



Bringing Energy
Together

ADE Response to BEIS Select Committee on Energy Efficiency, Call for Evidence

16 January 2019

Background

The Association for Decentralised Energy welcomes the opportunity to respond to the BEIS Commons Select Committee inquiry to examine whether the government's current delivery of energy efficiency improvements in residential, commercial and public-sector buildings is consistent with meeting targets set out in the Clean Growth Strategy and the fourth and fifth carbon budgets.

The ADE is the UK's leading decentralised energy advocate, focused on creating a more cost effective, efficient and user-orientated energy system. The ADE has more than 120 members active across a range of technologies, and they include both the providers and the users of energy equipment and services. Our members have particular expertise in heat networks, combined heat and power, demand side energy services including demand response and storage, and energy efficiency. The ADE's merger with the Association for the Conservation of Energy has also seen the introduction of ACE Research, building on the ADE and ACE's history of publishing robust research with practical applications.

The Committee's points of focus

Overarching approach:

Who should have responsibility to pay for energy efficiency?

The ADE supports the principle that the responsibility for paying for efficiency measures should generally be tied to who derives the benefit from that measure¹ - with the likely exception of those living in fuel poverty or who are vulnerable. Beneficiaries of energy efficiency measures are not just householders but rather are spread across the market, including public sector, private-commercial, and societal benefits such as improved health, stimulus to the economy and capacity saved on the electricity system².

Consideration needs to be given as to how to socialise costs related to energy efficiency programs and to whether this should continue to be spread across energy system users as per the current

¹ See for more information: ACE (ADE), 2016, Buildings and the 5th Carbon Budget: <https://www.ukace.org/wp-content/uploads/2016/09/ACE-RAP-report-2016-10-Buildings-and-the-5th-Carbon-Budget.pdf>

² UKERC, 2017, *Unlocking Britain's First Fuel: The potential for energy savings in UK housing*: <http://www.ukerc.ac.uk/publications/unlocking-britains-first-fuel-energy-savings-in-uk-housing.html>

approach (inclusion in energy bills) or should rather be spread across wider society through taxpayer contribution. It is also important to recognise, quantify and perhaps monetarise the indirect social benefits of energy efficiency, for instance to health care, to fund improvements.

Should energy efficiency be considered a national infrastructure priority?

The ADE supports the proposal that energy efficiency be considered a national infrastructure priority, as it will prove critical to meeting the government's key decarbonisation and energy reduction targets.

It's important to note that the designation of energy efficiency as a national infrastructure priority does not necessarily mean that the government should pay for all energy efficiency measures (except where it is government that is benefitting). Rather, the designation can result in positive outcomes by signalling the strategic importance of energy efficiency and placing it high on policymakers' agendas. Designating it as a national infrastructure priority should also allow for more robust tracking of progress and transparent reporting, and will assist in accountability towards meeting targets.

There are examples from elsewhere in the UK where energy efficiency is considered to be a national infrastructure priority with successful policy resulting from it. In Scotland, for example, energy efficiency has already been designated as a national infrastructure priority, with £119.6 million allocated in the 2019/20 Scottish Budget for energy efficiency and fuel poverty, with plans to invest £500 million in energy efficiency by 2020/21³.

Existing housing stock:

Are the Government's targets to improve the Energy Performance Certificate (EPC) ratings of our existing housing stock ambitious enough?

Whilst the 2030 target is ambitious enough in principle, there remains significant uncertainty about what will happen after 2030. Clarity around the longer-term policy trajectory is essential for ensuring progress towards targets. The Association would like to see forthcoming targets consistent with the Committee on Climate Change's optimal path to emissions reduction⁴.

Additionally, consideration needs to be given as to the limitations of EPCs and whether they are indeed the appropriate mechanism by which to set targets. For instance, as the principal Energy Efficiency rating on an EPC is based on running costs they are generally not a reliable measure of the true energy efficiency of off-gas grid property, which tend to heat using fuels that are more expensive than natural gas. Government policies requiring a certain level of EPC before sale or rental could risk being seen to disadvantage rural householders unless such factors are accounted for.

Further, although the ambition of the target is important, discussions around increasing the government's targets are secondary to concerns around the lack of enforcement currently in place. This is explored in further detail below.

³ The Scottish Government, 2018, *Scottish Budget: 2019-20*

⁴ Committee on Climate Change, 2018, *Reducing UK emissions 2018 Progress Report to Parliament*: <https://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf>

It is also important to recognise the significant progress made under the current and previous ECO and environmental schemes, and to consider what the appropriate means of incentivising and supporting greater energy efficiency by those in the able to pay market. Consideration should be given to options including fiscal incentives, for instance stamp duty reliefs, and consequential improvements. Thought should be given to how best to create a sustained and driven customer-base while ensuring alignment with ongoing policy development.

Is there sufficient support in place to deliver targets for all homes to be EPC band C by 2035?

Currently there is not enough support to deliver all the targets for all homes to EPC band C by 2035. There is uncertainty about how government will ensure that all owner-occupied buildings will meet targets, as there is not sufficient policy to address this. The Association strongly supports the deployment of the supply chain pilots, which will help to identify the most effective options.

