Department for
Business, Energy
& Industrial Strategy

ENERGY COMPANY OBLIGATION

ECO3: 2018 – 2022

March 2018

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The consultation and Impact Assessment can be found on the BEIS section of GOV.UK: https://www.gov.uk/government/consultations/energy-company-obligation-eco3-2018-to-2022

ENERGY COMPANY OBLIGATION

Contents

General information

Purpose of this consultation

This document sets out proposals for the Energy Company Obligation (ECO).

ECO is a programme to deliver energy efficiency measures in homes across Great Britain. The current ECO scheme is due to end on 30th September 2018. This consultation covers the future ECO for the period 1 October 2018 to 31st March 2022.

We will shortly publish a draft impact assessment to support the policy proposals set out in this consultation.

An illustrative draft ECO Order 2018 will be published shortly, for information.

We would like to hear from a wide range of stakeholders, including consumer representatives, energy suppliers and those with an interest in energy efficiency and fuel poverty policies.

Issued: 30 March 2018

Respond by: 29 April 2018

Enquiries to:
ECO: Home and Local Energy Directorate, Department of Business, Energy & Industrial Strategy
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Consultation reference: ECO 3 Consultation

Territorial extent

This consultation is for England, Wales and Scotland.

How to respond

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Where possible, responses should be submitted electronically via the e-consultation link https://beisgovuk.citizenspace.com/home-local-energy/eco3-2018-2022. This is our preferred method for receiving responses. However, responses sent to the postal address or email address set out above will also be accepted.

To aid our analysis, please state 'yes' or 'no' to indicate whether you agree or disagree with each proposal. If you have information which supports your view, we invite you to provide details in support of your response.

Additional copies:

Electronic copies of the consultation document, impact assessment and associated documentation can be found on BEIS's website at: https://www.gov.uk/government/consultations/energy-company-obligation-eco3-2018-to-2022.

Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us using the email address and/or postal address above to request alternative versions.

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential, please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

Quality assurance

This consultation has been carried out in accordance with the Government's Consultation Principles.

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

Email: enquiries@beis.gov.uk

Foreword

In the Industrial Strategy, we set out this Government's ambition to drive productivity across the whole economy, helping to make this a country that works for everyone. As part of achieving that, this Government is determined to bring down the costs of energy for all consumers, including by delivering on the aspiration set out in the Clean Growth Strategy for as many homes as possible to reach EPC Band C by 2035 where practical, cost effective and affordable. The Energy Company Obligation is one of several key policies which will help us achieve those aims with a particular focus on bringing down bills for low income and vulnerable households.

Alongside, we have also published a consultation proposing improvements to the Warm Home Discount, which will continue to provide £140 off energy bills to over 2 million low income and vulnerable households each year. From February, Warm Home Discount customers on standard variable and default tariffs are also benefitting from a safeguard tariff which will save them an additional £120 per year on average. And, the Domestic Gas and Electricity (Tariff Cap) Bill, currently before Parliament, will implement price protection for all domestic customers on standard variable and default tariffs.

The Energy Company Obligation provides energy saving measures that make homes warmer and more comfortable to live in. The installation of energy efficiency measures brings many other benefits which help implement our Industrial Strategy and promote clean growth. It supports skilled jobs in small and medium businesses spread throughout Great Britain; it supports innovation in product manufacturing and installation, with proposals in this document intended to boost these benefits and allow a route to market for innovative new technologies; it improves the prosperity of individuals and communities; and it will reduce our energy needs and carbon emissions.

Alongside the benefits to the wider economy we believe that the direct impact of the measures will benefit those households most in need of help. That is why we are completing the transition of the Energy Company Obligation to a scheme focused on low income and vulnerable households, who are least able to adequately heat their homes and most likely to suffer from these impacts. This includes extending eligibility to cover households with disabled occupants. The changes are an important step on the road to meeting our commitment to improve the energy efficiency rating of fuel poor homes to EPC Band C by 2030. It is also set in the context of our broader strategy to promote a thriving market in energy efficiency, and create the conditions where those able to afford energy efficiency measures have the right incentives to invest in them.

We recognise the need for cost-effectiveness in getting help to such households to maximise the number of homes that can be improved, so we will be providing mapping tools and using

the powers provided by the Digital Economy Act to help the supply chain to identify them more efficiently.

In order to ensure high standards of installation quality and customer service, we intend to adopt the changes of the Each Home Counts review under ECO. This is an important step in creating a sustainable long-term energy efficiency market.

In this document we also pave the way for the long-term future so our transition to low energy, low carbon homes can be as effective as possible. We want constant improvement in the products being installed and their methods of installation, including through innovation to drive down costs. We want the development of a better offer for the consumer so they know what to expect from the improvements made to their home. And we want to move to a world where data about the performance of energy efficiency improvements is freely available, creating incentives for constant innovation and improvement.

Executive Summary

This document sets out the proposals for the Energy Company Obligation (ECO) which will run from October 2018 until March 2022 at an average cost of £640m per year in 2017 prices. ECO and the changes we are proposing are integral to our Industrial Strategy, and to clean growth whilst also being the main policy meeting our fuel poverty commitments.

As trailed by Government previously, we are proposing to focus the whole scheme on Affordable Warmth such that low income and vulnerable households are the beneficiaries of measures installed under the scheme; consequently the Carbon Emissions Reduction Obligation (CERO) will be removed. We are, however, proposing to increase the size of the Affordable Warmth Group such that around 6.5 million households will be eligible. This expansion will include households in receipt of Child Benefit, subject to an income threshold, and disability benefits, including Personal Independence Payment. We will provide energy suppliers with data and tools in order to improve the efficiency of identifying eligible households.

In addition, we propose to expand the flexible eligibility element of the scheme so that suppliers can meet up to 25% of their overall obligations through measures delivered to households identified by local authorities. We believe an increase in this option will help us reach more households who are on low incomes but not claiming benefits. To safeguard rural delivery, we are proposing that 15% of the obligation has to be delivered in rural areas.

We are proposing to make it easier to install First Time Central Heating (FTCH), so that homes with broken or inefficient electric storage heaters can be eligible for FTCH. This is a highly effective fuel poverty reduction measure which does not have sufficient uptake currently and is consistent with our principle of treating the worst homes first. In order to support the supply chain and encourage innovation in an area where it is most needed, we are proposing to introduce a target to improve the equivalent of 17,000 solid walled homes per year. We see this as essential to support the supply chain and encourage innovation to bring down costs in the longer-term.

Insulation tends to be the best long-term solution to reducing energy costs and fuel poverty so we want ECO to reflect that. We recognise, however, that there are households who cannot replace their heating systems and may face the prospect of cold homes and high cost heating. Therefore, we are proposing to allow broken heating systems to be replaced up to a cap equivalent to 35,000 heating systems per year. Suppliers will also be able to replace inefficient heating subject to installing certain types of insulation. This should encourage a more multi-measure approach, a more complete package for households and a greater improvement to the energy efficiency of those homes.

We recognise that renewable heat technologies have a big role to play in decarbonisation of domestic heating. However, to maintain value for money and avoid double subsidy we are

proposing that measures which receive support under the Renewable Heat Incentive will not be eligible under ECO.

It is also important that we recognise the market is moving quickly, with new technologies and installation techniques appearing that have the potential to make energy efficiency cheaper, quicker and more appealing to consumers. In order to reflect that changing market, and in line with the principles of our Industrial Strategy, we are proposing that suppliers can choose to meet up to between 10% and 20% of their obligation through innovative measures. This is intended to encourage products and methods of installation which are ready for market but not currently eligible under ECO or delivered in large volumes. We are seeking views on three different methods of incentivising and enabling innovation; demonstration actions, innovation score uplifts and scores based on in-situ monitoring. We also explain our long term vision for transforming the energy efficiency market so that consumers will be able to get data about the performance of measures and any incentives will be based on such actual performance.

The Scotland Act 2016 provides Scottish Ministers with powers to design and implement ECO in Scotland, including setting rules about the types of households and measures eligible. Should Scottish Ministers decide to use their powers during the period of ECO3, we propose to apportion lifetime bill savings targets based on gas and electricity supply volumes in Scotland and the rest of Great Britain. We would also work closely with the Scottish Government to ensure that the design of both schemes was consistent with the overall funding envelope and objectives.

Given the large volume of measures delivered under ECO, it is imperative that the scheme adopts the latest quality standards. A central recommendation of the independent Each Home Counts review, which reported in December 2016, was the introduction of a quality mark that will aim to improve installation quality and customer service. The quality mark is expected to be fully established as a product by September this year. We therefore propose that in order for installers to deliver ECO measures under the quality mark, they should be approved and compliant with the quality mark framework operating requirements on a phased basis, once the requirements are established and enforced.

The obligated parties under the current ECO are energy suppliers with more than 250,000 domestic customer accounts and, on balance, we are not proposing to change that, though we welcome evidence on whether there is a case for amendment. In order to help maintain a smooth trajectory of delivery, we include proposals on allowing carry-over, carry-under[1] and delivery in any period should there be any gap between the current and future scheme.

Finally, we are not proposing any changes to the administration and reporting requirements under the scheme with Ofgem remaining as the administrator for the duration of the future scheme

[1] The flexibility to deliver against current targets during the next obligation period, subject to caps and penalties.

Introduction

1. The Energy Company Obligation (ECO) requires obligated energy suppliers to deliver energy efficiency and heating measures to homes in Great Britain. These measures help households to keep their homes warmer, reduce their energy bills and reduce carbon emissions.

2. ECO was launched in January 2013, and has delivered over 2.2 million improvements in around 1.8m homes.

3. This consultation sets out the Government's proposals for the three and a half year period of the scheme from October 2018 to March 2022.

Our objectives

4. The Government has an objective to ensure that the UK has a reliable, low cost and clean energy system. This will require us to upgrade and diversify our energy supplies to meet future needs – ensuring they are smarter, cleaner, more secure and affordable for consumers and businesses. We will promote clean growth and take action to tackle climate change, working in partnership with business and international communities.

5. The Energy Company Obligation helps households to reduce their energy bills, which makes them more affordable and helps to tackle climate change by reducing carbon emissions from our housing stock. It also supports economic activity right across the country, and supports the aim of our Industrial Strategy to have a country that works for everyone.

Our vision

6. The Government considers it important to bring down the costs of energy for consumers and the Clean Growth Strategy sets out our high aspirations and commitments to delivering clean growth, including ensuring households have affordable energy and making our buildings more energy efficient. Improving the fabric of our homes over the longer term by insulating them will make them more energy efficient and less expensive to heat while the Government is committed to homes being offered smart meters by the end of 2020. This will enable consumers to better understand their energy use and save money.

7. Insulating homes helps to reduce our carbon emissions and contributes to meeting our carbon targets while also allowing us to make important progress on our Fuel Poverty

strategy and targets. The Government is committed to upgrading all fuel poor homes to EPC Band C by 2030 – this is a priority for the Government and we are providing more immediate help to those that need it the most. The Domestic Gas and Electricity (Tariff Cap) Bill will provide protection for consumers who have Standard Variable Tariffs and default tariffs. We are currently consulting on how we will continue to help over two million low income households per year through the Warm Home Discount (WHD), which will continue to provide energy bill rebates each year to over 2 million low income and vulnerable households. In future, the Digital Economy Act will allow us to make better use of data to target households most in need of help.

8. As we set out in this consultation, we intend to focus the 2018 – 2022 Energy Company Obligation on fuel poor, low income and vulnerable households. Local authorities also have an important role to play in helping to identify households not on benefits, suffering from the cold or on low incomes, and the Flexible Eligibility element of the ECO will support this.

9. We have committed to funding ECO until 2022 at a projected cost of £640 million per annum, rising with inflation. Between 2015 and 2020, ECO will upgrade around a million homes supporting £3.6 billion of investment. The Clean Growth Strategy announced that we would extend support for home energy efficiency to 2028 at least at the current level of ECO funding.

