowering of costs for consumers** - by supporting the development of the electricity system to provide consumers with affordable, low carbon electricity;
- **The transition to a smart and flexible electricity system** - by promoting the efficient use of electricity through price signals, which incentivise consumer behaviour that enables the efficient management of the grid i.e. promoting export when the grid is experiencing high demand.
- 1.27. The points set out above are pertinent to the role small-scale low-carbon generators play in a growing UK wide distributed energy system. To stimulate and cement the changes we wish to see we intend to:
- Ensure small-scale generators are compensated by the market for the value of their exported electricity;
  - Establish a framework for the sector which still provides room for the market to develop options promoting innovation and competition, in particular the growth of aggregators and a digital marketplace;

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<sup>10</sup>Ofgem is consulting on two aspects of change: reform of the way in which the residual element of electricity network charges is recovered, with the lead option being a move to a fixed charge; and possible removal of some of the remaining 'embedded benefits' (which relate to the charging arrangements for smaller generators connected to the distribution system). Both aspects are likely to be relevant to small-scale low-carbon generation. The consultation is available at: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-minded-decision-and-draft-impact-assessment>



- Enhance the role small-scale generators play in driving a smarter energy system, using smart meters and time of use tariffs, which will allow more consumers to benefit from location and time specific electricity prices.
- 1.28. Based on the objectives set out above, Government is consulting on the introduction of a mandatory supplier-led route to market: the **Smart Export Guarantee (SEG)**. Under the SEG, Government would legislate for suppliers to offer remuneration to small-scale low-carbon generators for the export they produce. The tariffs offered would be available to all the technologies currently eligible for the FIT scheme up to 5MW in capacity.
- 1.29. Further details of the proposed SEG for small-scale low-carbon electricity generation are set out in detail in Chapter 2 of this document.

## Next Steps

- 1.30. The closing date for this consultation is 5 March 2019, we intend for this consultation to be 8 weeks long.
- 1.31. The Government welcomes responses on all questions, or on specific parts of this consultation. Responses will be most useful if they are framed in direct response to the questions posed, though further comments and evidence are also welcome.
- 1.32. Please provide your name and email address (or other contact address) as part of your response. We will only use this if we need to contact you to ask about any of your responses.
- 1.33. Electronic responses through our online survey are preferred however we aim to consider responses in any accessible format. Responses should be sent to [futureofsmallscalesupport@beis.gov.uk](mailto:futureofsmallscalesupport@beis.gov.uk), or to Future of Small-Scale Support team, Level 3 Spur, BEIS, 1 Victoria Street, SW1H 0ET.

# Chapter 2 - Smart Export Guarantee

The Smart Export Guarantee would place an obligation on electricity suppliers to purchase electricity exported to the grid from small-scale low-carbon generators, allowing suppliers to determine the level of remuneration for that electricity.

- 2.1. A Smart Export Guarantee (SEG) should be cost reflective and market led, helping level the playing field for small-scale low-carbon generation. This will provide a route to market whilst supporting the smart agenda.
- 2.2. Although the SEG will be market-led, Government believes that generators should not be captive takers and that small-scale low-carbon generation should not be provided to the grid for free. In this consultation document we set out options to ensure generators are compensated for the electricity they export to the grid.

## Smart Export Guarantee design summary

- 2.3. To achieve these objectives, Government is proposing to mandate (via new secondary legislation and modifications to the Electricity Supply Licence Conditions) that the SEG is made available to all small-scale low-carbon technologies that are currently eligible for the FIT scheme up to 5MW capacity. Government is proposing to mandate that the SEG should include the following design features:
  - Larger electricity suppliers (>250,000 domestic electricity supply customers) must offer small-scale generators a price per kWh for the electricity they export to the grid. Smaller suppliers can opt to voluntarily provide a SEG tariff but must adhere to the rules and guidance associated with the SEG;
  - Suppliers determine the tariff per kWh for remuneration, and the length of the contract;
  - Suppliers are obliged to provide at least one metered export tariff - for domestic installations we expect smart meters to enable this;



- Remuneration must be greater than zero and at times of negative pricing generators must not be required to remunerate suppliers for electricity exported to the grid;
- No levelisation of costs is proposed - suppliers providing the SEG will be expected to make appropriate discounts for their administration costs in setting the tariff levels;
- Suppliers must register eligible installations for the settlement process and settle in accordance with the requirements in the Balancing and Settlement Code (BSC);
- Ofgem will be required to monitor suppliers' implementation of the SEG to track deployment, prevent fraud and ensure consumer protection standards are met;
- Minimum safety standards for consumer protection for generators with Solar PV, wind and mCHP installations up to and including 50kW e.g. a requirement to use Microgeneration Certification Scheme (MCS) registered installers;
- Administrative duties will be carried out by Ofgem and electricity suppliers.

### Consultation Question

1.	Will the SEG as described provide a suitable and practical route to market for exported electricity?
2.	Will the SEG support innovation towards the 'smart' energy transition and if so how?

## Setting a SEG tariff and the tariff structure

- 2.4. The SEG legislation would place an obligation on SEG providers to purchase exported electricity from eligible generators – meaning SEG providers will be required to offer at least one tariff for eligible exported electricity. SEG providers, and other providers who voluntarily offer the SEG tariff, would be free to provide more tariff options for generators - the smarter the better.
- 2.5. Our broad objective is to provide a route to market for small-scale low-carbon generation that helps support the transition to a smart, flexible electricity system. The long-term aim is for energy suppliers to offer generators smart export tariffs where the price paid varies on a half-hourly basis to reflect the wider electricity system conditions. However, we recognise that it may not be possible to move to this type of tariff design immediately.

- 2.6. Many respondents to the call for evidence stated that widespread uptake of smart tariffs depends on various enablers, including the roll-out of smart meters and introduction of market-wide half-hourly settlement. We also note that additional market evolutions, including the DNO to DSO transition and changes to network charging arrangements, will help enable the transition to smart export tariffs that we expect to see in the medium and longer term.
- 2.7. As noted above, we propose that the minimum legislative requirement should be for all exported electricity to be metered and registered for settlement in accordance with BSC requirements. Beyond these minimum requirements there are a range of potential tariff design options that SEG providers might choose to offer to reflect that the transition to a smart energy system is underway, as set out in the table below, and which could be supported by legislation where appropriate.

