

Guidance

Energy Company Obligation (ECO3) Guidance: Delivery Version 1.7

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Contact: Chris Mack, Senior Policy Manager

Team: Policy and engagement Hub

Email: eco@ofgem.gov.uk

This guidance sets out Ofgem's procedures for administering the Electricity and Gas (Energy Company Obligation) 2018 Order¹ (as amended).² ECO places legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises. Each supplier has an overall target based on its share of the domestic energy market in Britain.

The guidance is provided in two documents: the ECO3 Guidance: Supplier Administration and the ECO3 Guidance: Delivery. The Guidance on Delivery is aimed at suppliers and the broader supply chain, describing how to deliver measures that are eligible to contribute towards the ECO target. It details how a supplier achieves its obligation and which measures are eligible under ECO, as well as the criteria that must be met for each measure. Information on how to determine ECO savings, notify completed measures and the monitoring process is also included.

This version has been issued to provide clarifications on the previous version (version 1.6) and updates on our wider administrative approach. This version applies to all measures installed on or after 15 July 2021. For measures installed between 1 October 2018 and 31 December 2019 inclusive, version 1.2 of the ECO3 Guidance: Delivery applies.³ For measures installed between 1 January 2020 and 30 September 2020 inclusive, version 1.4 of the ECO Guidance: Delivery applies. For measures installed between 1 October 2020 and 8 March 2021 inclusive, version

¹ Referred to in this guidance as the 'ECO3 Order'.

² As amended by the Electricity and Gas (Energy Company Obligation) (Amendment) Order 2019, referred to in this guidance as the 'ECO3.1 Order'.

³ Refer to the transitional provisions under article 15 of the ECO3.1 Order.

1.5 of the ECO Guidance: Delivery applies. For measures installed between 8 March 2021 and 15 July 2021 inclusive, version 1.6 of the ECO Guidance: Delivery applies.

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About this Guidance

Energy efficiency is a key part of Government policy for reducing the United Kingdom's (UK) greenhouse gas emissions. This policy contributes to the Government's wider commitment to cut greenhouse gases by at least 34% by 2020 and at least 80% by 2050.⁴

The Energy Company Obligation (ECO), first introduced in 2013, is an energy efficiency scheme for Great Britain. ECO places legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises. It focuses on insulation and heating measures and supports vulnerable consumer groups. ECO is intended to assist in reducing carbon emissions, maintaining security of energy supply and reducing fuel poverty.

An obligation has been outlined under the Electricity and Gas (Energy Company Obligation) Order 2018 (referred to in this guidance as the 'ECO3 Order'), and the scheme that runs during that period is called 'ECO3'. The ECO3 scheme, which will run until March 2022, will mainly focus on low income and vulnerable households, helping to meet the Government's fuel poverty commitments.

In July 2019, the Government's ECO3 Improving consumer protection consultation proposed making changes to the ECO3 scheme under the Electricity and Gas (Energy Company Obligation) (Amendment) Order 2019, (referred to in this guidance as the 'ECO3.1 Order').⁶ The ECO3.1 Order commenced on 1 January 2020.⁷ Measures delivered from 1 January 2020 will need to comply with the amendments to the ECO3 order as set out in the ECO3.1 Order. Measures installed before this date will need to comply with the ECO3 Order 2018.⁸ **This guidance will apply to all measures installed from 15 July 2021.**

Ofgem (the Office of Gas and Electricity Markets Authority) is the ECO administrator. This document provides guidance on how Ofgem ('we', 'our' and 'us' in this document) will administer the ECO3 scheme, in line with the requirements of the ECO3 Order.

⁴ The Carbon Plan: Delivering our low carbon future, December 2011 https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2.

⁵ Any further references to the ECO3 Order are references to the ECO3 Order as amended by the Electricity and Gas (Energy Company Obligation) (Amendment) Order 2019.

⁶ Details of the changes can be found in the Government response to the ECO3 Improving consumer protection consultation: https://www.gov.uk/government/consultations/energy-company-obligation-eco3-improving-consumer-protection

⁷ https://www.gov.uk/government/consultations/energy-company-obligation-eco3-improving-consumer-protection

⁸ The Electricity and Gas (Energy Company Obligation) Order 2018 (legislation.gov.uk)

For measures installed from 1 October 2018 to 31 December 2019, please refer to our ECO3 Guidance: Delivery (version 1.2) and ECO3 Guidance: Supplier Administration (version 1.1).

The ECO3 scheme consists of one distinct obligation and energy suppliers must achieve cost savings of £8.253 billion under the Home Heating Cost Reduction Obligation (HHCRO). The target is divided between suppliers according to each supplier's relative share of the domestic gas and electricity market.

The HHCRO target must be achieved before 1 April 2022.

To help users of our guidance, we have split it into two parts:

- a) **ECO3 Guidance: Supplier Administration -** is aimed mainly at suppliers, describing the processes that suppliers and Ofgem follow to meet the requirements of the ECO3 Order.
- b) ECO3 Guidance: Delivery is aimed at suppliers and the broader supply chain, describing how to deliver measures that are eligible to contribute towards the ECO targets.

This document (ECO3 Guidance: Delivery) addresses the following:

- a) how a supplier achieves its obligations
- b) which measures are eligible under ECO and the criteria that must be met
- c) specific requirements relating to eligibility
- d) how to determine ECO savings, including information on deemed scores and SAP/RdSAP
- e) how measures are notified and the information we require
- f) the technical and score monitoring requirements that suppliers must meet
- g) the auditing and counter fraud processes that suppliers will be subject to, and
- h) supporting information contained in appendices.

We have no role in administering the ECO Brokerage mechanism and this document does not address its requirements.

It is the responsibility of each supplier to understand the provisions of the ECO3 Order and how those provisions apply to it. This guidance may be used by suppliers and members of the supply chain but it is not intended to be a definitive guide to the statutory instrument. A supplier is responsible for ensuring that it, and any member of the supply chain acting on its behalf, complies with the applicable requirements of the law and industry standards.

Useful Links

The Electricity and Gas (Energy Company Obligation) Order 2018: http://www.legislation.gov.uk/uksi/2018/1183/contents/made

The Electricity and Gas (Energy Company Obligation) (Amendment) Order 2019: http://www.legislation.gov.uk/uksi/2019/1441/contents/made

Government response to the Energy Company Obligation (ECO3 2018-2022) consultation: https://www.gov.uk/government/consultations/energy-company-obligation-eco3-2018-to-2022

Government response to the Energy Company Obligation (ECO3): improving consumer protection consultation: https://www.gov.uk/government/consultations/energy-company-obligation-eco3-improving-consumer-protection

BEIS ECO3 improving consumer protection consultation: impact assessment:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment da ta/file/822619/ECO3 Improving Consumer Protection Consultation Impact Assessment.pdf

ECO3 Guidance: Supplier Administration:

https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2018-22-eco3-guidance-supplier-administration

ECO3 Guidance: Innovation

https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation

BEIS Energy Company Obligation (ECO): Help to Heat scheme - flexible eligibility guidance

https://www.gov.uk/government/publications/energy-company-obligation-eco-help-to-heat-scheme-flexible-eligibility

ECO3 Monitoring

https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring

TrustMark's Framework Operating Requirements

https://www.trustmark.org.uk/aboutus/useful-links

Contents

Useful Links	5
Contents	
1. Introduction	10
The ECO3 guidance	11
Queries and further information	12
2. Setting and achieving obligations	13
Obligations	13
Promotion of a qualifying action	15
Domestic premises	15
Extensions and new builds	22
TrustMark Government Endorsed Quality Sch	eme 26
Standards relating to the installation of ECO	measures26
Percentage of a measure that must be install	ed 30
3. Eligibility	34
The premises requirement	35
Private Rented Sector Rules	
The occupant requirement	
Membership of the help to heat group	
Affordable Warmth in-fill for SWI & DHS mea	
Affordable Warmth (AW) in-fill examples	50
Flexible eligibility - Local authority declaration	
Mixed eligibility projects	
Social housing E, F or G	59
The rural sub-obligation	63
Qualifying benefits under the help to heat gro	oup64
4. Information on specific ECO measures	82
Qualifying actions in HHCRO	82
Heating measures	95
Measures installed at non-gas fuelled premise	
Microgeneration	
Oil and coal heating systems	113
Renewables	
Connections to district heating systems	114
Primary insulation and secondary heating me	
Solid wall alternative measures	

Interactions with the Renewable Heat Incentive (RHI)	127
Interactions with the Green Homes Grant scheme	128
Interactions with the Warm Home Discount scheme	128
5. Determining ECO savings	129
Introduction to ECO savings	129
Methodologies for determining savings	129
Deemed scores	
Calculating the savings for district heating systems (DHS)	131
Measure lifetimes	
Alternative methodologies	133
Guarantee dependent lifetimes for wall, park home, underfloor an	d room in roof
insulation	137
Demonstrating the accuracy of calculations	138
Decimal places	139
6. Deemed scores	140
Using the deemed scores	140
Identification of property type	
Identifying the number of bedrooms	
Identification of wall type for heating measures	
Identification of the pre-main heating source for the property	
Identification of the post-main heating source for the property	
Uplifts for deemed scores	
Average Treatable Area and Percentage of Property Treated	155
Measure specific POPT principles	
Measure specific guidance	168
7. Notification of completed measures	188
When a supplier must notify us of completed measures	188
Notifying a completed measure	
Notifying late measures	
Fair and transparent processing	
8. Technical monitoring, score monitoring, audit and fraud prevention	
The monitoring requirement	
The monitoring process	
Monitoring timelines	
Monitoring fails	
Our response to poor performance	
Audit	20/

Fraud prevention	207
Documentation guidelines	209
Appendices	218
9. Appendix 1 – Documents and data to be made available on request	219
10. Appendix 2 – Evidencing the premises and occupant requirements	236
Introduction	236
Premises requirement	237
Occupant requirements	246
Children and qualifying young persons	249
Guidance on redacting information	249
Example letters	250
11. Appendix 3 - Boiler information pack	269
Introduction	269
Defining boilers and heating systems	269
Replacement boilers	270
Eligible boiler measures in ECO	271
Determining whether a boiler is broken down or non-condensing	272
Carrying out boiler assessments	274
Warranties requirement for boiler measures	276
12. Appendix 4 - Electric Storage Heaters (ESHs) Information Pack	280
Replacement electric storage heater (ESH)	280
Eligible ESH measures in ECO	280
Determining the functional condition of an ESH	281
Carrying out ESH assessments	283
Warranty requirements for ESH measures	284
13. Appendix 5 – Process for new scores and alternative scoring methodolo	ogies. 286
14. Appendix 6 – Abbreviations	287
15 Appendix 7 - Glossary	290

1. Introduction

- 1.1. The Energy Company Obligation (ECO), first introduced in 2013, is an energy efficiency scheme for Great Britain that places legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises. The ECO1 scheme ran between 1 January 2013 and 31 March 2015.
- 1.2. The ECO2 scheme then ran from 1 April 2015 to 31 March 2017. The scheme was then extended, and ran from 1 April 2017 to 30 September 2018 and is referred to as ECO2t.
- 1.3. An obligation period has been established under the ECO3 Order, and the scheme that runs during that period is called 'ECO3'. The new arrangements added under the ECO3.1 Order have applied since 1 January 2020.
- 1.4. The changes introduced by the ECO3.1 Order, take effect from 1 January 2020. Ofgem will administer the scheme in line with the requirements of the ECO3 Order and subsequent amendments set out in the ECO3.1 Order. Any further references to the ECO3 Order are references to the ECO3 Order as amended by the ECO3.1 Order.
- 1.5. All measures completed on or after 1 January 2020 must comply with the requirements of the ECO 3.1 Order. This guidance, and other ECO3 related Ofgem documents have been fully revised to take account of these changes. In relation to measures completed before 1 January 2020, version 1.2 of the ECO3 Guidance: Delivery will apply.
- 1.6. The overall obligation period for ECO3 runs from 3 December 2018 to 31 March 2022 and is split into four phases. The ECO3 Order recognises that there is a gap between ECO2 and ECO3. Measures that are completed on or after 1 October 2018 and before 3 December 2018 can contribute towards the achievement of supplier's ECO3 obligations. These measures must be completed in compliance with ECO3 scheme rules.
- 1.7. ECO3 is comprised entirely of a single obligation. The **Home Heating Cost Reduction Obligation (HHCRO)** incorporates: the replacement of broken heating systems, the upgrade of inefficient heating systems, and the installation of insulation, to reduce home heating costs for low income, fuel poor and vulnerable people.

10

 $^{^{9}}$ The government removed CERO from the scheme for ECO3. Suppliers with a CERO target had to achieve this by 30 September 2018.

- 1.8. The ECO3 Order sets an overall target for HHCRO of £8.253 billion.
- 1.9. For each phase of ECO3, a supplier is allocated a proportion of the overall obligation depending on its relative share of the domestic gas and electricity market. A supplier must achieve its obligations before 1 April 2022.
- 1.10. A supplier achieves its obligations by promoting qualifying actions ('measures') at domestic premises.

The ECO3 guidance

- 1.11. This guidance details our administrative processes for ECO3 and sets out the requirements for all obligated suppliers in accordance with the ECO3 Order. Where a supplier fails to meet the requirements of the ECO3 Order, we may take enforcement action.
- 1.12. We consider that there is a hierarchy of documents that we follow to support our administrative approach. These are, in order:
 - a) All existing wider legislation including the ECO legislation
 - b) Ofgem's guidance and any guidance produced by BEIS (eg LA FLEX)
 - c) Any requirements or specifications referred to in the legislations, eg PAS, Heat Trust requirements, TrustMark, etc
 - d) Other specifications and guidance not directly specified in the legislation
- 1.13. This guidance does not address the operation of the ECO Brokerage mechanism.

Information gathering powers

1.14. We use our information gathering powers¹⁰ under the ECO3 Order to require suppliers to provide us with information (for example, the submission of technical monitoring reports). We may require a supplier to:

¹⁰ Article 37 of the ECO3 Order.

- a) provide specific information about its proposals for complying with any requirement under the ECO3 Order
- b) produce specific evidence to demonstrate that it is complying with, or that it has complied with, any requirement under the ECO3 Order, and
- c) provide information relating to the cost to the supplier of achieving its obligations.
- 1.15. The information that suppliers must be able to provide at audit, based on the requirements set out in this guidance, is detailed in Appendix 1. This appendix provides full details of the specific data and documents that must be made available on request.

Queries and further information

- 1.16. For further information on our administration of ECO please visit our website: www.ofgem.gov.uk/eco. Any queries about our guidance or the administration of the ECO scheme should be directed to eco@ofgem.gov.uk.
- 1.17. For further advice regarding energy efficiency, including ECO, visit https://www.simpleenergyadvice.org.uk.
- 1.18. For further information on the ECO Brokerage, please refer to: https://www.gov.uk/energy-companies-obligation-brokerage.
- 1.19. For further information on TrustMark, please refer to: https://www.trustmark.org.uk/.

 Any queries on the TrustMark Framework should be directed to eco@trustmark.org.uk.
- 1.20. Please direct any queries about the ECO3 Order, future changes to the ECO scheme and wider policy to the Department for Business, Energy and Industrial Strategy (BEIS) to: beisecoteam@beis.gov.uk.

2. Setting and achieving obligations

- 2.1. For ECO3 each supplier must achieve one overall obligation the Home Heating Cost Reduction Obligation (HHCRO). This also includes: i) the Rural Sub-obligation and ii) the Solid Wall Minimum Requirement (SWMR). This chapter provides information that relates to these obligations. This chapter covers:
 - a) obligations
 - b) promotion of a qualifying action
 - c) definition of domestic premises
 - d) extensions and new builds
 - e) standards relating to the installation of ECO measures
 - f) the percentage of a measure that must be installed.

Obligations

2.2. The overall obligation period for ECO3 runs from 3 December 2018 to 31 March 2022 and is split into four phases. We are required to determine a supplier's obligation for each of these phases:

phase 1: 3 December 2018 to 31 March 2019

phase 2: 1 April 2019 to 31 March 2020

phase 3: 1 April 2020 to 31 March 2021

phase 4: 1 April 2021 to 31 March 2022

- 2.3. A supplier's total obligation is determined by adding together their obligations for each phase. They must meet their total obligation by the end of the scheme (31 March 2022).
- 2.4. ECO3 has one overarching obligation: the Home Heating Cost Reduction Obligation (HHCRO). This obligation includes the replacement of broken heating systems, the upgrade of inefficient heating systems, and the installation of insulation, to reduce home heating costs for low income, fuel poor and vulnerable people. This is also known as 'Affordable Warmth'. The ECO3 Order sets an overall target for the HHCRO obligation of £8.253 billion in cost savings.

- 2.5. For each phase of ECO3, a supplier is allocated a proportion of the overall targets depending on its share of the domestic gas and electricity market.
- 2.6. A supplier achieves its obligations by promoting qualifying actions ('measures') which result in the reduction in the cost of the space heating of the domestic premises.¹¹

Rural sub-obligation

2.7. A supplier must achieve at least 15% of their total HHCRO by delivering measures to eligible domestic premises in rural areas (the rural sub-obligation).¹²

Solid wall minimum requirement (SWMR)

- 2.8. To meet this requirement, suppliers can either install Solid Wall Insulation (SWI) in eligible solid wall premises or install measures in eligible solid wall premises that are equivalent to, or in excess of, the savings achieved by SWI. In order for premises to count as solid wall premises, and therefore be eligible to count towards the minimum, at least 50% of the premises exterior wall area must be constructed of solid wall, and at least 50% of the solid wall area must be uninsulated.
- 2.9. The ability to count solid wall alternative measures towards SWMR does not override other scheme rules, such as restrictions on measure types based on tenure. For example, private rented sector properties of Energy Performance Certificate (EPC) rating F or G can still only receive solid wall insulation or renewable measure types.

¹¹ Article 13 of the ECO3 Order. For more information see paragraph 4.4.

¹² Article 11(3) (b) of the ECO3 Order.

Promotion of a qualifying action

- 2.10. A qualifying action is the installation¹³ of a measure at domestic premises that meets the eligibility criteria specified in the ECO3 Order. The act of promotion is therefore linked to the act of installing a measure. A supplier promotes the installation of a measure if it is a cause of that measure being installed. Only one supplier may be credited with the savings arising from a specific measure.
- 2.11. The clearest means of promotion is if a supplier contracts an installer to carry out the installation of a measure. However, the fact that a supplier has funded all or part of the installation of a measure is sufficient to establish that the supplier was a cause of that measure being installed.
- 2.12. A supplier may jointly fund a measure with a third party, for example local government or a devolved administration. In this case the supplier will still need to satisfy us that it was a cause of that measure being installed.
- 2.13. The supplier A notifying the measure might not be the supplier that originally promoted the measure. In this scenario the supplier A that notifies the measure must be able to provide on request evidence that the supplier B was the cause of the measure being installed.