In the owner/occupier space, current policy mechanisms will not facilitate achievement of the targets. More will need to be done to encourage or obligate these users, and there is currently a lack of clarity about how this will be implemented. Ideas for how to encourage uptake in this area of the market were explored in ACE's response to BEIS's 2018 consultation on 'Building a market for energy efficiency', which can be found out Appendix A for consideration.

In the private rented sector, although policy is in place it can be poorly enforced. The burden of enforcement is placed on local authorities which often lack the resources to adequately fulfil the responsibility. Indeed, between 2010 and 2016, local authorities reduced spending on enforcement by one fifth⁵. Enforcement is also challenging given the lack of data on EPCs and steps being taken to improve them.

Work needs to be done to support local authorities in prioritising enforcement. This could comprise developing guidance on how enforcement should take place, including information on the delegation of enforcement services to external bodies better equipped to efficiently use resources. The government should also seek to introduce guidance on how local authorities (or enforcement services) can implement a comprehensive programme of engagement with landlords, letting agents and managing agents. Finally, more work should be done to better identify policies that improve the collection and use of data to support enforcement of EPC targets, as the lack of data is currently preventing accurate assessment.

The Association strongly supports the announced enforcement pilot projects, which will provide valuable, transferable lessons on the challenges and opportunities in enforcing private rented sector energy efficiency regulations.

Is the Energy Company Obligation (ECO) an adequate mechanism to ensure fuel-poor homes are upgraded to EPC band C by 2030?

The ECO mechanism is currently not sufficient to ensure fuel poor homes are upgraded to EPC band C by 2030. Importantly, the level of funding is not adequate - ECO3 is expected to amount

⁵ MHCLG, 2018, *Private rented sector*:

<https://publications.parliament.uk/pa/cm201719/cmselect/cmcomloc/440/440.pdf>

to £640 million per year, but estimates indicate that £1.2 billion will need to be spent per year to meet the 2030 target⁶.

Furthermore, the money spent through ECO often fails to reach fuel poor homes. For the most recent ECO scheme, only half of fuel poor homes were eligible for help under ECO, and only 35% of those helped under ECO were actually fuel poor⁷. Targeting of the programme needs to be improved, along with commensurate data collection.

Additionally, a recent report by UKERC, University of York and ACE Research found that many viewed ECO as a “regressive policy”⁸. As the cost of supplier obligations are spread across all energy customers, fuel poor households that do not receive energy efficiency improvements can face higher bills as the costs of ECO measures are applied to their bills, pushing them deeper into fuel poverty.

It is important that any scheme construct promotes innovation whilst also ensuring measures which retain heat are not reduced in preference to those which simply reduce energy costs. For instance, there is concern that that the construct of the current ECO 3 could actually result in a reduced number of building fabric measures being deployed. Retaining heat improves the healthiness of the building, through reducing damp and mould for example, and energy efficiency must continue to have a focus on retention of heat and reduction of cost to heat.

Private rented sector:

Are the Government's private rented sector regulations for energy efficiency for both residential and commercial buildings ambitious enough? Are there implementation and enforcement challenges that need to be remedied?

The Association supports the ambitions proposed by government and believes that the critical factor will be effective enforcement of these.

This includes ensuring there are both appropriate resources and sufficient understanding to allow effective enforcement, as well as ensuring exemptions are not over-utilised. A review in due course of the level of the (domestic) landlord obligation cost-cap would be appropriate, as the announced cap of £3,500 (£2,916 after tax) will not be high enough to set us firmly on the road to EPC C, as is intended. The ADE continue to support a cap of £5,000 instead, which would be more effective in maximising energy efficiency activity to make a real difference in the lives of private renters.

The inclusion of third-party funding and finance within the cap was also disappointing; landlords should be investing in their properties, not taking up grant funding through the Energy Company Obligation (ECO), local authority grants and the Green Deal.

Greater understanding of enforcement challenges is crucial to meeting to the government's ambitions in this area. The Association strongly supports the announced enforcement pilot

⁶ Policy Exchange, 2016, *Warmer Homes: Improving fuel poverty and energy efficiency policy in the UK*: <https://policyexchange.org.uk/wp-content/uploads/2016/09/warmer-homes.pdf>

⁷ Energy Saving Trust, 2017, *The Clean Growth Plan: Tackling Fuel Poverty*: <http://www.energysavingtrust.org.uk/clean-growth-plan-tackling-fuel-poverty>

⁸ UKERC, University of York and ACE Research, 2018, *Justice in Energy Efficiency: a focus on fuel poor disabled people and families*: <http://www.ukerc.ac.uk/publications/justice-in-energy-efficiency.html>

projects, which will provide valuable, transferable lessons on the challenges and opportunities in enforcing private rented sector energy efficiency regulations.

A 2013 Freedom of Information Request found that only 26% of PRS properties had an EPC in compliance with regulations⁹. In 2017, Caroline Lucas requested more recent data from MHCLG, but was told “the Government does not hold data about the number of buildings in the private rented sector for which an EPC should have been made available but has not been”¹⁰. This statistic shows not only a lack of enforcement, but also an inherent problem in terms of being able to adequately assess ambition as part of wider decarbonisation goals.

