



elmhurst  
energy

EXCELLENCE  
IN ENERGY  
ASSESSMENT

Elmhurst Energy Response to:  
“ECO3:2018-2022”  
In Confidence

Prepared for: BEIS

27<sup>th</sup> April 2018



Domestic

Commercial

On Construction



## 1. Introduction

Elmhurst Energy are pleased that BEIS are consulting on ECO3: 2018-2022, in an effort to focus it towards fuel poverty and match the UK's strategic aims set out in the Clean Growth Strategy and as such we are delighted to respond to each question in turn.

The Consultation asked 42 questions and we have answered them all below. We hope you find the responses considered and useful for taking the ECO policy forward in a progressive manner.

## 2. Questions and Answers

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

We have no strong opinion.

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

We have no strong opinion.

### 3. Do you agree with our proposed obligation phases for the future scheme?

We would always like to see continuous improvement of people's homes, and the stop/start approach is unhelpful to the supply chain. The phasing seems a sensible route on paper.

### 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)?

As advocates of continuous improvement, we agree that there shouldn't be a stop/start approach to the Policy in terms of installs, however to allow these to be scored on a previous ECO2t score system appears to be overly complex and makes measuring success of ECO3 impossible (and unnecessarily) complicated. Whilst there will normally be some flexibility in meeting hard deadlines, we propose that a % is allowed across the boundary. Unlimited carry over is not helpful.



**5. Is carry-under necessary and do you agree with our planned approach?**

To support the answer to Question 4, we also support this approach to 'carry under' and like the %'s used, these need to be reflected in the 'carry over' section for consistency and clarity. Again if these are not consistent, the measuring of success for ECO3 will be overly complex.

**6. Do you agree with our planned approach to early delivery during a potential gap between schemes?**

The same answer applies as per Question 4. We all want to see continuous installs as much as possible. This answer suggests that anything installed here, will not have the uplift attached. This is not how carry over is described, as these can use the current scoring mechanism. Again different rules around the transition means it is very difficult to understand what is going on and how the successes are measured.

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

We agree with the policy moving towards the fuel poor, low income and vulnerable households. However fuel poverty seems to be aligned in ECO as being someone on benefits, with no connection to the energy efficiency of the home they occupy. It is important to remember that the definition of fuel poverty in England is:

*i. "Fuel poverty in England is measured using the Low Income High Costs (LIHC) indicator. Under the LIHC indicator, a household is considered to be fuel poor if:*

- they have required fuel costs that are above average (the national median level)*
- were they to spend that amount, they would be left with a residual income below the official poverty line*

*ii. There are 3 important elements in determining whether a household is fuel poor:*

- household Income*
- household energy requirements*
- fuel prices "*



If there is no connection to the household energy requirements, which can't be the amount of billed energy used (as by definition the fuel poor will use less energy as they can't afford it), but the energy efficiency requirements to heat the home to adequate healthy and warm standards must be used. This calculation exists and is the Energy Performance Certificate (EPC).

Using terms such as "rural" and "off gas" as a metaphor for inefficient homes is wrong and will result in the wrong homeowners being helped. The truth lies in an EPC.

To be clear ECO 3 needs a specific rule to ensure homes currently rated E, F and G receive the help first. If BEIS is to deliver on the Government's own Clean Growth Strategy (to raise our homes to a 'C' standard by 2030 / 2035) then we cannot afford to waste three and half years of its flagship policy on installing measures in the wrong homes

The measuring tape of success based on deemed scores and notional lifetime savings, is not the measuring tape of the EPC. The policy can and must require that the worst homes are upgraded first, to allow anything other, will be regretted when in 2022 we have not met our strategic targets.

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

We agree that it is a good idea to ensure that appropriate amounts of funding goes to isolated rural homes. As otherwise the funds will always go to urban areas, where it is often easier and cheaper to find and install measures. We also agree that as a general rural (off grid) properties are the homes that will struggle to ascertain the strategic goal of C rating and should receive special focus.

**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 agree.

**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 agree, in essence funding that goes to fuel poor homes that have children is a good idea. We do however have some serious concerns about the ability to validate the total household income and this will be an obvious opening for those intent on fraud. This information needs to be made available through approved data channels.



**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?**

Yes we agree, this simplifies the process and is also generated by an approved data source i.e. it is not self-declared.