Domestic premises

- 2.14. A supplier achieves its obligations by promoting qualifying actions at domestic premises, including mobile homes.¹⁴
- 2.15. Under HHCRO, measures delivered to premises either occupied by a member of the help to heat group (HTHG), or listed in a local authority declaration (see Chapter 3) must also meet the domestic premises requirement.

¹³ In the case of most boilers and electric storage heaters, installation refers to repair, replacement or upgrade. In the case of district heating systems, installation refers to a connection.

¹⁴ Article 2 of the ECO3 Order.

Domestic premises test, other than a mobile home

- 2.16. We use a two part test to determine whether premises, other than a mobile home, are domestic premises by asking:
 - **Test I.** are the premises self-contained by containing kitchen facilities for occupants to prepare food?
 - **Test II.** are the premises used by the occupants wholly or mainly for domestic purposes (ie as a home)?
- 2.17. If the answer to each question is yes, then we consider the premises to be domestic premises. Further information is provided below about each part of this test.
- 2.18. Structures that meet the definition of a mobile home in the ECO3 Order¹⁵ are domestic premises. In this case we do not apply the test for domestic premises. For information about determining whether a structure is a mobile home see paragraphs 2.38.

Test I. Are the premises self-contained?

- 2.19. This part of the test is about the physical layout and setup of the building.
- 2.20. Premises may be part of a building (for example, a flat in a tower block) or may be the whole building (for example, a detached bungalow).
- 2.21. Premises will be considered to be *separate and self-contained* if, within the boundaries of the premises, they contain:
 - a) one or more bedrooms, and
 - b) private kitchen facilities, including a kitchen sink and stove, for occupants to prepare food. Note that a portable microwave or campfire stove would not be considered as a stove for this purpose. Kitchen facilities are private when they are accessible only to the occupants of the bedroom or bedrooms within the part of the building that forms the premises.

Our test does not take account of bathroom facilities.

¹⁵ Article 2 of the ECO3 Order.

Bedrooms

2.22. A space can function as both a bedroom and a living area – for example, a studio or a bedsit.

Kitchen facilities

- 2.23. Kitchen facilities include a kitchen sink and a stove. Where one of these items is not present in the kitchen, then we do not consider the premises to contain kitchen facilities.
- 2.24. Kitchen facilities may be located in the same space that functions as a bedroom for example, a studio or bedsit.
- 2.25. Kitchen facilities are private when they are accessible only to the occupants of the bedroom or bedrooms within the part of the building that forms the premises.
- 2.26. Examples of premises that are self-contained (although might fail the domestic purposes test):
 - a) a studio (containing private kitchen and bathroom facilities)
 - b) a bedsit (containing private kitchen facilities, with access to shared bathroom facilities)
 - c) an apartment, including a shared apartment where the occupants of each bedroom share a communal kitchen
 - d) a house, including a shared house where the occupants of each bedroom share a communal kitchen
- 2.27. The following are not self-contained premises:
 - a) a bedroom which does not contain private kitchen facilities
 - b) a bedroom which contains some kitchen facilities, for example a refrigerator and a microwave oven, but does not contain a kitchen sink and/or stove
 - c) two or more bedrooms with a kitchen that is not for the exclusive use of the occupants of those bedrooms, and
 - d) any facility where the occupants do not have access to kitchen facilities to cook for themselves.

Determining the boundary of premises

- 2.28. The boundaries of the premises are the outermost walls of the total space used exclusively by the occupants of the premises. For example:
 - a) in a shared apartment or house, the total space includes all bedrooms and the common areas (kitchen, bathroom(s) and living area(s), halls and corridors), or
 - b) for a bedsit containing a kitchen, the boundaries of the premises are the walls of that bedsit, or
 - c) for mixed use premises, such as a Bed & Breakfast with both commercial and domestic parts, the premises boundaries of the domestic part would be the outermost walls of the area that is self-contained and used for domestic purposes (ie, it contains its own kitchen and has one or more bedrooms).

Test II. Are the premises used as a home?

- 2.29. Premises are considered to be *used wholly or mainly for domestic purposes* if the premises are used by the occupants as a home.
- 2.30. This part of the test considers the way in which the building is generally used. In most cases it should be clear that premises are being used as a home, ie the premises are used by the occupants for living in on more than a short term basis (typically more than three months). Suppliers are normally expected to check the length of a lease or licence to occupy in scenarios where you would expect the lease or licence to be short term, eg hostels.
- 2.31. The use of premises as a home can be evidenced in the following ways:
 - a) Owner-occupied premises: the receipt by the occupant of utility bills or mortgage statements relating to the premises may indicate that the premises are used as a home. There may be other indicators such as mortgage deeds naming the occupant.
 - b) Premises occupied under a lease or licence to occupy: the receipt by the occupant of 3 months of utility bills relating to the premises, or the existence of a lease or licence of longer than 3 months in the name of the occupant (such as a tenancy agreement) may indicate that the premises are used as a home. There may be other indicators that may be considered acceptable evidence.

Commercial activities

- 2.32. Occupants may carry out some commercial activities at the premises from a room also used for domestic purposes, provided that the primary use of the premises is as a home. Examples of commercial activities include working or running a business from home. Areas used solely for commercial purposes should not be included in calculation of savings for that premises.
- 2.33. Examples of premises that are not generally used as a home:
 - a) a hotel, or guest houses (including 'bed and breakfast' properties), where guests do not usually stay for periods of longer than a couple of weeks,
 - b) a short-stay apartment or hostel, where occupants usually stay for periods of less than 3 months, or
- 2.34. There may be examples where a clear distinction between commercial activities and domestic living space, can be made within a single premises. An example of this could be a flat located above the ground floor of a premises which contains a shop. In this scenario, only the percentage of the floor, wall, or roof area directly adjoining the areas used as a domestic living space or domestic premises would count towards any score.
- 2.35. Suppliers should contact Ofgem if they are unsure how to score a premises with both domestic living spaces and areas used for commercial purposes.

Care homes

2.36. Care homes do not meet the domestic premises requirement, and are therefore outside of the scope of the ECO3 scheme.

Student halls of residence

2.37. Student halls of residence do not meet the domestic premises requirement, and are therefore outside of the scope of the ECO3 scheme.

Mobile homes

- 2.38. For a structure to be considered a mobile home, and therefore a domestic premises, it must:
 - a) be a caravan, AND
 - b) be used as a dwelling.16

Houses in Multiple Occupation

- 2.39. Houses in Multiple Occupation (HMOs) are eligible to receive measures, except for district heating system (DHS) measures. As specified in the Housing Act (2004) and the Housing (Scotland) Act 2006, an HMO is a building that contains living accommodation where 'two or more of the households who occupy the living accommodation share one or more basic amenities or the living accommodation is lacking in one or more basic amenities.'¹⁷
- 2.40. The self-contained premises test sets out in paragraph 2.21 that premises will only be considered self-contained, and therefore meet the domestic premises criteria, if they contain private cooking facilities. Therefore, the arrangement of kitchen facilities within an HMO is critical in determining eligibility under ECO3.
- 2.41. Based on the definition of self-contained premises, we recognise two distinct categories of HMO:
 - a) An HMO with shared cooking facilities (eg a shared house).
 - b) An HMO with private cooking facilities in each bedroom (eg bedsits).
- 2.42. The eligibility, notification and scoring methodology is dependent on which of the above categories the HMO falls in.

¹⁶ As defined in article 2 of the ECO3 Order.

¹⁷ Section 254 (2) (f) of the Housing Act (2004) and section 125 of the Housing (Scotland) Act 2006.

- 2.43. Generally, an HMO with shared cooking facilities should be treated as if it were a single domestic premise. This type of HMO follows the same eligibility, notification, and scoring rules as non-HMO properties. This means that the deemed scores may be used.
- 2.44. An HMO with private cooking facilities is treated differently to other types of domestic premises. This is because individual bedrooms may meet the ECO3 definition of a self-contained premises. The eligibility, notification, and scoring of an HMO with private cooking facilities in each bedroom is set out below.

Eligibility

2.45. Each tenant's eligibility only extends to their individual private rooms, not the HMO as a whole. This means that one occupant in receipt of benefits would qualify their individual room, but not the whole HMO. For the whole HMO to be eligible, all rooms would need to have an eligible occupant, or meet other eligibility criteria (eg LA Flex).

Notification

- 2.46. As each tenant's eligibility only extends to their individual room, notification should be made on a room-by-room basis. If all occupants are eligible, the HMO should be notified as a whole property.
- 2.47. Additionally, individual rooms may be eligible for solid wall insulation under the Affordable Warmth (AW) in-fill mechanism. For example, AW in-fill could be used to provide solid wall insulation to the entire HMO if two-thirds of the occupants are members of the HTHG.

Scoring Methodology

- 2.48. The use of deemed scores is not appropriate for HMOs with private cooking facilities in individual bedrooms. This is because this type of dwelling is not reflected in the calculations used to create the deemed scores.
- 2.49. There is currently no scoring mechanism in place for this type of HMO. We ask that suppliers contact us with an alternative methodology application when they wish to install measures in this type of HMO.

Extensions and new builds

New build premises

- 2.50. Suppliers can only deliver measures to:
 - a) "pre-existing buildings" ie a building erected before 1 October 2018, or
 - b) "new buildings" ie a building erected on or after 1 October 2018 where there is evidence that confirms that the premises are occupied or were previously occupied before a measure was completed.
- 2.51. Where a building is subject to a change of use, such as commercial to domestic, or a single house into multiple flats, we would consider this building to be a "new building" under this provision. If an extension is being added, see paragraphs 2.65 to 2.70. Suppliers should contact us if there is any uncertainty over whether premises would qualify as a new building.

Confirming that premises are not new build premises

- 2.52. Where a building is pre-existing before 1 October 2018, the Declaration of Conformity and Completed Installation ('DOCC') should be completed and signed to confirm that the building was pre-existing before 1 October 2018. The supplier should make the DOCC available on request.
- 2.53. Where the DOCC is not completed and signed to identify that the premises are preexisting, evidence of occupancy (see paragraph 2.63), or evidence that the building is pre-existing, must be available.
- 2.54. Where there is uncertainty about the age of premises, a building that was erected before 1 October 2018 may be identified by reference to any of the following documents:
 - a) documentation that meets the occupancy requirements, listed in paragraph 2.63.
 - in England and Wales, a Land Registry search, where a title has been registered prior to 1 October 2018
 - d) in Scotland, a search of the Land Register of Scotland or Register of Sasines, where a title has been registered prior to 1 October 2018
 - e) a Certificate of Title or Deeds dated prior to 1 October 2018

- f) a date prior to 1 October 2018 on an EPC listed on the Landmark EPC register
- g) in England and Wales, a building control completion certificate, or
- h) in Scotland, notification from a local authority of acceptance of a completion certificate.
- 2.55. Where none of these documents are available, suppliers should contact us to discuss alternative documentation.
- 2.56. We may carry out an audit to confirm that the DOCC has been completed as required. Where the DOCC is not completed, we may request further evidence from suppliers to verify that a building was erected before 1 October 2018.

Evidencing requirements for delivering measures to new buildings

- 2.57. Where a measure is delivered to new build premises, occupancy must be evidenced.
- 2.58. For a help to heat measure, evidence to demonstrate that a member of the HTHG resides in the premises will be sufficient to evidence eligibility as this demonstrates that premises are occupied.
- 2.59. All Social E, F or G, and, Social D (delivered under all innovation routes), Local Authority Flexible Eligibility, and Affordable Warmth (AW) in-fill measures¹⁸ delivered to new buildings require a declaration on the DOCC to be completed and signed by the occupant.
- 2.60. Where premises were erected from 1 October 2018, a declaration from a landlord or non-resident owner must be signed on the DOCC to confirm that premises are occupied. If the DOCC is signed by a landlord or non-resident owner on behalf of the customer, additional evidence must be collected to demonstrate the date of building completion, as well as current or previous occupancy.

23

¹⁸ See Chapter 3 for more information on the social housing E, F or G, social housing D, local authority flexible eligibility and AW in-fill provisions.

- 2.61. Evidence to confirm the date of building completion can include:
 - a) in England and Wales, a building control completion certificate, or
 - b) in Scotland, notification from a local authority of acceptance of a completion certificate.
- 2.62. Where neither of these documents are available, suppliers should contact us to discuss alternative documentation. A measure may not be eligible if evidence cannot be provided. Evidence to demonstrate the date of building completion must be dated prior to the evidence of occupancy.
- 2.63. Premises are considered occupied, where any of the following documentation is dated after the building completion and prior to the installation of the measure:
 - a) a utility bill, landline phone bill or TV licence
 - b) a council tax letter or letter from the council
 - c) a mortgage statement or bank statement
 - d) a tenancy agreement, or
 - e) an extract from the electoral register.
- 2.64. Where these documents are not available, suppliers should contact us to discuss alternative documentation. Evidence of date of completion and occupancy must be made available on request. Where there is insufficient supporting evidence, the measure may be ineligible.

New build extensions

2.65. A new build extension is an extension 19 completed on or after 1 October 2018.

2.66. An ECO measure may not be delivered to a new build extension until the works for the extension have been completed.

¹⁹ An extension as referenced and defined by Building Regulations Part Lb, Fabric standards, at Section 4.1. This supports the Building and Approved inspectors (Amendment) Regulations 2010: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/697629/L1B secure-1.pdf

- 2.67. In the case of measures installed to new build extensions, suppliers will need to evidence that the construction of the extension is complete prior to the date of completed installation of the ECO measure.
- 2.68. Suitable evidence that the extension was completed before the date of completed installation includes:
 - a) in England and Wales, building control completion certificate, or
 - b) in Scotland, the notification from a local authority of acceptance of a completion certificate.
- 2.69. Where neither of these documents are available, suppliers should contact us to discuss alternative documentation.
- 2.70. This evidence must be made available on request. Where no documentation is available, the measure may be ineligible.

TrustMark Government Endorsed Quality Scheme

- 2.71. TrustMark was incorporated in ECO3 on 1 January 2020.
- 2.72. From 1 January 2020, measures must be installed by, or under the responsibility of, a person who is registered with TrustMark (or equivalent), in order to be eligible to deliver measures under ECO3. This will not apply to demonstration actions and certain district heating system (DHS) measures. Installers of demonstration actions or of DHS measures which are registered with Heat Trust or an equivalent standard would not be required to be TrustMark registered. Please see paragraph 4.145 for more information on DHS measures that do not require Heat Trust registration.

Equivalence

2.73. The ECO3.1 Order also allows measures that are "subject to arrangements for quality assurance and consumer protection, including arrangements for repairs and other remedies, which are equivalent to the requirements under TrustMark". Please contact Ofgem for further information on this route.

Standards relating to the installation of ECO measures

- 2.74. Suppliers should ensure that the installation of a measure is carried out in accordance with the relevant standards. How this is demonstrated will vary depending on whether or not the measure is referred to in the Publicly Available Specification (PAS) 2030.
- 2.75. If a measure is referred to in PAS 2030:2017 or PAS 2030:2019, the installation of the measure must be carried out:
 - a) by a PAS certified installer. We will accept certification to PAS 2030:2017 Edition 1 until 30 June 2021.²⁰ From 1 July 2021 all installers must be certified to PAS 2030:2019.
 - b) in accordance with the provisions of PAS, building regulations and any other applicable regulations

²⁰ This is available for purchase on the BSI website: http://shop.bsigroup.com/ProductDetail/?pid=00000000030297314.

- 2.76. We have adopted the PAS 2030 definition of an 'operative'. That is, a person employed by the installer, either directly or under a subcontract arrangement, to undertake installation tasks on an energy efficiency measure in accordance with the relevant method statement and the related requirements of this PAS. Individuals employed to provide labouring, carrying or loading / unloading capability do not constitute operatives in the terms of this PAS. In such cases, it is the PAS-certified installation company who should be notified on the register, as they remain responsible for any work carried out.
- 2.77. If a measure is not referred to in PAS, the installation of that measure must be carried out in accordance with building regulations and any other regulations that relate to the installation of the measure and by a person of appropriate skill and experience.²¹ In the first instance (except in the case of DHS measures, which are not shared ground loops) this person must still be registered with, or under the responsibility of someone who is registered with, TrustMark (or equivalent). Largely these will be operatives installing microgeneration measures where membership to a standards organisation such as the Microgeneration Certification Scheme (MCS) is required.
- 2.78. Measures which involve the installation, repair, or removal of gas appliances must be completed by a Gas Safe engineer. The details of the Gas Safe engineer who completed the work must be notified, and recorded on the boiler checklist (BACL) alongside the details of the relevant PAS certified installer.
- 2.79. Under ECO3, DHS measures are considered to be the installation and / or connection of a wet central heating system of a property to the heat network. Therefore, the appropriate skill and experience must be in relation to the installation and / or connection of a wet central heating system in domestic premises. Suitable qualifications for installers may be a Level 2 or 3 NVQ in gas, plumbing and / or mechanical engineering. We recommend CIBSE Heat Networks: Code of practice for the UK is followed during all phases of the DHS project where relevant. DHS (except in the case of shared ground loops) must also be registered with Heat Trust (or equivalent), see paragraph 2.91 for further information.

27

²¹ See Appendix 1 – Documents and data to be made available on request for information on installation by a person of appropriate skill and experience.

