

Flexible and Responsive Energy Retail Markets

Response on behalf of the Solar Trade Association

About us

Since 1978, the Solar Trade Association (STA) has worked to promote the benefits of solar energy and to make its adoption easy and profitable for domestic and commercial users.

A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large scale developers, investors and law firms.

Our mission is to empower the UK solar and storage transformation. We are paving the way for solar to deliver the maximum possible share of UK energy by 2030 by enabling a bigger and better solar industry. We represent both solar heat and power, and have a proven track record of winning breakthroughs for solar PV, storage and solar thermal.

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Would you like this response to remain confidential?	No

Response

The STA welcomes this opportunity to provide feedback on the BEIS-Ofgem joint consultation 'Flexible and Responsive Energy Retail Markets – Putting consumers at the centre of a smart, low carbon energy system'. The inclusion of this topic within the wider 'Future Energy Market Review' is important and it is encouraging to see greater collaboration between Government and the Regulator on these issues.

The decarbonisation of the energy system has radically altered the way that consumers engage with their energy consumption as well as the way the energy system must function. The increasing prevalence of variable generation on the networks has led to the development of flexibility services. On-site generation and storage allow both domestic consumers and businesses an unprecedented level of control over their energy consumption and fundamentally alter the relationship between consumers and networks. The Government's legally binding Net Zero by 2050 decarbonisation target poses a far greater challenge than the previous 80% target; requiring a faster, more comprehensive economy-wide decarbonisation. It is imperative that the existing market infrastructure, including the regulatory and policy barriers currently in place are swiftly reformed to ensure they are supportive of the deployment of large and small scale renewable and storage that is necessary to achieve this legislative commitment. These changes will further alter the experience and interaction that consumers have with the retail market.

The regulatory framework of the energy system has responded too slowly to emerging technologies and business models, to the detriment of both energy consumers and innovative businesses. The treatment of storage within the legislative and regulatory framework is a stark example: Currently, there is no appropriate definition for storage within the codes, with a consultation proposing to include it within the generation license (an inappropriate, short-term solution) only being issued by Ofgem this summer. Regulatory uncertainty continues to stifle and delay investment across the sector, particularly in subsidy-free renewable projects. The incremental and piecemeal reforms to the existing regulatory framework have proven insufficient in supporting innovation, competition or decarbonisation. An agile, future-proofed and adaptable regulatory framework will be imperative to achieve net zero 2050 and this joint review must fully explore the move away from the current 'one size fits all' supply license regime. The STA consider the following important to prioritise:

- A comprehensive review of Ofgem's remit and obligations, with a new Strategy and Policy Statement for the regulator that aligns with the 2050 Net Zero target
- Regulatory clarity, simplicity and certainty must be prioritised, in order to rebuild investor confidence
- Acceleration of the proposed phased approach to reform set out in this consultation
- A review of whether the supplier 'universal principle' is fit for purpose
- Ensuring that consumers are able to make informed energy purchasing decisions, with particular consideration of the increasing prevalence of "bundled packages", unclear supplier support for renewables ("greenwashing"), and whether suppliers are treating customers fairly under their SEG obligations

Incremental, piecemeal changes to regulation are no longer enough. An adaptable, future-proofed structure should be identified with a pathway determined for its implementation.

1. Do you agree with our vision for the future of the energy retail market, the outcomes we are seeking to achieve and our characterisation of the key challenges we need to overcome?

