27 April 2018



# Energy Saving Trust's response to the ECO3 consultation

Energy Saving Trust is pleased to respond to the consultation on ECO3, launched by the Department for Business, Energy and Industrial Strategy.

The Energy Saving Trust is the leading, impartial sustainable energy organisation, focused on changing the way we use energy in homes, communities and road transport. We provide advice on sustainable energy to millions of citizens each year, work on behalf of governments and businesses to administer energy saving programmes, and carry out research. We work principally in the UK but also in partnership with other energy agencies across Europe and globally.

We seek to influence government to develop a positive and effective policy framework for sustainable energy. We provide policy insight to governments from our work with individual householders, community groups, businesses, local authorities and other stakeholders, and from our international insight.

EST is the leading organisation working with householders on energy efficiency. We run the Energy Saving Advice Service for BEIS and support energy suppliers in the delivery of their ECO obligations. We carry out DWP data matching for ECO, as a service we provide to obligated energy suppliers. In Scotland we are the Scottish Government's main delivery partner in home energy efficiency programmes, as well as providing advice to Scottish householders we provide a range of services to Scottish local authorities to maximise their use of ECO funding.

#### **Key points:**

- We are concerned about levels of home energy efficiency funding in England. In order to meet the government's target of getting all fuel poor homes to EPC band C by 2030, and the target of getting nearly all homes to EPC band C by 2035, we need far more than what ECO is providing. There is also the issue that ECO funding is regressive, which is problematic for a programme now dedicated to helping the poorest in society. We believe ECO should only form one part of a much more diverse funding landscape for energy efficiency in England. This should include both public and private finance, but with a significant element of direct public funding for home energy efficiency in fuel poor homes, as in Scotland and Wales.
- We welcome the proposal to include an element of innovation in the ECO mechanism. Many of
  the least efficient properties where fuel poverty is most prevalent and profound are difficult
  and expensive to bring up to standard with current technologies, and it is essential that we develop
  new cost-effective products and services for these homes.
- But, innovation needs to cover not just products and methods of installation, but also innovative
  ways of delivering advice. It should include new ways of promoting the installation of energy
  efficiency measures and should provide advice on innovative installs to ensure customers
  understand the new technologies and are able to get the best savings out of them.
- Innovative products, services and advice should be assessed through field trials.

- We are concerned about the decision to exclude RHI funded measures from ECO. To date RHI has failed to drive significant installation of renewable heating, and it is clear that more needs to be done to promote the installation of such technologies. In particular we are concerned that offgas grid properties (that cannot be easily connected to the gas grid) will miss out, as the proposals mean ECO will not be able to install oil or renewable heat in such homes, leaving either LPG or electric storage heating, both of which are costly and carbon intensive.
- We support the development of a mapping tool to assist suppliers identify fuel poor households. EST already delivers the Home Analytics data service. With Scottish Government funding the service has developed an address level tool that can predict if a Scottish home is fuel poor with an accuracy of 65%, or 91% if commercially available data about household income is included. Our experience from Home Analytics is that suppliers need address level data if it is to be used in targeting, we are unsure of the value of providing data through the proposed service at postcode level. We suggest it would be helpful to have a discussion between BEIS, EST, and Scottish Government where we could share our experience of delivering Home Analytics which could be helpful to inform thinking on this new service.

### **Chapter 1: Suppliers**

1. Do you agree with the current supplier obligation threshold?

No view

2. Do you agree that we should amend the taper mechanism to a supplier allowance approach?

No view

- 3. Do you agree with our proposed obligation phases for the future scheme? Yes
- 4. Do you agree that an unlimited amount of Affordable Warmth delivery (from 1st April 2017) and up to 20% CERO delivery should be allowed to be carried over to the future scheme (with the exception of oil and coal heating systems)?

Yes, carry over enables a smooth transition between phases and avoids troughs in delivery.

- 5. Is carry-under necessary and do you agree with our planned approach? No comment
- 6. Do you agree with our planned approach to early delivery during a potential gap between schemes?

Yes, again this will help enable a smooth transition

### Chapter 2 Obligation Targets and Household Eligibility

7. Do you agree with the proposal to increase the Affordable Warmth obligation so that it represents 100% of the future scheme?

Yes. As ECO is the only support mechanism for fuel poor and vulnerable homes in England, it should be more focused toward these homes. However, as stated in our introductory statements, there should be wider provision of support for fuel poor households in England, as there is in Scotland and Wales. It is best for this support to be delivered through taxation as that is a non-regressive funding

mechanism. The government should encourage DNOs to do more, due to the benefits to them, primarily through avoided infrastructure investment, of reducing energy demand in homes.