**Table 1: Types of tariff design**

Type of tariff	Design
A) Export metered and registered for settlement only	Suppliers offer an above-zero export tariff to all small-scale generators who agree to metered and settled export. This could be a non-variable flat rate tariff.
B) Simple variable tariff	Suppliers offer a simple 'variable' export tariff. Interpretation as to variability (e.g. day/night or weekday/weekend) and tariff rates would be up to the supplier. Must also be metered and settled.
C) Advanced variable tariff	Suppliers offer a 'variable' export tariff, to reflect energy system conditions on up to a half-hourly basis. Interpretation of tariff rates would be up to supplier. Must also be metered and settled.
D) Variable tariff linked to market	As option C, plus suppliers 'link' their variable tariff to the market. The interpretation could be up to the supplier but there would be an expectation that there should be a rise and fall linked with half-hourly market (e.g. day-ahead wholesale) prices. Must also be metered and
E) Variable tariff benchmarked to market	As option C, plus suppliers benchmark their variable tariff to half-hourly market prices. The level of the tariff would be determined by the supplier but rising and falling in proportion to the market price. Must also be metered and settled.

- 2.8. While option A would guarantee that generators receive a payment for the electricity they export to the grid, it would not provide incentives on generators to export at the most beneficial times to the system, which would maximise the benefits available to energy consumers. At the other end of the spectrum a tariff that is linked to a relevant market price is most likely to accelerate the transition to a smart energy system for both consumers and exporters. This is because it would encourage suppliers to invest in smart systems and may support the development of smart import tariffs for consumers. However, some stakeholders have indicated that there may be administrative burdens or technical issues in moving to metered export arrangements, such as those described in Table 1, in a short period of time.

- 2.9. We are seeking views on what would be the most appropriate initial SEG tariff design, bearing in mind the range of barriers above as well as our ambition to move to a smarter, more flexible system as soon as possible.
- 2.10. We propose to keep the SEG tariff design under review for whichever tariff design we legislate for. This will encourage SEG participants to move towards ‘smarter’ options in the table above as soon as it is possible and appropriate to do so.
- 2.11. To enable the SEG to be market based and allow innovation, we propose that both the tariff levels and tariff structure should be set by the SEG providers.
- 2.12. By allowing SEG providers to set their tariffs they will be free to:
- Determine the value of any eligible exported electricity;
  - Provide more competitive tariff levels if they wish to – suppliers are free to set tariff levels independently of each other;
  - Make appropriate discounts in the setting of the tariffs for any administration costs.
- 2.13. With this approach SEG providers would be free to set additional, alternative, tariff structures outside of the SEG – these could include variable or fixed tariffs, or tariffs targeted at differing types of power generation e.g. intermittent or dispatchable - we expect increasing competition in this market as suppliers look to attract generators.
- 2.14. It will be essential for suppliers to clearly set out the tariff rate/s available under the SEG, to give visibility of the price generators would receive for exports. This information will be submitted as part of the market condition report set out in para 2.30.
- 2.15. We believe suppliers are likely to consider, among others, some of the following factors for setting any tariff structure:
- The market value of the electricity during the period it is purchased;
  - Simplicity and accessibility, to ensure that the tariff structure and any links to a market price can be easily administered;
  - The risk allocation between the supplier and the generator, for example imbalance risk resulting from the difference between actual generation and forecast generation and resulting costs in the balancing market under the Balancing and Settlement Code (BSC).
- 2.16. We expect SEG providers to make all contractual terms clear and easily understandable to the generator, for example exit terms, and any key features of the tariffs - for instance if an installation can be pre-accepted onto a SEG tariff offered by a supplier. Currently, communications between suppliers and their customers in the

electricity retail market are governed by a set of rules that are set by Ofgem and are currently under review<sup>11</sup>.

- 2.17. The SEG will be in place until such a time that the market can operate effectively without Government intervention and we are considering whether to set a fixed end date. We intend to review the SEG at regular intervals and will work with Ofgem to assess what offerings are made by the market to generators. This offers additional benefits for Government as we can track the state of the market and understand more fully how distributed energy can stimulate and support the move to a cleaner, more flexible and smart energy system.

### **Factors that may impact tariff design**

- 2.18. There are many factors that may impact the design of a SEG tariff and we welcome views on how these factors will affect the SEG design. For instance, in relation to the metering requirement, the Government's position is that SMETS-compliant smart meters are compatible with microgeneration and enable measurement of export on a half-hourly basis. However, some stakeholders have reported potential issues in using smart meters for metering exported electricity. This includes retrieval of export data from first generation (SMETS1) smart meters, particularly in the period before they are enrolled in the Data Communications Company (DCC),<sup>12</sup> and testing of export functionality on second generation (SMETS2) smart meters which operate via the DCC.
- 2.19. While we consider such metering issues to be transitional, we would welcome further information from respondents on the nature of potential issues. We will continue to work with Ofgem and industry to understand and, where necessary, address these issues to further accelerate a transition towards smart export tariffs. Section 2.43 deals with the SEG metering requirements in more detail.
- 2.20. In terms of other enablers, Ofgem's decision on moving to half-hourly settlement (see section 2.116) on a market-wide basis is expected in the second half of 2019. However, implementation will follow from that point and currently the timing and approach to the transition has not been confirmed.
- 2.21. Similarly, Ofgem are currently undertaking two charging reviews to ensure that network charges are fair, proportionate and cost reflective. Their Targeted Charging Review considers how network costs can be recovered to ensure that all consumers pay their fair share, including those with their own generation. Ofgem aim to make a final decision on this in 2019 for implementation in 2020/21. This will allow the question of whether to support small-scale renewables to be separated from concerns about equitable recovery of network costs.
- 2.22. Separately, Ofgem's review of Electricity Network Access and Forward Looking Charges should help to create more cost-reflective network charges and more options for how generation and other users access the grid. Among other matters, Ofgem is reviewing whether distributed generation should face the same transmission network

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<sup>11</sup> Ofgem, 2018, *Statutory consultation: Domestic supplier-customer communications rulebook reforms*, available at: <https://www.ofgem.gov.uk/publications-and-updates/statutory-consultation-domestic-supplier-customer-communications-rulebook-reforms>

<sup>12</sup> Enrolment of SMETS1 meters in the DCC is being delivered in phases and is expected to conclude by the end of 2020.

charging arrangements as larger generation in order to promote a level playing field. This would result in distributed generation receiving credits in zones where they are expected to reduce long term transmission costs, and pay charges in zones where they are expected to increase long term costs. Ofgem considers this would promote greater cost reflectivity in the charges, reduce distortions to competition between generators connecting at different network locations, and support more efficient whole system outcomes. Ofgem is also conducting a wide-ranging review of the distribution network charging arrangements. In December, Ofgem launched a Significant Code Review with the aim of implementing the changes that result from the review in 2022 and 2023.

- 2.23. The transition from Distribution Network Operators to Distribution System Operators will see them open up new network reinforcements to market competition so that technologies such as storage, demand-side response and small-scale renewables can compete with traditional network solutions. This is expected to deliver savings for consumers as traditional reinforcement can be costly and there is potential for large savings when this is avoided or delayed.
- 2.24. Such changes are starting to take place, and this will offer revenue opportunities for energy resources connected at the distribution level, where they are able to turn up or turn down generation and demand in response to signals from network companies. Small-scale low-carbon will be able to participate in these markets, providing an additional revenue stream where they are the most cost-effective solution, whilst lowering the cost of the energy system.