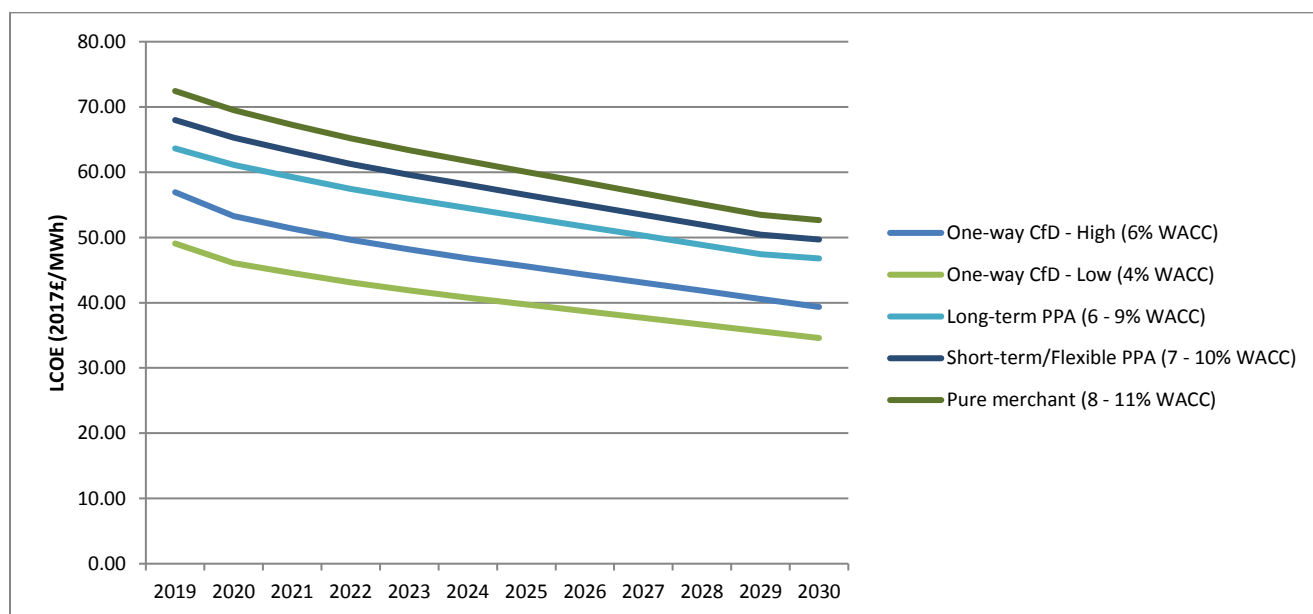
The vision of a wide choice of energy services, consistent consumer protection, minimal market distortions, competitive prices for all and energy consumers in vulnerable situations receiving services they need is broadly supported. However, the omission of decarbonisation from this list of key outcomes and challenges is deeply troubling and suggests that Ofgem have failed to recognise the significance of the legally binding 2050 Net Zero commitment.

Ofgem's own declaration of their principal objective: 'to protect the interests of existing and future consumers', has seemingly prioritised decision-making that does not consider the current or future threat that failing to achieve net zero by 2050 could have for consumers and the energy system. This is despite the consultation highlighting 'the reduction in greenhouse gases' as a core element of the regulator's principle role.

The concern over Ofgem's environmental remit and past decision-making is given credence through Ofgem's Consumer Impact Report of the past year (18/19). This relays that only two of their actions met the 'reduced environmental damage' objective whilst the CBI, Britain's largest business group, has also publicly denounced Ofgem as being out of touch over the climate crisis or risks 'undermining the UK's climate targets'¹.

We fundamentally disagree with the characterisation of the key challenges Ofgem need to overcome.

The consultation cites the recently published *Ofgem Strategic Narrative: 2019-2023* as demonstrating that decarbonisation has been reconsidered within their remit. Within this, the narrative highlights how Ofgem already investigates 'the impact of sustainability of major policy decisions, and outlines how there has been a move away from Government involvement in the energy system meaning 'the role in assessing the trade-off between current and future consumers' interests in sustainability and in cheaper prices will come into greater prominence'. This flawed and simplistic statement is indicative of the prevailing misunderstanding that there is a trade-off to make between decarbonisation and cost. Research supportive of 'the benefits of strong and early action far outweigh[ing] the economic costs of not acting' has prevailed for over a decade, most notably from 'The Economics of Climate Change: The Stern Review (2006)'². Additionally, renewables (particularly utility-scale solar and onshore wind) are the most cost-effective forms of generation. Our analysis of large-scale solar generation costs published in 2018 shows that an enabling policy framework, which lowers the cost of finance, would enable an LCOE of under £40/MWh for large-scale solar by 2025:



¹ Ambrose, Jillian: "Energy regulator is out of touch over climate crisis, say businesses" – The Guardian, 22 July 2019 – Available from: <https://www.theguardian.com/business/2019/jul/22/energy-regulator-is-out-of-touch-over-climate-crisis-say-businesses-ofgem>

² Stern, Nicholas (2006) "The Economics of Climate Change: The Stern Review". Available from:

<http://www.lse.ac.uk/GranthamInstitute/publication/the-economics-of-climate-change-the-stern-review/>

Ofgem urgently requires a new Strategy and Policy Statement aligned with the 2050 Net Zero target

In stating that the regulator is “required to have regard to the Social and Environmental Guidance (the Guidance) from government in carrying out our role”, GEMA Chair Professor Martin Cave’s letter to former Secretary of State Greg Clark (4 December 2018) cites an undated document titled [Social and Environmental Guidance to the Electricity and Gas Markets Authority](#). This document appears to be the [Draft social and environmental guidance to the Gas and Electricity Markets Authority published by the former Department for Energy and Climate Change](#) (16 June 2011). It is deeply troubling that this is the prevailing social and environmental governance under which the regulator is operating, and this underscores the urgent need for a new Strategy and Policy Statement aligned with the 2050 Net Zero target.