For a full summary of our arguments, see our white paper on Tackling Fuel Poverty.

## 8. Do you agree with our proposal to include a rural sub-obligation representing 15% of the total obligation?

Yes. As the Department will be aware in the 2017 fuel poverty statistics it is noted that "Households living in an area classified as rural, have both a higher proportion living in fuel poverty and a larger fuel poverty gap than households classed as semi-rural or urban." As such rural delivery is an essential part of tackling fuel poverty across the UK: reaching the households likely to be in the deepest fuel poverty as well as areas where fuel poverty is most widespread is essential.

## 9. Do you agree with the proposal to include the disability benefits noted in Table 2 above within the eligibility criteria for private tenure households under ECO3?

Yes: We have not carried out a detailed assessment of the impacts of this change but we agree with the analysis in the consultation document.

### 10. Do you agree that Child Benefit subject to an equivalised income threshold should be included within the ECO3 eligibility criteria for private tenure households?

Yes: We have not carried out a detailed assessment of the impacts of this change but we agree with the analysis in the consultation document.

- 11. Do you agree with the proposal to remove the income thresholds under the future ECO scheme for households in receipt of Universal Credit and Tax Credits?

  No comment.
- 12. Do you agree with the proposal that self-declaration is used for proving eligibility under the income threshold requirement attached to Child Benefit and for the benefits administered by Veterans UK?

No comment.

## 13. Do you agree with the proposal to retain eligibility for social tenure housing only for those properties with an EPC Band rating of E, F or G?

Yes, that the restrictions limiting access to ECO funding in social housing to E, F, and G banded homes should remain in place. Tenants in social housing are more likely to be low income and vulnerable so making improvements to E, F and G rated properties is in line with the fuel poverty alleviation objective of ECO. In addition social tenure households contribute to ECO funding so should also be eligible to benefit. There should be some degree of flexibility, as extending eligibility to D rated social housing may be beneficial under certain circumstances, such as those detailed in the next two paragraphs.

We believe that "D" rated social properties should be allowed as infill. Challenges may arise around the cost effectiveness of measures in social housing. In some areas there will also be a mixture of E rated and D rated social housing, particularly where end terraces or top floor flats are less efficient than mid terrace and mid floor flats. This will also impact on neighbouring owners and private renters who would be able to participate in such schemes. Barriers to treating the least efficient properties should be removed in cases where higher rated properties would act as blockers or could prevent schemes stacking up financially.

Noting the ECO innovation proposals, social housing is also often the best tenure in which to test innovative energy efficiency measures and services, as the housing provider can enable access to several similar properties and households. In the case of innovative products, processes, or advice, it may be worth allowing them to be deployed in EPC band D social housing properties as well. A relatively small number of social housing properties are E, F, and G and limiting innovative field trials to these properties could make it difficult to generate adequate sample sizes in social homes. Expanding eligibility to D for innovative measures could enable a single housing association to provide all the properties needed for innovative trials, which would reduce complexity.

14. Please provide evidence on how the mapping tool described above could reduce the search costs of identifying eligible households, quantifying the cost reduction where possible. EST welcomes the government's focus on this area, and the plan to use local area DWP data for better targeting of ECO.

For a number of years we have delivered the Home Analytics service to provide address-level data for the targeting of energy efficiency programmes. Home Analytics combines publicly available facts about the home (location, shape, size, and EPC data) and then uses analysis based on multiple other datasets to generate the best possible picture of the home's energy efficiency and socio-demographic characteristics. (These other datasets include the HEED database of energy efficiency installations that took place under previous supplier obligation programmes which EST developed and maintained on behalf of government.)

In England and Wales EST sells Home Analytics data to private companies, including energy suppliers working on ECO.

The Scottish Government funds EST to provide Home Analytics services to local authorities around Scotland to assist them in targeting energy efficiency programmes, included those funded through ECO. The Scottish Government has funded us to develop the Home Analytics service to target fuel poor households, and we have developed an address level tool that can predict whether any home in Scotland is in fuel poverty to an accuracy of 65% (and this can be increased to 91% if commercially available data about household income is included in our targeting model). We believe this could be readily adapted to England.

Our experience from Home Analytics is that suppliers need highly accurate data if it is to be used in targeting, we are unsure of the value of providing data through the proposed service at postcode level, as energy companies often require higher resolution address level data in order to cost-effectively target properties. We therefore suggest that the service should provide address level installs and socioeconomic data, combining this with the local level DWP data.