**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 we do not agree. No eligibility should ever be based on 'Self Declaration'. It is clearly open to abuse.

**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?**

We agree that support is still required for social housing. We also 100% agree that the money is focussed on E, F and G rated homes. This level playing field must apply to private stock too, if we are to meet our medium and long term strategic goals.

**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.**

The mapping tool suggested is an improvement on the current situation and welcome. We live in the 21<sup>st</sup> Century and all the information required finding out who should be 'eligible' for ECO funding is there. These separate data pots just need joining up. The home should be E, F or G rated in the national EPC register, the applicable improvement measures are also available here, the DWP benefit system stores the benefits data and HMRC contains the income thresholds – these 3 data pots could deliver the measures to the right people in the right homes. Delivering down to a postcode lottery is better than nothing, but more needs to be done to be truly digital.

The current cost of finding the homes is an unnecessary burden on all in the supply chain of this policy. Taking this money and spending on improving the worst homes would be a much better use of the total pot of money.



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

We agree that LAs may be in a good position to identify homes in need of improvements. We would suggest that the local authorities include reference to the property's energy efficiency rating to ensure the money goes to the worst homes first. This requirement needs to be set to the criteria.

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

We agree with the broad policy goals in the Clean Growth Strategy, and so also support the transition away from more carbon intensive fuels such as Oil and Coal. However we must ensure that those homes which are E, F or G rated and are 'declined' this funding option are made aware of other options available to them. At the moment this is not the case as the ECO policy is not driven from a list of improvements like is displayed on an EPC, but by installers. We fear that these homes will be left alone and not 'pushed' towards the other measures that would be available, again leaving those most in need without the help they desperately need. Potential spending the ECO funds on other better efficient homes.

Homes with oil heating are generally off grid. If this is the case, then ECO needs to ensure that the replacement is a 'renewable' source of heating; otherwise the replacement may well be LPG Boilers. Which may meet the requirement for less carbon, but actually puts the occupiers in a worse fuel poverty situation, as it is currently more expensive fuel. This policy is supposed to be about fuel poverty (based on £s); however these measures have been removed for a carbon reason. The unintended consequence of the decision to remove oil and coal, leaves the door open to worsening fuel bill for occupiers! To ensure that no one is worse off, the home should have a before and after EPC, so that it is proven that the home is not worse off on fuel bills after any installation

Our suggestion is to ensure that if the property is 'off grid' the replacement must be renewable. Or if gas is available then mains gas replaces the heating system, and that EPCs are used to prove that homes are more energy efficient.

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

Broadly agree however if the policy is to alleviate fuel poverty it is important that the replacement system is more cost efficient than the outgoing heating system and this should be demonstrated with an improvement in the RdSAP score.



**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?**

We believe that Government require a separate policy for the issue of broken boilers, the current approach is open to abuse. Fundamentally this 'measure' does not improve the energy efficiency of the home and for that fact doesn't sit within the aspirations of the policy (removing people from fuel poverty).

We recognise that if a boiler or main form of heating breaks down that the occupiers are seriously affected and as such may then start to use expensive options such as portable electric heaters (or no heating at all!). However the overriding policy is to improve the energy efficiency of the homes. This part of the Policy does not achieve this goal. The replacement of condensing boilers with other new condensing boilers is not an effective use of a limited amount of funds. The claimed savings with these install numbers are not true.

We accept that there needs to be a method of helping those in need to fix heating systems, but do not feel that this policy meets these requirements in a holistic manner. Fabric first approach is ignored and it then becomes a numbers game. We suggest that if broken boilers do remain part of the ECO mix they should be delivered alongside other measures, as detailed in question 19.

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

We support this suggestion. This combination of fabric and heating approach is much better than the above option for broken boilers. The fabric improvements should ensure that the owners actually see real benefits of the efficient heating system. Also if the heating system is to be properly sized, then surely the fabric of the property needs to be taken into account.

**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. We agree that solid wall Insulation is expensive, but as indicated there are vast numbers of fuel poor families in older solid walled homes. The process indicated of identifying the savings from a combination of other measures which would result in the same savings as solid wall for the home, seems to make sense.



However, deemed scores do not work in combination, therefore each individual 'score' is applied for all home irrelevant of previous measures. Therefore by applying averages it is easier to combine technologies together which inflates savings of the real combination of the measures. Furthermore items can be installed that have short/medium life times as opposed to long term solution of the fabric improvement. This again puts the quick term policy goals before the families habiting the homes.