The Energy Act (2013) contains provisions for what the Strategy and Policy Statement will set out, including the process for reviewing the Statement, at least every 5 years. It appears that this review process was initiated in 2014 and then [abandoned](#). The failure to update the Strategy and Policy Statement is a flagrant dereliction of duty by both the Secretary of State and the regulator.

The Net Zero legislation presents a clear opportunity for Ofgem’s remit to be reviewed with regards to prioritising decarbonisation in order to facilitate the legally binding 2050 decarbonisation commitment.

BEIS must establish clear guidelines and priorities upon which regulator decision-making should be based. This is acknowledged in the [Ofgem Strategic Narrative: 2019-2023](#), which states that “in the new circumstances [Net Zero] . . . [Ofgem] may have to take a more active role in building Great Britain’s low carbon energy system . . . this might involve:

- direct decision making to support the low carbon transition– for example through ensuring that network price controls,
- new retail arrangements and network charging support the efficient rollout out of new technologies, such as electric cars and low carbon heating”

Striking a balance between regulatory simplicity and clarity/certainty

In tandem with these five key outcomes and challenges the consultation highlighted Regulatory Simplicity. Whilst agreed that the current framework of licenses, codes and more is overly complex and acts as a barrier to entry and new business models, we would emphasise the need to strike the correct balance between simplicity and regulatory certainty. The correct balance needs to be struck between over-prescriptive rules (which can act as a market barrier and burden to those participating) and over-simplistic, overarching principles (which fail to provide the regulatory certainty needed by businesses to invest in increasingly capital-intensive flexibility solutions). An over-simplistic approach could merely reduce the level accountability of operators (such as networks) in this space to their customers.

Accelerating implementation of reform

The phased approach to reform is supported however, having already highlighted the barriers to entry and operation that the current slow reform to regulatory framework has inflicted on nascent markets such as storage, it is important to emphasise this should be done as quickly as possible to ensure the appropriate reform is attained in the shortest timeframe, whilst keeping open the possibility of a more substantial reform program of the regulatory framework.

2. Are there examples of new products, services and business models that would benefit current and future consumers, but are blocked by the current regulatory framework?

A varied choice of energy services, products and business models, unobstructed by the regulatory framework, will be necessary to maximise the potential for homes and businesses to reduce their energy consumption and provide flexibility services to the grid. We strongly agree with the consultation document’s correct identification that becoming a licensed electricity supplier is a barrier to new services, products and business models to be a licensed electricity supplier is a barrier to progress and innovation.

There are many examples of products, services and business models which could benefit current and future consumers but are currently prohibited by the regulation. By definition, those who have sought derogations will reflect technologies, business models, products and services that are in some way hindered by the existing regulatory framework. Some of these will have been successful and so form part of the Ofgem sandbox. These include trialling local energy market services such as peer-to-peer

trading. Others are actively pursuing change modifications such as the split metering code modification identified within the consultation. Whilst many of those hindered by the framework are directly concerned with energy generation, distribution and supply there remains barriers related to end uses. The regulations currently insufficiently recognise, support and value better built homes which ensure high energy efficiency standards with appropriate house base generation and storage. The value of these homes individually and as a portfolio able to be aggregated will assist in reducing or saving reinforcement costs on the networks or remove the need for additional (peak) generation capacity.

Other examples could look to what companies have expanded their usual operations to include the role of a supplier, in order to make a business model feasible. We would strongly support a review into whether the framework can be reformed, as it is likely the universal service application is currently preventing smaller, specialised and localised services from being tailored to sets of customers, for instance in a geographic area.

International experience can also point to what our regulations currently prevent. For instance, it is noticeable that models such as the SonnenCommunity already well established in Germany, Austria, Switzerland and Italy have not emerged in the UK.

3. Are there current or emerging harms to energy consumers which are currently out of scope of the regulatory framework? Do these differ for domestic and non-domestic consumers?

The scope of current and emerging harms within the current regulatory framework is questioned. Firstly, the impact and harms of the climate crisis are currently not being prioritised by Ofgem, nor appropriately considered within decision-making that affects the long-term operation of the energy market.

