



Department for Business, Energy & Industrial Strategy

ofgem

Making a positive difference
for energy consumers

Flexible and Responsive Energy Retail Markets - response form

The consultation is available at: <https://www.gov.uk/government/consultations/flexible-and-responsive-energy-retail-markets>

The closing date for responses is 16 September 2019 at 23.45

As this is a joint review with Ofgem, please return completed form to both email addresses below:

Email to: energyretailmarketsreview@beis.gov.uk and futuresupply@ofgem.gov.uk

If preferred, you may submit your full response by post by using the following addresses:

Write to:

Energy Markets and Affordability Team
Department for Business, Energy and Industrial Strategy
3rd Floor, Area Abbey 1
1 Victoria Street
London
SW1H 0ET

AND

Future Retail Market Design Team
Ofgem
Fourth Floor
10 South Colonnade
Canary Wharf
London
E14 4PU

Any enquiries to:

Email: energyretailmarketsreview@beis.gov.uk

Please be aware that we intend to publish all responses to this consultation.

Information provided in response to this consultation, including personal information, may be subject to publication or release to other parties or to disclosure in accordance with the access to information regimes. Please see the consultation document for further information.

If you want information, including personal data, that you provide to be treated as confidential, please explain to us below why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we shall take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the department.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy notice](#)

I want my response to be treated as confidential ☐

Questions

Organisation (if applicable): Centre for Research into Energy Demand Solutions (CREDS)
Address: University of Oxford, OUCE, South Parks Road, Oxford OX1 3QY

Please check a box from a list of options that best describes you as a respondent. This allows views to be presented by group type.

	Respondent type
<input type="checkbox"/>	Business representative organisation/trade body
<input type="checkbox"/>	Charity or social enterprise
<input type="checkbox"/>	Individual
<input type="checkbox"/>	Large business (over 250 staff)
<input type="checkbox"/>	Local government
<input type="checkbox"/>	Medium business (50 to 250 staff)
<input type="checkbox"/>	Micro business (up to 9 staff)
<input type="checkbox"/>	Small business (10 to 49 staff)
<input checked="" type="checkbox"/>	Other (please describe) Academic research consortium

Comments:

This response was prepared by Jacopo Torriti (University of Reading) and Nick Eyre (University of Oxford) on behalf of the Centre for Research into Energy Demand Solutions (CREDS).

About CREDS

CREDS (the Centre for Research into Energy Demand Solutions), is a research centre established in 2018 with a vision to make the UK a leader in understanding the changes in energy demand needed for the transition to a secure and affordable, low-carbon energy system. Working with researchers, businesses and policy makers, our work addresses a broad range of issues. New research questions in the areas of technology, business models, social change and governance, and in their interaction, are needed. Our vision is for research in the UK to rise to the challenge of transforming the energy demand sector. CREDS is funded by EPSRC and ESRC. www.creds.ac.uk

We have responded to questions 1, 2, 4, 8, 11 and 17.

CREDS' analysis shows the complexity associated with making the electricity market flexible and responsive. In our recent report 'Shifting the focus: energy demand in a net-zero carbon UK'¹, we provide three main recommendations with regards to flexible and responsive energy demand.

- First, we recommend that consumers should be enabled to benefit from the reform of the pricing settlement.
- Second, we recommend that the National Grid Capacity Market should aim to increase storage and DSR participation, extending the one-year contracts under transitional arrangements for a longer time period.
- Third, we recommend reform of the current system of double charging for storage.

The position of the consultation document is that there are challenges to increasing flexibility whilst maintaining high levels of access for all consumers and these should be studied and understood. We agree with this general position and in our response we try to unpack some of these challenges and provide information on how research can be used to facilitate the transition to an energy system which is not only more efficient from a technical perspective, but also fair for consumers.

We also use our experience of energy efficiency investments and markets to make some recommendations on the future of energy efficiency obligations.