In practical terms an EPC indicates all the measures that are suitable for the home, and can be used to identify the other measures that would be a suitable substitution for solid wall insulation. There we suggest that if alternative approaches are used there are some rules in place which ensure that sensible long lasting measures are installed, not just the cheapest and best for installers; but what is best for the home and the occupiers.

**21. Alternatively, do you believe that an SWI-only minimum should be continued?**

No, based on having suitable rules surrounding a combination of other measures (Q20) we would suggest that it doesn't have to be just solid wall insulation. The numbers within the policy are extremely low and from the basic maths it will take 500 years to insulate all the solid walled homes in the country (8.5m/17,000 per yr). ECO policy is scratching at the surface of this issue. Other policy and initiatives are required if we are to achieve lasting fabric improvement to these homes.

**22. Do you agree that the minimum is set at the right level (17,000 homes treated per annum)?**

No we believe that the number should be left at 21,000, in an effort to promote some innovation to help these people who live in solid walled homes to live in warmer homes. The numbers to be installed are extremely low, and if it is to be installed there should be an uplift (inflator) in the deemed scores for E, F and G rated homes. Thus incentivising this measure in the worst homes not just left to the current process of installing only in the largest and easiest to install.

**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.**

We understand that economies of scale mean and effective installation of the measure mean that solid wall and district heating, become more cost effective with more properties. So we welcome the flexibility this route provides. However we suggest that the rule applied



to social housing whereby the homes must be E, F or G should be applied to non-social homes, so that again the limited funds are spent on the worst homes first. This could be achieved extremely easily by adding an inflator to deemed scores for E.F or G rated homes. This would align ECO to the policy ambition of as many homes being C rated.

**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.**

No strong opinion.

**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?**

No strong opinion.

**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 agree that LAs can have more discretion. However we again state the obvious that this claims at point 120 "to ensure that more delivery goes to homes that are most in need". This is not true, and an inflator needs to be added to E, F and G rated homes to ensure the limited funds go to the worst homes first, not the ones with the most bedrooms.

**27. Do you agree that any measures which receive the RHI should not be eligible for ECO?**

In answer to questions 16 we identified the negative impact that the removal of oil boilers could have on levels of fuel poverty and EPC ratings.

Renewable heat measure, such bio mass and air source heat pumps, may be a more effective replacement solution but until the supply chain is established a degree of RHI funding to this niche sector may be necessary. Without incentives LPG, which is expensive and will detract from the Clean Growth Strategy for achieving C rated homes by 2030, may well be installed.



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

Deemed scores are 'probably' the best way to calculate the level of grant funding available. However a single inflator must be added to all deemed scores for E, F and G rated homes.

As we have stated since the beginning deemed score are averages of averages and a simple method to score measures on a simple count of bedrooms. The new scores and changes indicated are evidence of moving the scores around to make measures incentivised for the supply chain. Not one mention of installing measures in the worst performing homes. If the Government are intent to move people towards C rated homes, they must incentivise the worst ones first. A simple inflator for E, F or G rated homes would at least show some commitment to this. In the Consultation document, the 'Foreword', the 'Executive Summary', the 'Vision' mentions the strategy of C rated homes countless times. However the policy is all about incentivising installs and spending the obligation in the easiest manner. As the overall pot of money is limited the policy MUST aim towards the worst performing homes first.

A prime example of misalignment is in this section, as it talks about broken boilers, and incentivising this with lifetime savings and uplifts. This is all very complex, in order to derive at a number that means an install may occur. However a home is not noticeable more energy efficient if a 10 year old condensing boiler is replaced with a new condensing boiler. The journey towards the C rating has not yet started. If the home was 'F' rated it will still be 'F' rated, this is what deemed scores is camouflaging.

**29. In the event that separate rules are made for ECO in Scotland, do you agree with the proposal to:**

- a. (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. (b) that the calculation is based on an average taken from the last three years of domestic gas
- c. No strong opinion

**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 strong opinion.



**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%?**

We do not support this route as proposed. Whilst we understand that Government want to see innovation. This policy is not suitable to encourage this approach. Utility Companies would not be best placed to understand the energy efficiency savings claims by manufacturers of product/techniques. Ofgem guidelines would not in our opinion give enough guidance and so the potential is that 'snake skin oil' will be paid to be installed, and an effort to prove if it works or not based in some limited homes. Meanwhile the national calculation methodologies that reflect all the homes in the UK do not reflect these 'new' novel idea/approaches. The current route of obtaining the recognition within SAP or SBEM is being improved by BEIS in contract with BRE and RDL and this approach already ensures scientific integrity to any innovation that wants to be recognised.

