

7 January 2016

Energy Evidence,
National Infrastructure Commission,
1 Horse Guards Road,
London,
SW1A 2HQ

energyevidence@Infrastructure-Commission.gsi.gov.uk

Dear Sirs,

National Infrastructure Commission: call for evidence on improving how electricity demand and supply are balanced

Age UK is delighted to put some brief suggestions to the Commission as it considers these initial issues in the energy sector. The Charity co-signed a letter to the Chairman before Christmas proposing that there is merit in looking at energy efficiency programmes in general as a means both to manage demand more effectively and support consumers (especially the most vulnerable) to reduce consumption, and thus reduce their likelihood to be at risk of fuel poverty. Since this would amount to a major home retrofit and refurbishment programme, our argument was that it should be seen as a legitimate infrastructure project, recognising the savings that could be made in new generation capacity as well as the various economic and social benefits accruing from increased employment and better health outcomes. We highlight some of these benefits towards the end of this letter, and are still keen to see the Commission take a view about this wider vision.

However, this submission recognise that the Commission has defined its enquiry more specifically, so our suggestions are confined to that narrower agenda. In particular, we have noted that the Call for Evidence is primarily about the demand for electricity, so we have eschewed any comments on gas usage, and the use of gas for space heating, where there are significant potential savings from a more widespread investment in the upgrading of heating systems and the improvement of domestic insulation.

Below we outline our key points, which we would be happy to expand on and discuss.

1. Scrappage schemes

Government policies can have a big influence on consumer and market

response. The boiler scrappage scheme is a case in point; it helped significantly to stimulate demand for new, efficient boilers. That scheme, plus the rules for scoring energy savings outcomes in the Energy Company Obligation, weighted the choices offered by ECO strongly in favour of boiler replacements (which, for the fuel poor, would have been an unaffordable capital expense, by definition). As with old boilers, there must be thousands – perhaps millions – of ancient and inefficient fridges and freezers operating wastefully in domestic homes. There must be scope for similar scrappage schemes, and, as ECO is being reshaped pending its renewal from Spring 2017, for its outcomes to be reappraised, in order to promote the deployment of more efficient electrical goods.

2. Domestic generation and storage

Domestic generation of electricity triggered by feed-in tariffs has been a startling success, and led to a dramatic fall in the cost of photo-voltaic installations. But this momentum must be retained despite the well-publicised changes to the feed-in tariff regime, and the clue here probably lies in battery technology. Domestic batteries, which store the energy generated for later release, are now much more effective and efficient, but not yet available at scale in order to see their installation costs falling. There is a case for stimulating the domestic battery market with a time-limited subsidy or an incentive in the same way as the original concept of the feed-in tariff envisaged.

There may also be a case for a similar subsidy for battery schemes at a greater scale, linked to wind and solar generators in order to smooth their input of power into the grid.

3. Reforming Green Deal and ECO

The Green Deal was a massive disappointment, and one reason was probably that it was developed for individual households in the hope that they would individually and separately appreciate the concept and opportunity it offered and buy into it in isolation from the wider community. Similarly ECO has hitherto been largely focussed on individual households, some of which have shown little appetite even for a cost-free scheme when weighed against the disruption, mess and distrust of the work proposed.

However, where different programmes have been implemented at a community level, and encouraged neighbours to work together and provide mutual support and re-assurance, take-up levels can improve dramatically. The benefit goes beyond take-up and installation; neighbours compare notes on how the new scheme is working for them, and how they are making savings and using the benefits to best effect. ResPublica (amongst others) has done useful research into how behavioural change messages are amplified if they can be embedded in common conversation in a neighbourhood or community.

The emphasis in a new Green Deal and a re-shaped ECO must be to offer a wider array of options for community based schemes. Simple templates would curtail the administrative uncertainty for any neighbourhood or community group contemplating going down this route, and it could work with battery provision included too. And of course there is scope for incentives and other stimuli to be part of the package, such as reductions on Stamp Duty or council tax.