PAS 2030:2019 and 2035:2019 standards

- 2.80. This section refers to the inclusion of the new PAS standards (PAS 2035:2019 and PAS 2030:2019) into ECO3.²²
- 2.81. PAS 2035:2019 covers the whole life cycle of a retrofit project, from the initial engagement with a client, through the assessment, design, installation and evaluation stages that should be undertaken to ensure that suitable energy efficiency measures are installed appropriately to the right premises. ²³
- 2.82. PAS 2030:2019 sets out how the installation of specific energy efficiency measures should be carried out in existing domestic buildings.
- 2.83. A 24-month transition period from the date of publication of PAS 2035:2019 and PAS 2030:2019 has been established, which runs from 30 June 2019 to 30 June 2021.
- 2.84. During this period, TrustMark registered businesses must be certified as compliant with either PAS 2030:2017 or PAS 2030:2019 by a PAS 2031 accredited scheme provider / certification body.
- 2.85. In response to Covid-19, an installation transition period has been introduced which allows installers flexibility around the standards of work adhered to when transitioning from PAS 2030:2017 to PAS 2030: 2019. Updated information on this transition period can be found on the TrustMark website.²⁴
- 2.86. All installers registered with TrustMark must deliver energy efficiency measures within the scope of PAS 2035:2019 and PAS 2030:2019 from 1 July 2021. Any measures installed in accordance with PAS 2030:2017 will not be valid if completed after 30 June 2021.
- 2.87. All measures installed in accordance with both PAS 2030:2019 and PAS 2035:2019 standards will receive an uplift of 20% during the PAS transition. A measure is eligible

²² https://www.gov.uk/government/consultations/energy-company-obligation-eco3-improving-consumer-protection

²³ This is available for purchase on the BSI website:

https://shop.bsigroup.com/ProductDetail?pid=00000000030390699.

^{24 &}lt;a href="https://www.trustmark.org.uk/ourservices/pas-2035">https://www.trustmark.org.uk/ourservices/pas-2035

for the uplift if it is installed by a TrustMark-registered installer and meets the following criteria:

- a) it is referred to in PAS 2030:2019,
- b) it is installed in accordance with PAS 2030:2019 and PAS 2035:2019 by, or under the responsibility of, a PAS 2030:2019 certified installer.
- c) the installation of the measure is completed before 1st July 2021.
- 2.88. From 1 July 2021, all installers will need to deliver ECO3 measures in accordance with the new standards and the 20% uplift to all measures will be removed.

Demonstrating compliance with PAS

- 2.89. Compliance with the provisions of PAS can be demonstrated where the installation is carried out by a PAS-certified installer. Installers must be certified as being compliant with the parts of PAS that apply to the measure by a certification body accredited to ISO/IEC²⁵ 17065:2012.²⁶ Where there is clear evidence of a measure not being compliant with the relevant aspect of PAS 2030 then the measure may fail technical monitoring and therefore may not be deemed eligible.
- 2.90. All installers carrying out measures installed in accordance with PAS 2030:2017 must be TrustMark registered when the order comes into force. However, TrustMark may have further requirements beyond just evidencing that an installer is PAS 2030 certified.

Demonstrating compliance with building regulations and other regulations

2.91. Compliance with relevant regulations is demonstrated by registration with TrustMark for all measures except demonstration actions (although these must still be covered by PAS) and DHS that are registered with Heat Trust or an equivalent standard to those provided by Heat Trust. For DHS measures we will accept membership with an appropriate certification scheme, such as a relevant competent persons scheme²⁷, as a means of demonstrating compliance with building regulations.

²⁵ ISO/IEC is an international standard that specifies requirements for bodies certifying products, processes and services.

²⁶ Article 18(3) of the ECO3 Order.

²⁷ https://www.gov.uk/guidance/competent-person-scheme-current-schemes-and-how-schemes-are-authorised

- 2.92. We require suppliers to demonstrate that a product or system used in the installation of a measure complies with building regulations. Suppliers can demonstrate this in various ways, including:
 - a) United Kingdom Accreditation Service (UKAS) accreditation
 - b) European Technical Approval with additional documentation to show compliance with building regulations,²⁸
 - c) approval by a building control body, or
 - d) for some measures, self-certification schemes.²⁹
- 2.93. Any certification or approval must be relevant to the conditions under which the product or system will be used, although the building control body is ultimately responsible for accepting that a measure complies with building regulations.
- 2.94. Suppliers must commission technical monitoring of installation standards. Checking that a measure is installed in accordance with PAS (where relevant), building regulations and other regulations will form part of technical monitoring. See Chapter 8 for more information.

Percentage of a measure that must be installed

- 2.95. Suppliers must install 100% of a measure at premises, unless there are reasonable grounds for not doing so.
- 2.96. For clarity, below are some examples of what constitutes 100% of a measure for different measure types:
 - a) for loft insulation, 100% of the measure will be the insulation of the entire loft, including draught proofing and insulation of the hatch

²⁸ For further information of technical accreditation after 1 January 2021 and regulations following the UK's withdrawal from the EU, please refer to Annex C of the government guidance on Construction products Regulation in Great Britain: https://www.gov.uk/guidance/construction-products-regulation-in-great-britain

²⁹ The Building Regulations 2010 (as amended) in England and Wales and the Building (Scotland) Regulations 2004 (as amended) list the measure types this applies to and the requirements governing the person carrying out the work. Suppliers should refer to these building regulations for more information about self-certification schemes.

- b) for glazing or draught proofing of windows and doors, 100% of the measure will be the treatment of all windows and doors in the premises, rather than the treatment of a single window or door
- c) for internal wall insulation, 100% of the measure will be the insulation of the internal face of all exterior-facing walls in the premises
- d) for solid floor insulation, 100% of the measure will be the insulation of the internal face of all solid floors in contact with the ground.
- e) for suspended underfloor insulation, 100% of the measure will be the insulation of the internal face of all suspended floors in contact with the ground, above an unheated space (ie a cellar), or suspended and in contact with the outside air
- f) for party wall insulation, 100% of the measure will be the insulation of all party cavity walls of the premises
- g) for mobile home insulation (also known as park home insulation (PHI), or park home external wall insulation), there are three insulation measures: PHI walls, roof and floor. 100% of each measure will be the insulation of the exterior facing walls, ceiling, and floor area of the mobile home respectively, and
- h) for room-in-roof insulation, 100% of the measure will be the insulation of the common walls/stud walls, sloping ceilings, gable walls, party walls, ceiling, and possible residual areas.
- 2.97. The requirement to install measures in accordance with PAS and other relevant standards overrides the requirement to install 100% of the measure. Some examples of what we consider reasonable grounds for installing less than 100% of a measure include planning restrictions, or inability to gain access to necessary work areas.
- 2.98. Gaining access to the relevant structure of the house to install the insulation measure means ensuring that the surface in question is clear to install the measure to the appropriate quality standards (see paragraph 2.75) and that the surface is accessible for at least one method of installation to be carried out. For example:
 - a) For loft insulation measures, this could mean gaining access to physically place insulation in between joists.
 - b) For cavity wall insulation measures, this could mean access for the specialist tools required to install the insulation (either directly through the brick structure or otherwise).

- c) For solid or suspended floor insulation, adequate measures should be taken to gain access to applicable floor area. For example:
 - i. in the case of solid floor insulation this may mean removing all non-structural elements such as furniture and white goods from the floor as well as carpets or tiles which may inhibit the installation of solid floor insulation, and
 - ii. in the case of suspended floor insulation this may require lifting or otherwise gaining access through floorboards to physically access areas underneath suspended floorboards to attach insulation. This may mean accessing using a mechanised tool to expertly place or spray insulation into a narrow space.³⁰
- 2.99. Gaining permission to access certain areas of the household may be difficult for intrusive measures such as solid floor insulation. However, if timed to coincide with other events, such as home renovations, access may be easier and less disruptive for the resident.
- 2.100. When referring to the requirement to install 100% of the measure, this relates to installing the measure to the *treatable area* of a premises. For example, ventilation bricks do not constitute a treatable part of a premises area and so would not fall within the 100%.
- 2.101. Where a pre-existing measure (not delivered through ECO) has only been partially installed, we also consider this as reasonable grounds for installing less than 100%. For example, where pre-existing flat roof insulation is installed to 40% of the roof area, insulating the remaining 60% of the roof area will be an eligible ECO measure. In this case the total area that the measure could be installed to would match the amount installed, and therefore the Percentage Of Measure Installed (POMI) is 100%. The total 'similar' area of the property is the whole roof area, so the Percentage Of Property Treated (POPT) would be 60%.³¹
- 2.102. Reasons relating to customer refusal or the cost of installing the measure alone **will not** be accepted as reasonable grounds for suppliers not to install 100% of a measure.

872/suspended-timber-floors-underfloor-insulation-best-practice.pdf

³⁰ Further specific information on the installation of suspended UFI can be found in the BEIS Guide to Best Practice: Retrofit Floor insulation – Suspended Timber Floors: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/898

³¹ See Chapter 6 for more information on calculating the percentage of a measure installed and how to determine the percentage of property treated.

- 2.103. A supplier should contact us if it is unclear as to whether the reason 100% of a measure cannot be installed constitutes reasonable grounds.
- 2.104. Suppliers must ensure that, if less than 100% of a measure is installed where there are reasonable grounds for not installing more, the savings attributed to the measure are reduced accordingly. For more information on how to reduce the savings for a measure, see Chapter 6.
- 2.105. We recognise that for some internal wall insulation (IWI) installations, it may not always be feasible to install 100% of the measure without significant renovation works. In these instances, relevant industry technical guidance should be followed to reduce the risk of unintended consequences. We are aware that BEIS will be publishing a guide to best practice for IWI shortly. Once published, the relevant section(s) of the guide should then be followed when installing less than 100% of an IWI measure. Until that guide is published, suppliers must ensure that IWI measures are installed in accordance with the IWI Interim Approach Flowchart, which can be found on the Insulation Assurance Authority (IAA) website.³² We also require that all measures must be compliant with Building Regulations and PAS 2030 and 2035:2019.

³² https://www.theiaa.co.uk/partial-insulation-for-iwi/

3. Eligibility

- 3.1. Under ECO3, suppliers must deliver measures that reduce home heating costs for low income, vulnerable and fuel poor households. Measures can be delivered to:
 - a) private domestic premises occupied by someone in receipt of specific benefits (the help to heat group (HTHG)); or
 - b) private domestic premises listed in a local authority declaration (and those which meet the associated 'in-fill' criteria); or
 - c) social housing with an EPC energy efficiency rating of E, F or G;33 or
 - d) social housing with an EPC energy efficiency rating of D, E, F or G for innovation measures and demonstration actions only; or
 - e) private domestic premises as Affordable Warmth (AW) "in-fill" measures, as long as the premises at which these measures are installed are linked to two other separate premises in a particular area that were eligible under (a) or (c), and all 3 premises have had SWI or DHS measures delivered.
- 3.2. This chapter details the requirements suppliers must meet when delivering HHCRO measures, and in particular how a supplier can satisfy us that:
 - a) measures installed are eligible qualifying actions
 - b) measures are installed at private domestic premises or in social housing with an EPC energy efficiency rating of D, E, F or G
 - c) for measures installed at private domestic premises, the premises are occupied by a member of the HTHG or listed in a local authority declaration
 - d) where applicable, measures are installed to an in-fill property linked with two eligible associated measures,
 - e) where applicable, measures are installed at non-gas fuelled premises.
- 3.3. The specific documents which can be used to demonstrate that the premises and occupant requirements are met are provided in Appendix 2 Evidencing the premises and occupant requirements.

³³ Article 16 of the ECO3 Order.

The premises requirement

- 3.4. Measures delivered to premises either occupied by a member of the HTHG, or listed in a local authority declaration must be delivered to private domestic premises. Private domestic premises are domestic premises³⁴ that are, in general, not owned or let by a social landlord.³⁵
- 3.5. This requirement does not apply to measures installed in social housing with an EPC rating of D, E, F or G.
- 3.6. Measures can also be delivered to properties owned or let by a social landlord where it has been let by the social landlord at or above market rate. Information on how to determine market rate can be found in Appendix 2 – Evidencing the premises and occupant requirements.
- 3.7. The evidence required to demonstrate that premises are private domestic premises depends on:
 - a) whether or not a 'relevant interest' in the premises is registered³⁶
 - b) who the premises belong to, or are let by, and
 - c) where applicable, the financial rate at which the premises are let (ie rent).
- 3.8. The 'relevant interest' is the legal interest granting the current right to occupy those premises. In England and Wales, the relevant interest may belong to a freeholder, leaseholder or sub-leaseholder. In Scotland, the relevant interest may belong to the person holding the owner's interest or right, or the person holding the tenant or sub-tenant's interest.
- 3.9. Where premises are subject to a shared ownership arrangement between a private individual and a social landlord, we consider the premises to be a private domestic premises as the private individual is one of the owners of the premises.

³⁵ For more information on the definition of a social landlord, see Schedule 1 Paragraph 4 of the ECO3 Order.

³⁴ See Chapter 2 for information on domestic premises.

³⁶ A registered premises is one with a relevant interest registered on the Land Registry in England and Wales or, in Scotland, the Land Register of Scotland or recorded in the Register of Sasines. For more information on the evidencing routes for registered and unregistered premises refer to Appendix 2 – Evidencing the premises and occupant requirements.

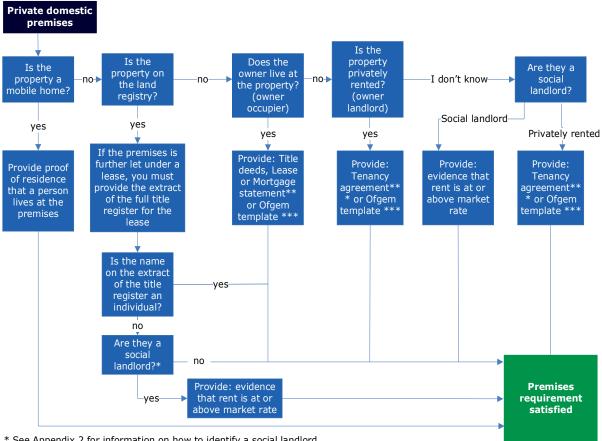
- 3.10. Where a customer has entered into an agreement with a bank where the bank buys the property and sells it back to the customer over a period of time (for example, due to the customer's religious beliefs) the following will need to be considered when determining whether the property is owner occupied:
 - a) the terms of the customer's agreement with that bank; and
 - b) who has the registered interest in the property.³⁷
- 3.11. Properties that have a Lifetime Mortgage through an Equity Release scheme are treated in the same way as a standard mortgage.³⁸ The premises should be categorised as owner-occupied as full ownership is retained by the occupier, subject to the plan provider holding a charge over the property. This is the same as a standard mortgage.
- 3.12. Where the Equity Release Scheme for the property is a Home Reversion Plan, properties will be considered on a case-by-case basis to determine if they are owner-occupied or private rented sector.
- 3.13. A property occupied by the way of liferent meets the definition of 'owner-occupied premises' in the ECO3 Order.³⁹ If the title deeds confirm that the property is under liferent, and the property has not subsequently been let out to someone else, it would be considered as owner-occupied for the purposes of ECO3.
- 3.14. Evidence demonstrating who premises belong to, or are let by, must relate to the person to whom the relevant interest belongs. Figure 1 shows how to identify private domestic premises, and some of the documents needed to prove the premises requirement.

³⁷ See paragraph 10.12 for information on the documentation needed in these circumstances.

³⁸ An Equity Release scheme is where the equity in the property is either extracted in a single lump or in instalments and repaid when the occupier either dies or moves to permanent long term care.

³⁹ A liferent is a feature of Scottish property law. It allows a person who owns a heritable property to transfer the property to another person(s) and retain the right to occupy the premises.

Figure 1: Private Domestic Premises Flowchart



^{*} See Appendix 2 for information on how to identify a social landlord

Registered relevant interest

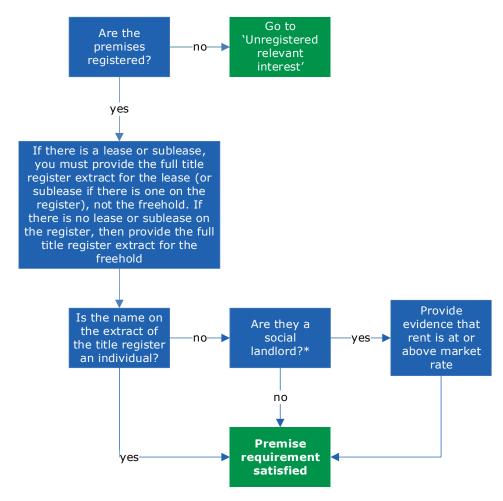
- 3.15. In England and Wales, premises are **not** considered to be private domestic premises if the relevant interest registered on the Land Registry belongs to a social landlord, unless the supplier can evidence that the premises are let at or above market rate.⁴⁰
- 3.16. In Scotland, premises are **not** considered to be private domestic premises if the relevant interest registered on the Land Register of Scotland or recorded in the Register of Sasines belongs to a social landlord, *unless* the supplier can evidence that the premises are let at or above market rate
- 3.17. Figure 2 shows how to meet the premises requirement for registered premises.

^{**} If dated older than within 18 months before the completion of the measure, must be accompanied by proof of residence dated within 18 months before the completion of the measure

^{***} Must be accompanied by proof of residence dated within 18 months before the completion of the measure

 $^{^{40}}$ See Appendix 2 – Evidencing the premises and occupant requirements for information on calculating the market rate.

Figure 2: Registered premises flowchart



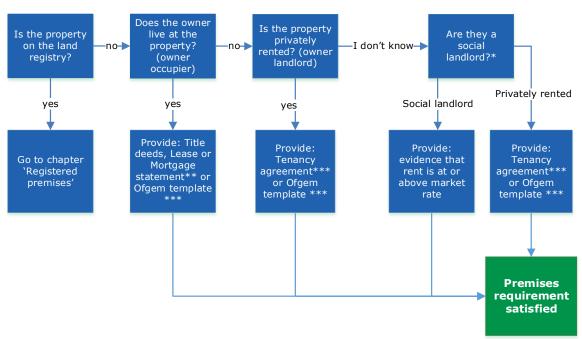
^{*} See Appendix 2 for information on how to identify a social landlord

3.18. For information on how to evidence the registered relevant interest see Appendix 2 – Evidencing the premises and occupant requirements.

Unregistered relevant interest

- 3.19. Premises for which a relevant interest is not registered will be considered private domestic premises if:
 - a) the premises are not owned or let by a social landlord unless the premises are let by the social landlord at or above market rate
 - b) the premises are let under a lease granted under the 'Right to Buy' or 'Right to Acquire' schemes in England or Wales
 - c) the premises are let under a lease granted under the 'Right to Purchase' scheme in Scotland
 - d) the premises is a croft (see paragraphs 3.25-3.26 for more information)
- 3.20. Figure 3 shows how to meet the premises requirement for unregistered premises.

Figure 3: Unregistered premises flowchart



^{*} See Appendix 2 for information on how to identify a social landlord

3.21. For information on how to evidence unregistered relevant interest see Appendix 2 – Evidencing the premises and occupant requirements.