Regional disparities:

Are there regional disparities, including in off-grid areas, in the delivery, costs and uptake of energy efficiency measures? If so, how could these be overcome?

While it is well accepted that regional disparities exist, there is inconsistent tracking of and understanding of these disparities. Increasing understanding of the disparities, including the nuances and underlying factors, is a critical first step which the Association welcomes.

In terms of rural and off-grid properties, evidence demonstrates that such properties are lagging behind the national average in deploying energy efficiency measures – for instance, analysis of National Housing Model input data (drawing from English Housing Survey 2014, Scottish Housing Condition Survey 2014, Welsh Housing Conditions Survey 2014) showed that, of the households off the gas grid using heating oil as the main fuel in Great Britain in 2014, 37,000 households were estimated to have an energy efficiency rating of A-C, 373,000 were at Band D, 448,000 were at Band E, and 317,000 were at band F or lower.¹¹

Further, a 2017 Freedom of Information request to Ofgem (by Calor) showed that despite rural off-gas grid homes numbering 11% of all UK homes, less than 2% of Energy Company Obligation (ECO) measures were in rural off-gas grid homes (homes where heating oil or LPG is the main fuel type). This is an area in which dedicated rural support could prove effective – the Association is supportive of the expansion of the rural sub-obligation in ECO3, for example. However more must be done to differentiate between ECO delivery to rural off-gas grid, rural on-gas grid and urban off-gas grid households if this initiative is to effectively meet its policy intent.

In terms of policies targeting vulnerable people, access to support should not be a postcode lottery. The recent UKERC, University of York and ACE Research report on *Justice in Energy Efficiency*¹² found that take-up of support even where eligibility existed was heavily dependant on

⁹ MHCLG, 2013, *Freedom of Information Request – Energy Performance Certificates Compliance:*

<http://www.1010global.org/sites/default/files/uploads/ckfinder/files/130816%20-%20Final%20response%20letter%20to%20D%20Timms.pdf>

¹⁰ UK Parliament, 2017, *Energy Performance Certificates: Written question – 111244:*

<https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2017-11-02/111244/>

¹¹ As noted in Parliamentary Questions, asked 19 Oct 2018 and answered 29 Oct 2018 by Rt Hon Claire Perry MP. See:

<https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2018-10-19/181540>

¹² UKERC, University of York and ACE Research, 2018, *Justice in Energy Efficiency: a focus on fuel poor disabled people and families:*

<http://www.ukerc.ac.uk/publications/justice-in-energy-efficiency.html>

one's locality. In particular, without proactive targeting and promotion of schemes, some families and disabled people who are either socially isolated or not engaged in typical communication channels miss out on support. This is most notable in England where access typically relies on local arrangements, and impact varies substantially as a result.

The effectiveness of regional targeting for other policy measures will substantially depend on the desired outcome the policy is hoped to deliver. The previously announced local supply chain development pilot projects will prove useful in trialling approaches in different areas and assessing where more targeted approaches can prove effective, as well as what mechanisms are suitable to roll-out across all areas.

Non-domestic sector:

What does existing evidence indicate about progress being made towards greater energy efficiency in public and commercial buildings?

The existing evidence base to assess progress towards greater efficiency in public and commercial buildings is inadequate – there is mixed understanding and tracking, and much of the available data is through piecemeal reports that are unable to paint a comprehensive picture of progress made.

In terms of public buildings, there is a lack of easily accessible information on the progress being made towards meeting public sector efficiency goals – including both mandatory and voluntary targets. Indeed, in 2010 the incoming government scrapped National Indicators (NI) - 198 different performance indicators on areas from child services to the environment. This had included several NIs linked to energy and called on local government to monitor and take action on emissions from their own estate (NI185), per capita carbon emissions (NI186) and eradicating fuel poverty (NI187). NIs were replaced by a 'Single data list', but only one relates to emissions, focusing on local government emissions from their own estate and operations (BEIS 067-00). There are no further policy drivers encouraging action. Data such as this is essential to assessing the effectiveness of current measures – including voluntary targets – and determining longer-term plans.

There have been attempts across governments to have the public sector 'lead by example' in implementing energy efficiency measures within the sector, which the Association strongly supports. However, anecdotally this has been challenging for many departments to implement, as they struggle to balance carbon reduction targets with 'most cost effective' procurement requirements. More must be done to account for the value of energy efficiency in calculating the cost effectiveness of options.

In terms of commercial energy efficiency measures, implementation is patchy due, in part, to an inconsistent policy landscape. For example, the government has signalled that commercial energy efficiency remains a priority whilst simultaneously removing Enhanced Capital Allowances (ECAs) in the name of simplicity with no moves to replace the scheme. There are also stark differences in progress within the sector, with policy seemingly aimed more towards larger businesses and not SME's – a report by ACE Research and SE2 commissioned by the GLA¹³ found that action in the commercial sector has been focused on the larger emitters, despite SME's accounting for 99% of all businesses and 52% of employment. Learning from this example, action targeting energy efficiency of SMEs needs to be increased.

¹³ ACE Research and SE2s report for the GLA will be published in 2019.