In situ performance measuring based on NEED data is far too crude to calculate actual savings, because these are based on a multitude of changes that could have occurred over time e.g. heating systems have been improved and the measurement is over the summer months, or alternatively measured over a extremely cold snap.

Whilst we appreciate that claims are made of new products, and that more testing is welcome. We suggest that not all innovation is good. Only proven quality and safe innovation is. We do not believe that this would be a cost effective way to deliver innovation.

We think Government would be better exploring other options/policies to deliver this policy objective. The reduced funds in ECO are better spent on known poor efficient homes (E, F and G rated), using technologies that are already recognised.

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

As above.

**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?**

We suggest that this pot could be used to give families good independent advice so that the right measure goes into the right home, rather than the scatter gun approach of individual measures with no concept of the energy efficiency improvements that the family may



obtain. An EPC opens up the discussion with the occupant about 'all' the available measures that could take place for the property, overlaid with occupation information, good plans can be put in place for the good of the occupant; thus feeding into ECO to put the right measures in the right order for the occupants. This is a bottom up approach, not a top down approach, which we believe is better and fit for purpose.

This approach cuts down on administration, as at the moment industry pays for a lead for one measure, and then potentially subsequently another organisation pay for a lead of a different measure. Having one base independent EPC, allows for a short, medium and long term plans for the occupants, giving work to installers without the need for paid leads. The money can be spent on improving the homes, not on 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 strong opinion.

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

No strong opinion.

**36. Do you agree with the proposal to retain the mechanism for the trading of obligations?**

No strong opinions.

**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 ?**

We agree that the present ECO scheme is not about quality or with the occupier's best interest; it is all about number of installs at the best margins. EHC at its heart recognised that the families in the home were not recognised in previous policies. We therefore support the move in EHC to good quality installs going into the right homes, in the right order for the occupants. Fundamentally ECO is in most cases about single measures. EHC wants to put quality first and make sure that families live in warmer and cheaper to run homes. We support this notion wholeheartedly.

We trust that good quality installers will be recognised and there should be a barrier to entry for bad quality installers, in an effort to protect consumers.



- 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?**

All measures (not just limited to these few) should only be recognised in ECO if they are compliant with the EHC Quality Mark.

- 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?**

Yes, we agree with this.

- 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?**

Yes, we agree with this.

- 41. Do you consider that heat networks installed under ECO, or connections to heat networks should require specific consumer protection standards?**

All publically available funds must have consumer protection as standard.

- 42. The Government invites views on the general requirements set out in this consultation and the illustrative draft of the ECO Order.**

ECO is a policy that makes direct connection to the Clean Growth Strategy. Inside this is a clear ambition to improve the energy efficiency of all homes in the UK, especially focussing on the fuel poor. ECO2 and ECO3 make it an ambition to target the fuel poor, by using data to identify these families. However the limited funds are not going to the people in the most need. The funds are going to the measures that make the most margins for the supply chain. This essentially means large homes are those that are most likely to have measures installed, irrespective of need.

Elmhurst continues to make a very simple suggestion that can be implemented very easily within the framework. The deemed scores need to be 'inflated' for homes that are E, F or G



elmhurst  
energy

EXCELLENCE  
IN ENERGY  
ASSESSMENT

rated. This will incentivise the industry to install in fuel poor homes that are in the most need. With limited resources available, we must make sure that we are uplifting as many of these very inefficient homes up towards the UK's strategic goals. Installing at the moment into large homes that are not the worst is a waste of limited resources and we will again hide behind number of installs as the measure of success and wonder why our homes are not getting better.

Add the inflator and incentivise the policy to install in the least energy efficient homes i.e. those that are E, F or G rated.

## Contact Details

Should you require any further clarifications please contact us at:

### Elmhurst Energy

Head Office:

16 St John's Business Park

Lutterworth

Leicestershire

LE17 4HB

Tel: 01455 883 250

[www.elmhurstenergy.co.uk](http://www.elmhurstenergy.co.uk)