Consultation Question	
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.
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?
5.	Should the SEG have a fixed end date or not? Please provide justification for your answer.
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?
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?
8.	How long will it take for suppliers to put systems in place in order to administer the SEG, and what would the associated administrative costs of the SEG be? Please provide justification for your answer.
9.	We would welcome views on whether the SEG can and should be linked to any similar mandatory communications requirements.

### Proposed approach in a negative price scenario

- 2.25. Whilst suppliers will set the tariff structures and tariff levels, the treatment of negative market prices needs to be considered.
- 2.26. With increased penetration of renewables on the system and a lack of flexible technologies available to mitigate this increase, low wholesale price scenarios may become more frequent in future, e.g. on days of lower demand and high renewable generation – to the extent that prices may temporarily become negative for short periods. This is already happening in markets where intermittent renewables represent a significant proportion of the energy mix, such as Germany; and although we anticipate this type of scenario to remain relatively infrequent in the UK in the foreseeable future, we consider here how it might be best addressed.
- 2.27. In July 2017, Government commissioned a report by Baringa<sup>13</sup> to look at the potential frequency of negative prices (both day-ahead and intraday) which projected in the ‘Policy scenario’ (which has higher deployment of subsidised low-carbon capacity than the ‘Market scenario’) an average of 68 day-ahead negative hours per year over the period 2020-2023.
- 2.28. We are proposing to legislate that for any tariff under the SEG, generators must not be required to pay suppliers at times when relevant market prices are negative. We believe this approach (which would differ from the approach under the Contracts for Difference scheme for large-scale renewable generation)<sup>14</sup> is appropriate and proportionate on the basis of keeping the SEG as simple as possible. Providing for the potential for small generators to have to make payments to suppliers would increase the administration and set-up costs. Also, the concept of having to make payments to suppliers for exported electricity is unlikely to appeal to the small domestic sector (who

<sup>13</sup> Baringa, 2015, *Negative pricing in the GB wholesale electricity market*, available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/441809/Baringa\\_DECC\\_CfD\\_Negative\\_Pricing\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441809/Baringa_DECC_CfD_Negative_Pricing_Report.pdf)

<sup>14</sup> For information, under Contracts for Difference: the difference payment is capped at the strike price, so the generator’s total revenues in that period would be lower than the strike price; and for longer periods of negative prices (6 hours) the difference payment is zero.

generally do not have the ability to curtail generation output) and may unnecessarily inhibit deployment.

### Tariff guidance and market condition report

2.29. It is our intention that the SEG should be market led and suppliers should be free to set the tariff. Nevertheless, consideration should be given as to whether there is a need for appropriate guidance applicable to both SEG suppliers and eligible generators that would cover at a minimum:

- Administrative arrangements suppliers are to adopt in order to administer the SEG;
- The value of the exported electricity to the SEG supplier, considering the differential in value of metered exported electricity relative to unmetered electricity sold at system sell price in the balancing market. The system sell price in the balancing market reflects the value to the market of electricity spilled onto the system;
- Any other comparable market prices, which give a reasonable proxy to the value of this exported electricity;
- The risk allocation between the SEG supplier and the customer under the SEG tariff, for example imbalance risk. The imbalance risk is the risk of generation being below the expected generation level for the supplier.

2.30. We are also considering requiring Ofgem to produce a market condition report on the tariff(s) offered by SEG suppliers. We believe this report would encourage transparency by suppliers and greater competition in the market. This report would not only include information on the tariff offerings under the SEG, but also other market offerings provided by suppliers and/or other parties, such as aggregators.

2.31. This report could be published annually to provide generators and suppliers with visibility of the offerings available on the market for electricity exported from technologies eligible under the SEG.

2.32. The Government will look at how this guidance and market condition report might be provided in a way that encourages the above objectives including whether Ofgem, as the regulator, should play a role in the provision of guidance and market condition report.

### Consultation Question

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

## Costs and impacts of the SEG

### Costs

- 2.33. SEG providers will be obliged to purchase metered exports from eligible generators. Suppliers will then be able to use this electricity beneficially, for example in the balancing and settlement process, or by selling it on to the market. With suppliers setting the tariff levels for the SEG, they will be able to take account of the costs of providing and administering such tariffs.
- 2.34. We do not expect the SEG to have a net negative impact on consumer bills. The SEG should not increase the cost of the system and the impact of small-scale low-carbon generation on the wider electricity system will depend on future deployment, which is uncertain. Given SEG providers ability to benefit from this electricity, and in order to maximise design simplicity, we do not propose to introduce a FIT scheme style levelisation process as part of the SEG.
- 2.35. However, a consumer with small-scale low-carbon generation will typically self-consume a proportion of the electricity generated, and as network and other policy costs are generally charged on an import rather than gross consumption basis, such consumers are likely to pay a lower share of network and other policy costs than consumers without small-scale generation. Ofgem's current Targeted Charging Review<sup>15</sup> is considering this charging regime and we will be mindful of the outcomes when considering responses to this consultation.

### Impact on fuel poverty

- 2.36. We do not expect a net negative impact on consumer bills. Given this, we do not propose to introduce support measures for consumers classified as being in fuel poverty to account for the impact of the SEG.
- 2.37. Respondents to the call for evidence highlighted the benefits that on-site generation from renewable technologies have brought to those in fuel poverty, community groups, schools, and local authorities. The FIT scheme has helped stimulate these groups to become electricity generators and participate in the electricity sector. The point was made that for projects like these to be considered in future, prospective generators need certainty that they can be paid for any electricity they export to the grid. We believe that our proposals for the SEG will ensure that a route to market remains

<sup>15</sup>Ofgem, 2018, *Targeted Charging Review - a consultation*, available at: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-consultation>



available to projects of this type, whilst laying the foundations for the market to bring forward tariffs of its own.

### Impact on Energy Intensive Industries

- 2.38. Exemption or compensation arrangements are available for eligible energy intensive industries (EIs) for the indirect policy costs of various renewable energy incentive schemes, for example the FIT scheme, the Renewables Obligation and the Contracts for Difference.
- 2.39. We do not expect a net negative impact on consumer bills. Therefore, we do not propose to introduce any support measures for EIs to account for the impact of the SEG.

Consultation Question	
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?

### Eligibility requirements

- 2.40. For an installation to be eligible for a SEG tariff we are proposing the following criteria. Table 2 below provides a summary of the eligibility criteria for the SEG. The full details of the eligibility requirements are discussed in paragraphs 2.41 - 2.80.

