

National Energy Action (NEA) response to Ofgem's Targeted Charging Review: Minded to decision and draft impact assessment



Action for Warm Homes

About National Energy Action (NEA)

NEA¹ works across England, Wales and Northern Ireland to ensure that everyone in the UK² can afford to live in a warm, dry home. To achieve this, we aim to improve access to energy and debt advice, provide training, support energy efficiency policies, local projects and co-ordinate other related services which can help change lives.

Our Response

Living in cold, damp and unhealthy homes continues to cause shocking levels of unnecessary hardship and premature mortality. Across the UK, at least 10,000 people die each year due to a cold home, the same as the number of people who die from breast or prostate cancer³. As well as the devastating impacts cold homes have on their occupant's lives, this problem extends to all of us; needless health & social care costs⁴, queues at GPs and A&E as well as delaying the discharge of the most vulnerable patients from hospital⁵.

NEA recently finished the administration of a Technology Innovation Fund (TIF). Overall over 44 projects were awarded funding (with an additional two programmes granted funding in 2017), involving 19 types of technology and 66 products. The grant recipients⁶ agreed to work with NEA to ensure that appropriate monitoring and evaluation⁷ could take place. NEA also utilised its extensive experience to work with local partners in areas experiencing high levels of fuel poverty to ensure the impacts of the technologies themselves were amplified. Where possible, there was also a focus on low income households, 61% of the residents had incomes under £16,000. In addition, NEA targeted rural and off-gas communities and EPC band D, E, F and G properties and 24% were living off the mains gas network and reliant on more expensive heating fuels. Early analysis of the initial household surveys indicated the TIF programme brought about significant benefits with high levels of satisfaction reported across the programme. These impacts included:

- Keeping warm and comfortable at home - A large majority (78.2%) of households have experienced increased thermal comfort as a result of TIF interventions
- Energy bills and affordability - Almost three quarters (73%) of households thought the affordability of their energy bills had improved since receiving their measures, with over a third (35.5%) agreeing that it had improved a lot while a further (37.5%) thought it had improved a little
- Managing energy bills - While almost half of households (48%) thought their energy bills were manageable before they received measures, this increased to over half (62%) after installation of the TIF measures
- High levels of satisfaction with our programme - The majority (85.5%) of households were satisfied or very satisfied with the assistance they had received from the TIF programme overall

The knowledge gained from these technical trials gives us a unique standpoint on which to comment on how changes in rules and structures in the energy system will impact on fuel poor and vulnerable households. The insights from these projects have fed into our answers in the main response.

We have four main recommendations for Ofgem as we move towards half hourly settlement in the domestic retail energy market:

1. There should be a significant cool-off period, of at least 6 months, for vulnerable customers who sign up to a time of use tariff, whereby if they find that their cost has

increased because of changing to a time of use tariff, they can revert to the initial deal with no penalty, as if they had not changed tariff.

2. Price comparison websites need to be very clear on the savings that customers can make when they are giving information on time of use tariffs. Ofgem should take more action, where possible, to ensure that price comparison websites are acting in the best interests of all customers.
3. Heat pumps can turn the home into a heat store so that the house itself can act like a battery, but only where the home is properly insulated. Government should provide further funding energy efficiency improvements for FP households as recommended by the CFP to ensure that the decarbonisation of heat (especially when moving to HPs) can mean that household consumption can become more flexible. If energy efficiency isn't improved, HPs are an inflexible source of demand.
4. Ofgem must enforce the broad vulnerability principle to the domestic Standards of Conduct. These requirements need to be addressed by all suppliers (regardless of their size) so that customers can have a greater level of confidence that they are being treated fairly by the supplier in all circumstances. This becomes much more important as the market becomes even more complicated with the introduction of often complex time of use tariffs.

Main Response to the Call for Evidence Questions.

Please note that we have only responded to questions that we believe are relevant to our charitable activity of campaigning to ensure that the needs of fuel poor households are recognised and addressed. The answers to the questions below represent our high-level views, gained from practical experience in the field.

Question 2.1: Individual domestic consumers will differ in their ability and/or willingness to engage with how they use electricity.

a) What are your views on the forms of communication most likely to facilitate/encourage consumers to engage with their energy use to help them make informed choices?

b) What specific information about their energy use could encourage consumers to engage? Please consider how this information is presented and how regularly it is communicated.

Our work on the technical innovation fund has shown time and again that face to face communication is the best way to engage vulnerable customers, and that if a second face to face conversation with the same customer, is possible then it is of great value in embedding any information that is being passed on. We are aware that this form of engagement is costly, and so is not always practicable in each situation. In these cases, we are aware that other techniques need to be explored, including communicating through an in-home display. More work needs to be done to investigate the appropriateness of these techniques, and we would encourage Ofgem to fund projects that aim to contribute to this knowledge base.