However there are some examples of innovative and effective implementation. For instance, the Heart of the City Foundation Programme coaches business leaders to run successful companies that make a positive difference to people places and the planet and has succeeded in leading businesses to reduce energy use; the Zero Emissions Network (ZEN) offers free advice and services to residents and businesses in London's city fringe to help them switch to low emission energy and travel options; and Ealing Council's Smart Business Grant programme offers advice and funding to support small and medium-sized businesses across the borough to become more energy and resource efficient.

There are significant opportunities to further support efficiency in commercial buildings, where more regular property turnover and associated re-fitting means that there are additional opportunities for efficiency interventions. This remains an area of little activity and thus of untapped potential. More needs to be done to ensure these opportunities are being seized, perhaps through a targeted policy mechanism. Policies targeted towards incentivising or supporting commercial landlords to invest in building fabric as well as wider energy capture and efficiency measures in buildings would be welcomed. Consideration should be given as to whether there is a greater role for Chambers of Commerce, Local Enterprise Partnerships and Local Authorities in this area.

Lessons to learn:

What lessons can be learnt from the devolved administrations on delivering energy efficiency measures?

There are some significant lessons that can be gleaned from the work of devolved administrations, including cities, in this area.

Firstly, it is important to appreciate that an initiative that starts in a devolved administration can grow substantially over time - this can be seen, for example, in London's RE:FIT programme which is now in its second generation. It is thus important to recognise the potential in expanding existing devolved programmes that have proved effective.

This links to another important idea - that national government should work with devolved administrations, as partners, to trial measures to meet ambitious targets. In a sector where trials and demonstrations are seen as increasingly important in establishing what mechanisms are effective (and where), devolved administrations are leading the way in trialling new approaches and will prove essential partners over the coming years.

In particular, devolved administrations appear to prioritise energy efficiency at a local level and encourage innovative Local Authority Schemes. It is also apparent that combining national funding with devolved funding can lead to more nuanced and effective targeting of measures. For instance, the recent UKERC, University of York and ACE Research report on *Justice in Energy Efficiency*¹⁴ found that Scotland and Wales have made the best use of ECO by combining funds with tax payer funded schemes to boost the number of households supported and the scale of interventions made (e.g. multiple measures). Some stakeholders attributed Scotland's success to the fact that energy efficiency has been made a National Infrastructure Priority by the Scottish Government and therefore was high on the administration's political agenda. The Scotland Act

¹⁴ UKERC, University of York and ACE Research, 2018, *Justice in Energy Efficiency: a focus on fuel poor disabled people and families*:

<http://www.ukerc.ac.uk/publications/justice-in-energy-efficiency.html>

(2016) has also devolved responsibility for ECO (and other fuel poverty programmes such as the Warm Homes Discount Scheme), thus enabling the Scottish Government to have greater control in the implementation of fuel poverty support. Similarly, in Wales the Arbed 3 programme¹⁵ combines ECO, Welsh Government and European Regional Development Fund (ERDF) funds to further target their energy efficiency outreach.

For further information please contact:

Lily Frencham
Head of Operations & Heat and Efficiency Policy Lead
Association for Decentralised Energy
lily.frencham@theade.co.uk

Joanne Wade
CEO, Association for the Conservation of Energy &
incoming Deputy Director, Association for Decentralised Energy
Tel: + 44 (0) 20 30318740
joanne.wade@theade.co.uk

¹⁵ See:

<https://gov.wales/topics/environmentcountryside/energy/efficiency/warm-homes/arbed/?lang=en>

Appendix A – ACE Response to Building a market for energy efficiency

Response ID ANON-VD29-K22W-B

Submitted to Building a market for energy efficiency: Call for Evidence
Submitted on 2018-01-09 20:48:39

About you

What is your name?

Name:
Joanne Wade

What is your email address?

Email:
joanne@ukace.org

What is your organisation?

Organisation:
Association for the Conservation of Energy

Are you happy for your response to be published?

Yes

Would you like to be contacted when the consultation response is published?

Yes

State of the Market

1 What information do you have on current rates of delivery of measures outside of government programmes, including through DIY etc.?

Comment here:

It seems likely that the current rate of delivery of measures is very low outside of Government programs. Anecdotal evidence to this effect from our members is supported by e.g. Kingfisher's 2014 survey of European consumers (1): in this, the proportion of UK consumers reporting energy efficiency improvements to their home in the preceding five years was very similar to the number of households receiving measures from Government programs over a similar period. Although the two groups do not necessarily coincide, there is probably a very large overlap.

The current level of investment under Government programmes (£640m per year) can be contrasted with the level of activity in the general refurbishment market, which perhaps provides a better indicator of the potential for action: the market for repairs, maintenance and improvement in owner occupied housing in the UK is around £18bn per year (2) . Stimulating investment in energy efficiency to improve the energy performance of all homes to EPC Band C by 2035 could increase this market in privately funded home improvement by around 20% (3) .

(1) Representative sample of adult household decision makers of 2,241; Kingfisher (2014) European Home Report 2014.