10. The Industrial Strategy sets out how we will ensure the UK is the best place for innovation. ECO currently supports companies, including SMEs across the country with the highest rates of ECO delivery in the North West, the West Midlands, Yorkshire and the Humber and Scotland.[2] However, it is essential that we develop new ideas and then deploy them. The innovation element we propose to introduce in the new ECO scheme can help support routes to market for innovative manufacturers and installers to deploy new products and methods with the potential to deliver bill and carbon savings for consumers. Offering support in this way will provide wider economic benefits by encouraging more innovation by UK businesses. It will allow innovative products to be trialled and monitored so that if they perform as claimed and can offer real consumer benefits, they can become new mainstream measures within the current scheme and beyond. This is not about lowering standards around safety. Products and processes will not be supported under ECO unless they have met the required safety standards.

11. We are also undertaking other work on how we can improve the energy efficiency of our housing. We published a Call for Evidence on Building a Market for Energy Efficiency in 2017 to explore how the able to pay market could be encouraged to install energy

[2] See: https://www.gov.uk/government/statistics/household-energy-efficiency-national-statistics-headline-release-february-2018

efficiency measures in their homes. That call for evidence closed on 9th January 2018 and we will publish a summary of responses in due course. The current consultation on Domestic Private Rented Sector Minimum Level of Energy Efficiency seeks to strengthen the effectiveness of those regulations, while asking about the right balance between requiring landlords to contribute to the cost of improving the energy efficiency of their properties, while ensuring those costs are not excessively high.

12. All of the above will contribute to our aspiration, set out in the Clean Growth Strategy, for as many homes as possible to be Energy Performance Certificate (EPC) Band C by 2035 where practical, cost-effective and affordable.

Focusing the Energy Company Obligation on low income and vulnerable households

13. The best long-term solution to tackling fuel poverty is to make it cheaper for people to heat their homes through installing energy efficiency measures. Measures such as insulation and efficient heating systems achieve a long-term reduction in the cost of heating homes and help keep homes warm year-round. Supplier obligations have been in place for more than twenty years, and have helped to improve the energy efficiency of homes across Great Britain. The Energy Company Obligation is the current scheme in Great Britain.

14. Since ECO was introduced in 2013, the Government has continued to analyse how it and other policies are contributing to the alleviation of fuel poverty, and how it could be improved to help us better support households on the lowest incomes.

15. 'Cutting the cost of keeping warm: a fuel poverty strategy for England' is the roadmap for meeting the statutory fuel poverty target in a way that reflects a number of guiding principles – prioritising the worst cases first, taking account of vulnerability and deploying cost effective policies. The strategy also includes interim milestones for as many fuel poor homes as is reasonably practicable to achieve energy efficiency ratings of:

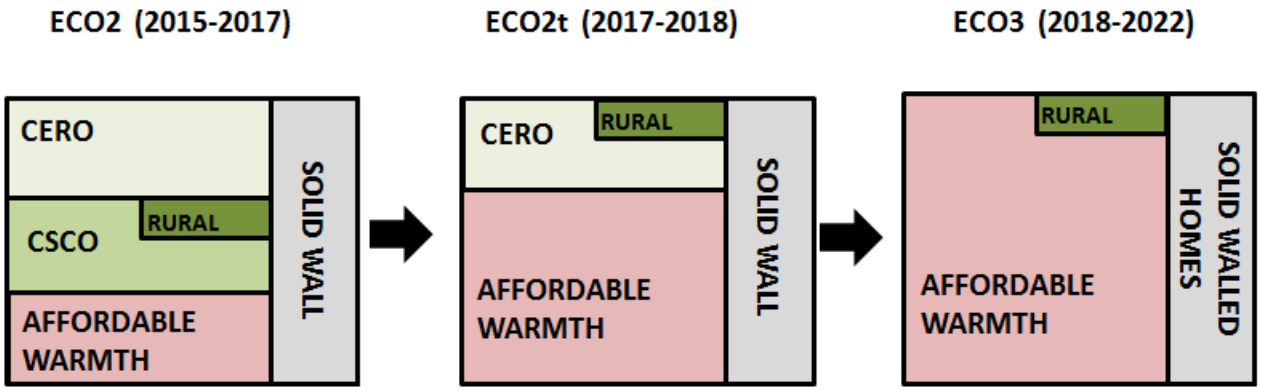
    - Band E by 2020
    - Band D by 2025; and
    - Band C by 2030 (the statutory fuel poverty target).

16. The strategy also states that we would reform future energy efficiency schemes, including ECO, to support the least energy efficient low income households. The Government's 2017 election manifesto made the commitment that we would improve the energy efficiency of homes, especially for the least well off, to EPC Band C by 2030.

17. In April 2017, the Government changed the scheme so that it became more focused on households with low incomes. Under the current transition, "ECO2t", scheme, around 70%

of the obligation, known as Affordable Warmth, is targeted at low income and vulnerable households. The remaining 30%, the Carbon Emissions Reduction Obligation (CERO), is open to all households and is focused on reducing the carbon emissions of our housing stock. The current scheme was intended as a transition to what we are proposing in this consultation.

18. Therefore, the Government wants to focus fully the 2018 – 2022 obligation on those households that are fuel poor, on low incomes and vulnerable to the cold – households that cannot otherwise afford the cost of installing energy efficiency measures.



Fuel Poverty in England, Scotland and Wales

19. Fuel poverty is a devolved matter, with separate indicators, targets and strategies adopted by England, Scotland and Wales. Although fuel poverty is measured differently in Scotland and Wales compared to England, the characteristics of households considered to be in fuel poverty across Great Britain are very similar.

20. In England, a household is considered to be in fuel poverty if the home has higher than typical energy costs (for instance because of poor energy efficiency) and, were they to spend that amount on energy, they would be left with a residual income below the official poverty line. Households who meet both conditions are referred to as Low Income High Costs. According to the latest official statistics, there are just over 2.5m households living in fuel poverty in England.

21. Scotland and Wales use variations of the 10% fuel poverty indicator, whereby a household is considered fuel poor if they need to spend more than 10% of their net income on energy. The Scottish Government committed to a review of the fuel poverty

strategy and eradication target in Scotland in March 2017[3] and published evidence in November 2017[4].

22. The UK Government is committed to helping the lowest income households with the highest energy costs keep their homes warm. A home should be warm and comfortable and provide a healthy and welcoming environment. The Government is clear that it is unacceptable that some people living on a low income should have to do so in properties that cannot be kept warm at reasonable cost. Living in a cold home can result in a range of negative health outcomes. It is also associated with poor educational attainment, which may have knock on implications for social mobility and life chances.

23. We have worked closely with the Welsh Government to ensure that the scheme reflects the needs of fuel poor households across both England and Wales.

24. The Scotland Act 2016 transferred various powers over ECO to the Scottish Government. Further information on ECO and Scotland is set out in chapter 4.

Ensuring quality for consumers

25. The Government is keen to ensure that ECO measures are delivered to appropriate industry standards and provide adequate consumer protection. Once the recommendations of the independent Each Home Counts (EHC) review on quality, standards information and advice in home energy are implemented to the required standard, we propose to incorporate the relevant standards and practices into the ECO scheme. Further information on quality and standards is set out in chapter 7.

Scheme administrator

26. Under these proposals, the Office of Gas and Electricity Markets (Ofgem) will continue to be the scheme administrator for the 2018-22 period.

[3] See: https://consult.gov.scot/better-homes-division/fuel-poverty/?_ga=2.71033881.882145802.1518619227-373315598.1428925324

[4] See: https://beta.gov.scot/publications/new-definition-fuel-poverty-scotland-review-recent-evidence/pages/5/

Chapter 1: Suppliers

This chapter outlines our proposals with regard to obligation thresholds, the taper mechanism and supplier targets.

Supplier obligation threshold

27. The Government has a vision for a fair and competitive energy market where established suppliers and small new entrants compete to make better offers to consumers. Therefore, as part of a drive to enhance competition and consumer choice, the Government and Ofgem have over time put in place a range of measures, including increasing the customer number threshold for some Government schemes from 50,000 to 250,000 customer accounts. We adopted this approach for ECO, setting a customer threshold of 250,000 customer accounts, alongside supply volume thresholds for gas (2000 GWh/year) and electricity (400 GWh/year) considered equivalent to 250,000 customers. There are currently 15 obligated suppliers.

28. When the threshold was set, it was considered that the compliance costs of Government programmes could act as a barrier to market entry. In recent years there has been substantial growth in the number of energy suppliers, and there are now over 65 in the domestic retail energy market, up from 18 in 2013. Independent suppliers now have more than 24% of the dual fuel market.[5] Therefore, with many new suppliers entering the market, it might be argued that some of the original justifications for retaining the current customer number threshold no longer apply: the supplier exemption means smaller suppliers avoid the obligation costs, over and above compensating them for the disproportionate costs they would face in the absence of an exemption. Additionally, the obligation trading mechanism that was introduced to some extent addresses higher fixed costs that small suppliers would have faced in delivering an obligation themselves.

29. On the other hand, whilst there has been a significant increase in market entrants since the scheme was introduced, the market share of obligated suppliers has only fallen by 6%; their market coverage has dropped from 99% when ECO was first formed, to 93% currently.[6] This indicates that the threshold may not distort competition. Additionally, many small suppliers cannot access capital as cheaply and experience cash flow limitations, which means trading might not be a realistic option if the obligation threshold were to be lowered. For suppliers who are able to make the upfront costs of obligations, trading, in

[5] Source: Domestic energy market share surveys, Cornwall Insight, See: https://www.cornwall-insight.com/documents/supply-markets/domestic-market-share-survey

[6] Source: Cornwall Insight, See: https://www.cornwall-insight.com/documents/supply-markets/domestic-market-share-survey

effect, could also result in smaller suppliers increasing the profits of the larger energy suppliers, ultimately affecting competition and price. Finally, lowering the obligation threshold could present a greater risk of non-compliance for newly obligated, smaller suppliers whose initial delivery of the scheme may be slow whilst they familiarise themselves with scheme rules.

30. We recognise that this is a balanced argument and we are seeking views on this matter.

Consultation Question

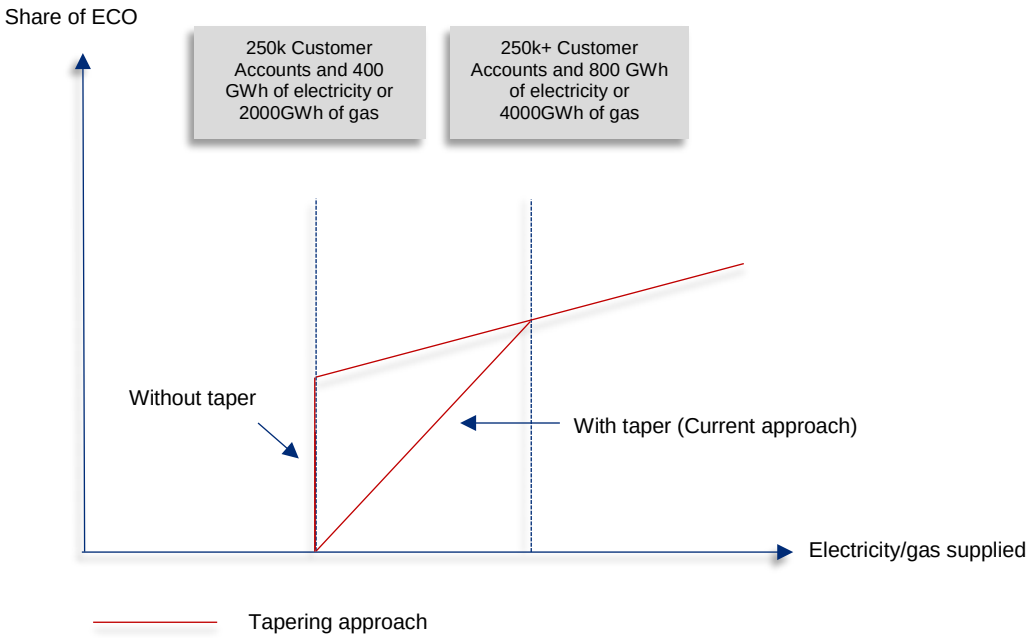
1.	Do you agree with the current supplier obligation threshold?