Below we address some of the specific questions set out in the terms of reference of the consultation.

Question 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? [Page 17 in document]

Comments: [Click here to enter text.](#)

The aspiration is to open up suppliers' opportunities for more responsive energy demand and create greater choice to consumers. Overall, we agree with the outcomes outlined in the consultation document, but we also think that there should be a better recognition of how the innovation which will enable this transition will affect different types of users.

This requires careful research work to understand the interaction between flexible (and so-called 'smart') solutions and everyday life (i.e. the current patterns of energy demand). Research at CREDS sets out to shed light on aspects of how innovation aimed at higher flexibility interacts with people's lives. This is because those consumers who can afford the capital costs associated with flexible services will be able to initially reap the benefits and reduce their energy costs.

¹ <https://www.creds.ac.uk/publications/shifting-the-focus-energy-demand-in-a-net-zero-carbon-uk/>

The principles which drive the energy retail vision outlined in the consultation document relate to post-trilemma thinking. For instance, with regards to fairness, suppliers of small consumers are paying too much for capacity they do not use (kW). Overall the consultation document does not seem to be too negative around the status quo (or arguably not very optimistic about regulatory change). Higher simplification of the retail market is desired, but the areas in which simplification will take place are not specified. Priority areas for simplification should not consist of retail tariffs only, but also billing, customer contracts and access to consumer protection.

Understandably, the consultation document does not analyse in detail examples of innovation for the retail market. However, intuitively products which have recently entered the market, such as 'energy as a service' (where photovoltaics and home batteries are installed by suppliers to facilitate demand flexibility), are better suited to larger dwellings with higher investment capacity. Beside home batteries and 'energy as a service', other flexible products and tariffs which might be offered by retailers include smart tariffs and time of use tariffs for electric vehicles. Compared to all car owners, electric vehicle owners are more likely in the 40-69 age group, high social grade, live in multi-car households² and are 89% male³. There is increasing evidence that opening the market to flexibility products will be mainly to the advantage of those with financial and capital advantages⁴. It is critical that government intervention takes into account distributional effects of any technical and price intervention aimed at increasing the level of flexibility offered by retailers to consumers.

Question 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?

[Page 26]

Comments: [Click here to enter text.](#)

There are examples of new products, services and business models that would benefit current and future consumers, but are blocked by the current regulatory framework. For example, a more responsive power market could be delivered through programmes and tariffs which limit and charge consumers modularly for the amount of power which can be demanded at any given time.

Work carried out on behalf of Citizens Advice reviewed experiences in a number of countries that have implemented measures to place limits on consumers' capacity

² Department for Transport (2014) Public Attitudes to Electric Vehicles: 2014

³ Hutchins, R., Delmente, E., Stannard, J., Evans, L. and Bussell, S. (2013) Assessing the role of the Plug-in Car Grant and Plugged-in Places scheme in electric vehicle uptake

⁴ Powells, G., & Fell, M. J. (2019). Flexibility capital and flexibility justice in smart energy systems. *Energy Research & Social Science*, 54, 56-59. The ability to be flexible is affected by a wide variety of sociotechnical factors and determines what we term 'flexibility capital'. Levels of flexibility capital vary in populations, both absolutely and in the extent to which they are primarily derived from technological or social means, which has implications for the (dis)comfort and (in)convenience involved in economising flexibility capital.

requirements. These limits appear to be lower than the physical household fuse capacity in these countries. Capacity thresholds are associated with higher costs for higher thresholds. Typically, customers can choose from pre-defined capacity limits. Retailers provide guidance on how much might be required for smaller and larger households, with or without certain appliances, heating and cooling. Some markets also allow for short periods of disconnection if consumers exceed their capacity limits. We found that the Southern European countries of Italy, Spain and Portugal offer substantial experience in implementing and refining capacity-based limits and charging. A key driver of this is the capacity-demand of electric air conditioning. Similarly, countries where heat pumps are gaining ground – Sweden, Norway and France – are starting to implement capacity-based charges for domestic consumers.