(https://www.kingfisher.com/files/reports/2014/european_home_report/european_home_report.pdf)

(2) Figures quoted by Catrin Maby and Gavin Killip at ACE round table on integrating energy efficiency into the RMI market. See ACE, 2018, 'More and Better – workshop report' for more detail.

(3) Frontier Economics (2017) Affordable Warmth, Clean Growth: Action Plan for a comprehensive Buildings Energy Infrastructure Programme (<http://www.frontier-economics.com/documents/2017/09/affordable-warmth-clean-growth.pdf>)

2 What information do you have on the remaining potential for energy efficiency improvements and what savings could be expected from these measures?

Comment here:

Whilst we broadly agree with the assessment of the remaining potential for major building fabric measures set out in the call for evidence, we note that there is a much wider range of energy efficiency measures with remaining potential that could generate significant energy use reductions. Our 2016 report on 'Buildings and the 5th Carbon Budget' (4) sets out some of these potentials, as does the 2017 UKERC policy briefing on 'Unlocking Britain's First Fuel' (5) .

(4) <http://www.ukace.org/wp-content/uploads/2016/09/ACE-RAP-report-2016-10-Buildings-and-the-5th-Carbon-Budget.pdf>

(5) <http://www.ukerc.ac.uk/publications/unlocking-britains-first-fuel-energy-savings-in-uk-housing.html>

3 Do you agree with our assessment of the current market for energy efficiency amongst owner occupiers, including the trigger points and supply chain relationships?

Comment here:

We agree broadly with the trigger points as described from the point of view of householders' life events. Trigger points can also be looked at from the point of view of events in the life of the building, with opportunities for energy performance improvement during maintenance; modernising and upgrading; major refurbishment; complete home renovation, and distress purchases (6). Using this frame alongside the life events frame may identify opportunities that would otherwise be missed.

(6) See ACE, 2018, 'More and Better – workshop report' for more detail

4 Do you agree that it makes sense to prioritise those groups most likely to be open to investing in energy efficiency? And do you agree with our assessment of who those groups are most likely to be?

Comment here:

We agree that it makes sense to consider these groups when developing policy designed to strengthen demand for energy efficiency measures. However, it is important to keep in mind the long-term market transformation goal of improving all homes to EPC C and beyond. Hence, policy aimed at strengthening supply chains for energy efficiency should consider all the opportunities to up-sell the benefits of energy efficiency (see 3, above). The 'first mover' approaches advocated by the Centre for Sustainable Energy (7) and others form just one key part of an overall market transformation strategy.

(7) <https://www.cse.org.uk/downloads/file/do-the-next-million-first-transforming-the-owner-occupier-retrofit-market.pdf>

Barriers to market growth

5 Do you agree with our assessment of the current barriers to market growth?

Comment here:

Yes (but see answer to 6, below)

6 Are there other barriers that you think we should be addressing?

Comment here:

Yes: the assessment does not mention the overarching issue of raising energy efficiency to the top of a home-owner's priority list, whether during general decision-making about expenditure or amongst the multiple decisions needed during a refurbishment project. Minimum efficiency standards or effective nudges will be needed to overcome this barrier.

Split incentives, between current and future home-owners, are also not mentioned. Home-owners may be reluctant to invest in improvements if they believe that much of the value will accrue to someone other than themselves (i.e. a future owner). This barrier may also be overcome by minimum efficiency standards or incentives, such as stamp duty variations, that provide an indication of this value to a future owner and hence enable such value to be reflected in sale prices.

7 Do you think there are any other important lessons to learn from past attempts to stimulate the market?

Comment here:

The most important lesson to learn is that a long-term approach and long-term demand drivers are needed for successful market stimulation, and we welcome the stated aspiration in the Clean Growth Strategy for all homes to achieve EPC Band C by 2035. Government now needs to put in place the long-term demand drivers and then industry will be able to address some of the other barriers described in the call for evidence: if demand for energy efficiency investments grows, finance offerings will be brought forward; companies are already selling energy efficiency as something more than a way to reduce energy bills (see, for example, the BetterHome programme from Danfoss, Grunfoss, Velux and Rockwool - mentioned in the call for evidence - or St Gobain's 'my comfort' initiative).

8 Are there other international examples we could learn from?

Comment here:

Scotland, Germany and France all have clear, long-term targets for carbon and energy in buildings, with policy packages of regulation, incentives, coherent and salient information and supply chain development initiatives. The US offers a long-standing example of a regulatory approach to encouraging energy system operators to invest in demand-side measures. These are referred to in more detail as appropriate in answer to later questions.

9 Are there any barriers preventing business models for energy efficiency that have developed in other countries from also developing in the UK?

Comment here:

The main barrier is lack of demand. The supply chain will implement innovative business models if demand from homeowners appears strong and long-term. However, as these business models in themselves could help to drive demand, the Government could accelerate their introduction, for example via seed-funding for pilots of new approaches (8).

Our recent fiscal incentives survey (9) demonstrated clear industry willingness to support government action, but also a reluctance to develop new market offerings until confidence in long-term demand for energy efficiency investments is much higher.