Our work on the TIF has shown that cost is the biggest driver for fuel poor and vulnerable households, with very few engaging on concepts such as the kWh or kW. In most cases, cost is the biggest driver, with the environmental side of energy falling further down the list of priorities.

Question 2.2: Aside from communication, what other measures or initiatives would encourage consumers to become more confident about engaging with their energy use? This engagement may be direct, or through an intermediary/third party.

Where information comes from is perhaps as important as the information itself. Information needs to be communicated by a trusted independent party, and information should be presented in language that is as simple as possible.

Question 2.3: Based on any relevant evidence you have collected, a) what proportion of consumers would be price responsive? B) what enablers would be important and what barriers might exist? C) what volume of load shifting from peak to off-peak periods (%) will a consumer be able to offer?

Whilst we do not have any evidence to suggest that any set percentage of customers are price sensitive, we are aware that price has a large impact on many fuel poor households. As we noted in our response to Ofgem's recent self-disconnection call for evidence⁸, customers are self-disconnecting and rationing their energy usage whilst on prepayment meters, implying a stark sensitivity to price and cost.

It is important that Ofgem understands that there is a significant risk that a lack of trust in the market dissuades particularly vulnerable households from participating in time of use tariffs. It is increasingly important that Government reinstates a centralised independent energy advice (which used to be the Energy Savings Advice Service) that customers can trust to help them make informed decision. The complexity of also represents a barrier to uptake, as it creates a risk of customers choosing a tariff that results in paying more without understanding this. NEA recommends the need for a cooling off period of at least six months for the most vulnerable customers

Question 2.4: A number of different approaches to load shifting exist.

a) Which approaches to load shifting (direct, or indirect, with or without automation) would domestic consumers be more likely to prefer and respond to?

b) What are the risks and benefits of these approaches?

c) How could those risks be mitigated?

d) Would certain types/groups of consumers favour certain approaches?

e) Would certain types/groups of consumers be at greater risk of detriment from certain approaches? These approaches could include but are not limited to:

- **ToU tariffs**
- **Tariffs reflecting capacity-based charges, which may involve a defined access limit or different types of access option as described in paragraph 2.6 and Appendix 4**

We believe that automation is likely to have the greatest effect once it is in the home, but there will be trust barriers in getting such hardware installed. We believe that direct price signals are more effective in producing a sharper response, as the incentive is clearer and more defined. An indirect signal is likely to give a more gradual steer to consumers, and may be more effective in changing the overall customer profile (e.g. economy 7)

Once again, we believe that trust issues can be mitigated through the reinstating of a central energy advice service.

Question 2.5: Which parties (eg suppliers, other third parties, network companies, community schemes etc) do you consider could be best placed and/or trusted to facilitate these above approaches?

The SSE-N SAVE project⁹ showed that community schemes are vital in ensuring that DSR can be successful at domestic level¹⁰. In order for time of use tariffs to be successful, suppliers need to have the IT infrastructure in place, as well as the support mechanisms to be able to offer the tariffs. If networks are to feed price signals into time of use tariffs, they will need to:

- a) understand where network constraints are;
- b) Be willing to want to solve these constraints using domestic DSR; and

c) Offer a price signal for the supplier to pass through.

Question 2.6: Certain consumers may face barriers that prevent them from load shifting.

a) What barriers exist that may prevent consumers from load shifting?

b) Which particular groups of domestic consumers may face greater or more significant barriers than others?

c) For particular consumers are there certain types or levels of consumption that there will be less scope to flex (ie are there any forms of consumption that consumers would consider as "essential" and be unable to shift, such that suppliers, network companies or third parties should not be able to offer to reduce consumers' usage below this limit)?

We are aware of several barriers fuel poor and vulnerable customers may face that prevent them from load shifting:

- Some essential medical equipment is required to be running 24/7, meaning that for some households a significant load is not flexible
- As previously discussed, a significant amount of PPM customers self-disconnects, meaning that they do not have load to shift (but could possibly benefit from lower prices at sometimes that they could not previously access).
- Homes with on demand electrical heating will not be able to shift a large part of their electricity demand in winter, as they are reliant on that load to adequately heat their homes at distinct points in time.

Question 2.7: Do you have any views about the scale of any distributional impacts? How may these be mitigated?