Provide further clarity on “green” tariffs and what constitutes support for renewables

Further harm could come from consumers not being able to make informed decisions about their energy choices with the emergence of new products, services and business models. For instance, it is questionable as to whether consumers currently choosing to support green and renewable tariffs understand what the tariffs they choose are supporting. This has had attention following Ofgem’s decision on the SVT Price Cap, which suggested REGO-only based green tariffs or ‘activities and costs associated with subsidies, obligations or other mandatory mechanisms, for example, costs for purchasing Renewable Energy Guarantees of Origin (REGOs; the costs of which we note are immaterial)’ as an SVT that supports renewables, would not be considered. With this decision, there is scope for further clarification by Ofgem as to what consumers should be made aware of in order to make informed decisions about their support of renewables. We would also encourage a wider review of the REGO framework, pending Brexit arrangements.

Taking a proactive approach to supporting prosumers

Future products and services from suppliers will also distinctly differ to what is offered on the market now. Bundled packages could become prominent, meaning it will become more difficult for customers to distinguish good deals from misleading advertising and pricing structures. Information to assist understanding should be made available to consumers, and Ofgem must keep abreast of developments in offers whilst considering whether additional regulations are needed to facilitate informed decision-making by consumers and businesses. This point was briefly touched upon in the consultation:

We will also need to consider the impacts on other consumers posed by increasingly engaged ‘prosumers’ active in demand response programmes. For example, where consumers participate in aggregation activities that optimise local demand in exchange for financial remuneration, they must be made clearly aware of what this service entails and risks to market and system integrity related to the recovery of network and system costs would need to be mitigated

However, we disagree with how the framing of engaged prosumers within this consultation. The consultation refers to “risks to market and system integrity related to the recovery of network and system costs” without due consideration or supporting evidence for the system benefits these prosumers provide through decarbonisation and flexibility. Whilst fairness in network and system cost recovery is imperative, we urge BEIS and Ofgem to gain a better understanding of prosumers benefits and costs to the system currently and moving forward (particularly with business models such as aggregation / virtual power plants coming

into force to provide DSR). This undertaking would be in keeping with research undertaken by the regulator such as the 2018 project on the '[Value of baseload capacity in low-carbon GB electricity system](https://www.ofgem.gov.uk/publications-and-updates/value-baseload-capacity-low-carbon-gb-electricity-system-2018)'.³

The social role of Ofgem with the social harm of fuel poverty is also questioned. The report 'Reshaping Regulation: Powering from the future' is worth noting, particularly the paragraph 'Reshape Fuel Poverty':

"[Fuel poverty] is a misplaced responsibility given to the energy sector and should be removed from energy policy. Fuel poverty is not an energy problem, but either one of real poverty or of bad housing, and as a result should sit clearly within a different set of policy areas and departments. Placing the fuel poverty agenda within the energy sector has distorted the system and created ceilings and thresholds that have restricted some companies' development. To address those in fuel poverty, policy should be reallocated to both the Department of Work and Pensions and the Department of Communities and Local Government."

There are further risks from the policy framework that mean consumers could be treated unfairly by their retail supplier. This is evident with the implementation of the Smart Export Guarantee (SEG), which legislates that suppliers are required to pay above £0.00/KWh, meaning that prosumers exporting electricity to the grid could be remunerated at a rate of £0.001p/KWh. The risk that consumers would be forced to export electricity at significantly below its fair market value is a profound concern for our industry, as this prospect would greatly undermine the economic case for investing in on-site renewable generation.

4. Would it be beneficial to allow suppliers to specialise and provide products and services to targeted groups of customers? If so, how can this be delivered while balancing the need for universal service?

There are likely to be cost and system benefits in allowing some supplies to specialise and provide products and services to targeted groups of customers, for instance, through using geographic licenses. This would enable localised opportunities to emerge as well as maximising the flexibility capabilities of specific segments of the population – enabling competition and offerings in this market to further develop.

There would likely need to be new regulations to protect certain consumers from being 'discriminated' against unfairly by suppliers. Under the current regulatory framework, this could be done by requiring suppliers to outline and prove their requirement to not have the universal principle applied through specifying the product or service and the benefits that targeting groups of customers would bring over a universal supply model. Those that do not fulfil this requirement would continue to apply the current universal principle.

5. Are incremental changes to regulation sufficient to support the energy transition and protect consumers? Or does this require a more fundamental reform, such as moving to modular regulation?