^{**} If dated older than within 18 months before the completion of the measure, must be accompanied by proof of residence dated within 18 months before the completion of the measure

^{***} Must be accompanied by proof of residence dated within 18 months before the completion of the measure

Online Verification Service (for premises in England and Wales)

- 3.22. For properties in England and Wales, the Energy Saving Trust (EST) has developed a service allowing users to verify that a premises is a private domestic premises through a data-matching process with the Land Registry. This service cannot be used to evidence tenure for social housing or local authority owned properties.
- 3.23. EST will provide the following categories against these verifications:
 - a) Matched
 - b) Unmatched
 - c) Unavailable
- 3.24. Where EST verifies a premises as 'matched', we consider that the premises is a private domestic premises. Where the premises are 'unmatched' or 'unavailable', alternative evidence will be required.

Crofts

- 3.25. A property that is a croft can be treated as an owner-occupied premises as long as appropriate evidence is provided. This should show that the property is a croft and that the HTHG member or person listed as eligible by the local authority lives at the property. This can be evidenced by any of the following:
 - a) evidence of leases registered with the Crofting Commission
 - b) evidence that the premises is listed on the Register of Crofts (mandatory for all crofts)
 - c) a copy of a crofting tenancy agreement.
- 3.26. Although it is possible to evidence the property as recorded on the Register of Sasines or providing title deeds, these documents are not usually available for Crofts. If a supplier wishes to use an alternative form of evidence, they should contact us.

Private Rented Sector Rules

- 3.27. The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 establish a Minimum level of Energy Efficiency Standard (MEES) for private rented sector (PRS) properties.⁴¹
- 3.28. To reflect the separate minimum standards, the measure type that can be delivered to private rented premises is dependent on the EPC efficiency rating of the property before the installation of the measure being claimed under ECO:⁴²
 - PRS properties occupied by a member of the HTHG or person declared as eligible by
 the local authority with an initial EPC efficiency rating of A, B, C, D, or E can receive
 any measure, except for the installation of a heating system to replace or repair a
 broken heating system.
 - PRS properties occupied by a member of the HTHG or person declared as eligible by the local authority with an initial EPC efficiency rating of F or G (or unrated) are only eligible to receive solid wall insulation, a renewable heating measure or a first time central heating (FTCH) measure where it meets the relevant pre-conditions outlined in paragraphs 4.99-4.123.
 - A renewable heating measure will also be eligible as a solid wall alternative measure in PRS F or G (or unrated) properties.
- 3.29. Suppliers must notify the property tenure to reflect the initial EPC rating of the property.
- 3.30. Suppliers must provide evidence of the property's initial EPC energy efficiency rating for PRS properties with an EPC rating of A-E. This must be achieved by providing the EPC report reference number (RRN) at notification.
- 3.31. The EPC must be pre-installation, and must be the most recent certificate issued prior to the date of installation.

⁴¹ https://www.gov.uk/government/publications/the-private-rented-property-minimum-standard-landlord-guidance-documents

⁴² Private rented premises as defined in article 2 of the ECO3 Order.

- 3.32. The EPC must be valid (dated within 10 years of being lodged) on the date of installation and be the latest to be lodged for that premises.⁴³
- 3.33. To evidence whether properties are PRS, we will require suppliers to obtain a declaration from the customer confirming the tenure. This should be included on the Declaration of Conformity and Completed Installation (DOCC).⁴⁴
- 3.34. Suppliers may also choose to request that the landlord's permission is obtained for the delivery of a measure(s) in a PRS property. This can be evidenced using the 'Private housing FTCH declaration and landlord permission' template for both FTCH and non-FTCH measures in PRS premises. Suppliers may also wish to use the 'Landlord or Management Company Permission form' to evidence similar information. Both documents can be used to evidence that the property is owned by a private landlord and also to demonstrate the EPC rating of the premises. Suppliers may choose to have further evidence requirements in relation to PRS properties beyond this.
- 3.35. We may choose to conduct an audit if we believe incorrect information is being provided in relation to PRS and EPC ratings.

The occupant requirement

- 3.36. Where measures are delivered to private domestic premises, except in the case of infill, the premises must either be occupied by:
 - a) a member of the HTHG,47 or
 - a household living in fuel poverty or with a low income and vulnerable to the effects of living in a cold home, as declared by a local authority.⁴⁸

⁴³ The EPC must be lodged with Landmark:

https://www.epcregister.com/reportSearchAddressListAddresses.html?id=d86a925309968c7c

⁴⁴ The ECO3 DOCC is published as an ECO Reporting Working Group Document: https://www.ofgem.gov.uk/publications-and-updates/eco-reporting-working-group-eco3-standardised-templates. This is an ECO Reporting Working Group document and not an Ofgem document.

⁴⁵ https://www.ofgem.gov.uk/publications-and-updates/eco3-private-housing-ftch-declaration-private-rented-sector-landlord-permission.

⁴⁶ https://www.ofgem.gov.uk/publications-and-updates/eco-reporting-working-group-eco3-standardised-templates

⁴⁷ Article 14(1) of the ECO3 Order.

⁴⁸ Article 17(1) of the ECO3 Order.

- 3.37. The occupant requirements do not apply to in-fill premises eligible under local authority flexible eligibility.
- 3.38. The occupant requirements do not apply to measures delivered to social housing, however these premises must be let below the market rate.⁴⁹ For more information on social housing see paragraph 3.116-3.142.

Affordable Warmth in-fill

- 3.39. Measures can also be delivered to private domestic premises as Affordable Warmth (AW) in-fill measures, as long as the premises at which the measures are installed are linked to two other separate premises in a particular area that were eligible under the HTHG or social E, F or G.
- 3.40. The occupant requirement is considered to be met for the private domestic premises where an "in-fill measure" is installed as long as all of the rules for Affordable Warmth in-fill are met, see paragraph 3.68.⁵⁰
- 3.41. Please note that in-fill measures cannot be claimed under ECO if the measures at an adjoining property are rejected. Other approved measures can however be substituted, if available and linked to the in-fill measure.

Membership of the help to heat group

- 3.42. Householders who receive specific benefits and, for child benefit, are below the equivalised income threshold for the household composition⁵¹ are referred to as the "help to heat group" (HTHG).
- 3.43. Under this eligibility route, a supplier can promote a measure to occupants of private domestic premises⁵² that they:
 - a) are members of the HTHG⁵³, or

⁴⁹ Schedule 1 of the ECO3 Order.

⁵⁰ For more information on affordable warmth in-fill measures see paragraph 3.68.

⁵¹ Equivalised income thresholds reflect 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. See Table 4 for the values.

⁵² See paragraphs 3.4 to 3.14 for more information on private domestic premises.

⁵³ Schedule 2 to the ECO3 Order.

- b) live in the same home as a member of the HTHG.
- 3.44. HTHG eligibility is based on the tenant's status rather than the landlord's. This is because in most cases, the person who pays the energy bill is usually the tenant, which means that they would benefit from bill savings achieved by the installation of the measures. It will also be the tenant who is at risk of harm by living in the cold, and who, after the installation of the measures, will benefit from living in a potentially warmer home.
- 3.45. There are several things to consider when collecting evidence for HTHG eligibility:
 - a) Suppliers must ensure the measure being installed is at private domestic premises where an HTHG member lives and there is appropriate evidence to demonstrate this
 - b) Suppliers must ensure benefit letters are from official departments/organisations
 - c) Suppliers must ensure relevant information is clearly visible
 - d) Suppliers must ensure all documents showing HTHG eligibility are dated no more than 18 months prior to the completion of the measure, with the exception of core group customers (which should all be dated on or after 1 April 2019), Child Benefit award notices and Industrial Injuries Disablement Benefit letters.
- 3.46. Where suppliers submit matched DWP data matching service reference numbers to evidence HTHG eligibility this must be dated no more than 18 months prior to completion of the measure, or no more than 31 days after completion of the measure.
- 3.47. For suppliers to demonstrate that the occupant requirement is met they must be able to provide evidence of the following:
 - a) a person's membership of the HTHG, and
 - b) that the person is an occupant of the premises.
- 3.48. Appendix 2 Evidencing the premises and occupant requirements details the specific documents which can be used to demonstrate this requirement.
- 3.49. This section provides an overview of the criteria that must be used to determine whether a person is a member of the HTHG.

- 3.50. A person living at private domestic premises is an eligible member of the HTHG if the person is a core group customer from 1 April 2019 (scheme year 9)⁵⁴ onwards under the Warm Home Discount scheme, or receives at least one of the following benefits and satisfies the relevant income requirements, where applicable:
 - a) Armed Forces Independence Payment
 - b) Attendance Allowance
 - c) Carer's Allowance
 - d) Child Benefit (on the condition that the household's relevant income does not exceed the amount set out in Table 4 corresponding to the type of claim and the number of qualifying children)
 - e) Constant Attendance Allowance
 - f) Disability Living Allowance
 - g) Pension Guarantee Credit
 - h) Income-related Employment and Support Allowance (ESA)
 - i) Income-based Jobseeker's Allowance (JSA)
 - j) Income Support
 - k) Industrial Injuries Disablement Benefit
 - I) Personal Independence Payment
 - m) Severe Disablement Allowance
 - n) Tax Credits (Child Tax Credits and Working Tax Credits)
 - o) Universal Credit (UC)
 - p) War Pensions Mobility Supplement.

Evidencing eligibility - help to heat group

3.51. Suppliers can demonstrate to us that the occupant requirement is met by ensuring that a copy of the relevant documents are made available at audit.

⁵⁴ See Regulation 7(2) of the Warm Home Discount Regulations, Regulation 3(h) of the Warm Home Discount (Miscellaneous Amendments) Regulations 2018 and our Warm Home Discount (WHD) Guidance for Suppliers for further details: https://www.ofgem.gov.uk/publications-and-updates/warm-home-discount-whd-quidance-suppliers-version-61

- 3.52. We do not require full 'proof of benefit' letters. To evidence HTHG eligibility, we only need the page(s) that show:
 - a) official letter headed paper from HMRC, DWP/Jobcentre Plus, MOD, HM Government or the Pension Service
 - b) name and address matching where the measure was installed. Where the address is different, official documents proving they resided at the premises where the measure was installed
 - c) relevant date (either of the letter, start or end of the benefit), and
 - d) confirmation that a customer receives a qualifying benefit
- 3.53. Appendix 2 Evidencing the premises and occupant requirements provides examples of which documents should be produced at audit to demonstrate that the occupant requirement was met at some point during the course of promotion of the measure. Suppliers wishing to use documents which are not detailed in Appendix 2 Evidencing the premises and occupant requirements should contact us.

Matched Warm Home Discount (WHD) Core Group Notice

3.54. A supplier can produce a matched WHD Core Group Notice⁵⁵ dated from 1 April 2019 (scheme year 9) at audit to satisfy us that a person is receiving Pension Credit Guarantee Credit and is therefore a member of the HTHG.

Matched 'DWP reference number'

- 3.55. Suppliers or members of the supply chain may arrange for the Energy Saving Trust (the data-matching service provider), who have a contract with DWP, to confirm that a person is a member of the HTHG.
- 3.56. The following HTHG benefits cannot be data matched by DWP:
 - a) Armed Forces Independence Payment,
 - b) Constant Attendance Allowance,

⁵⁵ Article 14(4)(c) of the ECO3 Order. See Regulation 6(1) of the Warm Home Discount Regulations 2011 and our Warm Home Discount (WHD) Guidance for Suppliers for further details: https://www.ofgem.gov.uk/publications-and-updates/warm-home-discount-whd-guidance-suppliers-version-61.

- c) War Pensions Mobility Supplement, and
- d) Child Benefit.
- 3.57. If DWP confirms (via the Energy Saving Trust) that a person receives an HTHG benefit, the supplier may rely on this as a way of demonstrating that a person is a member of the HTHG. If a supplier wishes to rely on a DWP confirmation, it must include the 7-digit reference number (or 10 digits where it includes the user prefix) provided by the datamatching service provider when notifying the measure. This is the 'DWP reference number' in the notification template. This reference number will also be accepted where it is preceded by the three digits identifying the service user.
- 3.58. The Energy Saving Trust refer the following categories of people to suppliers:
 - a) matched a person who is confirmed by DWP as receiving an HTHG benefit
 - b) **unmatched** a person who is confirmed by DWP as not receiving an HTHG benefit at the time of the search
 - c) **un-verified** the person's details could not be found and verified by DWP. This is typically due to an error with the data submitted (ie hidden spacing or a spelling mistake)
- 3.59. Where a 'matched' DWP reference number is provided at notification that is dated within 18 months prior to completion of the measure, or is dated no more than 31 days after completion of a measure, this will act as sufficient evidence for HTHG eligibility in the case of audit. We will verify these reference numbers against the records of the datamatching service provider to check that the notified number relates to a person receiving an HTHG benefit residing at the address and is dated within the acceptable timeframe. We will conduct these checks during monthly processing.
- 3.60. Where the 'matched' DWP reference number is dated more than 18 months prior to completion of the measure, or more than 31 days after completion of the measure, suppliers will receive error notifications through monthly processing. In these instances we will require alternative evidence to demonstrate that the person was in receipt of an HTHG benefit and was residing at the address at the time of the install.
- 3.61. An 'unmatched' or 'unverified' referral will not be sufficient to satisfy us that a person is a member of the HTHG. In this case, the supplier should not include the DWP reference number when notifying the measure. The supplier should satisfy us that the relevant person is a member of the HTHG through one of the other routes detailed in this section.

They should also ensure that any additional evidence that demonstrates this is made available on request.

3.62. Recipients of Universal Credit (UC) can be on either the full service or the live service.

Both full service and live service UC records can be data matched by DWP.

Self-declaration for income levels under Child Benefit

- 3.63. We expect suppliers to communicate to the supply chain that where a person is in receipt of one of the HTHG qualifying benefits listed in paragraph 3.50 that this evidence route is pursued before using Child Benefit. Verifying eligibility through the Child Benefit route should be the method of last resort and only utilised where **all** other routes of establishing eligibility are exhausted.
- 3.64. Where Child Benefit is used to evidence HTHG eligibility, suppliers should collect a Child Benefit award notice as evidence of responsibility for children or qualifying young persons.⁵⁶ Further detail is provided in Table 5.
- 3.65. To mitigate the risks around compliance with the data protection regime processing a consumer's income data should be avoided. Instead, a self-declaration signed by the occupant and dated no more than 18 months prior to completion of the measure will verify that a person living at the premises confirms to not only be in receipt of Child Benefit, but crucially is under the relevant annual income threshold for the household composition.⁵⁷
- 3.66. The declaration must also be counter-signed by the relevant third party to provide assurance that the person living at the premises is in receipt of Child Benefit and is not in receipt of any of the other qualifying benefits listed in paragraph 3.50. The relevant third party could include, but is not limited to: the installer, operative, assessor or managing agent.
- 3.67. We will monitor the number of measures notified using the Child Benefit eligibility route and may undertake targeted audits where considered appropriate. In this instance, we will work with suppliers to seek assurance that household eligibility has been appropriately verified, and other routes discounted, as well as verifying the evidenced

⁵⁶ See paragraph 3.160 for information on how to evidence receipt of Child Benefit where the award notice is not available.

⁵⁷ See https://www.ofgem.gov.uk/publications-and-updates/eco3-child-benefit-self-declaration.

Child Benefit award notice. Where there is evidence of suspected fraud this will be treated under our existing Counter Fraud policies.

Affordable Warmth in-fill for SWI & DHS measures

- 3.68. The ECO3 Order establishes two in-fill mechanisms: one operates under the local authority flexible eligibility mechanism, and is set out in the next section. The other, Affordable Warmth (AW) in-fill, is available in the wider scheme. It is intended to ease delivery of SWI and DHS measures to terraces, flats and other groups of properties.
- 3.69. Under the AW in-fill mechanism, for every two ECO-eligible premises which are treated with one of the above measures, a third 'in-fill' premises (which would not otherwise be eligible for ECO) can also receive support. We refer to this as the '2:1 ratio'. The in-fill premises must be a private domestic premises, however the associated premises can be either a private domestic premises occupied by a member of the HTHG or social housing with an EPC rating of E, F or G. All three must receive either SWI⁵⁸ or DHS: two DHS measures cannot support an SWI in-fill measure, for example.
- 3.70. In-fill properties must either be:
 - a) in the same terrace as,
 - b) in an immediately adjacent building to, or
 - c) in the same building as households eligible for HHCRO.
- 3.71. Immediately adjacent buildings are buildings that do not physically join but are separated by an alleyway, footpath, side garden or fence, for example roads that contain terraced houses only would be considered immediately adjacent. If there are buildings separated by a road on which motorised vehicles travel these are not considered adjacent, although if the alleyway is used by motorised vehicles for parking purposes only then this would be allowed. "Same building" will typically refer to multiple properties in the same structure (eg block of flats).
- 3.72. Each associated measure must be completed within six months of the in-fill measure.

 The associated measures do not need to be completed within six-months of each other.

⁵⁸ Solid Wall External Insulation and Solid Wall Internal Insulation only.

- 3.73. If suppliers wish to utilise AW in-fill for SWI or DHS they will need to submit information about the associated measures via the ECO register, along with the rest of the notification details. It should specify which premises are in-fill and which eligible premises the in-fill measures are associated with, in order to be validated.
- 3.74. The "Associate_AW_In-fill_Measure_1" and "Associate_AW_In-fill_Measure_2" fields in the notification template should only be populated when notifying an AW in-fill measure to identify the two eligible measures that are supporting it.
- 3.75. AW in-fill measures must be notified against the same supplier licence, and the in-fill measures cannot be transferred until all the in-fill and associated measures are approved. Once the measures have all been verified, they can only be transferred as a group.
- 3.76. In the event that a measure installed into an eligible property is not approved, then any in-fill property relying on that measure would also not be approved. Parties need to be aware that a measure being in an approved status may not always remain in that status and therefore that measure (and any associated in-fill measures) could collectively be rejected at a later date. If the decision to refuse or revoke the savings of a supporting measure is taken, suppliers will be able to update the notification of the AW in-fill measure to link it to different supporting measure, assuming it meets all relevant criteria.
- 3.77. The section below provides examples of projects where the AW in-fill requirements have been met. These examples are illustrative and non-exhaustive, and are intended to be used as a guide.