Question 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? [Page 26]

Comments: [Click here to enter text.](#)

Question 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? [Page 26]

Comments: [Click here to enter text.](#)

In principle, it might be beneficial to allow suppliers to specialise and provide products and services to targeted groups of customers. The extent to which this approach will be successful in increasing flexibility whilst balancing the need for universal service depends on whether they will be able to offer flexible products which do not exacerbate differences in bills, whilst incentivising flexibility. For instance, given the current smart meter functionalities, supplier could offer tariffs which not only take into account time-use, but also power demand. The University of Reading carried out work for Citizens Advice to estimate which core capacity different customers can be associated with based on smart meter data. This painted a picture of how maximum demand varied in time, and across different types of consumers (income levels, heating type, rural or urban and other categorisations). Electric heating and high-income levels contribute to high-end capacity usage, whilst vulnerable consumers contribute to low-end capacity use.

Question 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? [Page 26]

Comments: [Click here to enter text.](#)

Question 6.

Are there any other potential market distortions we should be considering as part of our views? [Page 28]

Comments: [Click here to enter text.](#)

Question 7.

Would removing the thresholds for the Energy Company Obligation and Warm Home Discount help remove imbalances in the retail market, and could this be done without significantly increasing barriers to supplier entry or expansion in the retail market?

[Page 30]

Comments: [Click here to enter text.](#)

Question 8.

How could the delivery burden on suppliers from the Energy Company Obligation be reduced, for example through the introduction of a buyout mechanism? [Page 30]

Comments: [Click here to enter text.](#)

The impact of supplier energy efficiency obligations on consumer bills has been hugely beneficial, as the costs of the investments have been significantly smaller than the lifetime energy saving benefits according to Government's own impact assessments. This is significantly underplayed in the consultation document, as it only refers to the period of ECO (2013-current). Supplier obligations have been in place in the UK market since 1994 . They were substantially reduced in 2013 , with consequential damage to consumer interests. Whilst supplier obligations may therefore reasonably be described as a 'delivery burden' to those suppliers that do not want to support energy efficiency amongst their customers, they are clearly in the national interest, and consistent with the statutory duty to promote consumer interests.

The perverse public policy in the UK on supplier obligations has not been mirrored in other countries, many of which have introduced and strengthened energy efficiency obligations in recent years . So, there is now much that the UK can learn from other countries. Two particular changes could help reduce the risk of uneven costs to suppliers that is mentioned in the consultation document.

The first change would be to broaden the base of the obligation. GB supplier obligations are focussed entirely on low income household heating, despite there being no evidence that this is their most effective use. GB supplier obligations have always been unique in being confined to households; every other country uses them to support business energy efficiency as well and some to support transport. In GB, since 2013, almost all electricity use and 'able to pay' households have been excluded as well. Since the collapse of the

Green Deal this is a huge anomaly, for which there is no supporting justification. Allowing measures in business and non-heating end uses within the scope of the obligation would increase the number of obligated suppliers, increase cost effectiveness and reduce risks of costs falling unfairly on some suppliers.

The second change would be to place the obligation on gas and electricity distribution companies instead of suppliers. At the time of the unbundling of the Public Electricity Suppliers in 1998, both supplier and DNO options were discussed and both are allowed under the relevant primary legislation. However, the supplier obligation option was preferred on the grounds that it would encourage suppliers to be energy service companies selling energy efficiency as part of their core business. This has clearly never happened, and it is ironic that the current consultation now sees the obligations as a potential barrier to more innovative retail market offerings. DNOs are showing an increased interest in end use efficiency as part of the toolkit for delaying or avoiding network investment. There are a number of reasons to think a distribution option would be preferable. All distribution companies have the size to bear obligations. Their longevity and asset management focus is better suited to infrastructure investment. And costs to consumers would be spread over a price control period rather than incurred in the year of the measures. We therefore recommend that BEIS and Ofgem revisit this option.