The taper mechanism

31. A taper mechanism is also currently in place to help ensure ECO does not act as a barrier to growth for smaller suppliers. The taper is designed to avoid a cliff edge for newly obligated suppliers, as their obligation is calculated only on their supply volume above the threshold.

32. Smaller suppliers currently benefit from this taper mechanism, which gradually increases their share of the obligation as their supply volumes increase from the equivalent of 250,000 to 500,000 customer accounts. Without this taper, newly obligated suppliers would jump to their full share of the obligation as soon as they become obligated. The taper means that, depending on their supply volumes when they pass the threshold, newly obligated suppliers should have a smaller obligation to begin with, when first obligated (see Figure 1 below).

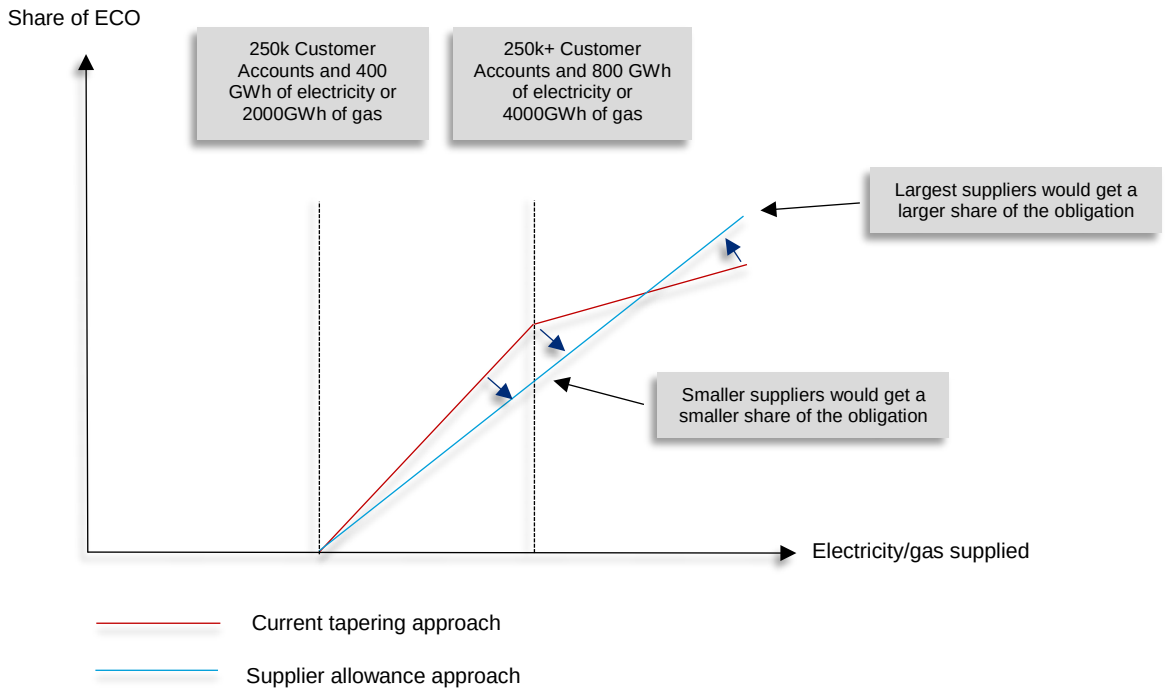
Figure 1: Current taper mechanism under ECO



33. However, some suppliers have argued that the current taper results in a double marginal cost impact. This means their share of the obligation increases at twice the rate of larger suppliers and therefore remains a barrier to growth. The figure above illustrates that the gradient at which their obligation increases is significantly steeper than for larger companies above the threshold. As a result, several stakeholders have suggested that there is a strong argument for reducing the gradient of the taper.

34. Having considered a number of options following the last consultation, we believe the best alternative taper is the 'supplier allowance' approach. This means that all energy suppliers would be entitled to the same 'supplier allowance' (equal to the threshold), after which their obligations would be calculated on a 'per unit of supply basis'. This approach would address the current problem of a steeper gradient for smaller suppliers subject to the taper, removing any disincentive to expansion (see Figure 2 below).

Figure 2: Supplier allowance taper mechanism



35. If the taper mechanism was changed to a supplier allowance approach, some suppliers might see a very small increase in their obligation, though, the impact of this change overall would be very small. We consider this approach to be more equitable than the current taper mechanism, with all suppliers increasing their share of the obligation at the same rate as they grow.

Consultation Question

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

Obligation phases

36. The current and previous ECO schemes have been divided into obligation phases, each typically one year long to ensure that the suppliers' obligations are aligned to their market share. Suppliers' obligations are calculated at the start of each phase and the obligation share a supplier is allocated during a phase does not need to be delivered until the end of the scheme.

37. Phasing ensures that a supplier's share of the obligation changes in line with their market share, and also mitigates the risk of other consumers contributing to the cost of the scheme through their energy bills over the period of the scheme.

38. The future ECO scheme will run to 31st March 2022. We propose that it will have four phases; a first phase of up to six months and three subsequent annual phases (see below). This also means that the second phase of the scheme can start in April 2019, which is consistent with previous obligations. We are also proposing to retain the existing data collection points and timings for calculating obligations. In the event of regulations coming into force after 1st October 2018, the first obligation phase will begin the day the regulations come into force. Further provision for this is provided for in the sections below on carry-over and early delivery of measures during a gap in the schemes.

Table 1: Proposed Obligation Phases

Phase Number	Dates	Length
1	From the start of ECO 3 – 31st March 2019	Up to 6 months
2	1st April 2019 – 31st March 2020	12 months
3	1st April 2020 – 31st March 2021	12 months
4	1st April 2021 – 31st March 2022	12 months

Consultation Question

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

Carry-over

39. Obligated suppliers normally seek to deliver a certain volume of measures above the obligation level for each obligation period in order to manage risks of measure approval and non-compliance. This is a prudent approach to meeting their obligations which we encourage. They usually meet their obligations early for these reasons. However, savings achieved over and above the obligation still have to be paid for. Carry-over would enable these surplus savings to count towards ECO3. If carry-over is not allowed, the costs of these measures are likely to be pushed onto consumer bills alongside the costs of

delivering the obligation. In addition, the impact of the suppliers stopping delivery as soon as they have reached their target could result in a contraction of the supply chain. Allowing carry-over may encourage suppliers to continue delivering in such scenarios, avoiding a hiatus in delivery before the close of the current scheme.

40. We propose that suppliers should be allowed to carryover an unlimited amount of Affordable Warmth delivery (from 1st April 2017), with the exception of oil and coal fuelled heating systems, and up to 20% of CERO delivery to the future scheme. We also propose that any carry-over would count towards any minimums or maximums set out in ECO3. We propose that measures that are carried-over would be awarded a score based upon the current ECO2t scheme's deemed scores.

Consultation Question

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)?

Carry-under

41. We expect all suppliers will meet their obligations on time under the current ECO. Our understanding is that most are on track to do so, with some suppliers due to deliver their obligations significantly ahead of the final deadline. However, in the unlikely situation where a supplier is unable to do so, we are proposing that rather than be non-compliant, they can offset that under-delivery by delivering more under the future scheme. We are doing this to limit the potential costs to the obligation whilst maintaining a clear incentive to comply with the scheme and not use this mechanism.

42. In order to achieve this, we are proposing to allow carry-under but with a cap on the amount each supplier is able to use. If, at the end of the current scheme on 30th September 2018, a supplier under-delivers by an amount that is greater than the limit then they will face enforcement action. We are proposing that this limit be set at the equivalent of 10% of the Affordable Warmth obligation and 10% of the CERO obligation allocated to suppliers for phase 3 of the current scheme (1st April 2017 to 30th Sept 2018). A supplier would also be able to carry-under a similarly limited amount of their solid wall minimum, rural minimum and home-heating minimum obligations, if they have not met these sub-obligations. In addition to this, we propose to implement a penalty rate multiplier of 1:1, which would increase a supplier's ECO3 obligation by 10% if they under deliver during the transition scheme.

43. We will continue to monitor delivery during the consultation period alongside responses on this issue and will not introduce carry-under if it appears unnecessary.

Consultation Question

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

Early delivery of measures during a gap between schemes

44. The Government intends to lay legislation as soon as possible after we publish a Government response. However, the ECO Order for the future scheme may not be brought into force to start immediately after the end of the current ECO on 30 September 2018. We intend to provide as much information as soon as possible to industry on the design of ECO3 by summer 2018, including issuing the Government response to this consultation, in order to maximise certainty.

45. To further mitigate the impact on the supply chain of any potential gap between schemes we are proposing to allow measures that are completed in the period between when the current scheme ends and when the ECO3 scheme starts, to contribute to the new scheme. Our proposal is to allow measures that would have been eligible under the current scheme to be able to count towards the new scheme, with the exception of oil and coal fuelled heating systems (i.e. oil and coal heating systems could not be counted towards early delivery). We propose that measures that are delivered early would be awarded a deemed score based upon the current scheme's deemed scores, however these measures will not receive the overarching 30% uplift which is currently applied to all ECO2t deemed scores. These measures will count towards any minima and caps under the future scheme.

Consultation Question

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

Chapter 2: Obligation Targets and Household Eligibility

This chapter outlines the proposed obligation targets, our proposals to fully focus the scheme on Affordable Warmth and the changes we propose to the eligibility criteria.

Obligation targeting

46. As set out in the introduction, changes have been made to the Affordable Warmth element of the transition scheme, namely:

- It was increased to around 70% of the overall scheme, equating to approximately £450m per annum;
- Some of the eligibility criteria were simplified and expanded to include social housing in Energy Performance Certificate ('EPC') Bands E, F and G for certain measures; and
- Income thresholds that reflect household size were introduced.

47. Additionally, we introduced the complementary Flexible Eligibility (described later in this chapter) to enable fuel poor households outside of the benefits system to receive measures.

48. In line with our priority to help those most in need to heat their homes, we propose that the whole of ECO3 should be focused on the fuel poor and low income and vulnerable households. This will be achieved by removing the CERO element and increasing the Affordable Warmth obligation to 100% of the ECO scheme and, in so doing focusing finite resources on those most in need and helping us make progress against our fuel poverty commitments.

49. We are therefore proposing the following targets for obligated suppliers:

The proposed Affordable Warmth target is £7.735bn in notional lifetime bill savings to be achieved by March 2022, of which, the following minimum requirements apply:

- rural minimum requirement of 15%, equivalent to £1.16bn notional lifetime bill savings; and
- solid walled homes minimum requirement of £0.713bn notional lifetime bill savings (equivalent to around 60,000 solid walled homes over the lifetime of the policy).

The figures given in this consultation document for notional lifetime bill savings are provisional, reflect the spending level of £640 million per annum set out in the 2015

spending review and are based on evidence around measure and delivery costs and deemed scores.

50. This target will be apportioned on a phased basis in accordance with the individual market share of obligated energy suppliers.

Consultation Question

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

Rural delivery

51. The current scheme has a requirement that 15% of the CERO target imposed for the last 18 months of the scheme must be delivered to rural homes, defined as 'not urban' on the rural urban classification system.[7.] We intend to use the most up to date classifications for the ECO3 rural requirement. This safeguards the delivery of measures in rural areas and recognises the difficulties that can be faced by off gas grid households.

52. The Government remains committed to ensuring that the scheme continues to deliver measures in rural areas. We propose therefore to retain a rural delivery target totalling £1.16bn notional lifetime bill savings within the new scheme, representing 15% of the total obligation. We consider this target complements our planned proposals to encourage First Time Central Heating (see chapter 3).

Consultation Question

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

[7] Further details on the Rural-Urban Classification can be found at: https://www.gov.uk/government/statistics/2011-rural-urban-classification . Further details on the Scottish Rural-Urban Classification can be found at: http://www.gov.scot/Topics/Statistics/About/Methodology/UrbanRuralClassification.

Household eligibility criteria for new scheme

53. Current Affordable Warmth eligibility centres on:

- Private tenure households in receipt of certain means-tested benefits, or a combination of benefits, with a household income threshold for Universal Credit and Tax Credits;
- Private tenure households identified by a local authority as living on a low income and vulnerable to the cold or in fuel poverty; and
- Social tenure households living in properties with an EPC band rating of E, F or G, with extra limits on eligible heating measures.