Grid Edge Policy have recently completed a short piece of research¹¹ to determine the distributional impacts that time of use tariffs may have. The conclusions are;

- It is important to look at both the distributional impacts absent behaviour change and taking account of behaviour change;
- There is not a clear pattern in the way that there is between average income and average consumption. All groups on average have a similar pattern of consumption based around the evening peak;
- However, within these averages there are still individual customers who have very different profiles and who would stand to gain or lose materially as a result of such changes. Even if there is no pattern to this Ofgem should be mindful of the fact that increases will be more difficult for customers on low incomes to absorb;
- Intuitively, one might expect that consumers at home all day (e.g. the elderly) would have flatter profiles (and more flexibility) and hence might stand to gain while working families with school age children might be expected to have peakier profiles (and less flexibility) and hence might stand to lose. This is not evident from the data but that may well reflect the paucity of the current data which is just linked to broad socio-demographic categories.

These conclusions are in line with our thinking. However, we urge Ofgem that it should not be incumbent on customer advocates to provide analyses of distributional impacts for debate, and this analysis should form part of Ofgem's own decision-making process. It is essential that Ofgem builds a consistent and stringent distributional analysis into all pieces of work that have a substantial effect on domestic customers, looking into different domestic segments, not just domestics as a whole.

Question 2.8: How could innovative technologies or solutions enable more consumers to provide flexibility, either individually or collectively (eg through a community approach)?

Our TIF trials have shown how automated solutions, including batteries, can help vulnerable and fuel poor households to provide flexibility. The results of our battery trials have not yet been published, but we will share them in due course.

We have also trialled a SUNAMP technology that looks to use a heat pump and thermal store to be able to load shift. We did not consider offering DSR services within this trial, but the potential is clear. Similarly, heat pumps can be flexible in a well-insulated home, which can act as a heat store. We believe that this is one of the many reasons that Government should provide further funding energy efficiency improvements for FP households as recommended by the CFP to ensure that the decarbonisation of heat can mean that household consumption can become more flexible. If the thermal efficiency of buildings is not improved, heat pumps will prove to be an incredible costly and inflexible source of demand.

Question 2.9: We want to understand what specific concerns or risks of detriment may exist with the use of technology and innovation to enable flexibility.

- a) What barriers exist for consumers to access these enabling technologies/innovative products?**
- b) How could these barriers be overcome?**
- c) Are there any particular concerns which may apply for certain consumer groups, eg vulnerable consumers (affordability and practicality)?**
- d) What further protection measures should be considered alongside these technologies?**

As hardware becomes more prevalent as an offering alongside tariffs, there is a need to ensure that customers are not locked in to faulty hardware for a number of years and are protected against outcomes where such hardware works to increase their energy cost when it was meant to save them money. There is currently no protection against this offered by Ofgem, who should look to work closely with other regulators to minimise the risk of this happening to customers in the energy market.

Once again, we urge Ofgem to implement cooling off periods for vulnerable customers signing up to time of use tariffs, and to push government to fund a centralised energy advice service to give customers independent advice when it comes to an ever-complex market that is increasingly difficult to navigate

Question 2.10: Do you have any views about whether consumers may prefer particular tariff types over others (for reference, some examples of ToU tariffs are listed in Appendix 2, and potential access options are described in Appendix 4)?

For vulnerable and fuel poor customers to benefit from time of use tariffs, they need to be as simple, clear and predictable as possible so that consumers can easily understand and plan their flexibility. As stated several times, a cooling off period for vulnerable customers is key to protecting them from an increasingly complex market.

Out of the options protected, we believe that the most effective would be “dynamic with limited changes”, e.g. spikes when network is constrained (once a week maximum for 1 hour maximum). As discussed in previous questions, even this level of complexity needs a lot of community engagement and energy coaching to work.

It is of course up to the market to decide which type works on a broader scale, but we believe there should be a requirement for all suppliers to offer at least one flat rate tariff available for those who don't want to engage with time shifting their demand.

Question 2.11: Which types of flexible tariffs and offers are likely to be available following settlement reform, considering the potential network charging and access options described? Please identify specifically the types of tariff options which

- a) suppliers are already offering or are developing**
- b) you expect may emerge following settlement reform**
- c) you expect suppliers may develop in response to more granular, locationally differing network charging signals and the availability of different access options for their consumers. Would you expect to see such tariffs, automation deals or offers targeted to consumers by location if underlying network charges varied locationally?**

As we are sure Ofgem is aware, Economy 7 and 10 tariffs have been around for a significant amount of time and are well established. We are also aware that Octopus Energy are offering a time of use tariff that broadly follows the wholesale price¹² whilst British Gas have offered a tariff with free weekend¹³ We expect more wholesale following tariffs after settlement reform, as well as tariffs that reflect TOU network costs around constraints.