Affordable Warmth (AW) in-fill examples

- 3.78. This section covers examples of projects where the Affordable Warmth (AW) in-fill requirements have been met. The examples are only illustrative and this is a non-exhaustive list provided as a guide.
- 3.79. It is important to bear in mind that where, in the examples given below, a property is stated as not meeting the relevant eligibility criteria under AW in-fill, a supplier can

- consider whether the properties could be eligible for funding under another eligibility route (eg if they are social housing EPC band E, F, or G).⁵⁹
- 3.80. The in-fill premises must be a private domestic premises, however the associated premises can be either a private domestic premises occupied by a member of the HTHG or social housing with an EPC rating of E, F or G.
- 3.81. The scenarios outlined below will typically refer to houses that directly adjoin onto one other property. "Directly adjoined" refers to two individual properties that join onto one another. This includes two semi-detached houses, two semi-detached bungalows, or a detached building containing two properties (eg one above the other).
- 3.82. Semi-detached and detached buildings composed of a single premises would not meet the 2:1 ratio and therefore would not be eligible for AW in-fill. However, a semi-detached or detached building that has been converted into multiple premises may be eligible where the AW in-fill criteria are met. For example, a semi-detached property that has been converted into 3 separate flats would be eligible, subject to all other eligibility criteria being met.

Examples below include boxes representing whole households:

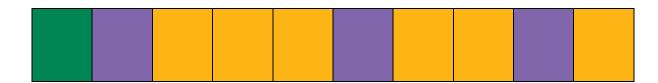
Key	Colour
Not a member of the HTHG or social housing with an EPC rating of E, F or G.	
AW In-fill	
Member of the HTHG or social housing with an EPC rating of E, F or G.	

⁵⁹ See paragraphs 3.68-3.77 for more information on the eligibility criteria for Affordable Warmth in-fill.

Examples below include boxes representing whole households

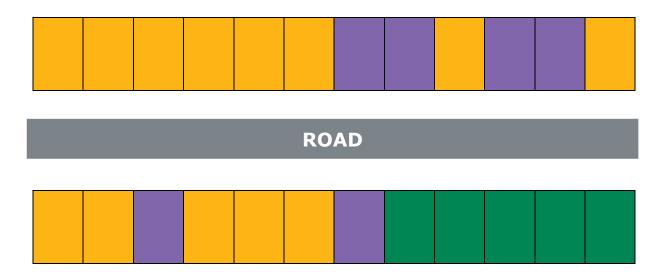
3.83. In Figure 4 there are ten terrace properties then 66% of eligible households can receive the measure and the adjacent property can also receive the same measure, as long as the number of these in-fill properties does not exceed 34% (2:1 ratio).

Figure 4: Example of same terrace



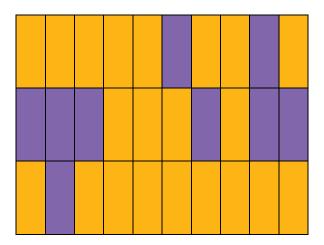
3.84. Figure 5 shows that all of the properties in the top row of terraces are eligible under AW in-fill as eight properties house a member of the HTHG or a person living in social housing with an EPC rating of E, F or G and the remaining four properties are part of the same terrace. The bottom row of terraces act independently from the top and are not considered the same terrace or an immediately adjacent building as they are separated by a road. As five properties in the bottom row house a member of the HTHG, an additional two properties in the row can be counted as AW in-fill. The remaining five properties cannot be counted as in-fill as the ratio of eligible properties to in-fill has not been met.

Figure 5 example of same terrace separated by a road



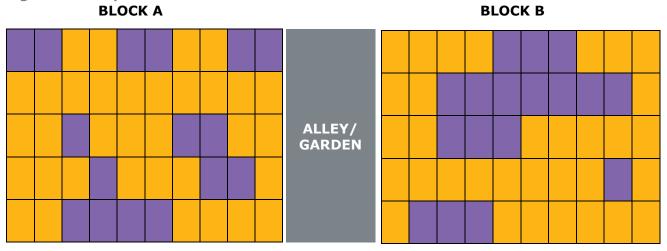
3.85. Figure 6 shows 21 flats house a member of the HTHG or a person living in social housing with an EPC rating of E, F or G. As such, a further nine other flats can be treated as infill as the 2:1 ratio has been met.

Figure 6 Example of block of flats



3.86. Figure 7 shows all the properties in Block A are eligible for SWI or DHS as 34 of 50 properties house a member of the HTHG or a person living in social housing with an EPC rating of E, F or G. The other 16 properties can be classed as in-fill as they are part of the **same building**. In Block B, 33 of the 50 properties house a member of the HTHG or a person living in social housing with an EPC rating of E, F or G. This would mean that only 16 of the remaining 17 properties can be classed as in-fill if Block B was considered in isolation. However, as Block A & B are **immediately adjacent buildings**⁶⁰, then they may be amalgamated for the purposes of calculating in-fill. As 67 of 100 properties in Block A and B are eligible then the other 33 can be classed as AW in-fill.

Figure 7 example of block of flats



⁶⁰ See paragraph 3.71 for definition of "immediately adjacent building" and "same building".

Flexible eligibility - Local authority declarations

- 3.87. Measures delivered to private domestic premises are eligible where suppliers are able to demonstrate to Ofgem that a local authority (LA) declaration exists stating that the households listed in the declaration are either: ⁶¹
 - b) living in fuel poverty (FP),
 - c) living on a low income and vulnerable to the effects of living in a cold home (LIVC), 62 or
 - d) non-fuel poor but located in an immediately adjacent building to, in the same building as, or in the same terrace as households identified by an LA as FP or LIVC (SWI in-fill only).
- 3.88. Properties owned or let by a social landlord can only be listed in an LA declaration where it is let by the social landlord at or above market rate, ie meeting the private domestic premises requirement. For more information on how to evidence market rate see Appendix 2 Evidencing the premises and occupant requirements.
- 3.89. A supplier may deliver up to 25% of its HHCRO through this route, including any SWI in-fill.
- 3.90. Once all measures are approved we will carry out an assessment of a supplier's flexible eligibility measures before we determine whether a supplier has achieved its obligation. Where the cost savings for a supplier's flexible eligibility exceeds the 25% limit we may not approve some of the flexible eligibility measures with total savings equal to the amount by which the limit was exceeded. If we are required to revoke approved measures we will work with suppliers to select which measures this will apply to. It is important to note that these measures may be eligible under another eligibility route for HHCRO and could be treated as such.

⁶¹ Articles 2 and 17 of the ECO3 Order

⁶² BEIS have provided guidance on what types of households meet the criteria. However, the LA maintains discretion and flexibility on whether to apply criteria that better reflect local needs: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/776
540/energy-company-obligation-3-LA-flexible-eligibility-guidance_.pdf

Statement of intent

- 3.91. Prior to making LA declarations, an LA must produce a Statement of intent (SoI) regarding its delivery of the ECO flexible eligibility provision. This SoI should be publically available (eg published on an LA's website) so that it can be easily accessed by interested parties. LAs are responsible for ensuring the SoI is accurately numbered and dated to allow for clear distinction from previous versions. The LAs must ensure all published versions of the SoI remain publically available for viewing (eg published on an LA's website). All previous versions of the SoI should be marked 'withdrawn/superseded' and dated accordingly.
- 3.92. The supplier must be able to evidence that:
 - a) the SoI was published prior to any declarations being made by that LA, and
 - b) the SoI includes a methodology on how the LA intends to target FP and LIVC households.
- 3.93. The supplier can provide evidence of the above by:
 - a) producing a screenshot of a published and dated SoI
 - b) producing a hard copy of the SoI; this includes declarations provided in any LA report (eg the Home Energy Conservation Act 1995 report), or
 - c) any other means agreed with Ofgem, eg providing a link to an LAs website where the SoI has been published.
- 3.94. Suppliers will need to check that a statement outlining the LA's targeting methodology is included in the SoI, but are not required to assess the content of the methodology. Ofgem will not assess or approve local authority SoIs.
- 3.95. Suppliers are entitled to rely on the LA having made an accurate assessment of eligibility. However, if we find that the SoI was not published before the LA declaration was made or that the methodology for targeting is not included in the SoI, we will look to revoke approval of the measures included in the relevant declarations, ie those linked to that version of the SoI. However, these measures may be eligible under another route for HHCRO and could be treated as such.
- 3.96. Suppliers should be aware that an LA may update its SoI and publish a later version. In such circumstances the supplier should obtain assurance from the LA that it had

published the relevant version of the SoI prior to the date of any declarations being made.

3.97. A local authority can provide declarations for households not within its administrative area under certain circumstances. For example, this includes where a LA delegates some functions to another LA, where the LA providing the service is best placed to make a determination of the eligibility of a household. In such situations all relevant LAs must co-sign the SoI to confirm which LAs are operating on behalf of others. This must also be recorded on the LA declaration.

Local authority declarations - Determining and evidencing household eligibility

- 3.98. Once an SoI has been published by an LA, the LA can make declarations. Suppliers must ensure that a copy of the LA declaration listing the household is available for audit.⁶³
- 3.99. The LA is responsible for making the determination that a household is eligible (including SWI in-fill). Ofgem does not require suppliers to undertake supplementary checks to determine eligibility once an LA declaration is made. Suppliers are entitled to rely on the LA having made an accurate assessment of eligibility. However, suppliers should have assurance that any LA declaration used has been provided by the appropriate local authority and is legitimate.
- 3.100. In keeping with our zero tolerance approach to fraud and scheme abuse, we require suppliers to undertake checks to ensure that LA declarations are genuine.⁶⁴ As a minimum, compliance checks should be carried out on at least 5% of LA declarations to ensure they are fully complete and signed by an appropriate LA official (with the requisite authority), as indicated in the LA's SoI.
- 3.101. Where we become aware that an LA is not following the targeting methodology outlined in its SoI, we will pass this information to BEIS for investigation. This will not affect measures already notified to us based on declarations made by that LA.
- 3.102. LA declarations including those with SWI in-fill will remain valid for a period of 18 months from the date of signature or until the 31 March 2022, whichever is earliest, providing there is a valid SoI in place unless otherwise stated by the LA. There is no requirement

⁶³ See Appendix 1 – Documents and data to be made available on request for information on audits.

⁶⁴ See Chapter 8 for more information on fraud prevention

to reassess households once a LA declaration has determined a household to be eligible within a period.

- 3.103. Declarations can be made before or after the installation of measures. Parties involved in flexible eligibility are free to negotiate when declarations should be made. The ECO3 Order does however require that a LA is 'consulted' prior to the installation of the measure. As part of the standard declaration, LAs will be required to confirm that they were 'consulted' prior to installation of a measure.⁶⁵
- 3.104. When notifying flexible eligibility measures to Ofgem, suppliers will need to provide the unique reference number (URN) of the completed LA declaration.⁶⁶ All households listed in a declaration are given the same URN. A separate URN is not required for each property. Guidance on the format of URNs can be found in the BEIS guidance for LAs.⁶⁷
- 3.105. A household listed on an LA declaration may also be eligible as a member of the HTHG. If a supplier decides to notify the measures as an HTHG measure, the information on the declaration should also be included in the notification of the measure. This information will be provided to BEIS for reporting purposes.
- 3.106. Suppliers should be aware that Ofgem's primary interactions on measures submitted based on LA declarations will be with suppliers. However, should we have concerns with the content or validity of a declaration we may engage with the relevant LA.
- 3.107. BEIS has developed standardised templates for declarations which can be found in its guidance for LAs.

Local authority declarations - SWI in-fill

3.108. A LA can also declare households as eligible for HHCRO measures that do not meet the criteria for FP or LIVC where they are in the same terrace as, immediately adjacent to, or in the same building as households that do meet those criteria. Measures delivered to these premises are known as "in-fill" measures.

⁶⁵ Articles 17(1)(b) and 17(4)(b) of the ECO3 Order.

⁶⁶ Guidance on the format of URNs for local authority declarations is provided in the BEIS guidance note for flexible eligibility.

⁶⁷ See

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/776 540/energy-company-obligation-3-LA-flexible-eligibility-guidance.pdf

- 3.109. Premises with in-fill measures should be listed on the same LA declaration as household(s) that i) are in the same terrace as, ii) in an immediately adjacent building to or, iii) in the same building as households identified by an LA as FP or LIVC. BEIS has created a separate declaration template for SWI in-fill projects.
- 3.110. Only SWI can be installed where the premises are listed in the LA declaration as in-fill.
- 3.111. The specific requirements over the type and number of households that can be eligible as in-fill based on the presence of eligible FP or LIVC households are summarised in Table 1.

Table 1: Summary of the requirements for different property types under in-fill

Property Type	LA declaration requirements	In-fill available
Semi-detached houses or bungalows, or a building containing no more than two domestic premises	At least one of the two- properties must be declared by the LA as FP or LIVC (50% eligibility).	The other private property to which it is directly adjoined is eligible for solid wall insulation This is known as the in-fill property.
Any other properties that are contained together on a list provided by the LA that are in the same or immediately adjacent buildings or in the same terrace (eg flats and terraced houses) ⁶⁸	At least 50% of properties listed in the declaration must be classified by the LA as FP or LIVC.	The other 50% of properties on the list are eligible for solid wall insulation, provided they are either in the same building, an immediately adjacent building or in the same terrace.

Mixed eligibility projects

3.112. In some cases a project may include households that are eligible for different reasons, for example a block of flats that is considered eligible through a mixture of HTHG eligible consumers and LA Flex (including SWI in-fill).

⁶⁸ A detached building is eligible where it has FP or LIVC households containing two properties. For example, where an eligible property directly adjoins an in-fill property as it is located directly above or below and there are no more than 2 properties in the building.

- 3.113. Measures installed in flats identified as housing a member of the HTHG or LA Flex should be notified as such and no connection needs to be made between these measures installed in the same block.
- 3.114. Any remaining measures delivered through LA flexible eligibility must meet the relevant in-fill requirements. For example, if some households in the block of flats are identified as in-fill, these must be supported by the required number of HTHG, FP, or LIVC households in the same block of flats and listed in the same LA declaration.
- 3.115. AW in-fill cannot be combined with LA flexible eligibility to meet the eligibility ratio. The in-fill premises must be a private domestic premises, however the associated premises can be either a private domestic premises occupied by a member of the HTHG or social housing with an EPC rating of E, F or G. All three must receive either SWI or DHS: two DHS measures cannot support an SWI in-fill measure, for example.

Social housing E, F or G

- 3.116. HHCRO measures can also be delivered to social housing with an EPC energy efficiency rating of E, F or G, where the premises are let below market rate.
- 3.117. Delivery to social housing premises is limited to the following measures:
 - a) insulation measures,
 - b) demonstration actions,
 - c) innovation measures, or
 - d) first time central heating systems (FTCH) (including renewable central heating (CH)), and DHS connections delivered as FTCH.⁶⁹
- 3.118. We refer to the delivery of FTCH (including renewable central heating) or first time district heating connections, excluding a district heating connection to an uninsulated property, collectively as FTCH.

⁶⁹ Article 16(1) of the ECO3 Order.

- 3.119. A central heating system is 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, and does not include district heating connection".⁷⁰
- 3.120. For a FTCH measure to be eligible, the domestic premises must at no point prior to the installation have had:
 - a) a central heating system (including renewable central heating), or
 - b) a connection to a district heating system
- 3.121. Suppliers can also install FTCH measures to domestic premises heated by electric storage heaters, if all the heaters are either broken down or have a responsiveness of equal to or less than 0.2 when assessed against SAP. See paragraph 3.140 for further information on evidencing 'at no time prior'. Further information on first time central heating can be found in paragraph 4.82-4.123.
- 3.122. First time central heating is available to all property tenures, including owner-occupied premises.

Determining whether premises are social housing

- 3.123. In England and Wales, premises are considered to be social housing if the relevant interest is registered on the Land Registry as belonging to a social landlord.⁷¹
- 3.124. In Scotland, premises are considered to be social housing if the relevant interest is registered on the Land Register of Scotland or recorded in the Register of Sasines as belonging to a social landlord.⁷²
- 3.125. Where premises are not registered, it can be considered as social housing where there is proof that a social landlord lets the property.
- 3.126. Information on how to identify social landlords can be found in Appendix 2 Evidencing the premises and occupant requirements (see from paragraph 10.26).

⁷⁰ Article 2 of the ECO3 Order.

⁷¹ Schedule 1 of the ECO3 Order.

⁷² Schedule 1 of the ECO3 Order.

Determining whether the premises have an EPC energy efficiency rating of E, F or G

- 3.127. Suppliers must demonstrate that the social housing property has an EPC with an energy efficiency rating below band D (ie E, F or G), or below band C for demonstration actions and innovation measures ("innovation"). This must be achieved by providing the EPC report reference number (RRN) at notification. This can either be a pre- or post-installation EPC. Note that a post-installation EPC can be used where the property remains within bands E, F and G after the measure is installed (D, E, F and G for innovation).
- 3.128. The EPC must be valid (dated within 10 years of lodgement) on the date of installation and be the latest to be lodged for that premises. Please note that the 'date... of lodgement' of the EPC for this and any other relevant paragraph is the date it was issued not the date it was assessed.
- 3.129. Where a pre-installation EPC is used to demonstrate the energy efficiency rating of a premises, the supplier must collect a declaration signed by or on behalf of a social landlord providing assurance that the EPC reflects the current characteristics of the property. The signatory should have sufficient and appropriate authority to act on behalf of the social landlord.
- 3.130. Where multiple measures are installed in a single premises, the premises improved energy efficiency rating must be considered prior to any subsequent qualifying installations. For example, where the first measure improves the EPC energy efficiency rating to a D, then the only subsequent installation that would be eligible is a demonstration action or innovation measure. Where earlier measures have improved a premises to band C or better, no subsequent installations would be eligible.
- 3.131. Following the installation of multiple measures, the supplier can demonstrate that the measures are eligible using the social landlord declaration in the following ways:
 - a) The social landlord can list as part of the declaration the measures to be installed in the intended order of installation. Where multiple measures are installed the social landlord must confirm that the energy efficiency rating of the premises will not increase to a band D or above **before installation of the final measure listed on the declaration** (C where this is a demonstration action or innovation measure), or

- b) The social landlord can produce a separate declaration for each measure, taking into account the previous installations when confirming that the EPC energy efficiency rating of the property remains below band D (C for innovation).
- 3.132. We expect social landlords to have appropriate information available to them to make such a declaration.
- 3.133. We may not approve measures where there is evidence on the EPC stating that the measures notified to us will improve the energy efficiency of the premises to D or above (C for innovation) before the installation of the final measure listed on the declaration. Social landlords and suppliers should satisfy themselves that there is no evidence to suggest this.
- 3.134. This declaration should be made available to us on request.
- 3.135. Where a post-installation EPC RRN is notified to us and states an energy efficiency rating of E, F or G (D, E, F or G for innovation) after the measure is installed, the declaration relating to the energy efficiency of the premises is not required.
- 3.136. Where there have been inaccuracies in the creation of an EPC for a property and the property rating is not in fact within bands E, F or G (D, E, F or G for innovation), measures notified to us at that property may be rejected.