(8) A proposal made by Gavin Killip at our recent round-table (see ACE, 2018, 'More and Better - workshop report')

(9) For more information see ACE, 2017, 'Fiscal incentives survey - summary report' and ACE, 2018 forthcoming, 'Fiscal incentives survey - final report'.

Proposed approach

10 Do you agree with the set of proposed principles for guiding our approach?

Yes

11 Do you agree that the policy areas we have set out are the correct ones to focus on?

Comment here:

In general yes, provided that the policies proposed in the Clean Growth Strategy (e.g. developing a long-term trajectory for the PRS, strengthening part L of the building regulations) are also fully and robustly implemented.

However, we believe that minimum efficiency standards for owner-occupied homes should have been included. If the regulations in the Private Rented Sector are robustly implemented, they will over time affect a significant number of rental properties and this in itself could eventually have an effect on demand from the owner-occupied sector. But we need to consider regulation of the worst-performing owner-occupied properties now and hence this should have been explored in this call for evidence.

Scotland's government proposes to consult on minimum standards for the owner-occupied sector, as part of its wider consultation on incentives and standards for owner-occupied homes under Scotland's Energy Efficiency Programme. And this is a policy that may be politically more acceptable than expected: a recent Bright Blue poll showed that 70% of Conservative voters would support 'all homes being bought having to meet a minimum energy performance standard' (10).

(10) [http://www.brightblue.org.uk/images/Green conservatives polling report Final.pdf](http://www.brightblue.org.uk/images/Green%20conservatives%20polling%20report%20Final.pdf)

Developing new methods for financing energy efficiency

12 Which of the fiscal levers described here would drive the greatest consumer demand?

Comment here:

This question does not have an obvious answer. The key to driving demand for energy efficiency investments is a combination of policy levers, not one option in isolation, and the effectiveness of any of the options proposed will depend on the other mechanisms that are implemented at the same time.

It is worth noting here that, in our recent industry survey on fiscal and other incentives (see question 9), low interest loans and tax breaks for renovation projects received significant support, in terms of interest in the incentive and willingness to promote it if introduced (with over 70% of respondents responding positively to both questions for both options). This industry support would help to drive consumer demand.

At our round table on integrating energy efficiency into the repairs and maintenance market (11), modernising and upgrading projects were identified as those where it may be most difficult to make basic energy efficiency measures interesting to consumers.

(11) ACE, 2017, 'More and Better...', op.cit.

13 Is there evidence to suggest that any other fiscal levers not described here could drive consumer demand?

Comment here:

As mentioned in our response to question 12, there is industry support for the introduction of tax incentives (e.g. 0% VAT) for refurbishment work that increases energy efficiency. A report by Experian for the 'Cut the VAT Campaign Coalition' drew on experience from the Netherlands and the Isle of Man from reduced VAT rates on general refurbishment (12). This could provide useful indicators of the potential of this incentive when targeted towards energy efficiency.

(12) <https://www.fmb.org.uk/media/10357/vatresearchfinal.pdf>

14 What would be the profile of homeowners likely to take up these different incentives?

Comment here:

We do not know. Low interest loans and conditional mortgages are likely to appeal most to home improvers who are already interested in better home energy performance but have insufficient funds for the investment; home equity loans are most relevant for older, equity rich and cash poor home-owners who, again, are already interested in improving the comfort of their homes. Tax incentives linked to the achievement of higher energy performance could interest home improvers who are not initially thinking about increased energy performance. But this is speculation: these options need to be robustly piloted (see our answer to question 15, below).

15 How could these incentives be designed to deliver the best value for money for government and best savings for consumers?

Comment here:

A programme of pilots that robustly tests and refines the different combinations of levers is urgently required. Scotland's SEEP pilots could provide a model for this, and we would urge Government to commit to funding such a programme in the Budget 2018, with funding committed from 2019 onwards.

16 What barriers, regulatory or otherwise, exist to financial institutions developing any of these products or incentives themselves?

Comment here:

In our view, the single biggest barrier here is the lack of widespread and sustained demand from homeowners for energy efficiency renovations. Robust, long-term policy, such as Stamp Duty differentials or an intention to introduce minimum efficiency standards would provide a strong statement of intent from Government, and this would give financial institutions the confidence to develop and deliver new products to the market.

17 How could government assist financial institutions with a retail presence, local authorities and other actors to run trials of these ideas?

See response to question 18.

18 How could we ensure that any trials would lead to the development a self-sustaining market for support?

Comment here:

A co-ordinated programme of pilots, as mentioned in our response to question 15, is the best approach to ensuring that any trials together produce options that will lead to a self-sustaining market in the long-term.

The action plan that BEIS will produce following this call for evidence needs to set out what this programme will look like, including the level of government support and the requirements for pilots receiving this support. These should include innovation in delivery, testing a combination of levers, and robust evaluation of consumer response and satisfaction levels. Again, Scotland's SEEP pilots may provide a useful model to follow.

Price Signals to encourage homeowners to prioritise energy efficiency

19 What price signals would best drive uptake of energy efficiency measures?

Comment here:

The strongest signal on the value of more energy efficient homes would be a clear trajectory to the introduction of minimum energy efficiency standards for all homes. In the absence of this, a Stamp Duty incentive is likely to offer the best price signal. Initially, this may affect only homes at the point of sale. However, over time, if the incentive is designed so that it increases the value of energy efficient homes, it could also impact on renovation decisions at other points in time.