Question 9.

What effect does the range of Energy and Climate Change Policy Levies have on the retail market? [Page 30]

Comments: [Click here to enter text.](#)

Question 10.

What actions could government take to reduce any negative impact of Energy and Climate Change Policy Levies? [Page 30]

Comments: [Click here to enter text.](#)

Question 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?

[Page 32]

Comments: [Click here to enter text.](#)

Any intervention in the retail market will need to be strongly connected to other targeted changes in Significant Code Review looking at access and forward-looking charging arrangements and access rights and choices for small users. Hence, timing associated with these changes is critical. For example, domestic energy bills are mainly energy-only (charged solely as a flat per kWh rate) and this is the case because of how wholesale energy is bought and sold, and how the networks charge for non-half hourly metered

users. If network charges were to change and incorporate a capacity-based charge for smaller users, suppliers would be expected to pass on this change to their customers.

Question 12.

What total costs do suppliers face with regards to bad debt? [Page 33]

Comments: [Click here to enter text.](#)

Question 13.

How could any potential distortions related to high cost-to-serve customers be addressed, for example by the provision of additional support services for customers struggling to afford their energy? [Page 13]

Comments: [Click here to enter text.](#)

Question 14.

Would addressing market distortions (for example size-based obligation thresholds for some policy schemes, supporting those who are struggling to afford their energy bills) help reduce incentives for suppliers to adopt pricing strategies that lead to excessive prices for loyal consumers? If so, to what extent (providing quantitative evidence, where possible)?

[Page 39]

Comments: [Click here to enter text.](#)

Question 15.

What are your views on the measures being considered to address loyalty penalties in different markets? What approach or – combination of approaches – would be most effective in the energy retail market? [Page 39]

Comments: [Click here to enter text.](#)

Question 16.

What other approaches could be adopted to ensure loyalty penalties do not re-emerge?

[Page 39]

Comments: [Click here to enter text.](#)

Question 17.

What protections or support may be required to engage consumers in vulnerable situations in the future market? [Page 39]

Comments: [Click here to enter text.](#)

Flexible products such as Real Time Cost pass-through for those customers previously on Standard Variable Tariffs and currently defaulting to price cap could be introduced to ensure flexibility, cost reflectiveness but also reducing distributional effects. Retailers use strategies whereby they charge a higher tariff, and therefore earn a greater margin, to consumers on default arrangements. This tactic of 'tease and squeeze' acts by incentivising consumers to switch through cheap, low-margin or loss leading tariffs on the expectation that they will default on to more expensive (and more profitable) Standard Variable Tariffs once their fixed rate expires. This pricing strategy has prompted a significant price differential between engaged consumers (typically on more competitive fixed price deals) and those on default arrangements. A cost pass-through tariff means that consumers on default arrangements are exposed to a tariff in which short-run marginal wholesale cost changes are passed through in their entirety. This means that consumers will be exposed to volatile wholesale costs in close to real time. This mechanism will probably provide more price-transparency and assurances that default consumers are paying a cost reflective price .

Capacity limits also have the potential to ensure energy bills remain fair and cost reflective but there is the potential for disproportionate impacts on vulnerable and disadvantaged consumers. The introduction of something like core capacity or capacity charging is a significant shift for domestic consumers. It will most likely change the way consumers behave, as well as what they pay. Its introduction on a market-wide basis would almost certainly be accompanied by detailed impact assessment, and this will need to include careful consideration of the impact on vulnerable and/or disadvantaged consumers.

Do you have any other comments that might aid the consultation process as a whole? It proved impossible to separate text into paragraphs using the content box, so we chose not to use the boxes. Apologies.

Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☒

At BEIS we carry out our research on many different topics and consultations. As your views are valuable to us, would it be okay if we were to contact you again from time to time either for research or to send through consultation documents?

☒ Yes

☐ No