54. It is not possible to identify households in fuel poverty with 100% accuracy, and nor would it necessarily be desirable to try, given it can be a transient problem with considerable churn in households considered to be in fuel poverty. Changes in circumstances such as becoming ill or moving house, move people in and out of fuel poverty. We have, therefore, used means-tested benefits as a proxy for low income with the scoring mechanism in ECO incentivising measures going to homes which are high cost to heat. The added advantage of using benefits criteria is that eligibility can be independently and cost-effectively verified.

Including additional benefits criteria

55. In moving to a scheme fully focused on Affordable Warmth we have to be mindful of the cost-effectiveness of delivering to low income and vulnerable households during a three and a half year scheme. Furthermore, as a result of changes to the benefits system and a rise in the number of people in work, the eligible pool, using the current eligibility criteria, would decrease during the obligation period. In general, a larger eligible pool results in more measures being installed per pound spent. We are proposing, therefore, to increase the size of the Affordable Warmth Group. Whilst this will affect the percentage of fuel poor captured within the eligible pool, reducing that percentage to some 26%, we believe this is more than counteracted by the move to a 100% Affordable Warmth scheme (enabling focused targeting) and by the increase in the percentage of flexible eligibility discussed below. In addition, the proportion of fuel poor households treated may be increased as a result of the minima and incentives within the scheme.

56. We continue to believe that the use of means-tested benefits remains the best proxy for identifying low income and fuel poor households. For the future scheme, we therefore propose to retain the current suite of means-tested benefits for determining eligibility of private tenure households. However, we also propose to expand the eligibility criteria by including two categories of non-means tested benefits, namely Child Benefit and the disability and related disability benefits noted in Table 2 below. This reflects our desire to help more households with higher heating needs and more vulnerable to the effects of cold homes.

57. The recent DWP report[8] states that on both relative and absolute low income measures, families with a disabled family member are more likely to be on low income than non-disabled families. The report also points out that working-age adults with disabilities are less likely to be in employment, and are at greater risk of being on low income than a non-disabled adult for all family types. This may result in these households having increased energy costs as a result of greater time spent in the home. As 34% of fuel poor households contain someone with a disability or long-term illness, we consider these households should be eligible for the scheme.

58. Published data also highlights that approximately 20% of fuel poor households have a child aged 5 or under. However, there are working families who have a household income below the median who are not eligible for benefits and therefore do not meet the current eligibility criteria. Therefore, we propose to extend eligibility to those households in receipt of Child Benefit. However, as we believe a balance should be struck between helping low income working families and diluting the potential impact on other sectors at risk of fuel poverty, we propose that eligibility under Child Benefit will be subject to an income threshold. The threshold will be adjusted to take account of the different household composition types ('equivalisation')[9]: for example, at the level of joint claimants with one child the income threshold would equate to £25,500.

59. Within the spirit of the Armed Forces Covenant, the additional benefits to be covered include equivalent benefits administered for and on behalf of the Ministry of Defence:

TABLE 2: Department of Work and Pensions and Ministry of Defence administered Benefits under ECO3

Department of Work and Pensions administered Benefits	Ministry of Defence administered Benefits
Disability Living Allowance Personal Independence Payment Attendance Allowance Carer's Allowance Severe Disablement Allowance Industrial Injuries Disablement Benefits	War Pensions Mobility Supplement Constant Attendance Allowance Armed Forces Independence Payment

[8] See: DWP, 'Household Below Average Income: An analysis of the UK income distribution: 1994/95-2015/16', 16 March 2017 https://www.gov.uk/government/statistics/households-below-average-income-199495-to-201516

[9] 'Equivalisation'/'equivalised income thresholds', this reflects the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members. The income threshold therefore varies to take account of the different household composition types.

60. We also propose, should the Warm Home Discount be reformed in future such that different criteria to those listed in this chapter are used, that households eligible for the Warm Home Discount will automatically be eligible for ECO.

Consultation Question

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?
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?

Income thresholds for benefit recipients

61. We included equivalised income thresholds in the current scheme to reflect, more effectively, household composition for recipients of Universal Credit and Tax Credits (Child Tax Credit and Working Tax Credit). This was introduced to improve the targeting of fuel poor households (as Tax Credit recipients tend to have higher incomes than other benefit recipients and are a large group). Under Government reforms, Tax Credits will be replaced by Universal Credit.

62. With the exception of Working Tax Credit during the Universal Credit transition phase, the working age eligibility criteria in the current scheme are being replaced by Universal Credit. As Universal Credit is already subject to a cap for those who are not in work, we believe that removing the income thresholds is a suitable simplification. We therefore propose to remove the income threshold. In addition, given the purpose of Working Tax Credit, namely, to top up the low incomes of those in work, we propose not to retain an income threshold for this category of eligibility.

Consultation Question

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?

Verification

63. Where possible, verification will be by means of DWP's electronic verification system ('data matching'), the exception will be in relation to the income threshold for Child Benefit and those benefits administered on behalf of the Ministry of Defence by Veterans UK. We are proposing that eligibility under these criteria may be evidenced by means of self-declaration, but the details will be set out in guidance.

Consultation Question	
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?

Social tenure housing

64. On average, in light of obligations on local authorities, social housing tends to be more energy efficient than housing in the private sector. Consequently, ECO has historically focused on private sector housing. However, for the current transition scheme we decided to extend support to social housing properties with an EPC rating of E, F or G, as we considered this to be in line with the Government's fuel poverty strategy. Over the period April to September 2017, 11% of all measures delivered under Affordable Warmth have been to social tenure households.

65. Given the 2020 interim milestone of fuel poor homes reaching Band E, we continue to believe that we should focus attention on the least energy efficient social housing properties. We therefore propose to retain the current criterion that only social housing with an EPC band rating of E, F or G is eligible under the scheme. We propose to continue to restrict the types of measures which can be installed in social housing to insulation and first time central heating (including renewable and district heating) only. District heating connections installed to social E, F or G households will need to have certain roof or wall insulation in place as under the current ECO Order.

Consultation Question

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?

Helping suppliers find eligible households

66. Evidence received from suppliers shows that the costs of finding eligible households are, on average, currently several hundred pounds per installation and that this cost is increasing. These search costs account for finding households in receipt of the eligible benefits that both need and want an ECO measure.

67. In order to reduce these costs, we are working to develop a mapping tool that operates at a postcode level. The tool would be based on DWP benefits data to identify the proportion of households on eligible benefits. We will then overlay data on housing characteristics and energy efficiency measures. Whilst this would not identify individual households, this could allow a supplier or installer to identify, for example, that a particular postcode has:

- 50% of households in receipt of eligible benefits;
- 80% of these households have unfilled cavity walls; and
- 50% of these households need loft insulation top-up.

68. Therefore, it may be possible to identify that, within a single postcode there are 20 homes eligible for ECO and requiring insulation measures. The tool could include additional data so that, for instance, the number of homes off the gas grid could also be identified.

69. As indicated earlier, the Digital Economy Act (DEA) will allow greater sharing of data between public authorities and with energy suppliers for the purpose of fuel poverty alleviation. We intend to use these powers to reform the Warm Home Discount and we are also looking at whether the DEA powers could be used to make it easier to more generally identify eligible households under ECO.

Consultation Question

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.

Flexible eligibility: A role for local authorities

70. The flexible eligibility element of Affordable Warmth was introduced in April 2017. This is a voluntary element that enables suppliers to meet up to 10% of their ECO Affordable Warmth targets by working alongside participating local authorities. Under flexible eligibility, a participating local authority is able to: (a) determine its own locally specific criteria for identifying private tenure households that it considers to be living in fuel poverty or on a low

income and vulnerable to the effects of living in a cold home (hence the term 'flexible eligibility') and (b) determine non-fuel poor households as eligible for solid wall insulation exclusively where this forms part of a project that delivers solid wall insulation to fuel poor or low income and vulnerable households. All other scheme requirements (e.g. measure type, maximums, administrative processes etc.) apply in the same way as under the rest of the scheme.

71. With access to locally held data on their housing stock, local authorities are often well placed to identify fuel poor households, and may also be well placed to identify households who are most likely to be susceptible to living in a cold home they cannot afford to heat. These particularly vulnerable households can be the hardest to reach with fuel poverty support. By suppliers working with and using local authorities' expertise of their local areas as well as their existing services or networks to coordinate referrals from local agencies (e.g. health bodies, community groups and charities), these partnerships are well placed to support flexible eligibility households to receive more holistic support with ancillary services (e.g. benefit entitlement checks, home adaptations etc.). Participating local authorities are required to publish a Statement of Intent setting out their flexible eligibility criteria prior to determining eligible households, and set out in a declaration the addresses of the households and the category under which they are determined as eligible. We propose that this will continue to be required of participating local authorities.

72. In order to enable BEIS to monitor and review whether flexible eligibility is being delivered in the way we intend, energy suppliers will continue to be required to provide Ofgem with the reasons given by local authorities in their declarations for granting eligibility to each household stated on a declaration.

Which types of households would be eligible?

73. We do not propose to make any changes to the two main categories of household that are currently eligible under flexible eligibility. These are private tenure households which are identified by a local authority as:

    i. Living in fuel poverty, or
    ii. Low income households who are vulnerable to the effects of living in a cold home.

74. To assist local authority participants, we published guidance on the types of household that we intend to be targeted under flexible eligibility (the 'Guidance'). For ECO3, we will update this Guidance.

75. We do not propose to expand flexible eligibility to include social housing. In this way we will continue to prioritise the use of flexible eligibility for vulnerable and fuel poor households in private tenure properties.

Size of flexible eligibility

76. We propose that Flexible Eligibility remains a voluntary option for both local authorities and energy suppliers. This is in keeping with the principle of setting out the types of household and measures that we want to be targeted through suppliers' obligations, without unduly constraining how energy suppliers deliver them. In this way, it will not only provide an alternative way by which suppliers can comply with a portion of their obligation, but it will serve to increase the number of eligible households, and potentially reduce the costs of identifying these homes, thus improving the cost effectiveness of the scheme. Given that it is optional for them to do so, we would only expect suppliers to use flexible eligibility where it is cost-effective. Furthermore we expect this approach to simplify delivery, as suppliers are able to rely on leads provided by local authorities, rather than carry out their own household eligibility checks.

77. Local authorities are able to continue, either to seek out and identify eligible homes themselves, or provide an assurance role where other bodies (e.g. suppliers, installers or other organisations) identify suitable households. We believe there will be significant scope for local authorities to work with existing partners and other organisations such as charities, health organisations or community groups in order to identify and/or refer households under both the flexible eligibility element and other parts of the scheme. Therefore, we do not propose to widen the range of organisations that can provide flexible eligibility declarations to suppliers directly, as this could complicate delivery. However we do propose to add the Greater London Authority to the list of local authorities, as the GLA covers city wide interests, potentially simplifying delivery.

78. Flexible eligibility was introduced in April 2017 and, whilst we know it is popular with energy suppliers and local authorities, we have limited data about the types of homes being targeted and the measures being installed. We will continue to gather this data and welcome further input as part of this consultation. Should the evidence demonstrate that flexibility eligibility is resulting in the intended outcomes, we propose that suppliers can meet up to 25% of their ECO3 targets through the flexible eligibility element of the scheme. This is an increase from the 10% limit under the current scheme.

Consultation Question

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

Chapter 3: Eligible Energy Efficiency Measures

This chapter outlines our proposals for the energy efficiency measures eligible under the future scheme.

Overall measure eligibility

79. In 2017 amendments were made to the scheme that limited the delivery of mains-gas qualifying replacement boilers, within the Affordable Warmth obligation, set at the equivalent of around 25,000 mains-gas boiler replacements per year. This limit aimed to broaden the range of measures being delivered under Affordable Warmth and encourage greater delivery of measures that are most beneficial over the long-term, such as insulation and first time central heating, which have proven more cost effective at making progress in tackling fuel poverty. Our proposals in this chapter seek to support this transformation further towards delivering the most beneficial measures to those most in need whilst being consistent with the Clean Growth Strategy.