We suggest it would be helpful to have a discussion between BEIS and EST, where we could share our experience of delivering Home Analytics which could be helpful to inform thinking on this new service. It is particularly important that discussions on this topic should also involve Scottish Government who, as we describe above, are already funding EST to provide a very closely related service.

15. Do you agree that, subject to supportive evidence being available, up to 25% of ECO can be delivered through flexible eligibility?

Yes.

### **Chapter 3: Eligible Energy Efficiency Measures**

## 16. Do you agree with our proposal to exclude the installation or repair of oil and coal fuelled heating systems?

Yes, and it fits with the government's wider drive to phase out high-carbon fossil fuel heating, as detailed in the Future Framework for Heating call for evidence. However, this does raise questions of what heating systems will be supported under ECO for off-gas grid properties (which cannot be connected to the grid) if oil/coal is excluded and heat pumps are excluded due to ECO being mutually exclusive with RHI. That leaves electric storage heaters, or LPG, both of which are more expensive to run than oil boilers and thus unlikely to help rural residents living in fuel poverty.

### 17. Do you agree with the broadening of the criteria for the installation of FTCH?

We are concerned that this may result in electric heating being replaced with gas heating, which may reduce costs, but does not contribute to long term decarbonisation, as the carbon intensity of grid electricity is declining. Ideally electric heating should be replaced by heat pumps, but it is planned that these are excluded from ECO due to falling under RHI.

# 18. Do you agree with our proposed approach to limit the replacement of all broken heating systems to the equivalent of 35,000 per year, (excluding the installation of FTCH, renewable and district heating systems, inefficient heating upgrades delivered alongside insulation and heating controls) and our proposals for limiting certain heating repairs?

Yes. ECO is intended to deliver energy efficiency improvements and alleviate fuel poverty. As the number of old inefficient boilers declines, boiler replacement brings increasingly limited improvements in energy efficiency. As such boiler replacement is increasingly no longer an energy efficiency issue and should be limited under ECO.

We therefore support the proposed cap, but, we believe that, alongside ECO, evidence should be gathered about the extent to which low income home owners in Britain are being left without working heating systems because they can't afford to replace them.

A warm home – as is recognised by environmental health legislation (Housing Act 2004 and Housing (Scotland) Act 2006) – is a matter of basic health and safety. Therefore, while boiler replacement is not appropriate at large scale for ECO, it should receive support elsewhere. We argue that a new broken boiler fund should be set up to assist those who cannot get support under ECO.

The fund should only be available in the owner occupier sector, in the rented sector there should be better enforcement of housing health and safety regulations to ensure landlords replace broken boilers in a timely fashion.

We would like to note that the wording of this question raises some confusion, as here there is mention of renewable heating systems, but later renewable heating systems are stated to be excluded due to ECO/RHI mutual exclusivity.

## 19. Do you agree with our proposal to allow certain heating system upgrades where they are delivered alongside certain insulation measures?

Yes, this should encourage a whole house approach to be taken. Encouraging insulation and improvement of building fabric and heat retention will also help more with long term energy saving.

## 20. Do you agree with our proposal to include a requirement to treat a minimum number of solid walled homes? What technologies or combinations of technologies could cost-effectively deliver the same bill saving outcomes as SWI?

Yes, though this should be retained as a minimum number of solid wall insulation installations. Finding new technical solutions for delivering energy savings in solid wall homes is important, but this should be promoted/encouraged through the new ECO innovation element.

Addressing solid wall insulation is important and for many, probably most, solid wall dwellings additional wall insulation will be essential if we are to achieve levels of energy efficiency consistent with 2050 decarbonisation aims.

We recognise that there have been problems with achieved installation standards for previous government (and supplier obligation) supported solid wall insulation programmes. Yet that's not a reason for the government to move away from supporting SWI. Instead there needs to be a focus on resolving these issues by: improving installation standards through Each Home Counts; support for innovative insulation products and processes through the ECO innovation element; and supporting supply chain training and capacity building. Uplifts may be required and area based schemes should be encouraged, including through support for EPC D rated social housing needing solid wall insulation.

Finally we note that other countries are promoting solid wall insulation at a scale far beyond that of the UK: the supplier obligation in France supports around 200,000 solid wall insulation installs each year.

- 21. Alternatively, do you believe that an SWI-only minimum should be continued? Yes. See response to question 20.
- 22. Do you agree that the minimum is set at the right level (17,000 homes treated per annum)?