Determining whether the premises are let below market rate

- 3.137. Social housing under this provision will only be eligible where the housing is let at below the market rate. The supplier must produce a declaration signed by a social landlord providing assurance that the social housing premises are let at below the market rate, or where the premises are currently void, have previously and will be let at below the market rate.
- 3.138. This declaration should be made available to us on request.
- 3.139. For more information on how market rate is determined for different areas see Appendix2 Evidencing the premises and occupant requirements.

First time central heating and evidencing 'at no point prior'

- 3.140. For the installation of first time central heating systems⁷³ under this provision, suppliers must demonstrate that 'at no point prior' to the installation was a central heating system (including renewable central heating), district heating connection or immediately prior a working, efficient electric storage heater installed at the premises.
- 3.141. A supplier can evidence that this requirement is met through a declaration signed by the social landlord. This must state that at no point prior to the installation of the first time central heating measure did the social housing premises have a central heating system (including renewable central heating), district heating connection, or immediately prior a working, efficient electric storage heater.
- 3.142. The declaration should also identify the pre-main heating source in-situ prior to the installation of the FTCH measure. This declaration should be made available to us on request.

The rural sub-obligation

- 3.143. A supplier must achieve at least 15% of their total HHCRO by delivering measures to domestic premises in rural areas (the rural sub-obligation).
- 3.144. Suppliers should refer to the 2011 rural-urban classification of output areas document for properties in England and Wales,⁷⁴ and to the Scottish Government Urban Rural Classification 2016 document for properties in Scotland⁷⁵ or use the ECO tool,⁷⁶ or an equivalent system, to ensure measures are installed in eligible rural areas.

⁷³ See paragraph 4.82-4.123 for more information on first time central heating

⁷⁴ See https://www.gov.uk/government/statistics/2011-rural-urban-classification.

⁷⁵ See https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/pages/2/

⁷⁶ See https://eco.locationcentre.co.uk/.

Qualifying benefits under the help to heat group

Armed Forces Independence Payment

- 3.145. Armed Forces Independence Payment (AFIP) provides financial support to Service personnel and veterans who have been seriously injured as a result of service in the UK Armed Forces.
- 3.146. The award of AFIP is based on Service personnel and veterans who are entitled to a Guaranteed Income Payment (GIP) of 50% or higher through the Armed Forces Compensation Scheme (AFCS).⁷⁷

Evidencing Armed Forces Independence Payment

- 3.147. Customer entitlement notice letters confirming receipt of AFIP from DWP can be used to evidence HTHG eligibility. These are issued on a case-by-case basis when requested by the claimant. See Appendix 2 Evidencing the premises and occupant requirements for example letters.
- 3.148. Table 2 shows the expected wording on the relevant letter from **DWP**. The statements may vary slightly between letters.

Table 2: Evidencing Armed Forces Independence Payment

Armed Forces Independence Payment		
		The letter should include:
		"We can confirm you've been awarded
Customer entitlement	notice	Armed Forces Independence Payment from
from DWP		and including DD MONTH YYYY"
		Within in fact the consist DD MONITH MANY to
		"This is for the period DD MONTH YYYY to
		DD MONTH YYYY"

⁷⁷ More information on Armed Forces Independence Payment can be found in the Ministry of Defence's AFIP FAQs: https://www.gov.uk/government/publications/faq-on-the-armed-forces-independance-payment

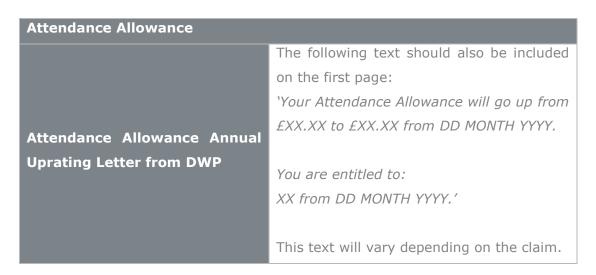
Attendance Allowance

3.149. People can receive Attendance Allowance (AA) to help with extra costs if they need someone to look after them due to a disability. In order to receive the benefit, the individual needs to be physically (including sensory disability, for example blindness) and/or mentally disabled (including learning difficulties), and aged 65 or over. It is paid weekly at 2 different rates depending on the level of help the individual needs.

Evidencing Attendance Allowance

3.150. Attendance Allowance uprating letters can be used as evidence of HTHG eligibility. These are issued annually to notify recipients on what their new income will be. Suppliers can also use a DWP 'proof of benefit' letter showing that the consumer is in receipt of Attendance Allowance as evidence of HTHG eligibility.

Table 3: Evidencing Attendance Allowance



Carer's Allowance

- 3.151. People can receive Carer's Allowance if they care for someone for at least 35 hours a week and the person they care for is in receipt of one of the benefits listed below:
 - a) Personal Independence Payment
 - b) Disability Living Allowance
 - c) Attendance Allowance
 - d) Constant Attendance Allowance at or above the normal maximum rate with an Industrial Injuries Disablement Benefit

- e) Constant Attendance Allowance at the basic (full day) rate with a War Disablement Pension
- f) Armed Forces Independence Payment
- 3.152. The carer must also earn no more than £120 a week after tax and expenses, be aged 16 or over, normally live in England, Scotland or Wales, and not be studying for 21 hours a week or more. The benefit entitles individuals to £64.60 a week.

Evidencing Carer's Allowance

3.153. A DWP 'proof of benefit' letter showing that the consumer is in receipt of Carer's Allowance can be used as evidence of HTHG eligibility. This can either be either an annual uprating letter or a Carer's Allowance award notice.

Child Benefit

- 3.154. People can receive Child Benefit if they are responsible for one or more children aged under 16, or under 20 if the child stayed in approved education training.
- 3.155. In order to be eligible under the HTHG those in receipt of Child Benefit must not have an income exceeding a certain level. The level depends on the number of children the person(s) is responsible for ('equivalised income threshold').⁷⁸ The equivalised income threshold is:
 - a) for a single claimant, the claimant's annual gross income from all sources cannot exceed the amount set out in the first row of Table 4 in the column corresponding to the number of children or qualifying young persons for whom the claimant is responsible;
 - b) for a member of a couple, the couple's combined annual gross income from all sources cannot exceed the amount set out in the second row of Table 4 in the column corresponding to the number of children or qualifying young persons for whom at least one member of the couple is responsible.

⁷⁸ Equivalised income thresholds reflect 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.

Table 4: Relevant annual gross income thresholds for Child Benefit based on household composition 79

Type of claim	Number of children or qualifying young persons for which the person is responsible ⁸⁰			s for which the
	1	2	3	4 or more
Single claim ⁸¹	≤ £18,500	≤ £23,000	≤ £27,500	≤ £32,000
Member of a couple ⁸²	≤ £25,500	≤ £30,000	≤ £34,500	≤ £39,000

- 3.156. Where an individual is in receipt of Child Benefit and is living in a household with multiple incomes (ie living with parents, family members or housemates), then the household would still be eligible to receive a measure under this route.
- 3.157. Where Child Benefit is claimed as a member of a couple, at least one member of the couple, who is resident in the property where the measure is to be installed, is responsible for children or qualifying young persons.
- 3.158. The young person does not need to live in the same house as the claimant. If the claimant is paying at least the same amount as Child Benefit (or the equivalent in kind) towards looking after the child they can be considered responsible.

Evidencing Child Benefit

3.159. Where Child Benefit is used to demonstrate HTHG eligibility, the supplier must collect a self-declaration completed and signed by the occupier of the premises dated no more than 18 months prior to completion of the measure. See paragraph 3.63 for more detail

⁷⁹ Income should be determined from all sources before tax and be based on the preceding annual tax year, which runs from 6th April to 5th April of the following year.

⁸⁰ "Child" and "qualifying young persons" means a person under the age of 16 (or under 20 if they are in approved education or training). A person shall be treated as responsible for a child or qualifying young person who is normally living with them or paying at least the same amount as Child Benefit (or the equivalent in kind) towards looking after them. More detail can be found on the government website for child benefit: https://www.gov.uk/child-benefit/eligibility

^{81 &}quot;Single claimant" means a person who is not a member of a Couple.

^{82 &}quot;Couple" means: (a) two people who are married to, or civil partners of, each other and are members of the same household; or (b) two people who are not married to, or civil partners of, each other but are living together as a married couple.

on using a self-declaration to evidence eligibility. The supplier should make the Child Benefit self-declaration available on request.

3.160. Suppliers should also request a Child Benefit award notice as evidence of responsibility for children or qualifying young persons. Where the occupier does not have an award notice they can request one from HMRC.⁸³ We understand that in a small number of cases it may not be possible to obtain an award notice and in these cases a photo of the occupier's bank statement showing Child Benefit payments can be provided. We expect the bank statement to be used as evidence only where it has not been possible to collect an award notice.

Table 5: Evidencing Child Benefit

Child Benefit		
Child Benefit award notice	A Child Benefit award notice which states	
	the name of the parent claiming Child	
	Benefit for the child or qualifying young	
	person(s).	
	Either a photo of a paper copy of the bank	
	statement or an online version shown on a	
	computer or portable device clearly	
Pank statement	displaying a payment into the account for	
Bank statement	Child Benefit and the name of the recipient.	
	The bank statement must be the most	
	recent available and within the period of the	
	previous 18 months.	

Constant Attendance Allowance

3.161. A person can receive Constant Attendance Allowance if they receive Industrial Injuries Disablement Benefit or a War Disablement Pension and need daily care because of a disability. There are 4 different weekly rates depending on the extent of the disability and amount of care needed.

⁸³ https://www.gov.uk/government/organisations/hm-revenue-customs/contact/child-benefit

Evidencing Constant Attendance Allowance

- 3.162. One of the following documents should be made available on request to evidence HTHG eligibility:
 - a) A Ministry of Defence (MOD) annual uprating letter from Veterans UK showing receipt of Constant Attendance Allowance. These are issued annually around the start of April/May.
 - b) An MOD pension breakdown letter from Veterans UK showing receipt of Constant Attendance Allowance. These are issued on a case-by-case basis when requested by the claimant and will vary depending on what information is requested by the individual.
- 3.163. Table 6 shows the expected wording on the relevant letters from **Veterans UK on behalf of the MOD**. The statements may vary slightly between letters.

Table 6: Evidencing Constant Attendance Allowance

Constant Attendance Allowance		
		A MOD annual uprating letter stating receipt
MOD annual unrating	lottor	of "War Pension Constant Attendance
MOD annual uprating I from Veterans UK	letter	Allowance" in the appropriate checkbox on
Holli Veteralis OK		the second page. The amount received
		should also be populated on the letter.
		A MOD pension breakdown letter stating
W 00		receipt of Constant Attendance Allowance in
		the table on the first page.
MOD pension breakdown	letter	
from Veterans UK		The date(s) in the column(s) will be the
		uprating date (typically first week in April of
		the relevant year).

Disability Living Allowance

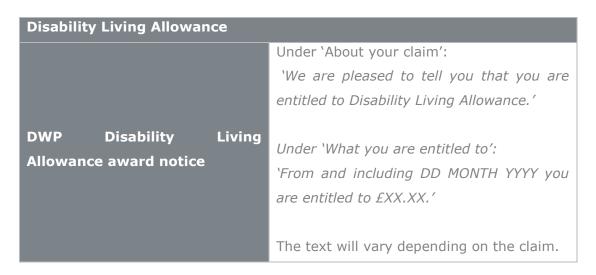
3.164. People can receive Disability Living Allowance if they are disabled and aged under 16 or were born on or before 8 April 1948. It is paid to the individual in the form of a monthly tax-free payment. Personal Independence Payment (PIP) has replaced Disability Living

Allowance for disabled people aged 16 to 64. For more information on PIP, see paragraph 3.183.

Evidencing Disability Living Allowance

3.165. Disability Living Allowance award notices can be used as evidence of HTHG eligibility. Suppliers can also use an annual uprating letter from DWP to show that the consumer is in receipt of Disability Living Allowance as evidence of HTHG eligibility. These are issued annually to notify recipients what their new income will be.

Table 7: Evidencing Disability Living Allowance



- 3.166. Disability Living Allowance may be claimed on behalf of a child by their parent or guardian, which could mean the child is not named on the benefit letter. In these circumstances a Child Tax Credit Award Notice can be used to evidence that the child lives with the parent or guardian in the premises where the measure is being installed. See paragraph 10.71 for more information.
- 3.167. Where the parent or guardian is not in receipt of Child Tax Credit one of the following forms of evidence can be used to evidence that the child lives in the premises where the measure is being installed:
 - a) A letter from the child's nursery or school confirming the child's address,
 - b) or a recent letter from an NHS health professional addressed to the child at the relevant address (for example a letter from a GP, Physiotherapist or a letter from a hospital or clinic).

Income Support

- 3.168. People can receive Income Support if they have a low income or none at all, have no more than £16,000 in savings, work fewer than 16 hours a week and have not signed on as unemployed. Individuals will also need to meet one of the qualifying criteria outlined on the government Income Support website.⁸⁴ They will receive a basic payment and additional payments called 'premiums'.
- 3.169. People receiving Income Support will not be receiving Jobseeker's Allowance or Employment and Support Allowance.
- 3.170. For information on how to evidence receipt of income support see paragraphs 3.179-3.180.

Income-related Employment and Support Allowance (ESA)

- 3.171. People can receive Income-related ESA if they are ill or disabled. It may provide support if they are unable to work or need personalised help at work if they are able to work. The amount people receive depends on their circumstances. There are three types of ESA: income-related, contribution-based and 'new style'. Only income-related ESA is eligible under the HTHG.
- 3.172. If a person has contributed enough national insurance in a preceding period and they are not in a Universal Credit full service area, then they will receive contribution-based ESA. This is not eligible for the HTHG.
- 3.173. If a person lives in a Universal Credit full service area, has already claimed for Universal Credit or has claimed within the last 6 months they may receive the 'new style' ESA. This is not eligible for HTHG.
- 3.174. A person is eligible under the HTHG if they are in receipt of any income-related ESA. If the 'proof of benefit' letter states the person is in receipt of both income-related ESA and contribution-based ESA this is eligible. However, receipt of contribution-based ESA alone is not eligible for the HTHG. In a joint claim, if one individual receives income-related ESA and the other contribution-based, they would still be eligible because there

71

⁸⁴ https://www.gov.uk/income-support/eligibility

is income-related ESA within the claim. For information on how to evidence receipt of income-related ESA, see paragraphs 3.179-3.180.

Income-based Jobseeker's Allowance (JSA)

- 3.175. A person can receive income-based JSA if they are over 18 and able to work. The amount people receive depends on their circumstances. There are three types of JSA: incomebased, contribution-based and new-style. Only income-based JSA is eligible under the HTHG.
- 3.176. If a person has contributed enough national insurance in a preceding period then they will receive contribution-based JSA. This is not eligible for the HTHG. Recipients of 'New Style' JSA are also ineligible as this works in the same way contribution-based JSA
- 3.177. If a person has not contributed enough national insurance they may receive incomebased JSA. This is eligible for the HTHG. The 'proof of benefit' letter will need to state whether the benefit is income or contribution based
- 3.178. For information on how to evidence receipt of Income-based Jobseeker's Allowance, see paragraphs 3.179-3.180.

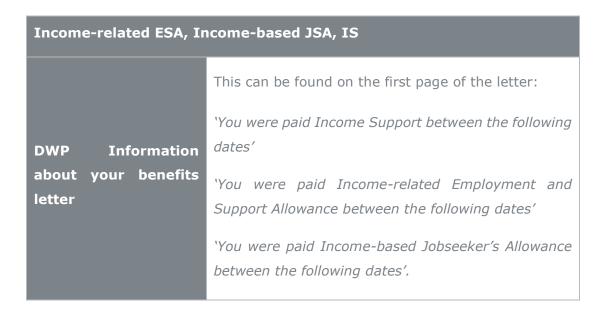
Evidencing income-related ESA, JSA and Income Support

- 3.179. Benefits can be issued by DWP/Jobcentre Plus at any point in the year when a person claims. They can be amended at any point. Award notices that are issued by HMRC are reissued annually (called 'annual review award notices'), can be amended at any point ('amended award notices') and can be provisional award notices. Where we refer to award notices, this can include any of the above.
- 3.180. The following documents should be made available on request:
 - a) HMRC award notice⁸⁵ or a DWP/Jobcentre Plus 'proof of benefit' letter confirming receipt of one of the benefits above.
 - b) A Tax Credit, Working Tax Credit or Child Tax Credit award notice confirming receipt of one of the benefits mentioned above.

⁸⁵ An HMRC award notice can also include annual review award notices, amended award notices and provisional award notices. Provisional letters must state they will receive the benefit within 18 months prior to the measure being installed.

c) CTC or Tax Credit award notices to evidence Income-related ESA, Income-based JSA, or Income Support. The statements may vary slightly between letters.

Table 8: Evidencing Income-related ESA, Income based JSA and Income Support



Industrial Injuries Disablement Benefit

3.181. A person can receive Industrial Injuries Disablement Benefit if they became ill or are disabled because of an accident or disease either at work or on an approved employment training scheme or course. The amount received depends on the level of disability.

Evidencing Industrial Injuries Disablement Benefit

3.182. A DWP 'proof of benefit' letter showing that the consumer is in receipt of Industrial Injuries Disablement Benefit can be used as evidence of HTHG eligibility. This can either be an annual uprating letter or an Industrial Injuries Disablement Benefit award notice.

Personal Independence Payment (PIP)

3.183. Personal Independence Payment helps with the extra costs caused by long-term ill health or disability experienced by those between the ages of 16 and 64. The weekly payment amount varies depending on how severely a claimant's condition affects them.