80. We aim to achieve this through the following proposals:

- Oil and coal fuelled heating systems will no longer be repaired or installed under the scheme. This is consistent with our commitment in the Clean Growth Strategy to phase out high carbon heat in off-gas grid properties;
- First time central heating ('FTCH') will be applicable to both private and social housing and include households that are heated by electric storage heaters, which are all inefficient or broken;
- The current mains-gas boiler cap will be replaced with a new Broken Heating Cap (this excludes the installation of FTCH, renewable or district heating systems and inefficient heating upgrades delivered alongside certain insulation measures);
- Inefficient heating systems can only be upgraded alongside insulation unless they are replaced with FTCH, or renewable or district heating;
- Efficient working heating systems can only be replaced by renewable or district heating systems
- Heating controls can continue to be installed for all heating systems. The broken heating cap or requirement to install insulation will not apply to the heating controls.
- A SWI only minimum will be retained or a new minimum requirement will be introduced for treating solid walled homes with other measures if a combination of measures can be delivered cost effectively and while achieving the same total bill savings for the property

Oil boilers

81. The current limit on mains-gas boiler replacements has reduced delivery of this measure from 90% (before the cap was introduced) to less than 20% of the measure mix under the current Affordable Warmth obligation. This limit has also had the unintended consequence of increasing the delivery of oil boilers. From April 2017 to December 2017 there have been 11,407 oil boiler replacements installed which represents 3.5 times the average number of oil boilers installed under ECO2.

82. We therefore propose that oil fuelled heating systems should no longer be supported under ECO. This is in line with the Clean Growth Strategy, which confirms the ambition to move away from oil fuelled heating. Although we would not expect them to be installed under ECO, we also intend to ban the installation of coal heating under ECO to prevent any unintended consequences from occurring.

83. The mainly rural households affected by this change will benefit from the increase in the element of ECO ring-fenced for rural delivery and delivery of other measures such as FTCH.

Consultation Question

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

First time central heating eligibility

84. Under the current ECO scheme there has been a relatively low level of first time central heating (FTCH) installations in social housing. The relatively low delivery is primarily due to the cost of the measure and the difficulty of finding suitable homes, for instance, homes with the potential for connection to the gas grid.

85. FTCH can be a highly effective measure in alleviating fuel poverty, particularly in rural areas, making a big difference to households living in cold homes. It can also improve the energy efficiency performance of homes that have relied on more carbon intensive forms of heating. It is also relevant that the Gas Distribution Network Organisations, through the Fuel Poor Network Extension Scheme (FPNES), have been set a target by Ofgem to provide 91,000 gas connections to homes off the gas grid up until 2021.

86. Under the current scheme, FTCH does not include installations in premises that are, or have previously been, heated by an electric storage heater. We propose to broaden FTCH

eligibility to include households without previous central heating that are heated by electric storage heaters which are all inefficient or broken, and to apply this definition to both social and private tenure housing. We propose to define an electric storage heater as inefficient if it has a manufactured responsiveness rating of 0.2 or less when assessed against the Standard Assessment Procedure. Fossil fuel heating systems that do not fall within the definition of central heating system set out below can continue to be replaced.

87. A central heating system will continue to be defined as a system which provides heat for the purpose of space heating through a boiler or other heat source connected to one or more separate heat emitters.

88. We propose to continue to prevent other heating measure installations (with the exception of FTCH) in social housing properties. This will avoid significant levels of ECO support going towards upgrading heating systems in social housing, which the Government expects would be carried out as appropriate, as part of social landlords' duties towards their tenants.

Consultation Question

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

Broken and inefficient heating system replacements

Broken heating system replacements

89. As insulation and FTCH tend to be the best long-term solution to reducing energy costs and fuel poverty we would like this to be reflected in scheme delivery by continuing to limit certain heating replacements and repairs under the scheme.

90. We recognise, however, that there are households with broken heating systems who may be unable to repair or replace them with a functioning system, and may therefore be forced to use expensive coping strategies such as plug-in electric heating or forced to live in a cold home. As such, we are proposing to replace the current mains-gas boiler cap with a new Broken Heating Cap of £2.54bn notional lifetime bill savings, which will allow broken heating systems to be replaced up to an equivalent of around 35,000 heating systems per year.

91. This 35,000 figure reflects the move to a 100% Affordable Warmth obligation, the cap being targeted at all broken heating measures, as well as the proposed ban on installing oil and coal fuelled heating systems.

92. The replacement of any broken heating system with the installation of FTCH, renewable or district heating, inefficient heating upgrades delivered alongside insulation (see inefficient heating upgrades section below), will fall outside the Broken Heating Cap, as will the installation of heating controls. The replacement of any broken heating system with any measure other than the above exceptions will fall within the Broken Heating Cap.

93. In order to achieve this, we consider a heating system to be either:
    - a central heating system, namely, a system which provides heat for the purpose of space heating through a boiler or other heat source connected to one or more separate heat emitters,
    - district heating, or
    - electric storage heating.

94. We propose that the heating system must be considered:
    - broken down and unable to be economically repaired: and,
    - if electric storage heating, at least 50% of the total storage heaters in the property are broken and unable to be economically repaired.

Boiler and electric storage heater repairs

95. To ensure that ECO funding is focused towards the installation of measures that are more cost effective at tackling fuel poverty, we propose to restrict the repair of boilers and electric storage heaters in each case to no more than 5% of a supplier's Affordable Warmth obligation. This is consistent with the current restrictions and will limit the repair of both measure types to a total of 10% of a suppliers Affordable Warmth obligation, in a similar way to the current limit placed on qualifying gas boiler and electric storage heater repairs.

Consultation Question

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?

Inefficient heating system upgrades delivered alongside insulation

96. Alongside the Broken Heating Cap, we are proposing to allow heating system upgrades through the scheme, but only where the heating system is deemed inefficient and replaced alongside the installation of qualifying insulation measures. As a further exception, the replacement of any inefficient heating system with the installation of FTCH, or renewable, or district heating systems (including any heating controls that are installed alongside a heating system) can also be delivered without the requirement for insulation.

97. In addition, if the inefficient heating system is replaced alongside the installation of certain insulation measure(s), the replacement heating measure will fall outside the Broken Heating Cap, regardless of whether the inefficient system is broken.

98. This policy aims to allow more costly inefficient heating to be replaced through the scheme while encouraging a more multi-measure approach, a more complete package for households and greater improvements to the energy efficiency of those homes.

99. In order to achieve this, we propose to define inefficient heating as:
    - non-condensing boilers;
    - electric storage heating with a manufactured responsiveness rating of 0.2 or less when assessed against the Standard Assessment Procedure; or
    - any other heating where Ofgem deem it to be of a similar efficiency rating to those specified above.

100. The process of installing heating upgrades alongside insulation will follow a similar process to that currently in place for CERO primary and secondary measures. For ECO3 insulation will constitute the qualifying primary measure, and a heating upgrade the qualifying secondary measure.

101. We propose to limit eligible primary insulation measures to:
    - flat roof insulation;
    - loft insulation;
    - rafter insulation;
    - room-in-roof insulation;
    - wall insulation (insulation of a cavity wall or solid wall insulation);
    - insulation of a mobile home; and
    - under floor insulation.

102. The secondary heating system upgrade must be installed:
    (a) at the same premises where a primary insulation measure(s) has been installed;
    (b) by the same obligated supplier that installed the primary insulation measure(s);
    (c) on or after the date on which the primary insulation measure(s) was installed;

(d) no more than six months after the date on which the primary insulation measure(s) is installed.

103. In order for the primary insulation measure to be eligible to support a secondary heating system upgrade, we propose that the primary insulation measure must be:

(a) Installed to at least 50% of

i. the total exterior-facing wall area of the premises;
ii. the total roof area of the premises;
iii. the total floor/under floor area; or
iv. each of the ceiling, floor and wall area of a mobile home.

(b) Loft insulation that is:

i. installed in a loft which has no more than 150mm of insulation before the installation takes place; and
ii. insulated to a depth of at least 250mm after installation.

Consultation Question

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

Efficient working heating system replacements

104. Under these proposals, efficient working heating systems can only be replaced by renewable or district heating systems (this includes heating controls that are installed alongside the heating system).

Properties with no prior heating system

105. Under these proposals, where the property has no prior heating system any heating measures may be installed, such as FTCH, electric storage heaters, and renewable and district heating, but excluding oil and coal heating systems. The Broken Heating Cap and requirement to install insulation will not apply.

Treating solid wall homes

106. Improving the energy efficiency of solid walled homes is a significant challenge for the nation's housing stock, but essential to meeting our statutory emissions reduction goals and to delivering the ambition of the Clean Growth Strategy. There are an estimated 8.5 million homes of solid wall construction in Great Britain but less than 10% of these currently have solid wall insulation (SWI). Analysis shows that those living in fuel poverty are disproportionately affected; for example, while approximately 24% of non-fuel poor English households have uninsulated solid walls, 44% of homes occupied by fuel poor households have uninsulated solid walls[10]. Whilst these homes are considerably more expensive to insulate to a good standard, doing so will help us tackle fuel poverty and meet our longer-term carbon reduction targets. Some form of ongoing support for the SWI supply chain would help meet both of these longer term objectives. The current SWI minimum level is set at the equivalent of around 21,000 installations per annum (and reflects expectations on funding contributions from third parties including the Scottish Government).

107. Currently, solid walls are expensive to treat – an estimated average of £8,000 per household. We need to bring down the cost of this potentially important technology. While we continue to want to treat these homes, we need to recognise that ECO funds are finite and that there are other measures we wish to support. We also expect SWI to be more expensive for suppliers to deliver under a 100% AW scheme, as removing CERO may result in fewer multi-property projects and fewer financial contributions from households.

108. Furthermore, we would like to consider whether to offer flexibility in how solid walled homes can be treated to achieve a good standard of efficiency. It may be that in certain circumstances a combination of measures rather than SWI could be more appropriate and cost-effective to install whilst achieving the same level of bill savings.

109. We therefore wish to seek views on a proposal to change the minimum requirement from 21,000 SWI installations per annum to 17,000 solid walled homes being treated through SWI or to achieve equivalent bill savings to SWI. This would represent a total target of £0.713bn notional lifetime bill savings. Obligated suppliers may choose to deliver insulation to solid walled homes above the minimum requirement. We would expect that in most circumstances this will be achieved with SWI but we would like to receive evidence of the likely alternative measures and combinations of measures which could be used.

110. If Scottish Ministers decide to make separate rules or sub-targets for ECO in Scotland and the Affordable Warmth target for ECO3 is apportioned between Scotland and the rest

[10] See: https://www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2017

of GB, we would propose to reduce the solid wall sub-target to approximately 12,000 homes per annum in England and Wales to account for the loss of installations in Scotland.

Consultation Question

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

In-fill: ECO3 Affordable Warmth

111. Treating rows or blocks of adjacent homes with solid wall insulation can achieve economies of scale and increase the cost effectiveness of ECO. However, not all households within a specific area (e.g. row of terraced housing, block of flats) may meet the Affordable Warmth eligibility criteria, proposed earlier in this chapter.

112. Under the current scheme, we included an in-fill mechanism in the flexible eligibility part of the scheme. This allows a certain proportion of homes which do not meet the Affordable Warmth eligibility criteria to receive ECO support for solid wall insulation if they are adjacent to other households that are eligible for ECO support.

113. For ECO3 we recognise that the removal of CERO may impact upon the delivery of high cost measures (such as solid wall insulation) because fewer homes will be able to make a contribution towards the measure that they are receiving. This could reduce the cost-effectiveness of the overall scheme. However we need to strike a balance between ensuring that ECO support is targeted at low income and vulnerable households while allowing other households to receive support where this allows cost-effective delivery of certain measures to take place.

114. We are therefore exploring the potential to introduce an Affordable Warmth in-fill mechanism for measures such as solid wall insulation and district heating (DHS) which may be more difficult to deliver cost effectively under a scheme that is focused on low income and vulnerable households.