The level of solid wall insulations supported through ECO is insufficient to achieve the UK's decarbonisation targets and prepare the industry for the challenges we will face ahead. That being said, in reference to our points in question 7 and 20, we do agree that SWI under ECO should be set at the suggested level, to avoid the regressive effect that a high proportion of spending on SWI could entail. However, there is clear need for additional support for solid wall insulation outside of ECO.

23. Do you think a 66% minimum requirement of eligible households should be introduced under Affordable Warmth for the Solid Wall Insulation and District Heating? Please suggest an alternative preferred percentage, and supporting evidence where applicable.

Yes, this should encourage area based approaches.

24. Do you think the infill mechanism should be implemented using the same area based methodologies used for the current flexible eligibility in-fill mechanism? Please suggest an alternative preferred mechanism, and supporting evidence where applicable.

Yes, though we advocate extending it to neighbouring D rated social housing properties. As discussed in our response to question 13, the current eligibility criteria for social housing could prove a barrier to the success of in-fill and area based schemes.

## 25. Do you agree that all eligible and in-fill measures should be notified together and within six months after the first measure was completed?

Yes: we have not carried out a detailed analysis of these proposals but the arguments made in the consultation document are convincing.

## 26. Do you agree that the proportion of homes in the same building, adjacent buildings or the same terrace that can receive solid wall insulation as 'in-fill' under ECO flexible eligibility should be limited to 50%?

Yes: we have not carried out a detailed analysis of these proposals but the arguments made in the consultation document are convincing.

**27. Do you agree that any measures which receive the RHI should not be eligible for ECO?** It is unclear whether the proposal is (a) that a particular installed measure would not be eligible for RHI and ECO support, or (b) that any measure that could be supported under RHI is excluded from ECO support.

We would certainly oppose (b), as it would greatly limit the potential for ECO to support new heating systems in off-gas homes with broken boilers or storage heaters (that cannot be connected to the gas grid).

We also argue that there is a case for measures in individual homes to be eligible for both ECO and RHI support.

There remain many barriers in the renewable heating market so it is important to put in place strong incentives, particularly to make the market work for low income households, and to drive the long term decarbonisation of heat.

Considering that to date there has not been significant delivery of renewable heat, with just 34,000 homes installing measures under RHI since the scheme began, and in light of the eligibility criteria limiting who is able to receive measures through ECO, we do not think that there is much risk of overcompensation. Being overly cautious risks stifling renewable heat under ECO. We need a market transformation of renewable heating to make it accessible to low income households, RHI is a crucial part of that but ECO can also play an important role, especially to reach less well-off households.

It is questionable whether ECO on its own is enough to incentivise suppliers to install renewable heating in low income homes without substantial uplifts in scores. In fact it may be that without the joining up of RHI and ECO very few renewable heating installations go ahead under Affordable Warmth. Nonetheless, with the advent of third party assignment of rights under RHI, it is unclear how the renewable heat market will develop. Accordingly we suggest that government should allow a limited (capped) number of ECO-funded installations to also receive RHI and that the government should monitor the impact of this on the market.

#### 28. Do you agree with our approach for scoring ECO3 measures?

Yes, though with the inclusion of a solid wall insulation uplift to make the measure attractive to property owners.

### **Chapter 4: ECO in Scotland**

29. In the event that separate rules are made for ECO in Scotland, do you agree with the proposal to: (a) apportion the cost envelope between England & Wales and Scotland using a methodology based on the total amount of gas and electricity supplied in each region, with an equal weighting for each fuel? (b) that the calculation is based on an average taken from the last three years of domestic gas and electricity consumption data published annually in December by BEIS?

We have not carried out a detailed analysis, but this calculation should adequately reflect the higher expenditure and therefore contribution to ECO by Scottish bill payers, as Scotland has less access to cheaper gas, higher fuel use due to weather and climate, and higher tariffs in many areas.

30. In the event that separate rules are made for ECO in Scotland, do you agree with the proposal to apportion an individual supplier's targets between Scotland and the rest of GB? No comment.

### **Chapter 5: Innovation**

31. Do you agree that obligated suppliers should have the option of delivering a proportion of their obligation through innovative products, technologies and processes and, if so, where the maximum allowed should sit between 10% and 20%?

Yes, in the absence of any wider scheme to support innovation in home energy efficiency this should be driven under ECO. We need new cost-effective products and services that enable households to save energy in new ways, through the 2020s.