There is already a body of policy work on this type of incentive. For example, work by the Policy Studies Institute on 'Economic Instruments for a Socially Neutral National Home Energy Efficiency Programme' (13), in 2004, included consideration of Stamp Duty; the ACE research team examined the incentive in 2011 (14); and most recently, Jahn and Rosenow (15) explored the potential use of the incentive in Germany and the UK.

However, there is still little practical experience of this incentive; a fact reflected in the relatively low level of familiarity with the incentive expressed in our incentives survey (16). Hence there is a need for more detailed modelling and demonstration of the options for this incentive.

(13) <http://www.psi.org.uk/docs/rdp/rdp18-dresner-ekins-energy.pdf>

(14) <http://www.ukace.org/wp-content/uploads/2011/07/ACE-Research-2011-06-5-214-Croft.pdf>

(15)

https://www.eceee.org/library/conference_proceedings/eceee_Summer_Studies/2017/6-buildings-policies-directives-and-programmes/property-transfer-tax-reform-8211-a- (16) See ACE, 2017 and 2018, Fiscal Incentives Survey – summary and final reports

20 What would be the impact on the housing market of such price signals?

Comment here:

In theory, a 'bonus-malus' design Stamp Duty incentive would likely have an impact on house prices, with more efficient homes becoming more valuable than less efficient homes. Conversely, an incentive designed only to reward action on energy efficiency immediately after house purchase could have perverse effects on the value of homes that are already energy efficient.

In practice, it is difficult to predict precise effects. This reinforces the need for a pilot programme to test the impacts of this incentive.

21 What protections would need to be in place to ensure that vulnerable or fuel poor customers are not unduly affected by these price signals?

Comment here:

The existing Stamp Duty regime protects lower income households with a threshold and with increasing levels of Stamp Duty on higher-priced properties. There is no reason why this incentive should change this, and design of the incentive could include exemptions for less efficient properties up to one of the higher thresholds if this was felt to be necessary.

Here again, the need for a suite of policy instruments is clear: appropriate levels of funded investment for fuel poor households, plus availability of low-cost investment finance for others, will mitigate any negative effects by enabling lower income households to improve the energy efficiency of their homes.

22 Could these ideas be rolled out in a smaller scale, to a particular subset of homes or in a particular geographic area, to test feasibility before a national rollout?

Comment here:

The Stamp Duty incentive should be rolled out on a smaller scale before a national rollout, in pilots that combine the incentive with new finance mechanisms. The pilots of equity loans in Scotland show that geographical pilots are possible.

Improving awareness of energy efficiency products and technologies, their benefits and advice to consumers

23 What evidence do stakeholders have on the link between installing an energy efficiency measure and the value of property? What research could bolster this evidence base?

Comment here:

The Government has previously commissioned research into this link, and a correlation was found. Proving causality however remains difficult. Further analysis of energy rating and price data as this becomes available may increase our understanding.

However, the key question here is how much value there is in trying to establish a link between individual energy efficiency measures and property value, rather than focusing on the link between higher energy efficiency in general and property value: are householders interested in the economics of specific options, or in the overall combined improvement in comfort, aesthetics, and value that an improvement in energy performance may bring? Too much focus on trying to accurately estimate each impact for each energy efficiency measure may be a waste of resources.

24 How could government effectively deliver messages to promote energy efficiency through intermediaries and which are the most important intermediaries to target?

Comment here:

We refer you here to the report of our round-table on integrating energy efficiency into refurbishment work (17) and also to a forthcoming report on a Swedish Energy Agency workshop on promoting the multiple benefits of energy efficiency, which we will be happy to provide to BEIS once it is available.

The ACE round table report identifies intermediaries for each stage of a refurbishment project. These include friends and family, architects, planners, mortgage lenders, surveyors, building control and all building sector trades. Key elements of enabling them to convey the energy efficiency message to householders include better training and professional development, and easy access to relevant information. Other elements are specific to particular intermediaries, and more details can be found in the report on the round table.

One key element which the round table did not address is what is the benefit to these intermediaries of transmitting this information? Clearly, the development of demand for energy efficiency investment will offer business opportunities for many of these people; without this, it is difficult to see why they would invest in understanding more about energy efficiency options.

(17) ACE, 2017, 'More and Better...' op.cit.

25 At which additional points could homeowners be required to have an EPC, and how could this improve their value and the awareness of potential energy efficiency improvements?

Comment here:

EPCs may provide useful information to homeowners whenever they are considering work on their home. At our retrofit round table, we considered the following

'moments' in the life of a building: maintenance, modernising and upgrading, major refurbishment or complete renovation, and distress purchases. EPCs could be required at the point of major refurbishment as there is a clear added value here. However, for the other trigger points here, it is not clear that requiring a new

EPC would be proportionate or particularly useful. This may suggest that considering the use of retrofit roadmaps (18), rather than EPCs, as these would identify appropriate energy efficiency actions for each of the types of RMI project.