115. An in-fill mechanism would enable solid wall insulation and district heating to be installed in households that do not meet the Affordable Warmth criteria (these are known as in-fill measures) as long as these measures are also installed in a sufficient number of Affordable Warmth eligible, or social E ,F or G households in the same area. We propose that at least 66% of the households receiving the measure should be social E, F or G households, or meet the Affordable Warmth eligibility criteria. This will ensure that the focus of the scheme remains on low income and vulnerable households. Under the Flexible Eligibility part of the current scheme the in-fill measures must be installed in the same building, immediately adjacent buildings or in the same terrace as the low income or vulnerable to the cold households identified by the local authority.

- **"Same building"** will typically refer to multiple properties in the same structure (e.g. block of flats).
- **"Immediately adjacent buildings"** are buildings that physically join or are separated for example, by an alleyway, footpath, side garden or fence. Buildings separated by a road on which motorised vehicles travel are not considered adjacent, although if the alleyway is used by motorised vehicles for parking purposes only, then this would be allowed.
- **"Same terrace"** will typically refer to a row of houses (including straight or "L" shaped) that are part of a continuous structure without a gap between them. Where houses have an access alleyway between them, but the top sections of the properties join, these are "same terrace".

116. Further details on the area based approach applying to the flexible eligibility mechanism can be found in the ECO flexible eligibility guidance.[11] We are considering whether to adopt a similar area based approach for this proposed new option for in-fill under Affordable Warmth.

117. For this proposed new option, we would require the in-fill measures and the measures in eligible social E, F or G, or Affordable Warmth households (proposed minimum of 66%) to be notified together, and submitted within a six month period after the date on which the first measure was completed. This new option for in-fill under Affordable Warmth would remain separate to the criteria and limits for in-fill under the flexible eligibility mechanism (see In-fill: ECO3 Flexible Eligibility section below).

[11] See ECO Flexible Eligibility guidance: https://www.gov.uk/government/publications/energy-company-obligation-eco-help-to-heat-scheme-flexible-eligibility

Consultation Question

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.
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.
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?

In-fill: ECO3 flexible eligibility

118. Under the current scheme an in-fill mechanism is included in flexible eligibility that allows homes adjacent to those meeting the fuel poverty or low income and vulnerable to the cold criteria to receive solid wall insulation.

119. Over 40% of fuel poor households in England live in uninsulated solid walled properties so there are benefits in ensuring a minimal level of support for this measure. To facilitate greater delivery for solid wall insulation (SWI) under flexible eligibility, we propose to reduce the 66% minimum eligibility requirement to 50% for projects consisting of any premises that are contained in the same building (e.g. flats), immediately adjacent buildings (e.g. neighbouring properties) or properties in the same terrace. The existing 50% limit for other property types would remain. Enabling this type of delivery under flexible eligibility could potentially result in more delivery of SWI to private tenure fuel poor homes. A consequence of doing so, however, could be a reduction in the number of fuel poor homes that would be supported under the scheme, as some of the obligation would instead be used to treat nearby non fuel poor households as part of these multi-property projects.

120. The rationale for having slightly different rules for flexible eligibility in-fill and in-fill generally under the scheme is to ensure that more delivery goes to homes that are most in need. Flexible eligibility is voluntary and only applies up to 25% of the scheme, which limits the number of households that are not eligible.

121. We welcome your views on whether a higher proportion of in-fill homes should be permitted under the flexible eligibility element of the future scheme to help encourage the uptake for SWI measures. The proposal only applies to solid wall insulation to maintain support for the SWI market and to meet longer term fuel poverty targets.

Consultation Question

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%?

Interaction with the Renewable Heat Incentive

122. Under the current scheme, energy suppliers can install heating measures, such as heat pumps, which are eligible for support through the Renewable Heat Incentive (RHI). The owner of the RHI-eligible system is able to claim RHI payments for generating renewable heat. The Government believes that energy suppliers should not be able to benefit from the RHI when meeting their obligation under ECO, as this is effectively using tax-payer funded incentives to cross-subsidise measures under ECO. We therefore propose that measures installed that are accredited under RHI will no longer be eligible for ECO.

123. Following changes which will be implemented in the RHI later this year, it will be possible for a homeowner to assign the rights to the RHI payments to a third party that has paid for all, or part, of their renewable heating system. For example, a householder could assign their rights to RHI payments to a company installing the renewable heating system in their home, including an energy supplier. Given the future introduction of assignment of rights, the overlap between RHI and ECO could become more common, raising concerns about double counting support from ECO and RHI.

Consultation Question

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

District heating

124. We propose to tighten the definition of a district heating system, to make clear that this does not include heating systems that supply heat to only one house.

Scoring

125. Deemed scores were introduced for the current scheme from April 2017 and we propose that Ofgem will continue to set deemed scores for all measures except district heating. SAP will continue to be used to derive the bill savings for district heating. Ofgem is due to publish its ECO3 deemed scores consultation soon, which will set out proposed changes to the deemed scores for ECO3, including changes to reflect our proposals on the future scheme design.

126. Lifetimes for most measures are published by Ofgem but lifetimes for SWI and some heating measures are set out in the ECO Order. We propose to keep the lifetime for SWI and other heating measures in the ECO Order and to include lifetimes for cavity wall and park home insulation, which we propose to be 42 and 30 years respectively. These lifetimes are included due to the proposal for cavity and park home measures to be accompanied by a guarantee in order to receive the standard applicable lifetime (see Guarantees section in chapter 7 below). We also propose to remove the qualifying scoring concept for boilers and electric storage heaters, and to add revised lifetimes into the Order for broken boiler replacements and broken electric storage heater replacements specifically. We propose that these lifetimes are 3 years and 5 years respectively. These lifetimes are considered to be a more accurate representation of the period of time such heating systems will remain broken in fuel poor households, based on English Housing Survey data of boilers.

127. Our analysis suggests that an uplift of 400% is required to make broken boiler replacement measures cost effective to deliver and therefore achieve delivery closer to the capped level equivalent to 35,000 replacements per year. Without this uplift, analysis suggests delivery will fall significantly short of this cap and homes with broken boilers may be left without ECO support. This uplift was determined using Ofgem's proposed deemed scores for ECO3 and the proposed lifetime of 3 years to be set in the ECO Order.

128. We therefore propose to apply an uplift of 400% to all broken boiler replacements in both gas and non-gas fuelled homes, to ensure that suppliers are sufficiently incentivised to upgrade broken boilers and those most in need are able to receive ECO support. Additionally, we are considering whether to apply a similar uplift to broken electric storage heater replacements to ensure that households with these measures are more likely to receive support.

129. We propose to continue to apply uplifts to scores for insulation installed to off-gas homes; however by removing the qualifying scoring concept, the non-gas uplift for qualifying boilers will cease to apply. The proposed uplift of 400% will have a similar effect on the scores for broken non-mains gas boiler replacements as the current non-gas uplift of 145% for qualifying boiler replacements.

130. All other current uplifts will also cease to apply under ECO3, including the overarching uplift of 30% to all deemed scores which was introduced to align scores with ECO2 SAP based scores.

Consultation Question

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

Chapter 4: ECO in Scotland

This chapter outlines proposals on how the scheme will be delivered in Scotland

The Scotland Act 2016

131. The current ECO is a GB wide scheme. On 1st December 2017 some of the powers to make ECO Orders were transferred to Scottish Ministers by the Scotland Act 2016. These include powers to decide rules about the eligibility criteria for ECO in Scotland and the types of measures provided. Many aspects of ECO remain reserved to the Secretary of State, including the setting of the Affordable Warmth target and the apportionment of the Affordable Warmth target between suppliers.

132. The Secretary of State can continue to make ECO Orders that are GB wide, by obtaining the consent of Scottish Ministers. As such the proposals in this consultation apply to England, Wales and Scotland. To enable the Scottish Government to assess responses to this consultation and determine their future approach, we will share responses with the Scottish Government, subject to confidentiality requests.

Separate rules for ECO in Scotland

133. The proposals in this consultation are set out on the basis that a single ECO scheme will continue to apply across GB. If Scottish Ministers decide to make separate rules for ECO in Scotland, the following aspects of the ECO scheme would be for their determination:
    - the rules on measure eligibility and scoring in Scotland;
    - the rules on household eligibility in Scotland;
    - early delivery of measures in Scotland;
    - sub-targets and caps applying to measures in Scotland; and
    - transfers of measures in Scotland between suppliers.

    There would also be proposals that would continue to apply on a GB wide basis as these aspects of ECO have not been transferred to Scottish Ministers:
    - the proposal to have a 100% Affordable Warmth scheme and not to have a carbon emissions reduction target, and the size of that target;
    - phases of the obligation;
    - supplier thresholds and taper; and
    - apportionment of the Affordable Warmth target between Scotland and the rest of GB.

134. If separate rules are made for ECO in Scotland, we would expect to apportion the overall Affordable Warmth target between Scotland and the rest of GB, unless we were confident that the difference in ECO rules between Scotland and the rest of GB would not

lead to a disproportionate share of the ECO benefits or costs falling in one part of GB. An apportioned target would mean that suppliers would have to meet a specified proportion of their target through measures installed in Scotland and the rest of their target would have to be met through measures installed in England and Wales. We propose that this would be set in line with the apportionment of the overall Affordable Warmth target, so each supplier would have to meet the same specified proportion of their total obligations through measures installed in Scotland.

Apportionment method

135. While we do not apportion the targets or a share of the spending envelope across the different parts of GB for the current scheme, our analysis shows that for the period between April 2015 and September 2017, 13% of ECO measures were delivered in Scotland.

136. As a market-based mechanism, the supplier obligation is expressed in terms of energy efficiency outcomes (i.e. Lifetime Bill Savings) and not as expenditure. Achieving these targets imposes costs on the obligated companies that are passed onto domestic consumers, although the energy bills of households that receive ECO measures will be reduced, on a sustainable basis, from what they would otherwise have been.

137. As apportionment of the overall Affordable Warmth target could affect competition between suppliers and the costs of the obligation passed on to consumers' bills in each region, any methodology for calculating the split of the cost envelope needs to:
    - be fair and proportionate;
    - prevent market distortion; and
    - use data for the calculation that is robust, comparable and transparent.

138. We have tested different metrics according to the above criteria. These included the number of customer accounts, the amount of electricity and gas supplied (either individually or including both), and the remaining technical potential for delivering measures in each nation of GB. We consider the following metric provides the fullest alignment with the above criteria, namely, the total amount of gas and electricity supplied in each region, with an equal weighting for each fuel. The formula for this is:

$$\left(50\% \times \frac{\text{Total Gas Sales Volume in Scotland}}{\text{Total Gas Sales Volume in GB}}\right) + \left(50\% \times \frac{\text{Total Electricity Sales Volume in Scotland}}{\text{Total Electricity Sales Volume in GB}}\right)$$

We propose that the suggested calculation is based on an average taken from the last three years of published data on domestic electricity and gas consumption. This data is published by BEIS in December for the preceding year (e.g. data for 2017 will be available in December 2018).

139. This methodology also reflects how the obligation for suppliers is currently calculated under ECO, although as noted above, the obligation is not at present apportioned between Scotland and the rest of GB. Based on current figures, the share of ECO spending apportioned to Scotland would equate to 9.35% of the £640m per annum total ECO cost (i.e. £59.82m). The Affordable Warmth target would then be apportioned in a way that equates to the share of ECO spending that has been apportioned to Scotland.

140. If the targets are apportioned, Scottish Ministers will have a duty to set rules for ECO that they consider will keep it within the share of ECO spending apportioned to Scotland.

Consultation Question

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?
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?

Chapter 5: Innovation

This chapter outlines our proposals for increasing the flexibility of ECO so that it is able to support more innovative products, installation methods and processes, and respond more quickly to the rapidly changing energy efficiency market.

Supporting innovation

141. The Industrial Strategy sets out how we will ensure that the UK is the best place for innovation – to develop new ideas and deploy them. We also have a big challenge to meet our fuel poverty commitments and carbon emissions targets in the domestic sector. Great Britain's housing stock is one of the oldest and least efficient in Europe. As already mentioned, nowhere is this challenge more stark than in insulating solid wall properties. In order to meet that challenge over the longer term we will need new, more effective, lower cost, more appealing products and methods of installing them. We believe that ECO can help to support innovation which, in turn, can lead to new measures, boost British industry, creating more skilled jobs, raising productivity and boosting local economies. This will help underpin delivery of the Industrial Strategy, and has the potential to improve the cost effectiveness of ECO.