**Table 2: Summary of SEG eligibility criteria**

Eligibility criteria	SEG eligibility requirements
Technology type	Anaerobic digestion, hydro, micro-combined heat and power, onshore wind, and solar photovoltaics.
Capacity limit	5MW capacity limit.
Metered export volumes	Electricity exported to the grid which has been generated by an eligible technology must be metered using a meter capable of metering half-hourly export volumes.
Installation certification	Solar PV, wind and mCHP installations up to and including 50kW need to ensure they use

	<p>Microgeneration Certification Scheme (MCS)-certified (or an equivalent scheme) equipment installed by an MCS-certified installer.</p> <p>AD, hydro and all other technologies with installations above 50kW must as a minimum provide the same details as are required under the MCS certification process. We are not proposing any further requirements above those already required to meet industry standards.</p>
Installations in receipt of other support schemes	Installations in receipt of government support through the FIT scheme for the electricity generated by the installation, either for self-consumption or export to the grid, will be ineligible for the SEG.

## Technologies

2.41. We propose that the SEG be available to all the same technologies supported under the FIT scheme - anaerobic digestion, hydro, micro-combined heat and power, wind, and solar photovoltaics – all listed in the relevant section of the Energy Act 2008.

## Capacity limits

2.42. We propose that the capacity for eligible generation technologies must not exceed 5MW. It is our view that the 5MW capacity limit is appropriate for the SEG.

## Metering requirements

2.43. It is our view that all payments under the SEG should be based on metered export from an eligible generation technology. For suppliers to be able to offer generators a SEG tariff, exported electricity volumes must be metered via a meter which is able to record export at half-hourly granularity. While retrieval of this data may not be required from the start of the SEG, depending on the tariff design option selected, it will ensure that metering equipment does not need to be replaced if and when guidance on tariffs and tariffs structures transition to a half-hourly basis, as we envisage it will do over time.

2.44. To achieve the SEG metering requirements, generators must therefore:

- Measure exported electricity volumes using a meter that reflects the metering legislation definition, as outlined in 2.45;
- Use a meter that can measure exported electricity volumes on a half-hourly basis;

- Have an export MPAN<sup>16</sup> or MSID<sup>17</sup> to manage exported electricity volumes to the grid.
- 2.45. We will legislate that all export metering for SEG payment purposes must comply with specific metering legislation. The definition of “metering legislation” can be found in Schedule A to Standard Condition 33 of the Electricity Supply Licence.<sup>18</sup>
- 2.46. Where the maximum demand exceeds 100kW, The National Measurements Office (NMO) approves meters on Ofgem’s behalf. This is in addition to compliance with the metering requirements laid out in 2.44. The NMO also approves any modifications to existing meters that were originally approved before the Measuring Instruments (Active Electrical Energy Meters) Regulations 2006 (the MI (AEEM) Regulations)<sup>19</sup> were implemented.
- 2.47. An export meter that has been approved by, or under similar regulations to, the MI (AEEM) Regulations after 2007 in other European Member States will also be accepted under the SEG, as long as the export meter complies with the metering requirements laid out in paragraph 2.44.
- 2.48. In addition to meeting the metering requirements set out above in 2.44, it is our preferred option that these meters provide remote access for data retrieval to be eligible for the SEG. For most standalone installations, we would expect that metering export through a SMETS-compliant smart meter will enable generators to meet the requirements for the SEG. SMETS-compliant smart meters are offered to all domestic consumers by their energy supplier at no extra cost.
- 2.49. Energy suppliers are required, under standard conditions of electricity and gas supply licences, to take all reasonable steps to install smart meters in all domestic and smaller business<sup>20</sup> premises in Great Britain by the end of 2020. Smart meters provide a register showing the cumulative amount of energy exported and can record and store at least 3 months’ worth of half-hourly export data, enabling generators to meter and settle their export when used in conjunction with an export MPAN. Both the export register and half-hourly export data held on smart meters can be accessed remotely via the DCC, meaning that readings can be taken by the responsible export supplier.<sup>21</sup>
- 2.50. To manage electricity volumes exported to the grid, generators will require an export MPAN or MSID. This applies where installations have separate import and export meters, or where a single meter (such as a smart meter) - metering both import and export volumes - is installed. The import and export MPANs must be registered separately under the BSC<sup>22</sup>. Raising an MPAN or MSID is required to ensure the

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<sup>16</sup> MPAN stands for ‘Meter Point Administration Number’

<sup>17</sup> MSID stands for ‘Metering System Identifier’.

<sup>18</sup> Gas and Electricity Markets Authority, Standard conditions of electricity supply licence, available at: <https://www.ofgem.gov.uk/licences-industry-codes-and-standards/licences/licence-conditions>

<sup>19</sup>The Measuring Instruments (Active Electrical Energy Meters) Regulations 2006, No1679, available at: <http://www.legislation.gov.uk/uksi/2006/1679/made>

<sup>20</sup> In certain defined circumstances energy suppliers may install advanced meters in non-domestic premises.

<sup>21</sup> Half-hourly export data can also be retrieved, subject to the generator’s consent, by authorised third parties (where they are DCC Users acting in the role of ‘other user’).

<sup>22</sup> The Balancing and Settlement Code (BSC) uses the term of MSID in place of the term MPAN.

smooth operation of the SEG as it identifies the premises and responsible export supplier.

- 2.51. While our proposals are intended to support the rollout of smart meters, as noted in the tariff design section above, a small number of stakeholders have indicated that there may be issues in using smart meters in the way proposed here. The Government's position is that SMETS-compliant smart meters are compatible with microgeneration and enable half-hourly export, and any issues are likely to be transitional in nature. We will continue to work with Ofgem and industry to understand and, where necessary, address these issues.
- 2.52. As an alternative to using a SMETS-compliant meter, a stand-alone export meter could be used provided it can meter export on a half-hourly basis and meets the SEG metering requirements outlined in 2.44. While there is no cost in raising an MPAN with a DNO, we understand that the upfront cost for installing this type of export meter could fall in the region of £300, with a yearly maintenance cost of £50. In addition, to the best of our knowledge, no stand-alone export meter currently provides time of export information on a half-hourly basis. We would welcome further information on: (I) whether there are stand-alone export meters currently on the market that can record half-hourly export that are not smart meters, and (II) the costs of installing an export meter, and the impact of this on the commercial viability of installations in premises without a smart meter.
- 2.53. Government intends that SEG export payments are made based on the amount of electricity exported onto the grid. An export meter is always located at the point where the installation connects into the distribution or transmission network.
- 2.54. Given that there will be no generation payments under the SEG, it will not be a requirement to install a generation meter for the majority of installations. However, we are considering whether it would be necessary to require generation meters in addition to an export meter (which could be a smart meter) for installations where there is low-carbon generation co-located with other generation and/or storage. In this circumstance, a generation meter measuring the low-carbon generation may be necessary to determine the proportion of export eligible for payment under the SEG. This is developed further in the 'Co-location with storage' section below.