Long-term incremental changes are insufficient to fully maximise the potential services, products and business models that could emerge within the retail market, serving as a barrier to full decarbonisation and flexibility. This has been evidenced by Ofgem's Regulatory Sandbox findings which identified that 'when a proposition isn't possible today it is usually because of a complex mix of requirements including industry norms, systems, charging arrangements, codes and licenses'⁴. Those involved in the sandbox pilots have highlighted other countries with more favourable regulatory frameworks as to where it is likely they will deploy their models, due to the enduring, supportive framework being a preferable option to a time-limited derogation. Whilst incremental, phased reform is potentially the best option in some circumstances and for the time being, substantial reform to the existing framework is needed to elicit these opportunities. An adaptable, future-proofed structure should be identified with a pathway determined for its implementation.

To date, incremental reform has been slow and uncoordinated, proving an inappropriate means to keep pace with the rapid change occurring in the energy system and technologies and businesses participating therein. For instance, defining storage within the regulatory framework has only been consulted upon this summer, more than a decade after the commercialisation of large-

³<https://www.ofgem.gov.uk/publications-and-updates/value-baseload-capacity-low-carbon-gb-electricity-system-2018>

⁴https://www.ofgem.gov.uk/system/files/docs/2018/10/insights_from_running_the_regulatory_sandbox.pdf

scale battery storage technology⁵. Further to this, the definition being included is one under the generation license, meaning in the long-term this definition will likely change as the technology, its functionality and capabilities and thus how it should be treated under regulations differ distinctly from that of generation.

The approach suggested that there be 'licenses for each emerging category of service provider' would here have proven beneficial however, given the rapid change to the energy system expected to continue this may be an inefficient, slow and responsive regulatory framework to adopt in the longer term. Whilst derogations have proven useful to pilots, there has not been a substantial review as to how these derogations can be incorporated and the regulations adapted to ensure enduring business solutions to these pilots. Supply license exemptions were also highlighted as requiring Secretary of State decision-making, which could prove extremely time-consuming and complex for businesses. The concept of an authorisation regime and modular approach would mitigate many of the market barriers facing different business models, services and products currently and is an option the STA would support being fully explored.

9. What effect does the range of Energy and Climate Change Policy Levies have on the retail market?

The range of policy levies does have an impact on the retail market. UKERC research identified that levies to recover costs of energy policy add 13% to average household electricity and gas bills. However, wholesale costs of electricity remain by far the largest contribution to consumer bills⁶.

2018 analysis by Aurora Energy Research found that relative to 2010, the growth of renewables has dampened baseload prices by £4.1/MWh below a business-as-usual baseline, even factoring in the countervailing impact of the carbon price⁷. Most of this growth having been supported by the policy contributions from consumer bills. Going forward, this price-dampening effect will accelerate with the emergence of subsidy-free renewables, which would not have been possible without the establishment of domestic supply chains and expertise enabled by policy support mechanisms.

Moreover, research also undertaken by UKERC into 'Paying for energy transitions: public perspectives and acceptability' highlighted that 'research participants expressed willingness to accept between 9-13% of their energy bills going towards environmental and social levies'.

It is noted that there are historic policy costs still to come through, with the proportion of these costs in a consumer bill likely increasing between now and 2050, as an increasing prevalence of renewables on the system will lead to wholesale cost cannibalisation. Research has been done into reviewing the way these levies are collected, this is considered in the following question.

10. What actions could government take to reduce any negative impact of Energy and Climate Change Policy Levies?

UKERC research 'Funding a Low Carbon Energy System: a fairer approach?'⁸, suggests that socialising policy costs into general taxation could 'reduce energy bills for 70% of households'. This is due to policy levies on electricity bills having a disproportionate effect on customers whose electricity bills make up a larger share of their income, with a progressive tax either reducing this contribution or potentially removing it entirely.

11. Do you agree that now is not the time to make further changes on system and network cost recovery, metering and access to data as part of this retail market review?

⁵ <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.177.7586&rep=rep1&type=pdf>

⁶ <https://www.ofgem.gov.uk/publications-and-updates/infographic-bills-prices-and-profits>

⁷ <https://www.auroraer.com/wp-content/uploads/2018/10/Aurora-Report-public-Delivering-net-zero-November-2018-.pdf>

⁸ <http://www.ukerc.ac.uk/news/progressive-policy-could-reduce-energy-bills.html>

Whilst the Ofgem and BEIS workstreams focusing on the smart meter roll-out and network cost recovery are the appropriate places for those issues to be considered, it is important for the review of the energy retail market to keep these issues within scope and under consideration.