Evidencing Personal Independence Payment

3.184. Personal Independence Payment award notices from DWP can be used as evidence of HTHG eligibility.

Table 9: Evidencing Personal Independence Payment

Personal Independence Payment

This can be found on the first page of the letter:

I've looked at your claim and decided:

- I can award you the standard rate of £XX.XX a week to help with your daily living needs from DD Month YYYY to DD Month YYYY
- I can award you the enhanced rate of £XX.XX a week to help with your mobility needs from DD Month YYYY to DD Month YYYY'

Personal Independence
Payment award notice

Personal Independence Payment is awarded for a set time and based on scores for daily living activities and mobility (which are detailed in pages 2-3 of the award notice). Therefore the dates on the first page of the document should state that the individual is currently in receipt PIP.

Pages 7-9 of the award notice contains the 'Statement of Entitlement' which contains full details of the PIP award. It states the following:

'[Claimant's name] has been awarded PIP as follows:'

These pages can also be used to show receipt of PIP but does not contain the claimant's address so will need to be used alongside one of the official documents outlined in paragraph 10.50.

Severe Disablement Allowance

3.185. Severe Disablement Allowance is only available to those who have never been able to work, or have not been able to work for at least 28 weeks, due to a disability, and who claimed before April 2001. Otherwise it has been replaced with Employment and Support Allowance (ESA).

Evidencing Severe Disablement Allowance

3.186. A DWP 'proof of benefit' letter showing that the consumer is in receipt of Severe Disablement Allowance can be used as evidence of HTHG eligibility. This can either be an annual uprating letter or a Severe Disablement Allowance award notice.

Pension Guarantee Credit

- 3.187. State Pension Credit is an income-related benefit made up of two parts: Guarantee Credit and Savings Credit. Only Guarantee Credit⁸⁶ is eligible under ECO. Some householders may also be in receipt of Savings Credit, but they will only be eligible for ECO if they are in receipt of Guarantee Credit. Guarantee Credit State Pension is not the same as Guarantee Credit.
- 3.188. **The customer is not eligible if they receive State Pension.** However, those in receipt of both Pension Credit Guarantee Credit and Pension Credit Savings Credit are also eligible.
- 3.189. Guarantee Credit tops up a weekly income if it is below a certain level. Savings Credit is an extra payment for people who have saved towards their pension. The amount people receive depends on their circumstances.

Evidencing Pension Guarantee Credit

- 3.190. Letters for matched WHD Core Group recipients can be used as evidence of HTHG eligibility. The Warm Home Discount (WHD) Core Group receives a set discount from their electricity bill. This is not the same as a Cold Weather Payment or Winter Fuel Payment.
- 3.191. Letters are sent annually between September and March, outlining whether people will receive the discount automatically (if they match the requirements) or must apply for it (if their situation is unverified). These are distinguished by different letters at the start of their reference numbers: 'M' matched or 'U' unmatched.

 $^{^{86}}$ Article 16A(7)(d), paragraph 1(d), schedule 4B, and sections 1 and 2 of the State Pensions Credit Act 2002.

- 3.192. One of the following documents should be made available on request:
 - a) Pension Credit award notice or 'proof of benefit' letter from DWP/Jobcentre Plus or The Pension Service confirming receipt of pension guarantee credit, OR
 - b) Warm Home Discount (WHD) core group 'matched' notice from HM Government. The reference number on this notice should start with 'M'.
- 3.193. Table 10 shows the expected wording on the relevant letters from DWP/Jobcentre Plus/Pensions Service/HM Government letters. The statements may vary slightly between letters.

Table 10: Evidencing Pension Guarantee Credit

Pension Guarantee Credit Credit Pension award, amendment or annual To ensure that this is a guarantee credit, and not state review award notice or pension, the letter should include: 'proof of benefit' letter from the **Pensions** 'Pension Guarantee Credit of £xxx.xx per week' Service/DWP/Jobcentre Plus A letter with a reference number beginning with M indicates a matched notice. It may include the following text: 'You meet the scheme conditions and will receive £xxx.xx towards your electricity costs' Or WHD Core Group 'matched' **Notice** 'Information held by the Department for Work and Pensions (DWP) shows that you qualify for a discount of £xxx.xx to help with electricity costs'. It is not sufficient to provide a letter from HM Government saying the customer '...may be entitled to £xxx.xx towards your electricity costs'.

Tax Credits

- 3.194. Tax Credits include Working Tax Credits (WTC) and Child Tax Credits (CTC). Award notices are issued by HMRC when a person claims WTC or CTC. They are reissued annually (called "annual review award notices") and can be amended at any point ("amended award notice"). Customers can also receive confirmation of their benefits from the HMRC online service.
- 3.195. The award of a credit is based on an assessment of relevant income. This is calculated by HMRC and should appear on the award notices.

Evidencing Tax Credits

- 3.196. One of the following documents should be made available on request:
 - e) An HMRC Child Tax Credit, Working Tax Credit, or Tax Credit award notice showing receipt of a Tax Credit.
 - c) A DWP/Jobcentre Plus 'proof of benefit' letter showing that they receive a Tax Credit.
 - d) A confirmation from the HMRC online service showing that they receive a Tax Credit. For the rest of the chapter HMRC online notifications are included in references to award notifications.
- 3.197. Table 11 states the expected wording on the relevant HMRC letters. The statements may vary slightly between letters.

Table 11: Evidencing Tax Credits

Tax Credits	
Tax Credit/Working Tax	A Tax Credit/Working Tax Credit/Child Tax Credit annual review letter stating:
Credit/Child Tax Credit	On page 1 'Your tax credits award for DD/MM/YYYY to
Annual Review Award	DD/MM/YYYY',
Notice	On page 1 'The final amount of your tax credits award for the period DD/MM/YYYY to DD/MM/YYYY is $\pounds < xxx.xx>$.'

Tax Credits A Tax Credit/Working Tax Credit/Child Tax Credit amended letter stating: On page 1 'Amended tax credits award for DD/MM/YYYY to DD/MM/YYYY' Tax Credit/Child Tax Credit Amendment Award Notice On page 1 under "Summary" and "Tax credit for this period – see Part 2" the "Working Tax credit £<xxx.xx>" and "Child Tax Credit £<xxx.xx>", On page 4; in 'Part 2 How we work out your tax credits' 'in the 'Working tax Credit elements' section, the "Amount

Universal Credit (UC)

3.198. Universal Credit (UC) is a single monthly payment for people in or out of work. It replaces:

for the period £<xxx.xx>".

- a) Income-based Jobseeker's Allowance (JSA)
- b) Housing Benefit
- c) Working Tax Credit
- d) Child Tax Credit
- e) Income-related Employment and Support Allowance (ESA), and
- f) Income Support.
- 3.199. Universal Credit in live service areas is no longer available for new claimants. Customers may be able to claim other benefits instead. Those already receiving Universal Credit in a live service area will manage their claims by phone. Live service claims will eventually move to the full service.⁸⁷

⁸⁷ Further information on the Universal Credit and the difference types of services can be found at https://www.gov.uk/quidance/universal-credit-full-service-and-live-service

- 3.200. DWP provides monthly statements, and these can be used as evidence of HTHG eligibility. The statements are located in a claimant's online account. As UC is assessed on a monthly assessment period, any proof of benefit entitlement evidence will be reflective of the UC month by month structure.
- 3.201. Live service claims will eventually move to the full service. The transition rollout for full service is to be completed by December 2018.

Evidencing Universal Credit

- 3.202. One of the following documents should be made available on request to evidence HTHG eligibility:
 - a) a UC live service award notification (also used as a UC Full service clerical letter for those without an online account),
 - b) a UC full service statement,
 - c) a UC DWP/Jobcentre Plus 'proof of benefit' letter.88
- 3.203. UC full service recipients have an online account. A printed copy or a screenshot can be provided to the supplier to use as evidence as long as it clearly shows the consumer's name and address which match where the measure(s) is installed. UC full service users without an online account can evidence HTHG eligibility with a UC full service clerical letter.
- 3.204. UC full service and live service users can also be data matched using the DWP data matching service.
- 3.205. Table 12 states the expected wording if using a Universal Credit award notification/service statement or DWP/Jobcentre Plus 'proof of benefit' letter to evidence qualifying elements. The statements may vary slightly between letters.

⁸⁸ This is rarely issued once the transition to the UC full service is completed.

Table 12: Evidencing Universal Credit

Universal Credit	
	A Universal Credit Live Service Letter/Full Service Clerical Letter stating:
	'we can pay you Universal Credit' on the first page,
Universal Credit Live Service Award Notification/Full Service Clerical Letter	On page 3, in the section 'How your Universal Credit payments are worked out' stating: 'This is based on your circumstances between xx Month and xx Month'
	On page 4, in section 4 'Lastly, we look at any loans, advances, sanctions, penalties, deductions, overpayments or third party payments you have" stating: 'Your Universal Credit monthly payment for this period £XXX.XX".'
	A Universal Credit Full Service Statement showing the following:
	recipient's name and address in the top left of the statement,
Universal Credit Full Service Statement	<i>Your payment this month is £XXX.XX'</i> found directly below and to the right of the recipient's name and address,
	'your payment is based on what you've told us and covers the period between xx Month and xx Month.' or
	`Total Payment for this month £XXX.XX' in the blue box near the end of the statement.

War Pensions Mobility Supplement

3.206. An individual may be entitled to War Pensions Mobility Supplement if they are unable to walk because of the conditions for which they receive their War Pension. It is paid as an alternative to Personal Independence Payment (PIP) or the Disability Living Allowance (DLA).

Evidencing War Pensions Mobility Supplement

- 3.207. One of the following documents should be made available on request to evidence HTHG eligibility:
 - a) A Ministry of Defence (MOD) annual uprating letter from Veterans UK showing receipt of War Pensions Mobility Supplement. These are issued annually around the start of April/May.
 - b) An MOD pension breakdown letter from Veterans UK showing receipt of War Pensions Mobility Supplement. These are issued on a case-by-case basis when requested by the claimant and will vary depending on what information is requested by the individual.
- 3.208. Table 13 shows the expected wording on the relevant letters from **Veterans UK on behalf of the MOD.** The statements may vary slightly between letters.

Table 13: Evidencing War Pensions Mobility Supplement

War Pensions Mobility Supplement			
		A MOD annual uprating letter stating receipt	
MOD	lottor	of "War Pensioners Mobility Supplement" in	
MOD annual uprating	letter	the appropriate checkbox on the second	
from Veterans UK		page. The amount received should also be	
		populated on the letter.	
		A MOD pension breakdown letter stating	
		receipt of "War Pensioners Mobility	
MOD pension breakdown	letter	Supplement" in the table on the first page.	
from Veterans UK		The date(s) in the column(s) will be the	
		uprating date (typically first week in April of	
		the relevant year).	

4. Information on specific ECO measures

Qualifying actions in HHCRO

- 4.1. To achieve its ECO obligations a supplier must install measures that qualify under the scheme. The measures table (Table 14), below, lists energy efficiency measures that are eligible under ECO. Innovation measures, demonstration actions, and monitored measures are not included within this table.
- 4.2. The measures table identifies which combination of tenure and household EPC energy efficiency rating a measure can be credited against (ie Owner Occupier, Social E, F or G, PRS A-E or PRS F-G). This list is not exhaustive and is updated periodically. Suppliers wishing to install measures not listed in the measures table (for example new measures or innovative measures) should refer to the section within this guidance on or contact us prior to installation.

Table 14: Measures table

		Tenure	
Measure sub- category	Owner Occupied	Social E, F & G	PRS
Solid Wall Insulation			Eligible
Insulation of Cavity Walls Loft insulation	Eligible	Eligible	Eligible only in A-E
Other insulation measures			premises
¹ Boiler - Broken replacement	Eligible ⁸⁹	Not eligible	Not eligible in A-E premises. Eligible only in F & G premises where the measure installed is a renewable heating measure.
First time central heating	Eligible	Eligible	Eligible
¹Boiler - Repair	Eligible	Not eligible	Not eligible in A-E premises. Only eligible in F & G premises where the measure is a renewable central heating system.
¹ Boiler (inefficient) - Upgrade	Eligible when installed alongside a primary insulation measures (or alone if renewables).	Not eligible	Eligible in A-E premises alongside a primary insulation measure. Eligible in F or G premises where the measure is a renewable heating

 $^{^{89}}$ Oil boilers can only be installed in properties with a broken oil boiler, under the broken heating system cap.

	Installation of oil		system. Installation of oil
	boiler not eligible.		boiler not eligible.
ESH - Broken	Eligible	Not eligible	Eligible in F or G premises if renewables.
ESH - Repair	Eligible	Not eligible	Not eligible
ESH (inefficient) - Upgrade	Eligible when installed alongside a primary insulation measure (or alone if renewables)90	Not eligible	Eligible in A-E premises alongside a primary insulation measure (or alone if renewables). Eligible in F or G premises if renewables.
ESH (Room Heater) ⁹¹ – Upgrade	Eligible	Not eligible	Eligible in A-E premises. Eligible in F or G premises if renewables.
District heating systems	Eligible	New connections eligible if first time central heating. Heat meters and CHP upgrade not eligible.	Eligible in A-E premises. Eligible in F or G premises where the measure is a renewable DHS or if first time central heating.
Other heating – compensation, controls, smart thermostat and Time and Temperature Zone Control	Eligible	Eligible when carried out as part of a first time central heating installation.	Eligible in A-E premises. Eligible in F or G premises when carried out as part of a first time central heating installation.

⁹⁰ Electric heating systems are classed as a renewable heating source where they are the main heating

system in a premises which generates electricity all or partly through Solar PV.

91 A primary insulation measure is not required when carrying out an ESH upgrade measure in premises where the main heating source is not a central heating system, a district heating system or electric storage heaters. This includes room heaters of all fuel types and gas, LPG and solid fossil fuel fires to back boiler (where these do not meet the central heating definition).

Micro-			
generation -	Eligible	Not eligible	Eligible
Solar PV			

Key:

Measures are eligible
Measures are eligible with certain
conditions
Measures are not eligible
¹ Boiler measures also include the
following renewable heat sources; air
source heat pumps, ground source heat
pumps, biomass boilers and fuel cell
mCHP.

- 4.3. This chapter provides information, further to that contained in the measures table, on the following measure types:
 - a) solid wall insulation
 - b) loft insulation and the removal of pre-existing loft insulation
 - c) boilers and boiler installations
 - d) smart thermostats
 - e) First Time Central Heating (FTCH)
 - f) repair of a boiler or an ESH
 - g) replacement of broken heating systems
 - h) upgrade of inefficient heating systems (alongside the installation of insulation)
 - i) microgeneration, and
 - j) Renewables
- 4.4. A supplier achieves its obligation by promoting qualifying actions. These actions include the installation (or in the case of boilers and electric storage heaters, the repair or replacement) of an eligible measure where:
 - a) it is delivered to premises as defined by paragraph 3.1,

- b) it results in a reduction in the cost of heating those premises to 21 degrees Celsius in the main living areas and 18 degrees Celsius in all other areas, or in the case of a demonstration action is reasonably expected to result in such a reduction in the cost of heating those premises, and
- c) it is installed on or after 01 October 2018.92
- 4.5. Where the measure is specified in the Publicly Available Specification 2030 (PAS 2030), it must be installed by a PAS-certified installer.
- 4.6. Where the measure is not specified in PAS 2030, it must be installed by someone with the appropriate skill and experience. See paragraph 2.76 for more information.
- 4.7. In addition, the following measures must be accompanied by a warranty:
 - a) a replacement boiler or a boiler installed under FTCH. This measure must be accompanied, at the time installation is complete, by a warranty⁹³ of at least two years
 - b) the repair of a boiler. This measure must be accompanied by a warranty of at least two years
 - c) a replacement electric storage heater (ESH). This measure must be accompanied by a warranty of at least two years, and
 - d) the repair of an electric storage heater. This measure must be accompanied by a warranty of at least two years.⁹⁴
- 4.8. Where both a heating and insulation measure are being installed in premises, the heating measure should be sized so that it is appropriate for the premises after the insulation has been installed.⁹⁵

⁹² Article 13 of the ECO3 Order

⁹³ See article 18(1) of the ECO3 Order and Appendix 3 - Boiler information pack for information on qualifying warranties.

⁹⁴ Article 18(1) of the ECO3 Order

⁹⁵ For example, heating measures include a boiler, micro generation or electric storage heaters.

Solid wall insulation

Uninsulated solid wall property

4.9. In order for a property to count as an uninsulated solid wall property, and therefore be eligible to count towards the new solid wall minimum requirement (see paragraph 2.8), at least 50% of the property's exterior wall area must be constructed of solid wall, and at least 50% of the exterior solid wall area must be uninsulated.

Types of solid wall insulation

- 4.10. Solid wall insulation (SWI) means internal or external insulation of a solid wall (ie internal wall insulation (IWI) or external wall insulation (EWI) respectively). SWI does not include insulation of a mobile home, which is a separate eligible ECO measure.⁹⁶
- 4.11. A solid wall can be a solid brick wall or a solid non-brick wall (including stone walls). The types of non-brick wall covered by the definition of solid wall include metal or timber frame walls, and walls of pre-fabricated concrete construction.⁹⁷ There are not distinct measure types for different types of solid walls. The same set of deemed scores applies for both solid brick and solid non-brick wall properties. The types of solid wall may have different starting U-values as per Table 21.
- 4.12. Although most system build properties meet the definition of solid wall, some have external walls of a standard cavity construction and require a cavity wall insulation measure. The construction type of the external walls of a system build property should therefore be assessed prior to insulating the property as it will not automatically be considered a solid wall.
- 4.13. Where EWI or IWI is installed to at least 50% of the exterior solid walls of an uninsulated solid wall property, the savings for that measure can count towards a supplier's solid wall minimum requirement (SWMR).
- 4.14. Solid wall insulation installed as in-fill measures will count towards the SWMR.

⁹⁶ Article 11(5) of the ECO3 Order.

⁹⁷ See ECO3 Guidance: Supplier Administration Chapter 4 for more information on the solid wall minimum requirement (SMWR).

4.15. Please note that, following its publication, we expect that all IWI installations are conducted in line with BEIS guide to best practice for retrofit internal wall insulation. However, until the guide is published, IWI installations must be in accordance with the IWI Interim Approach Flowchart.98

Insulation of Cavity Walls

- 4.16. Insulation of a cavity wall includes the insulation of exterior-facing cavity walls and party walls. Cavity walls can be treated with:
 - a) Cavity Wall Insulation (CWI) installed to the cavity of the cavity wall
 - b) EWI installed to the exterior face of the cavity wall, or
 - c) IWI installed to the interior face of the cavity wall.
- 4.17. Cavity walls insulated with external or internal wall insulation do not count towards a supplier's SWMR.