### Consultation Question

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

## Energy efficiency

- 2.55. As stated in the Clean Growth Strategy, Government has ambitious plans to improve the energy efficiency of all fuel poor homes and in addition establish minimum levels of energy efficiency for privately rented properties in England and Wales. Small-scale low-carbon generation will play an important part in contributing to these plans. For example, the introduction of solar PV and battery storage to a property helps lower consumer bills by reducing the amount of electricity imported from the grid and maximising the opportunities of on-site generation.
- 2.56. In order to allow the maximum number of sites to benefit from the introduction of the SEG, we are not proposing to introduce an eligibility requirement based around a particular EPC criteria. It is our intention to aid those who currently find it difficult to enter into the FIT scheme, such as listed buildings, but still want to participate in helping the UK energy system become smarter. This will mean that community organisations or energy providers will not be required to provide additional information to either their supplier or the administrative body, which is currently the case under the FIT scheme. Of course, we still want to encourage all generators, together with their suppliers, to push forward with energy efficient measures, however for the reasons stated we do not think that the SEG is the best avenue by which to do this.

### Consultation Question

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| 16. | Do you agree that installations entering into 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. |
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## Installations in receipt of other support schemes

- 2.57. We propose that if an installation is already in receipt of Government support through the FIT scheme for the electricity generated by the installation, either for self-consumption or export to the grid, then it will be ineligible for the SEG.
- 2.58. Generators applying for the SEG will be required to declare to the SEG provider if the installation in question, or individual elements of the generating equipment, have received or are receiving any other Government support including locally, or regionally. For clarity, this is for information purposes only and will not preclude otherwise eligible installations from applying for the SEG.
- 2.59. For the avoidance of doubt, the receipt of RHI payments will also not in itself preclude an installation from registering for the SEG.

### Consultation Question

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| 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? |
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## Co-location with storage

- 2.60. We are committed to enabling smart homes and businesses. Storage systems can help households and businesses manage their energy consumption, and as a result, their bills. This can be achieved by using a storage device to either store electricity generated by on-site generation to displace consumption from the grid, or by consuming power from the grid when demand is low and selling it back when demand is higher, helping to balance the grid and avoid efficiency losses within the distribution system.
- 2.61. We want to enable generators who receive SEG payments to also be able to benefit from the advantages of storage technology, where it is practically possible. The SEG will make payments on electricity that is generated from an eligible generation technology and exported to the grid, known as 'green electricity'. However, storage technologies can be charged, either from a low-carbon generation source ('green electricity') or from the grid ('brown electricity').
- 2.62. Where storage is co-located with low-carbon generation, we would like to seek views on whether SEG payments should be limited to 'green' electricity, or also paid out on any 'brown' electricity exported from the storage device. If SEG providers were to pay out on 'brown' electricity, co-location of storage with an eligible generation technology would be a pre-requisite.
- 2.63. If SEG payments were to be limited to 'green' electricity when storage technology is co-located with generation, the metering arrangements will need to be able to determine the portion of electricity generated on-site by the eligible technology and then either exported to the grid, or stored and then exported to the grid.
- 2.64. We understand several solutions are being developed for storage arrangements which use multiple metering and software applications to determine the source of electricity used to charge it. This technology also has the potential capability to determine the proportion of electricity exported from the battery which is derived from the grid, and proportion of electricity derived from the low-carbon generating installation.
- 2.65. If this can be combined with an export meter capable of determining which proportion of electricity export comes directly from the eligible generation unit(s), and which proportion of export comes from the storage device, these figures can be combined to give an overall 'green' export figure.
- 2.66. We welcome views from industry on if and how this technology could be used under the SEG to demonstrate the volume of export solely from low-carbon sources.
- 2.67. It is our understanding that limiting SEG payments to 'green' electricity in these circumstances may require more than one meter to be installed, as well as specific software applications. Otherwise, the functionality of the storage device would have to be limited, for instance by using a disconnection relay that prevented the storage device from charging from the grid. If a disconnection relay were to be used in this way, a single export meter would allow the 'green' exported electricity to be metered. However, this would also limit the functionality of the storage – e.g. it would not be able to participate in frequency response services.
- 2.68. We welcome views on whether the practical implications of limiting SEG payments to 'green' electricity in this way might be disproportionate, especially at the domestic



scale, given the potentially complex metering arrangements or restrictions on the functionality of the storage unit that would be required.

- 2.69. However, we are considering if SEG payments should be made available to electricity exported to the grid from the storage device, irrespective of whether the storage device was initially charged using renewable electricity generated on-site or charged from the grid.
- 2.70. If SEG payments were to be made in this way, we do not propose that any additional metering arrangements (beyond those set out in 2.44) would be mandated in order to separate the quantity of exported electricity generated on-site from that which was imported from the grid, stored and then exported.
- 2.71. Were SEG payments to be made on 'brown' electricity exported from a co-located storage device, and assuming the cost of import is greater than the value generators would receive from their export, there would likely be a greater incentive to self-consume any stored electricity as opposed to exporting it to the grid. This is because consumers would be making a bill saving equal to the full import value of any electricity that would have otherwise been imported from the grid. This saving would likely be higher than any revenue that could be earned if this 'brown' electricity was exported to the grid under a SEG tariff.
- 2.72. As a result, it is our understanding that gaming opportunities would be minimal if SEG payments were to be made on 'brown' electricity exported from a co-located storage device.
- 2.73. We would like to seek further views on the implications of allowing SEG payments to be made on 'brown' electricity and any potential opportunities for gaming under this approach.

<b>Consultation Question</b>	
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.
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.
20.	If SEG payments were to be made on 'brown' electricity exported from a co-located storage device, are there any potential opportunities for gaming? If so, please provide details.
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?

## Sustainability criteria and feedstock restrictions

- 2.74. The UK Government's mandatory sustainability criteria for biomass for heat and power generation ensures biomass reduces carbon emissions and is sourced sustainably. We propose that the sustainability criteria and feedstock restrictions, which currently apply to Anaerobic Digestion (AD)<sup>23</sup> continue to apply to AD in any future arrangements to support small-scale low-carbon generation. As a result, generators will only be entitled to receive a SEG tariff for the exported electricity that meets these criteria and restrictions.
- 2.75. The rationale for sustainability criteria is to reduce the risks of generating energy from material which does not achieve a substantial greenhouse gas saving or has a detrimental impact on land with a high ecological value. The effect would be to further encourage the use of waste and avoid the risk that AD operators gravitate to a small-scale low-carbon support scheme if the feedstock is not likely to pass sustainability criteria in the Renewable Heat Incentive (RHI).
- 2.76. The rationale for introducing feedstock restrictions would be to reduce the use of crops in AD installations, and incentivise the use of waste feedstock instead, as this tends to offer the greatest greenhouse gas emissions savings.
- 2.77. The sustainability criteria and feedstock restrictions would also provide a consistent application of the principles of sustainability across Government interventions.
- 2.78. For these reasons, we propose mirroring the reporting requirements and the process for administering them under FIT as part of ongoing reporting requirements for the SEG. This will be administered by Ofgem in the same way it is now under the FIT scheme. We will remain open to potential changes in sustainability criteria and feedstock restrictions, and these may be updated in the future. Working with DEFRA, we will continue to assess and monitor any impacts this may have on air quality.