Question 2.13: How far could principles-based obligations help ensure tariffs/choices are appropriate, including in relation to potential new access options?

The vulnerability obligation should, in theory, provide a good deal of protection to those who need it most. However, Ofgem must work to adequately enforce this broad vulnerability principle to the domestic Standards of Conduct. These requirements need to be addressed by all suppliers (regardless of their size) so that customers can have a greater level of confidence that they are being treated fairly by the supplier in all circumstances. This becomes much more important as the market becomes even more complicated with the introduction of often complex time of use tariffs.

¹ For more information visit: www.nea.org.uk.

² NEA also work alongside our sister charity Energy Action Scotland (EAS) to ensure we collectively have a UK wider reach.

³ NEA's recent joint briefing with E3G highlighted the UK has the sixth-worst long-term rate of excess winter mortality out of 30 European countries. Over the last five years there has been an average of 32,000 excess winter deaths in the UK every year. Of these, 9,700 die due to a cold home – the same as the number of people who die from breast or prostate cancer each year. The new analysis was released on Fuel Poverty Awareness Day the national day highlighting the problems faced by those struggling to keep warm in their homes. To read the press release and the full copy of the report visit: <http://www.nea.org.uk/media/news/230218/>

⁴ ⁶ In 2016 BRE released its revised Cost of Poor Housing (COPH) report, which estimated the cost of poor housing to the NHS based on EHS and NHS treatment costs from 2011 and includes treatment and care costs beyond the first year. It also includes additional societal costs including the impact on educational and employment attainment. Finally, it provides information in terms of QALYs (Quality adjusted life years) as well as cost benefits, and to compare with other health impacts. The report estimates that the overall cost of poor housing is £2bn, with up to 40% of the total cost to society of treating HHSRS Category 1 hazards falling on the NHS. Overall, the cost to the NHS from injuries and illness directly attributed to sub-standard homes was estimated at £1.4 billion, and the total costs to society as £18.6 billion.⁶ Research by the BRE in 2013 suggested that if all of the English housing stock with a SAP below the historic average of 41 was to be brought up to at least the current average of 51 through heating and insulation improvements, the health cost-benefit to the NHS would be some £750 million per annum.⁶ Other estimates put the costs to the NHS of energy inefficient housing at £192 million (£35 million of which was in the private rented sector). Use of the BRE category 1 calculator put the estimated private rented sector costs to the NHS at between £37 and £674 million depending on SAP rating and occupancy level.

⁵ Elliot AJ, Cross KW, Fleming DM. Acute respiratory infections and winter pressures on hospital admissions in England and Wales 1990-2005. J Public Health (Oxf). 2008 30(1):91-8.

⁶ £4.5m was awarded in grants for capital measures installation. Working with our partners, NEA was able to secure £2.5m additional match and/or gap funding securing 49p for every £1 spent. This in turn increased the number of households we were able to assist from 2,166 households receiving at least 1 measure forecast to raise to 2,204 during 2017/18, exceeding the overall TIF target by 48%. In all 2,681 measures were installed, forecast to increase to 2,719 during 2017/18. Alongside this, 292 frontline workers were trained, and 946 residents were directly supported by NEA Project Development Coordinators. 700 engaged in the product monitoring processes.

⁷ Please read the interim report technical evaluation here: https://www.nea.org.uk/wp-content/uploads/2017/09/TIF_Report_2017-FINAL-FOR-PRINT.pdf.

⁸ https://www.nea.org.uk/wp-content/uploads/2018/12/NEA-Response-to-Ofgem-Call-for-Evidence-on-Self-Disconnection_Final.pdf

⁹ The SAVE project will robustly trial and establish to what extent energy efficiency measures can be considered as a cost effective, predictable and sustainable tool for managing peak demand as an alternative to network reinforcement. Targeting domestic customers only, it will utilise monitoring technology alongside innovative approaches to engagement. See more here: <https://www.ssen.co.uk/save/>

¹⁰ SAVE Report 1 Report 1 - Lessons learnt on Energy Efficiency & Behavioural Change says that "Parties delivering messages to customers need to be seen and recognised as both trustworthy and authorities in the subject matter". See more here: <https://www.ssen.co.uk/WorkArea/DownloadAsset.aspx?id=7876>

¹¹ From Paper "Distributional Impacts of a Move to Half Hourly Settlement" by Maxine Frerk and Daniel Kenway of Grid Edge Policy.

¹² <https://octopus.energy/agile/>

¹³ <https://www.britishgas.co.uk/content/britishgas/terms/homeenergy-free-time-sat-may-2018-terms.html>