4. Smart meters

The ramping up of smart meter installations this year and through to 2020 is intended (inter alia) to prompt a new interest in energy usage and consumption. The role of Smart Energy GB is primarily to drive a consumer engagement programme, and create a conversation where householders compare notes on what they are discovering from their new meter, and what it is prompting them to think about in order to save on fuel consumption and costs. Possible actions they may consider taking may lie in some of the paragraphs above, but we need to convert 'possible' actions into 'probable' ones. That requires facilitation on two fronts. First the capital costs of installing new equipment or housing adaptations need to be underpinned by an offer of soft loans (or grants and other incentives). Second the finding and commissioning of suitably trained and qualified installers, with credible complaints routes and appropriately guaranteed outcomes, is an important support service. The Bonfield Review is looking at this latter consideration with vigour. The Infrastructure Commission may want to engage with this work by offering recruitment and training support.

5. Making consumer action more straightforward

The installation of smart meters is one potential trigger point to raise consumer awareness about energy usage and possible savings. It is also a one-off opportunity to engage with every household in the country: everyone will be visited by a skilled energy engineer, whose visit should prompt a short discussion about using the information provided by the meter to manage their energy better. The engineers must be careful not to push the sales of energy upgrades, new appliances and other services, but it would be a colossal missed opportunity not to offer information and to make informal suggestions about improving energy consumption and to suggest lines to explore. But leaving the premises without comment about the likely cost of those improvements and how to access funds to act on them would be equally inadequate. There needs to be some mechanism whereby people can be referred to a neutral advice agency which can take the householder forward to the point of action.

Interestingly, the National Institute of Health and Clinical Excellence published a Guideline (March 2015) calling for precisely that, so that medical professionals, who suspect that a patient's health could be in jeopardy as a result of living in a cold home, could signpost a route forward. The Guideline suggests that non-medical professionals, such as these visiting smart meter engineers, could access the same service. The Infrastructure Commission may wish to consider how to stimulate a development along these lines.

A service of the kind envisaged does exist in a number of local areas, but seldom under an identifiable household name. Some are statutory, but most are a mixture of voluntary and commercial interests: there is no generic name to build on to promote awareness of the service: their skills are not monitored and few can offer professional indemnity cover. But there is a rudimentary system to build on.

6. Energy Performance Certificates

Energy Performance Certificates were originally intended to provide a better map of the energy efficiency of our housing stock. Since they are only mandatory when a property is sold or rented to a new tenant, their penetration has only extended to about half the national housing stock. There is no reliable update

procedure – for example when people have undertaken home improvements. They do not give the householder a menu or shopping list of potential steps they might consider taking to improve their homes. Overall, they are rather superficial and fall short of being fit for purpose.

The Bonfield Review is looking at how they might be improved and turned into a more useful tool for helping a householder to manage energy more effectively, but inevitably there is a national investment called for in implementing a better system. But taken together with some of the other suggestions tabled above, there could be merit in seeing EPCs as an important part of the infrastructure architecture, and thus a legitimate concern for the Commission.

With the exception of point 2 (supporting the development of battery technology), our focus is on managing demand by promoting more consumer awareness about energy usage, and making it easier for consumers to reduce their consumption. Investing in effective consumer awareness will be key to achieving the needed demand-side responses.

Age UK is willing to provide more detail and supporting material. We are impressed by the modelling work done by Cambridge Econometrics and Verco, which shows the potential of a national programme aimed at supporting all low income households to achieve at least EPC Band C by 2025, and helping all households to achieve that by 2035. This could lead to outcomes including:

- GDP increased by £3.20 on a Government investment of £1.00;
- Tax revenues increased by £1.27 on a £1.00 investment;
- A 23.6MtCO₂ reduction per annum by 2030;
- Total energy savings of £8.6bn – over £400 per home;
- 108,000 new jobs (net) per annum over the period 2020-2030;
- NHS savings of 42p for every £1 invested in reducing fuel poverty.

Overall, we ask the Commission to consider the merits of adopting energy efficiency as a key priority to reduce energy demand from our growing population of older people, many of whom live in cold homes and put pressure on health services.

Yours faithfully,

Mervyn Kohler

External Affairs Adviser
Age UK
[email address redacted]