### Consultation Question

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.
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.

<sup>23</sup> Details of the sustainability and feedstock restrictions for the FIT scheme are available in the following guidance: *Feed-in Tariffs: Guidance on sustainability criteria and feedstock restrictions (version 2)*, available at: <https://www.ofgem.gov.uk/publications-and-updates/feed-tariffs-guidance-sustainability-criteria-and-feedstock-restrictions>



## Transitional arrangements

- 2.79. The FIT scheme is set to close to new applications on 31 March 2019. We expect there will be a hiatus between the closure of the FIT scheme and implementation of the SEG. This could mean, depending on the market offerings at the time, that some newly deployed small-scale low-carbon generation installations may not have a route to market available to them for a short period of time.
- 2.80. A generator that is unable to receive support under the FIT scheme due to the closure of the scheme will be eligible to apply for the SEG once it is implemented. For clarity, we are not proposing that retrospective payments be made to generators for electricity exported to the national grid prior to their acceptance onto the SEG.

## Operational and administration arrangements

### The role of BEIS, Ofgem, and suppliers

- 2.81. The organisations involved in the delivery and administration of FIT (the licensed electricity suppliers, Ofgem, and through the MCS, Gemserv) have existing governance, audit and assurance procedures in place, some of which will be suitable for use with the proposed administration of the SEG.
- 2.82. We will work with the relevant organisations to ensure that the powers and procedures in place provide the assurance we need to help achieve the following:
- Only eligible and accepted installations receive the SEG;
  - Suppliers make the SEG available to eligible generators;
  - Information provided by generators is accurate and there are suitable checks in place to prevent fraud;
  - Adequate procedures are in place to ensure consumer protection.
- 2.83. Set out below are the proposed roles for each organisation. We welcome comments on the following role descriptions:
- 2.84. **The role for BEIS** – BEIS intends to legislate for the SEG and have no additional role in provision or administration. We intend to introduce the SEG through new secondary legislation under section 43 Energy Act 2008. A new Standard Licence Condition (SLC) in the Electricity Supply Standard Licence Conditions would also need to be introduced under section 41 Energy Act 2008 to set out relevant obligations for electricity suppliers.
- 2.85. We propose to introduce an evaluation process of the SEG, that would be conducted by BEIS, for the purposes of assessing whether small-scale low-carbon generators are able to effectively sell exported electricity to the grid. This outcome may be achieved through the SEG, or similarly through market-based solutions, which would be outside of the scope and control of government. It is important to note that as the SEG would be established to help support or stimulate offerings in the market, low uptake of the

SEG would not necessarily signal a negative outcome if the market was providing suitable alternatives.

- 2.86. **The role for Ofgem** - The SEG is to be introduced through licence obligations on electricity suppliers, meaning Ofgem will have the lead role in monitoring, enforcement and fraud prevention. We are also proposing to legislate for the following administrative duties. These are:
- Monitoring and enforcement of the supplier obligations, including ensuring mandated SEG suppliers provide a SEG tariff to eligible generators;
  - Maintain a central register of deployment;
  - Administer the sustainability criteria and feedstock restrictions reporting requirements applicable to AD installations, as per the FIT scheme;
  - Collection of data from suppliers for public reporting;
- 2.87. Ofgem may use its enforcement powers under the Electricity Act 1989, if it has grounds to believe that a Licensed Electricity Supplier is contravening or is likely to contravene a relevant condition. Such action may be by way of an order for securing Licensed Electricity Supplier compliance with the relevant condition. Where a Licensed Electricity Supplier has contravened or is contravening a relevant condition, Ofgem may take action through the imposition of a penalty.
- 2.88. Ofgem may take enforcement action which includes: issuing directions or orders to bring an end to a breach or remedy a harm that was caused, impose financial penalties, and accept commitments or undertakings relating to future conduct or arrangements.
- 2.89. Ofgem will also have a public reporting function including the publication of statistics and an Annual Report on activity under SEGs provided by suppliers. This would include, but not be limited to supplier's compliance with their obligations under SEG, deployment, and total payments made to generators.
- 2.90. The evaluation process proposed under the SEG would be for BEIS to utilise information gathered by Ofgem as part of their yearly report. This report would be based on the central register. Please refer to paragraph 2.111-2.115 for more information on registration requirements.
- 2.91. **The role for suppliers** - We propose to make provision within the supplier licence conditions for the introduction of mandatory and voluntary SEG providers. Mandatory and voluntary SEG providers will have the following definitions and obligations:
- **Mandatory SEG providers** - Electricity suppliers will be defined as mandatory SEG providers if they have at least 250,000 domestic electricity customers on 31

December of the immediately preceding SEG year<sup>24</sup>. Mandatory SEG providers will be obligated to register and make SEG payments to eligible generators.

- **Voluntary SEG providers** - Electricity suppliers with fewer than 250,000 domestic customers will be able to elect to become SEG providers. Voluntary SEG providers will accept the same obligations, as set out in the supplier licence obligations, as mandatory SEG providers. Once a supplier has become a voluntary SEG provider they will be obligated to register and make SEG payments to eligible generators. These suppliers will be defined as Voluntary SEG providers and required to remain in the SEG mechanism for the duration of the SEG year in which they enter.

- 2.92. Suppliers who elect to become voluntary SEG providers will help to increase the number of routes to market for eligible generators and play a significant role in the development of this market.
- 2.93. We anticipate SEG providers would come forward on a voluntary basis as was the case under the FIT scheme in which over 50% of suppliers eligible to become voluntary FIT licensees took up the option to become voluntary FIT licensees<sup>25</sup>.
- 2.94. We propose that under the SEG, SEG providers will also undertake the following administrative duties:
- Share publicly their status as a SEG provider, either as a mandatory or voluntary provider, and notify Ofgem of their status and any changes;
  - Assessment of a generator's eligibility for the SEG, to include the provision by generators of an MCS certificate where required, and responsibility to verify a generator's ongoing eligibility;
  - Make SEG payments to eligible generators based on verified export meter readings;
  - Should a generator no-longer be eligible for the SEG, the SEG provider will not be required to make payments to this generator under the SEG;
  - Register installations with the central register administered by Ofgem;
  - To carry out counter fraud activity to ensure only eligible generators participate in and benefit from the SEG by taking reasonable steps to reduce error and combat abuse, with appropriate reporting of suspected fraud to Ofgem;

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<sup>24</sup> The SEG year – we propose that, as with the FIT scheme, a SEG year should run from the 1 April to 31 March. As year one of the SEG may not commence on the 1 April, year one will run from the actual commencement date to 31 March. Year 2, and subsequent years will run from 1 April to 31 March.