142. ECO and previous energy efficiency supplier obligations have been highly effective at delivering against targets for carbon and energy bill reduction on a large scale. The method of scoring also provides certainty to obligated parties and installers; a certain type of measure installed in a certain type of home will receive a certain theoretical notional bill saving. ECO has been primarily focused on bringing about large scale deployment of energy efficiency rather than encouraging innovation. However, we know that deployment is in itself an important element of the innovation chain, and there is scope for ECO to play a part. Whilst keeping the fundamentals of the scheme the same, we would like to encourage innovation by allowing suppliers to deliver up to between 10 and 20% of their obligation through innovative products and methods that will gradually transform the energy efficiency market.

143. We are particularly looking for innovations that result in the following outcomes:
    a. the development and deployment of new measures that are not currently delivered under ECO and therefore do not have a deemed score;
    b. reductions in the costs of improving solid walled homes, recognising there can be trade-offs between the costs of the works and the levels of carbon savings achieved;
    c. devices and controls that improve a consumers' ability to manage their energy use;
    d. improvements in the processes of production and installation of measures that bring down costs and allow new ways of solving problems;

e. new ways of installing existing measures or combinations of measures which, for example, reduce cost, improve quality and enhance the overall experience for the consumer; and
f. better ways of identifying and targeting households for ECO support that result in an improved customer experience.

144. This is not intended to stimulate products in the early stages of development, for which the Government has made innovation funding available and products would need to be at Technology Readiness Level 8 (system complete and qualified) or 9 (actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies) to be eligible for innovation support under the scheme.[12] Also any innovative installations, as with ECO installations in general, will have to meet existing product and installation standards so that there is no compromise on safety or consumer protection.

145. We will work with Ofgem to provide further guidance on the requirements for all of the innovation options below. We welcome views on the approaches that we propose to include in the scheme.

Innovation options

146. Under ECO3, we propose that suppliers would be able to deliver a proportion of their total obligation, under the innovation part of the scheme. We propose this could be up to between 10 and 20% of the scheme. We are proposing to introduce three ways to encourage innovation, namely through:
- Demonstration actions – providing support for measures that have been tested in a laboratory and now require testing in a live environment;
- Innovation score uplifts – providing support for measures that have not previously been delivered under the obligation and have improved installation methods or materials that can drive down costs; and
- In-situ measurement of performance – to encourage a combination of new and innovative measures, on their own or in combination, to be installed in homes and the performance monitored to assess whether this provides increased energy savings compared to the delivery of traditional ECO stand-alone measures.

147. Delivery under the innovation part of the scheme will be able to count towards any scheme minima including solid walled homes and the rural minima while not counting towards any caps (e.g. the Broken Heating Cap). To maximise the benefit to households, in

[12] See Horizon 2020 technology readiness levels at: https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

determining the maximum proportion of the obligation which can be met through these routes, we wish to consider evidence on how best to minimise any risk that the use of less established technologies may impact the cost-effectiveness of ECO. One option will be to limit the number of any one new technology or process delivered under the innovation element of ECO.

Demonstration actions

148. Demonstration actions were used on a small scale under the Carbon Emissions Reduction Target (CERT), a predecessor scheme to ECO. A demonstration action will be a route to market for an innovative measure, combination of measures, or process. It will be a requirement that the measure will have already been tested in a laboratory with the demonstration action allowing further tests to be conducted under ECO in a live environment. There will need to be sufficient evidence and levels of confidence in the expected performance for the measure to be accepted. We will develop an approach to scoring based on converting the supplier's expenditure into notional lifetime bills savings (LBS).

Innovation score uplifts

149. This mechanism would provide an uplift to a deemed score for a limited period of time in order to expand deployment. It is intended to support the development of categories of measures that already have deemed scores but where the manufacturer of a particular product can provide credible evidence of the product out-performing others in that category through more cost effective installation techniques, improved insulation fabrics or both.

150. We propose that any uplift would be time-limited (e.g. available for one or two years of the scheme), and then at the end of the uplift period the score would either revert to a standard deemed score for the remainder of the scheme or receive a new deemed score depending on the evidence. This could mean, for example, that a solid wall insulation product and/or method which would otherwise get a standard SWI deemed score could benefit from an uplift following a successful application. It would not be possible to receive uplift more than once for the same measure once an agreed number of measures had benefitted.

In-situ performance measurements

151. Under the in-situ performance measurement option, suppliers could install combinations of measures in homes if they considered that through high-quality and innovative

installation techniques they could deliver better energy savings than the current predicted deemed modelled savings for that set of measures. We believe this will encourage a move away from a focus on individual measures towards a 'whole house' approach that will consider and treat the whole fabric of the home.

152. We propose that predicted LBS scores could be awarded for the suite of measures, along with a small additional uplift. Once the measures had been installed, data from the National Energy Efficiency Database (NEED) could be used to compare the household energy use for years before and after installation which would allow estimates of the impact of the measures on energy consumption to be calculated. NEED also allows us to have a control group of households with similar characteristics so that wider factors (e.g. general increases or decreases in energy use over the year) can be taken into account and other specific features (e.g. number of bedrooms, area of country) can be controlled, when assessing the energy efficiency of the measures. The results can be used to develop revised scores or approaches for any future energy obligation.

Application process

153. Under all three scenarios energy suppliers will be required to make an application to Ofgem with supporting evidence including, for example, performance data and, in the case of products, adherence to relevant safety and other standards, details on why the measure is suitable for inclusion for the relevant innovation strand and any other information that the Administrator considers relevant as part of the application.

Consultation Questions

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

Longer term vision

154. In the future, we want to move to an energy efficiency market where the performance of measures installed in the home is monitored so as to provide robust evidence of how it has performed. The Government is committed to homes being offered smart meters by the end of 2020 which will enable consumers to better understand their energy use and save money.

155. Energy suppliers are required when installing smart meters to offer tailored energy efficiency advice to domestic customers as well as an In Home Display that will show them, in near real time, their electricity and gas consumption. This will increase awareness of potential energy efficiency benefits and provide consumers with a good indication of the effect any subsequent energy efficiency measures have had.

156. Separately, it should also be possible to monitor the direct impact of the measure on the building independent of changes in the occupants of that building or their behaviour for example, by measuring the building's heat loss using sensors.

157. The situation described above would enable households to see the direct effect of energy efficiency measures they had installed more clearly. They would be able to take action if an installation did not perform as advertised and act on data available about select products and installers. Such data would create a more competitive market for both product manufacture and installation which should improve the performance of installed products and reduce costs.

158. While it is possible to monitor the energy performance of homes now, it is not currently cost-effective to do so, with its cost exceeding the cost of most energy efficiency measures. However, more products are being developed that can provide such data more cost-effectively and we are aware that a number of manufacturers of smart thermostats are looking into whether their products could be used to measure the performance of energy efficiency measures. The Government is also doing further research into the feasibility of developing a new methodology for measuring the actual thermal performance of buildings using a combination of smart meter data and other sensor data. This project could result in the development of a 'virtual EPC' giving a more accurate reflection of a building's performance than the current SAP methodology.

159. Should cheap and robust methods for the measurement of building performance become available, we intend to change ECO or its successors such that rather than relying on RdSAP and deemed scores, the targets would require the demonstration of real in-situ performance. This could be done per individual home or in aggregate for a set number of homes or measure types. While this would require a fundamental change to how the scheme operates, we believe it has merit, and want to give a clear signal now of our aspiration to fundamentally transform the market for the energy efficiency sector.

Chapter 6: Delivery and Administration

This chapter outlines our proposals for the delivery and administration of the future ECO scheme.

One month notification rule and automatic extensions for 5% of measures

160. Under the current ECO scheme, all measures must be notified to the Administrator by the end of the month following the month in which the measure was completed[13].

161. A number of stakeholders have claimed that the current deadlines are overly strict, which can lead to poorer quality reporting of information. This, in turn can prevent measures from being accepted or approved by suppliers and lead to issues of non-payment to installers.

162. From 1st April 2017, we relaxed the circumstances in which measures may be granted an extension to the one month notification deadline. Up to 5% of measures installed in a particular calendar month, and notified on time, can receive an automatic extension of three months to the notification deadline. Additionally suppliers can now apply for an extension request in instances where they have made an administrative error.

163. These provisions were introduced to provide sufficient flexibility and allow additional time to overcome any administrative issues, whilst ensuring that the majority of measures are still notified in accordance with the usual monthly requirements. There has however, been limited use of the 5% automatic extensions provision under the scheme.

164. The current rule to notify measures to the Administrator no more than one month after the month in which it was completed, ensures that suppliers report progress towards their obligation promptly and prevents a spike in notifications towards the end of the scheme. We view regular monthly notifications as essential to providing transparency to both Government and industry on how the scheme is operating.

165. As the requirement for monthly notifications of ECO measures has been a requirement since the start of the scheme, making any significant changes to this requirement could result in cost implications for suppliers to change internal systems and could place additional resource pressure on the Administrator to process large amounts of measure

[13] See Article 17 of the ECO Order 2014.

data at once. As such, we will continue to allow suppliers to notify measures on a monthly basis.

166. However, expanding the notification deadline set out in legislation to require all measures to be notified to the Administrator by the end of the second month following the month in which the measure was completed, could provide suppliers with additional flexibility allowing them to accept measures notified after the one month period. This could therefore prevent measures being lost due to administrative errors or lack of resource throughout the supply chain to meet short deadlines.

167. Conversely, extending the current notification requirement could potentially result in payment delays to the supply chain, if measures are left un-notified for a longer period of time.

Consultation Question

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

Payment

168. The market driven commercial nature of ECO means that suppliers have the freedom to meet their obligation using a range of contracting practices. Installers have raised concerns that some of these practices can be detrimental to the supply chain, due to suppliers withholding payments for lengthy periods of time. Such withholding often occurs because suppliers make the commercial decision to retain payments from the supply chain to mitigate the risk of measures being rejected or re-scored at any point prior to the Administrator's final compliance determination.

169. The most direct mechanisms open to Government to influence the position on payments is compliance. We have explored a number of options which could provide greater earlier assurance around the compliance of measures, through for example, setting interim compliance deadlines or increasing the amount of verification checks carried out by Ofgem. However, neither of these provisions would provide complete certainty that a measure would not later be rejected or re-scored due to, for example, fraud, whistle blowing or a duplicate measure being identified.

170. We recognise that more work is needed to address compliance issues associated with installation standards and expect the Each Home Counts review to help address some of these risks through the implementation of the industry quality mark framework.

171. As such, we do not propose to implement any substantial changes to the scheme administration or compliance determinations now as this is likely to increase the cost and complexity of the scheme and result in disproportionate administrative burdens for Ofgem and energy suppliers which will in turn affect the supply chain.

172. It is also the case that since ECO places an obligation on energy suppliers, the imposition of particular contractual/payment terms on suppliers under the scheme could be an interference with their commercial practices in order to meet the obligation. It may also limit the delivery models of suppliers which would counteract the market driven principles of ECO. As such we do not propose to mandate any specific contractual, or payment requirements for ECO measures.

173. We have considered whether the Housing Grants, Construction and Regeneration Act 1996 (the “Construction Act”) provisions apply to payments made through ECO contracts as this has been raised with us. It is not possible for us to take a definitive view as to whether the “Construction Act” does apply to ECO contracts as this is dependent on the nature of the contract itself, and in particular, what is being contracted. ECO contracts can take different forms, for example, by contracting for carbon or life time bill savings, rather than specific energy efficiency measures. This is allowed under the scheme to provide suppliers and the supply chain with flexibility and can avoid the need for delivery contracts which source specific quantities of particular measures and place additional pressure on the supply chain to deliver in a fixed way. It is for the companies entering into contractual arrangements to reach a view on whether the Act applies. The Government could only offer further clarity on whether the “Construction Act” applies to ECO contracts by imposing legislative changes to the Construction Act. However, we do not intend to change the scope of the “Construction Act” using Regulations derived from powers in other primary legislation and are also mindful of the rapid timetable required for these Regulations

174. Additionally it is noted that retention clauses may be used in contracts that do fall within the scope of the “Construction Act”. The Department has recently consulted on construction payment through two consultations. The first consultation looked at how effective the 2011 changes to the “Construction Act” have been in improving the clarity around construction payments. The second, focused on the practice of cash retention. The consultations closed on 19th January 2018 and the responses to both consultations and supporting documentation will be used to assess the extent of the issues; and whether, and what, further intervention may be of assistance.