(18) For more information see pp 8-9 of <http://www.ukace.org/wp-content/uploads/2015/07/ACE-position-paper-150724-Options-for-the-next-supplier-commitment.pdf>

26 How could EPCs be displayed more prominently to prospective homebuyers at different stages of the home buying process?

Comment here:
No comment

Creating the conditions so that those who derive value from energy efficiency can be key players in the market

27 Have we captured all the main sources of additional value of energy efficiency?

Comment here:
The call for evidence does not cover some of the macro-economic benefits of energy efficiency investments, which should provide a rationale for government funding. In addition, some of the wider social benefits (beyond health – for example, educational attainment) are not included. Some of these wider benefits are considered in our report on Buildings and the 5th Carbon budget (19), and many are also covered in the 2014 Verco / Cambridge Econometrics report on the economic and fiscal impacts of making homes energy efficient (20).

The consultation does refer to Government carrying out an analysis of the benefits of energy efficiency, drawing on the methodology set out by the IEA: this should address many of the gaps in the current picture.

(19) <http://www.ukace.org/wp-content/uploads/2016/09/ACE-RAP-report-2016-10-Buildings-and-the-5th-Carbon-Budget.pdf>

(20) <http://www.energybillrevolution.org/wp-content/uploads/2014/10/Building-the-Future-The-Economic-and-Fiscal-impacts-of-making-homes-energy-efficient.pdf>

28 What other ways could we seek to monetise the benefits of energy efficiency?

Comment here:
Support for the development of innovative business models may be the most effective way to achieve this. EnergieSprong provides one example; the models described in the report on our round-table (21) and in the UKGBC report on regeneration and retrofit (22) offer some examples.

(21) ACE, 2017, 'More and Better...' op.cit.

(22) <https://www.ukgbc.org/wp-content/uploads/2017/09/08498-Regen-Retrofit-Report-WEB-Spreads.pdf>

29 How could both Distribution Network Operators (DNOs) and Gas Distribution Networks (GDNs) be incentivised or required to deliver energy efficiency savings?

Comment here:
It may be worth reviewing US experience of regulators requiring Integrated Resource Planning by utilities (23).

(23) See <http://www.raponline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf> and <http://aceee.org/policy-brief/utility-initiatives-integrated-resource-planning> for more information

30 Do current market arrangements allow for DNOs and GDNs to fully realise the potential of energy efficiency savings? If not, what needs to change?

Comment here:
No comment

31 What are mortgage lenders' plans for improving the way they factor energy efficiency into lending decisions?

Comment here:
No comment

32 What support would lenders need in order to be able to commit to a voluntary target for improving the average energy efficiency of the properties they lend to?

Comment here:
No comment

33 How can lenders develop a more accurate model of fuel bill savings, and would they be willing to lend 'green mortgages' on this basis?

Comment here:
No comment

34 What other changes would encourage lenders to offer more 'Green Mortgage' products?

Comment here:
See our response to question 16.

Enabling innovative energy efficiency products and services

35 How could thinner, less intrusive insulation products be made to be compliant with building regulations?

Comment here:
No comment

36 Are there any ways that current regulations are preventing innovative energy efficiency products and services coming to market?

Comment here:
Anecdotal evidence from our members suggests that the slow rate of change to SAP calculations and eligibility criteria for schemes such as ECO are creating a barrier to new products coming to market: if their energy savings cannot be reflected in information to consumers or counted towards scheme targets, it is difficult to build a market for these new products.

37 What changes should be made to the Energy Company Obligation to ensure that it supports the development of innovative energy products and services?

Comment here:
No comment

Improving data to open up the market for investment

38 Are there other ways that Government could help improve access to data on energy efficiency and performance of homes for research purposes?

Comment here:
No comment

39 What would be the impact on the market and investment in energy efficiency of the availability of better data on the actual performance of homes?

Comment here:
Better data could support the development of new business models that include energy performance contracts or guaranteed savings.
Improving supply chain capability

40 Would the supply chain benefit from having a feature in the new Energy Savings Advice service for installers to share best practice and access a repository of advice?

Comment here:
At our round table on integrating energy efficiency into the refurbishment market (24), a need for building trades to be able to access information about energy efficiency measures whilst on-site was highlighted. A new feature within the Energy Savings Advice Service is one potential way to meet this need.

(24) ACE, 2017, 'More and Better...' op.cit.

41 Would funding for local supply chain growth and coordination lead to additional retrofit measures?

Comment here:

See answer to question 42

42 Is there anything else that central government could do to support local retrofit supply chain growth and to support builders to carry out retrofit projects?

Comment here:

Improved training and CPD for people in the building trades is crucial here. This was a key topic that recurred multiple times during our round-table on integrating energy efficiency into the RMI market (25). In addition, government seed funding and support for pilots of innovative business models, also raised during this round-table, could be effective here. More information on the perspective of builders can be found in Installer Power (26) and from the GLIDER project (27).

(25) ACE, 2017, 'More and Better...' op.cit.

(26) <http://ukace.org/wp-content/uploads/2015/12/Installer-Power-report-2015.pdf>

(27) <http://www.eci.ox.ac.uk/research/energy/gliders.html>