<sup>25</sup> We estimate that 52 suppliers were eligible to be Voluntary FIT Licensees in 2016/2017 based on Ofgem's Annual FIT report and supplier data, available at: [insert web link]

- Handle and resolve complaints raised by generators and where these complaints are passed to the Energy Ombudsman; and
- Provide Ofgem with data required for the publication of annual reports.

2.95. As the SEG will be implemented in part by modifications to the Electricity Supply Standard Licence Conditions, the requirements on suppliers will be a “relevant condition” under the Electricity Act 1989. If the suppliers do not comply with the requirements of the scheme it will be an enforcement matter for the Gas and Electricity Markets Authority.

<b>Consultation Question</b>	
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?
25.	Do you agree with the review process proposal for the SEG? If not, what alternative approach would you suggest?
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.
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 provisions need to be made?

### **The Customer experience: Finding a SEG provider and getting paid**

2.96. We propose that generators will make an application to their chosen SEG provider for a SEG tariff. We will legislate that suppliers will be responsible for determining whether an installation is eligible and therefore can be accepted onto the SEG and offered a tariff.

2.97. We propose that suppliers must request, and generators of all capacities up to the maximum threshold must provide, the details necessary to:

- Illustrate that a generation installation meets the eligibility criteria;
- Register eligible installations with the central register.

2.98. This provision will be set out in the supplier licence conditions.

- 2.99. In addition, we propose to require evidence of appropriate installation and product standards. Government is committed to ensuring that there is sufficient consumer protection and quality assurance for generators under the SEG. We intend to draw on existing arrangements, such as those under the FIT scheme, where appropriate.
- 2.100. The benefits of requiring technology and installation accreditation are that they give assurances to generators and suppliers about the likely quality, durability and performance of installations. By requiring that microgeneration products and installers adhere to robust industry developed standards, accreditation schemes guarantee a level of consumer protection and enables the provision of accurate forecasts of energy outputs to generators.
- 2.101. We propose to legislate that installations applying for the SEG will as part of their application be required to:
- Solar PV, wind and mCHP up to and including 50kW – provide certification to evidence that Microgeneration Certification Scheme (MCS)<sup>26</sup> certified, or equivalent, equipment that has been installed by an MCS-certified, or equivalent, installer;
  - AD, hydro, and all other technologies above 50kW - as a minimum provide the same details as are required under the MCS certification process. This should include the installation's MPAN, address, grid reference, commissioning certificates, and any evidence specifically needed to evidence an installations eligibility.
- 2.102. We believe that it would be beneficial to continue to require smaller generators (Solar PV, wind and mCHP installations up to and including 50kW) to have MCS certified installations and are proposing to remove the 2kW limit on mCHP installations. Under the FIT scheme, the assessment of eligible capacity for AD, hydro and all other technologies with installations above 50kW was undertaken by Ofgem. However, we do not intend to require any additional certification requirements, above the current industry requirements, for AD, hydro and all other technologies with generation installations above 50kW, but we will require SEG providers to carry out an eligibility assessment. We believe this is appropriate as the sector seeks to move towards more market-based solutions and given both the level of commercial oversight projects of this scale receive, and the requirements and procedures governing installations of this capacity, such as gaining access a grid connection, and the commissioning process.
- 2.103. Where an installation has eligible generation technology co-located with storage technology we propose that such installations be required to provide the following additional information as part of their application to the SEG provider:
- The energy capacity of the storage device in kWh;

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<sup>26</sup>MCS is a nationally recognised independent certification scheme accredited by the United Kingdom Accreditation Service (UKAS). MCS is the only formalised independent, industry standard in the UK based on European and international standards and has an established accreditation role for existing Government support programmes.

- The electricity power rating of the storage device in kW;
- Duration (can be calculated from above);
- The type of storage device, and if relevant, battery chemistry (e.g. lithium ion battery);
- Details on the metering arrangements being used with the storage and generation systems.

2.104. We do not currently believe there is a need for additional requirements for storage beyond those listed in 2.103. However, this view may alter depending on the decisions made on whether to allow payments for 'brown' electricity.

2.105. Once eligibility has been assessed by the SEG provider, the SEG provider would issue an appropriate contract to the generator and notify the central registry that an installation has been accepted onto a SEG tariff. We propose that electricity suppliers will be responsible for paying the SEG tariffs.

2.106. Our expectation is that the operation of the SEG, such as metering and payment arrangements, will be as fully integrated into existing industry structures and systems as possible. We propose that it will be up to the suppliers to decide their own procedures for paying eligible generators to enable suppliers to develop least-cost and innovative systems – which support the development of market led routes to market. However, we are proposing that there be guidance which sets out what administrative arrangements might be required for suppliers provide a SEG for electricity exported to the grid from an eligible technology.

2.107. Government is also considering other consumer protection measures. On 10 August 2018, the National Product Safety Strategy<sup>27</sup> was launched by the government's newly established Office for Product Safety and Standards (OPSS). Included in the plan are ambitious new measures such as:

- A new national incident management team for product safety incidents capable of coordinating large scale product recall and repair programmes;
- Establishing a new website to support consumers with reliable information and advice about recalled products;
- Close working with manufacturers to ensure they are compliant with safety regulations from an earlier stage of the production process;
- Developing tools and guidance to assist local authorities in improving risk assessments, identifying mistakes before they happen.

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<sup>27</sup> OPSS 2018, *Strengthening national capacity for product safety: Strategy 2018-2020*, available at: <https://www.gov.uk/government/publications/strengthening-national-capacity-for-product-safety-strategy-2018-2020>



- 2.108. The OPSS, as part of its Safety and Standards Strategic Research Plan, has identified domestic storage technologies (typically 2-10kWh) as an area for research, as, to date there has been a larger focus on grid scale batteries (MWh). This work will help to address this knowledge gap and will likely focus on the battery management system, excluding detailed consideration of the location within the house and the manufacture of the batteries.
- 2.109. The Government is committed to ensuring robust consumer protection measures are in place for storage technologies. As set out in our recent progress update on the Smart Systems and Flexibility Plan, we have set up an industry-led, health and safety governance group focusing on electricity storage. This group aims to ensure that as the industry develops and storage deployment increases, an appropriate, robust and future-proofed health and safety framework will be developed and maintained.
- 2.110. In particular, the governance group will seek to consolidate existing health and safety guidance, codes and working groups within the area, and consider the need for an umbrella standard. The Government will continue to support the work of this group where appropriate.

### Consultation Question

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?
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?