175. More broadly, the Department has introduced new reporting requirements under The Reporting on Payment Practices and Performance Regulations 2017.[14] The UK's largest businesses are now required to report on their payment practices, policies and performance on a half yearly basis,[15] resulting in greater transparency around their payment practices. The information must be published on gov.uk and is publicly available for individuals and businesses to search and review.[16]

176. The Government is considering with Ofgem whether these new requirements should be referenced through guidance issued to suppliers, and in doing so, may help draw public attention to the individual payment practices of businesses. Greater transparency could encourage suppliers to reconsider the use of lengthy payment practices to improve their commercial advantage and reputation.

177. Additionally, in December 2017 the Government launched the Small Business Commissioner (SBC)[17] which aims to play an important role in supporting small businesses to resolve their payment disputes with larger businesses, providing advice, and to help bring about a culture change in payment practices across the UK economy. The SBC provides general information and advice, delivered through its website, signposting small businesses to existing support, and handles complaints about payment issues between small business suppliers (with fewer than 50 staff) and their larger customers (with more than 50 staff).

Consumer experience and consumer contributions

178. The rationale for energy efficiency supplier obligations is that competition results in the most efficient delivery of energy efficiency measures. Delivering within a competitive market means that suppliers and delivery agents can ask households to make a financial contribution to the cost and installation of ECO measures. This is not currently restricted under the scheme as it increases the cost effectiveness of the scheme.

179. We have considered whether or not it is appropriate to have customer contributions in a scheme which will now be totally focused on low income households.

180. Any option which sought to set controls over contributions being made would require significant auditing and monitoring to ensure compliance, which in turn would lead energy suppliers to implement extensive evidencing procedures throughout the supply chain. This

[14] See: http://www.legislation.gov.uk/uksi/2017/395/contents/made
[15] For further guidance see: https://www.gov.uk/government/publications/business-payment-practices-and-performance-reporting-requirements
[16] See: https://check-payment-practices.service.gov.uk/search
[17] More information can be found at https://www.smallbusinesscommissioner.gov.uk/

would result in, increased scheme administration costs and fewer homes receiving ECO support. It is also relevant that acceptance of the installation of ECO measures by the householder is always voluntary as is whether or not they are prepared to contribute to the costs. We do not intend therefore to set down requirements on contributions.

181. We are currently monitoring the level of third party and consumer contributions being made towards the cost of ECO measures via a consumer sample survey and a supply chain sample survey. We intend to continue to monitor third party and consumer contributions to ECO measures throughout the future scheme.

Trading

182. Trading of obligations between suppliers was introduced in April 2017 as a means to simplify scheme administration and reduce delivery costs. The Government believes that the introduction of this mechanism has allowed flexibility for obligated suppliers in how they discharge their obligations. We consider this mechanism has likely reduced the total cost of compliance for suppliers and in particular helps smaller suppliers in how they meet their obligations. Therefore, we are proposing that trading continues under the future scheme.

183. In the current scheme, suppliers have a nine month trading window. In the future scheme, we propose to allow suppliers to trade their final obligation by December 2021 (3 months before the obligation ends). Any trading requests are subject to approval by the Administrator. This proposal enables suppliers with the flexibility to trade some or their entire obligation for each of the phases within the obligation period, or to trade the full obligation when they are clear about their final obligation target before the start of the final phase. Furthermore, this will provide newly obligated suppliers with more time to consider their options for trading or retaining their obligation, particularly if they become obligated part way through ECO3.

184. Where suppliers have multiple licences, the current scheme also allows suppliers to trade obligations between their own licenses which may help simplify scheme administration through the consolidation of multiple obligations onto a single license.

Consultation Question

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

Chapter 7: Quality and Standards

This chapter outlines potential scheme changes which aim to increase the installation quality and standards of ECO measures.

Each Home Counts quality mark

185. In July 2015, the Government commissioned Dr Peter Bonfield, Chief Executive of BRE, to lead an independent review of consumer advice, protection, standards and enforcement for UK home energy efficiency and renewable energy measures.

186. The Each Home Counts (EHC) Review findings were published in December 2016 and proposed that existing standards and quality assurance schemes be brought together under a single, recognisable brand including the introduction of a quality mark for the sector.

187. The development and implementation of the quality mark aims to avoid duplication and unnecessary bureaucracy, by working within existing schemes to build on good practice, and therefore reduce additional costs for industry and consumers.

188. The intention is that businesses registered with the quality mark through its scheme providers will be regularly monitored and audited for adherence to those standards. The Government will retain a level of influence through endorsing scheme standards and issuing a master licence agreement.

189. The quality mark, aims to achieve a range of objectives.[18] Those most relevant to the ECO scheme are to provide:
    - a reputable product and services to consumers through a holistic approach to all overarching standards and enforcement requirements included in the quality mark;
    - a consistent and fair redress process including a single point of contact for consumers with the capability to support vulnerable consumers, an agreed standard for complaint handling, and access to alternative dispute resolution;
    - a minimum set of requirements for Codes of Conduct and Codes of Practice for all organisations that wish to gain the quality mark, including agreed requirements on technical standards, sales practices, pre-contractual information, and requirements for appropriate financial protections for installations;

[18] For more information about the Each Home Counts quality mark see: https://nb158.infusionsoft.com/app/page/ehc-download-page-1

- a clear Customer Charter which provides information to households on what to expect from organisations across the energy efficiency and renewable energy sector covering the entire customer journey; and
- an information hub which provides best practice on standards, guidance, and statistics, including advice and buyers guides for ECO measures to aid consumer decision-making on energy efficiency measures.

190. The quality mark aims to be fully established as a product by September 2018.

191. We intend to work with the quality mark with the aim of ensuring that quality mark requirements applicable to ECO measures such as compliance with PAS specifications and requirements for guarantees are included in the framework requirements and enforced appropriately once they are fully functional (see questions 38- 40 for further information on guarantees and PAS). The adoption of the quality mark into ECO has the potential to allow ECO delivery to work to accepted industry-wide standards and reduce some of the separate controls that currently exist.

192. To ensure ECO measures benefit from the proposed technical, enforcement, operational, and consumer protection requirements of the quality mark, we propose that in order for installers to deliver ECO measures under the quality mark, they should be approved and compliant with quality mark requirements once they are fully established, functional and enforced. We intend that these requirements should be phased in as the quality mark becomes operational and to allow the supply chain the time to transition.

Consultation Question

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 ?

Guarantees

193. Under the current scheme, for solid wall insulation to receive a 36 year lifetime, the ECO regulations require the Administrator to be satisfied that the measure is accompanied by a guarantee that is:

(a) supported by a mechanism that ensures:
  (i) funds will be available to honour the warranty; and
  (ii) the installation of the solid wall insulation and products used in the solid wall insulation comply with a quality assurance framework;

(b) is for 25 years or more; and
(c) provides for repair, or replacement where appropriate, of the solid wall insulation, covering the cost of remedial and replacement works and materials.

194. Ofgem also applies similar criteria to cavity wall insulation and park home insulation. This is to ensure consumers have protection against failed measures and that the savings will be achieved for the lifetime of the measure.

195. Under the quality mark it is proposed that energy efficiency measures installed through the quality mark, and with a total measure cost over a certain threshold, should be accompanied by a quality mark approved guarantee. In order for guarantees to be approved for use under the quality mark it is proposed that guarantees must meet a set of agreed principles.

196. If we are satisfied that these principles enforce equivalent or increased requirements for quality mark guarantees compared to those currently required under ECO, we propose to replace the current guarantee requirements for solid wall insulation with a requirement for all solid wall insulation delivered under ECO to be accompanied by a QM approved guarantee, in order to receive a 36 year lifetime.

197. Additionally, if satisfactory principles are enforced through the quality mark, we propose to require all cavity wall, park home and room in roof insulation to be accompanied by a quality mark approved guarantee in order to be awarded the standard applicable lifetime. This will help ensure such measures receive a consistent level of guarantee protection through the scheme.

198. If satisfactory principles are not enforced through the quality mark, we propose to require all solid wall, cavity wall, and park home insulation to be accompanied by a guarantee that the Administrator is satisfied meets the criteria set out in the current ECO Order, for the measure to be awarded the standard applicable lifetime.

Consultation Question

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?

Publically Available Specification (PAS)

199. The Publically Available Specification (PAS) is a specification for the installation of energy efficiency measures (EEM) in existing buildings which is developed by the British Standards Institution (BSI). The primary objective of PAS is the provision of a robust, uniformly applicable specification that will assist installers that comply with its requirements in full, to demonstrate that their installation processes are capable of providing the installation of energy efficiency improvement measures to specification and in accordance with the customer's expectations. The current scheme requires ECO measures that are referenced in PAS to be installed in accordance with PAS 2030:2017 and for the installers delivering these measures to be certified against PAS 2030.

200. The EHC review identified the need for further work on standards for the energy retrofit of buildings to provide for the end to end delivery of retrofit EEMs.

201. As a result, a new PAS 2035 specification for the energy retrofits of domestic buildings will be produced in 2018 to include requirements for building assessment and measure design, installation, commissioning, and handover. This will replace parts of the current PAS 2030 and, in particular, will include the new design clauses that industry has recognised as more relevant to the EEM design community rather than installers.

202. PAS 2030 will also be revised and simplified in 2018 to remove the transferred design elements and move away from reliance on the common minimum technical competence (CMTC), focusing on industry approved minimum qualifications or apprenticeships together with industry-approved Accreditation of Prior Experience and Learning (APEL) procedures, for installers with previous training and experience.

203. To ensure that measures delivered through ECO benefit from the new and revised PAS frameworks, we propose to either:

(a) update the version of PAS 2030 cited in the ECO legislation to the latest version, and include the new PAS 2035 specification as a scheme requirement; or
(b) mandate compliance with the new and updated PAS specifications through a requirement for installers delivering ECO measures that are within the scope of the quality mark, to be quality mark approved and compliant with quality mark requirements (see question 37 above).

204. To allow industry time to adapt to the new and updated PAS standards we may allow a grace period for installers to become compliant with PAS requirements, as well as to become certified against them.

Consultation Question

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?
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?

Heat networks

205. The Government is keen to ensure that households connected to local heat networks receive adequate consumer protection. We consulted in 2016 on whether to introduce a requirement to demonstrate that there are suitable arrangements for consumer protection such as by being a member of the voluntary 'Heat Trust' scheme or meeting equivalent standards, in order to be eligible under ECO. After gathering views we chose not to introduce this due to concerns that this would be too administratively burdensome and would require detailed guidance to be produced to indicate 'equivalent standards' of consumer protection that would be accepted as an alternative to established consumer protection schemes. Under the Government's Heat Networks Investment Project to be launched in autumn 2018, it is likely that there will be a requirement for any district heating network to be a member of Heat Trust or have equivalent consumer protection standards and that these standards would need to be verified once networks are built. We are seeking views on whether this would also be appropriate to adopt for ECO, while recognising it may be appropriate to treat new district heating networks differently to connections to existing networks and small communal heating systems, and also noting the obligations that social landlords already have towards their tenants.

Consultation Question

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

General scheme improvements and draft ECO regulations

206. We plan to publish an illustrative draft of the ECO regulations alongside this consultation which will set out how we propose to legislate ECO3 requirements.

207. The creation of a new ECO obligation also presents a further opportunity to improve scheme delivery and administrative processes. Therefore, the Government is taking this opportunity to seek views on whether there are any further legislative or administrative improvements that can be made.

Consultation Question

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

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