32. Do you agree with the proposed routes through which ECO can support innovation? Please provide reasons, and if applicable, any alternative preferred proposals.

All three of the proposed routes can be valid methods for encouraging innovation in ECO. It is vital that BEIS and Ofgem provide clarity on how the routes would operate in practice and to keep the regulatory process as simple as possible. Making the process complex or allowing confusion over how the routes would work would be off-putting to suppliers. It must also be ensured that the benefits of taking an innovation route are sufficient to encourage supplier engagement, and that the risks to suppliers are minimised, again to encourage engagement. If the innovation routes see little uptake from suppliers, it will be necessary for the government to review the process and potentially introduce a minimum requirement for innovation in ECO.

We note the proposal to monitor the performance of measures using the National Energy Efficiency Data framework (NEED). We know that this can allow a statistically robust analysis of the performance of measures across large samples of homes, but understand that this process could take two or more years. It also does not monitor the lived experience of measures. Through the history of the supplier obligations, increasingly evidence has emerged of a minority of beneficiary homes where installations have caused long-term problems – problems that could only have been picked up by monitoring homes and interviewing residents in the period after installations happen. EST believes that in-situ field trials should be at the centre of monitoring the innovation products and processes supported under ECO. As well as energy savings, these trials should also assess the impact on home temperatures, how people use the measures, and unexpected consequences, such as moisture and damp. In-situ trials will also allow evaluation of the householder experience, both in terms of the performance of the measures and the installation process. We would recommend that detailed

protocols for implementing field trials and carrying out performance monitoring of innovative products are in place for the beginning of the programme.

33. Are there other ways in which suppliers can meet their targets more cost effectively, in order to maximise energy bill savings achieved through the scheme, while also ensuring that work is done to the right standards?

It is important that new ways of providing advice alongside installation of measures is an allowable innovation action under the ECO3 rules. The potential for savings are very significant: a recent pilot study in Scotland showed that 30% of households find their homes becoming too warm after the installation of energy efficiency measures as they have neglected to change how they use their heating systems to account for the new thermal retention of the house. New ways of providing advice to ensure households know how to operate their home and are making best use of measures installed deliver real, measurable energy savings and should be supported under ECO innovation.

We also argue that innovation support under ECO3 should extend to testing innovative advice and engagement services with customers. More effective engagement increases uptake of measures under the scheme, reducing long term costs of delivery.

As an example of innovation around engagement, the Energy Saving Trust's innovative SMAP service uses smart meter data to help Scottish households to see how much their family can save from different energy efficiency measures. Innovative engagement services could also target specific groups of households and home owners— for example landlords and tenants in the private rented sector. The PRS has the highest fuel poverty but also historically the lowest level of engagement with ECO. Specialist engagement services may be needed to reach the "hardest to reach" and most vulnerable customers.

### **Chapter 6: Delivery and Administration**

34. Do you think the one month reporting period should be extended? Please provide reasons, including any alternative preferred proposals, and supporting evidence where applicable.

No comment

35. If the one month reporting period was extended, do you think the 5% extensions provision could be removed?

No comment

**36.** Do you agree with the proposal to retain the mechanism for the trading of obligations? No comment

### **Chapter 7: Quality and Standards**

37. Once the quality mark requirements are fully established, functional and enforced, do you agree that in order for installers to deliver ECO measures under the quality mark, they should be quality mark approved and compliant with quality mark requirements? Yes.

38. Do you agree that once the quality mark is established and functional, and where we are satisfied with the guarantee principles enforced through the quality mark, all solid wall, cavity wall, park home and room in roof insulation delivered under the scheme should be accompanied by a quality mark approved guarantee in order to receive the standard applicable lifetime?

Yes.

- 39. Do you agree that all ECO measures referenced in PAS 2030 and PAS 2035 should be installed in accordance with PAS2035 and the latest version of the PAS 2030?

  No comment
- 40. Do you agree that installers delivering measures referenced in PAS 2030 and PAS 2035 should be certified against PAS 2035 and the latest version of PAS 2030?

  No comment
- 41. Do you consider that heat networks installed under ECO, or connections to heat networks should require specific consumer protection standards?

Yes, it is important to include arrangements for consumer protection for heat networks. We would emphasise that consumer protection is vital across all measures supported under the scheme, not only heat networks. In order to provide such standards, heat network schemes under ECO could be required to be members of the Heat Trust, where possible.

42. The Government invites views on the general requirements set out in this consultation and the illustrative draft of the ECO Order
See our introductory comments.