### Registering installations accepted for the SEG

- 2.111. We propose for there to be a central registration (CR) system for installations in receipt of a SEG to be administered by Ofgem. The required details would be added to the central register once an installation had been determined as eligible and accepted, i.e. once a contract has been issued. The purpose of this system would be to help track deployment of small-scale low-carbon technologies and co-located storage assets, assist Ofgem with their monitoring, and audit duties and to provide data to help prevent fraud.
- 2.112. Under this arrangement suppliers who are implementing the SEG will need to provide for the purposes of the CR:
- Installation details such as technology type, total installed capacity;

- Date of installation, location and MCS installer details; and
- Metering details such as supply and (if applicable) export MPANs, and serial numbers of generation, stand-alone export and smart meters.

2.113. In order to bring the information held by the CR into line with the proposal to meter and register for settlement of export and enable synergies with smart technologies, the following information will need to be included in the return by suppliers to Ofgem:

- That export MPAN information is provided;
- Disclosure of whether a smart meter, or suitable export meter, is installed;
- The serial number of an export meter/smart meter;
- A declaration of whether the installation is co-located with storage, and if so, to submit information on the total installed capacity of the storage; and

Tthat suppliers submit this information to the central register.

2.114. We propose that under the SEG registration process it will be the responsibility of the supplier to submit all necessary details and information to the CR. The SEG supplier or provider will then pass this information on to Ofgem who hold the CR. Solar PV, wind and mCHP installations up to and including 50kW in capacity would provide an MCS certificate.

2.115. However, an alternative approach could be for suppliers to collect and store the relevant information for the installations they make export payments to, with a requirement for all suppliers to publicly report this information quarterly to Ofgem. Compliance with this requirement and the quality of the data would be monitored by Ofgem. This would reduce the frequency of data reporting i.e. from real time to quarterly and remove the requirement for a central register.

Consultation Question	
30.	Is the process for applying to the SEG practical, and will it ensure only eligible generators are able to participate in the SEG?
31.	Should deployment of installations through the SEG be submitted to a central register administered by Ofgem?

### Settlement basis

2.116. The Electricity Settlement Reform Significant Code Review (SCR) being run by Ofgem is considering the introduction of market-wide settlement reform. The scope of the SCR



includes future arrangements for export settlement, as stated in the SCR launch statement<sup>28</sup>.

2.117. Currently it is optional for generators exempt from the requirement to hold a generation licence to register to settle their export volume. If a non-licenced generator decides to be registered into settlement, it must be settled half-hourly when its capacity is greater than 30kW. Where the installation is 30kW or less, it can be settled on a half-hourly or non half-hourly basis.

2.118. Ofgem has published an Outline Business Case (OBC) for the SCR. The OBC is the second of three iterations of the Business Case, which Ofgem will use to support its final decision on market-wide settlement reform and set out the arrangements for implementation. The OBC presents the results of the draft economic assessment of the impact of market-wide settlement reforms and indicates substantial potential benefits. In light of this, Ofgem have signalled that their decision on the project should centre on when and how, rather than whether, market-wide settlement reform should be introduced. The OBC also explores the benefits of market-wide export settlement on a half-hourly basis<sup>29</sup>, highlighting the opportunities to realise the full benefits of this reform including:

- Increasing the accuracy of the allocation of electricity volumes;
- Increasing the accuracy and efficiency of balancing at distribution network level;
- Increasing suppliers' ability to forecast and purchase energy accurately, reducing their costs related to imbalance position and wholesale energy prices.

2.119. Ofgem expects suppliers to pass these costs savings onto consumers in the form of cheaper bills.

2.120. Under the SEG we propose that suppliers must:

- Register the export meter of an eligible generator for settlement, this includes generation with a capacity of less than 30kW; and
- Settle the exported electricity volumes under the SEG in accordance with the Balancing and Settlement Code<sup>30</sup> (BSC), and in future in accordance with any changes that are made to the export settlement arrangements following the conclusion of the SCR.

2.121. We believe our proposals for the SEG are practical for suppliers to implement and compatible with the current BSC requirements. Under the BSC, suppliers have the option to register a site for settlement, provided an export meter is installed. To be

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<sup>28</sup> Ofgem, 2017, *Electricity settlement reform significant code review: Launch statement*, available at: <https://www.ofgem.gov.uk/publications-and-updates/electricity-settlement-reform-significant-code-review-launch-statement-revised-timetable-and-request-applications-membership-target-operating-model-design-working-group>

<sup>29</sup> Ofgem, 2018, *Market-wide Settlement Reform: Outline Business Case*, available at: <https://www.ofgem.gov.uk/publications-and-updates/market-wide-settlement-reform-outline-business-case>, pages 30-33.

<sup>30</sup> Elexon, 2001, *Balancing and Settlement Code*, available at: <https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/>

eligible for the SEG generators will have to install a meter capable of measuring the amount of electricity exported on a half-hourly basis.

## Consultation Question

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|-----|---|
| 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. |
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### Ownership of installations

- 2.122. In general, generating equipment that will be eligible for the SEG will be purchased by an individual or organisation who will then receive the SEG payments as well as the benefits of that generating equipment. It will be up to landlords and tenants of domestic or commercial property to come to an arrangement about the receipt of payments and on-site electricity use benefits through bilateral agreements.
- 2.123. It is likely that over time there will be changes in the ownership of the property hosting the generating equipment on which the SEG is paid. We expect standard property ownership rights to be applied to the ownership of the generating equipment. When ownership of that property changes, we will expect the ownership of the generating equipment to also change and pass to the new owner of the property. The SEG tariff contracts provided by suppliers will need to accommodate such change of ownership events, but for clarity we do not currently propose to make specific provision for this in legislation.
- 2.124. We would expect that the SEG provider would want to require that any change in ownership is notified to them.

### Tax treatment

- 2.125. The treatment of the SEG with regard to tax is a matter for the consideration of HM Treasury. However, we anticipate that payments made for exported electricity under the SEG will be subject to current tax rules (in relation to income or corporation tax as appropriate depending on the nature of the generator). An existing income tax exemption relevant to FIT may also be available for domestic SEG generators who satisfy the relevant legislative conditions - please refer to the HMRC manual BIM40520<sup>31</sup>, which sets out this exemption.

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<sup>31</sup> HMRC, 2017, *Business Income Manual 40520 - Specific receipts: domestic microgeneration: Income Tax exemption for domestic microgeneration*, available at: <https://www.gov.uk/hmrc-internal-manuals/business-income-manual/bim40520>

## Consultation Question

33.

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

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This consultation is available from: <https://www.gov.uk/government/consultations/the-future-for-small-scale-low-carbon-generation>

If you need a version of this document in a more accessible format, please email [futureofsmallscalesupport@beis.gov.uk](mailto:futureofsmallscalesupport@beis.gov.uk). Please tell us what format you need. It will help us if you say what assistive technology you use.