Loft insulation

- 4.18. Loft insulation, which is insulation installed between (and/or on top of) joists, can be considered one of two measures:
 - a) Loft Insulation: where there is less than or equal to (≤) 100mm pre-existing insulation, or
 - b) Loft Insulation: where there is greater than (>) 100mm pre-existing insulation.⁹⁹
- 4.19. For loft insulation to be claimed as loft insulation \leq 100mm, a supplier must be able to demonstrate that there was less than 100mm of pre-existing insulation present in the loft and/or that no insulation was recently removed before the measure was installed. For more information on removal of pre-existing insulation, refer to paragraphs 4.48-4.50.

⁹⁸ https://www.theiaa.co.uk/partial-insulation-for-iwi/

⁹⁹ In some instances, pre-existing insulation may be removed and new insulation installed. However, the pre-installation assessment accounts for the pre-existing insulation and so the measure should be notified as loft insulation > 100mm.

- 4.20. Where the pre-existing insulation is less than or equal to ≤ 100mm, the declaration of conformity and completed installation (DOCC) should record the level of pre-existing insulation.
- 4.21. Prior to the installation taking place, the installer, operative¹⁰⁰ or assessor, and either the occupier or landlord must sign the pre-existing loft declaration to confirm that
 - a) the level of pre-existing insulation was ≤ 100mm, and
 - b) that no loft insulation was removed within the past six months, before the ECO loft insulation was installed, or has previously been claimed under ECO.¹⁰¹
- 4.22. A copy of the signed declaration must be left in the loft. The declaration should be fixed in a secure position close to the loft hatch where it can be clearly viewed and is unlikely to be covered up or disturbed, for example on a nearby rafter. The declaration should be legible to somebody who is standing at the top of a ladder entering the loft.
- 4.23. A supplier must retain a copy (or photo) of the signed declaration. We would recommend a clear photo of the loft declaration securely fixed to the loft. We may request this is made available for review, should we have concerns over these requirements being met.
- 4.24. Where loft insulation has previously been claimed under ECO, we will request evidence of the date the property owner took ownership of the property this can include a number of items, for example the land deed. If this date precedes the previous ECO loft insulation measure, the latest loft insulation measure will be rejected.
- 4.25. Where score monitoring is carried out on the measure the monitoring agent must confirm that a correctly signed declaration is present in the loft where the measure was installed and that any pre-existing loft insulation is not more than 100mm deep.

¹⁰⁰ We have adopted the PAS 2030 definition of an 'operative'. That is, a person employed by the installer, either directly or under a subcontract arrangement, to undertake installation tasks on an energy efficiency measure in accordance with the relevant method statement and the related requirements of this PAS. Individuals employed to provide labouring, carrying or loading/unloading capability do not constitute operatives in the terms of this PAS.

¹⁰¹ https://www.ofgem.gov.uk/publications-and-updates/eco3-pre-existing-loft-insulation-declaration

¹⁰² Refer to Paragraph 10.21 for methods of evidencing ownership

4.26. Where part of a loft has already been insulated, the area with no pre-existing insulation can be claimed as loft insulation ≤100mm. Percentage of property treated (POPT) should be reduced accordingly (see Deemed scores 6 for information on POPT). If the pre-existing insulation has a depth of equal to or less than 100mm, any additional insulation installed in these areas can be claimed as part of the same measure (LI ≤100mm) as the area with no pre-existing insulation. If the pre-existing insulation has a depth greater than 100mm and further insulation is installed, this area should be claimed as a separate measure (LI >100mm) and the POPT reduced accordingly.

Room-in-Roof insulation (RIRI)

4.27. In order to claim that a RIRI measure has been installed in accordance with the latest relevant PAS standards, we expect that the installation of a RIRI is in line with the manufacturer's instructions and the prescribed installation methods for the product used. We also anticipate that BEIS will be publishing a technical guide to best practice for RIRI measures in the coming months. As such, following its publication, we expect that all RIRI installations are conducted in line with the BEIS guide to best practice.

Underfloor Insulation

- 4.28. Underfloor insulation can only be installed to the floor in the property that is either in contact with the ground, above an unheated space (ie a cellar), or suspended and in contact with the outside air.
- 4.29. A floor cannot be treated if there is a room below it that contains a heat emitter, for example a kitchen or living room.
- 4.30. Insulation of the underfloor can include insulating the uninsulated underfloor void.
- 4.31. It is recognised that underfloor insulation applied to a suspended floor can be installed using different techniques and requires different skillsets to underfloor insulation applied to a solid floor. 104 As such we consider them to be different measures, in much the same way as cavity wall and solid walls differ and require different insulation installation techniques. All underfloor insulation must be installed in accordance with the latest relevant PAS standards.

¹⁰³ Further specific information on the installation of RIRI can be found in the NIA-ATMA *Guide to Retrofit Room in Roof Insulation*: https://www.nia-uk.org/media/1214/nia_atma-riri-guide-v10.pdf
http://www.greenspec.co.uk/building-design/ground-floor-insulation/

- 4.32. Separate deemed scores for both variants have been introduced and should be notified accordingly.
- 4.33. In order to claim that a suspended underfloor insulation measure has been installed in accordance with Article 33(4) of the ECO3 Order, we expect that the installation techniques of the UFI measure is in line with the manufacturer's instructions, the prescribed installation methods for the product used, and the BEIS Guide to Best Practice: Retrofit Floor insulation Suspended Timber Floors.¹⁰⁵
- 4.34. We anticipate that BEIS will be publishing a technical guide to best practice for solid floor insulation measures in the coming months. As such, following its publication, we expect that all solid floor insulation installations are conducted in line with the BEIS guide to best practice.

Park Home Insulation (PHI)

4.35. In order to claim that a PHI measure has been installed in accordance with the latest relevant PAS standards, we expect that the installation of park home wall, roof, and floor insulation is in line with the manufacturer's instructions and the prescribed installation methods for the product used. We also anticipate that BEIS will be publishing a technical guide to best practice for PHI measures in the coming months. As such, following its publication, we expect that all PHI installations are conducted in line with the BEIS guide to best practice.

Removal of pre-existing insulation

- 4.36. The extraction or removal of insulation is not an ECO measure. However there are circumstances where pre-existing insulation must be removed. The following sections detail limited circumstances in which the installation of new insulation following extraction or removal can be a valid ECO measure.
- 4.37. Suppliers will need to ensure that there is no guarantee or building insurance in place that covers the remedial work. Where there is no guarantee in place that covers the remedial work, evidence must be provided to demonstrate this (ie confirmation from guarantee providers). We expect in a situation where an appropriate insulation

¹⁰⁵ Further specific information on the installation of suspended UFI can be found in the BEIS *Guide to Best Practice: Retrofit Floor insulation – Suspended Timber Floors*:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/898 872/suspended-timber-floors-underfloor-insulation-best-practice.pdf

guarantee is still valid, that remedial works should be covered by the guarantee. The measure will not be eligible under ECO where there is already a guarantee in place covering the replacement of the existing work. If the guarantee is revoked, then a repair and replacement of a measure would not be eligible under ECO. For example, if the failure of the measure is due to poor building maintenance, which has had a detrimental effect on the ECO measure, then ECO cannot be claimed under these circumstances.

- 4.38. Where there is a building insurance policy for the property, checks will need to be carried out to verify that the insurance will not cover the insulation. These checks could either be an enquiry or claim with the insurance provider or identifying relevant sections in the insurance policy document.
- 4.39. Where there is no guarantee in place, and the remedial work is not covered by building insurance or any other means, consumers should contact the installer who was responsible for the original installation to check if they will provide remediation. If the installer is unable to be contacted or refuses to remediate, the following situations may be suitable for insulation extraction and, where appropriate, re-installation to replace the failed insulation:
 - a) where the extraction is recommended by a suitably qualified independent professional and either the installation of the insulation was completed prior to the guarantee requirements or the guarantee has expired. Evidence should be provided to support the reason for removal (eg C1 monitoring survey, pre-installation building inspection (PIBI), an inspection report, or expired guarantee documentation evidence),
 - b) where the existing insulation has failed as a result of poor building maintenance (mould and / or cold spots are not reasons alone) and the issues with the building have been rectified to ensure that the property is in a suitable condition for the insulation to be reinstated. Evidence should be provided to support the reason for removal (ie C1 monitoring survey, PIBI or an inspection report) and to evidence that the building is suitable for new insulation. Ventilation of the property should be assessed to address mould and condensation issues prior to further actions.
 - c) when a material is causing or exacerbating structural damage to a property (eg foam products expanding and causing bowed walls in CWI, or exacerbating rising damp) or where there is an infestation in the insulation that is causing risk to the occupier's health. In these circumstances, we would expect the installer who carried out the initial works to be contacted to rectify the measure. Where this is not possible,

- evidence should be provided to support the reason for removal (eg C1 monitoring survey, PIBI, an inspection report, or expired guarantee documentation evidence).
- d) Where the existing insulation has failed due to damage from flooding. Evidence should be provided to support the reason for removal, along with a report from a suitably qualified independent professional, such as a certified Property Flood Resilience Surveyor. The report from the Property Flood Resilience Surveyor should include an assessment of the flood risk of the property, and a recommendation for an appropriate replacement measure (if any) along with any remediation or flood mitigation measures that may be required to prevent future damage to the measure from flooding.
- 4.40. In these circumstances, a suitably qualified independent professional (eg for CWI and EWI a Chartered Surveyor with the relevant qualifications or a Structural Engineer) must provide appropriate reasoning for removal and replacement including:¹⁰⁷
 - a) detailed reasons for why the insulation has to be removed,
 - b) appropriate evidence that the insulation is directly causing the relevant problems for the premises, and
 - c) a recommendation for the best insulation for the premises (if any).
- 4.41. Extraction of insulation must follow all relevant standards and requirements. Once the failed insulation has been removed, remedial work must be completed, where necessary, to address any building issues that may have caused the initial insulation to become ineffective or to remediate any damage caused to the premises. The premises may then be insulated with suitable insulation where a suitably qualified independent professional deems this appropriate for the building and location.
- 4.42. It is important that the exceptional circumstances relating to the 'before' case for the ECO measure are well documented and all evidence retained in case of audit or in case the measure should be identified as a duplicate with an ECO1, ECO2 (including ECO2t) or ECO3 measure. It is not acceptable to use representative sample surveys of premises

¹⁰⁷ A chartered surveyor accredited with a Royal Institution of Chartered Surveyors (RICS) membership (MRICS) or a Fellow (FRICS) of the association who has qualified through the residential survey and valuation pathway, or a structural engineer accredited with Chartered membership of the Institution of Structural Engineers (MIStructE), or an Associate (AIStructE) or Fellow (FIStructE) of the institution.

¹⁰⁶ A 'Property Flood Resilience Surveyor' is considered to be a person of appropriate skill and experience to determine which measures are appropriate for the replacement. Please contact us to confirm whether an alternative professional is suitably qualified.

- alone (eg borescope images of the elevation of a building) to understand what issues are affecting the pre-existing insulation and if it has failed.
- 4.43. Measures installed under ECO should be notified by 'household', and not per building, therefore only the premises (eg flats) that are experiencing exceptional circumstances that mean the insulation must be removed and potentially replaced with new insulation can be claimed under ECO. If all premises were affected by issues which were causing a health and safety risk to the occupants of the premises and / or the structural integrity of the building, then evidence should be provided for each premises.
- 4.44. Where an insulation measure is installed to a premises that has previously had insulation extracted, this must be notified to the supplier and the evidence outlined above should be provided.
- 4.45. A measure may be rejected if we find it has been preceded by an extraction that does not comply with the guidance. We expect suppliers to have processes in place to check that insulation was not present in the property prior to the measure being installed. For example, one method to check whether CWI was previously present in the property is to check historical EPCs where they are available.

Removal of Cavity Wall Insulation

- 4.46. The following situations may be suitable for cavity wall extraction and, where suitable, the re-insulation of the wall under ECO to replace the failed insulation:
 - a) Foam products expanding and causing bowed walls
 - b) Insulation exacerbating rising damp issues in the building.
- 4.47. The installation of SWI in instances of failed CWI will not count as solid wall insulation for the purposes of a supplier's solid wall minimum requirement (SWMR) or PRS F&G eligibility.

Removal of pre-existing loft insulation

4.48. We may consider removal and replacement of loft insulation under exceptional circumstances, ie health and safety reasons. The following situations may be suitable for loft insulation extraction and, where suitable, the re-insulation of the loft under ECO to replace the failed insulation:

- a) Presence of asbestos in insulation material. In such instances, the supplier should ensure the appropriate health and safety checks and procedures for removal have been carried out. Suppliers should contact us to discuss such circumstances prior to installation.
- 4.49. Where no pre-existing loft insulation is present during the assessment of the premises, but insulation has been recently removed (within the six months prior to the assessment) the measure must be notified as loft insulation >100mm, except in some exceptional circumstances as outlined above. In these cases, we will assess which score should be claimed on a case-by-case basis.
- 4.50. When carrying out technical monitoring and score monitoring, suppliers should indicate to the monitoring agent that pre-existing insulation was removed, making it clear why the relevant loft measure was selected.

Window Glazing

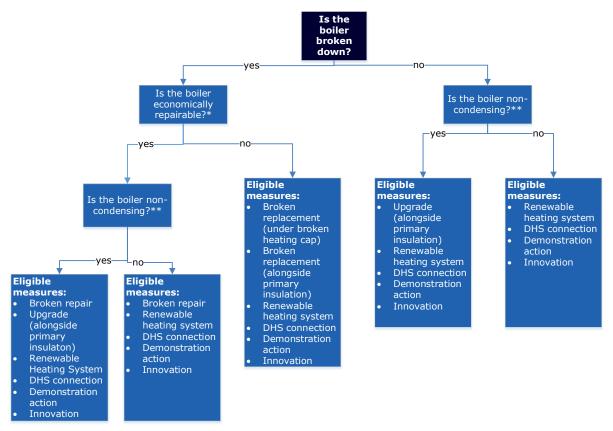
- 4.51. Window glazing can be installed as either 'single to double' or 'improved double glazing'.
- 4.52. 'Single to double' is the replacement of single glazed windows, to glazing which meets the current building regulations. This may be double or triple glazing.
- 4.53. 'Improved double glazing' is the replacement of double glazed windows that do not meet current building regulations. Such windows can be replaced with double or triple glazing that does meet current building regulations.

Heating measures

Boilers

- 4.54. This section should be read in conjunction with Appendix 3 Boiler information pack, which provides an overview of the different boiler measures which are eligible in ECO. It also details:
 - a) when a boiler installation is considered to be a broken boiler replacement, repair, or the upgrade of an inefficient system and how the boiler is assessed,
 - b) warranty requirements for the repair and replacement of boilers.
- 4.55. Figure 8 outlines the routes for eligible boiler measures.

Figure 8: Boiler Flowchart



* For information on determining whether a broken boiler can be economically repaired see Appendix 3.

4.56. Where a boiler installation replaces a previous heating source, it must be connected to a working heating system. If the heating system is not working then savings will not be achieved and the boiler is not a heating qualifying action.

Replacement of broken heating systems

- 4.57. A boiler is classed as broken down if when connected to electric and fuel supplies, it does not respond appropriately to any demand for heat as required by the central heating or domestic hot water system.
- 4.58. An electric storage heater is broken down if when connected to a working electric supply, it does not store heat or does not deliver any heat.

^{**} Or a system with a manufactured energy efficiency that is no better than a non-condensing boiler. For information on determining whether a boiler is non-condensing see Appendix 3.

- 4.59. For a broken heating system replacement to be eligible, immediately prior to the installation the premises must have a boiler, central heating system or DHS connection which has broken down and cannot be economically repaired or have one or more electric storage heaters, all of which are broken down and cannot be economically repaired.
- 4.60. The ECO scheme includes a cap on the replacement of all broken heating systems. No more than 21.023% of a supplier's total obligation can be achieved by the replacement of broken heating systems. The following measures can be installed outside of the broken heating system cap:
 - First Time Central Heating (FTCH)
 - a renewable heating system
 - a district heating system
 - a secondary heating measure when installed alongside a primary insulation measure
 - a demonstration action or an innovation score uplift measure
 - the installation of heating controls
- 4.61. If the broken heating system does not meet the definition of a boiler in paragraph 11.3, for example a warm air system, it can be replaced with a boiler measure under the cap however the associated uplift¹⁰⁸ cannot be applied to the score.
- 4.62. Premises heated by room heaters, or with no heating, would normally be able to receive a First Time Central Heating measure (see paragraph 4.82 onwards). Where they do not meet the relevant criteria, these premises are eligible for an ESH (room heater) upgrade or a boiler replacement measure under the cap, however the associated uplift cannot be applied. In line with the guidance in section 6 'Identification of the pre-main heating source for the property' (paragraphs 6.26-6.47) if a heating system has been removed from the property for over one year, the property may be eligible for a boiler replacement measure under the broken heating system cap without the uplift. In these scenarios the pre-main heat source should reflect the current heating system used at the property.

97

¹⁰⁸ See Uplifts section, paragraphs 6.52 to 6.56

- 4.63. A supplier must determine whether a broken heating system can be economically repaired. If a broken heating system cannot be economically repaired it can be replaced as a broken heating system measure. Broken heating systems which are economically repairable can be either repaired or upgraded.
- 4.64. The installation of district heating system connections and renewable heating systems are not capped.
- 4.65. Broken heating system replacements that are installed as a secondary measure alongside a primary insulation measure are not capped. Note that where a property has multiple electric storage heaters, and some are broken down and cannot be economically repaired, these can be replaced as a secondary measure.

Repair of broken heating systems

- 4.66. Suppliers should ensure the relevant heating checklist is completed in order to assess whether a boiler should be repaired or replaced.
- 4.67. Boiler repairs and electric storage heater repairs will continue to each be capped at 5% of a supplier's obligation.¹⁰⁹
- 4.68. Once all measures are approved we will determine the percentage of a supplier's HHCRO delivered through repairs. Where the savings for a supplier's repairs exceed the 5% limit we will revoke our earlier approval of some of these measures with total savings equal to the amount by which the limit was exceeded. If we are required to revoke approval of measures, we will work with suppliers to select which measures this will apply to.

Upgrade of inefficient heating systems (alongside the installation of insulation)

4.69. Efficient heating systems which are either working or repairable can only be replaced under ECO if they are replaced with renewable heating systems or district heating system.

¹⁰⁹ Article 12 of the ECO3 Order.

- 4.70. Inefficient heating systems can be replaced with a new heating system, as long as the new system is either renewable or is installed alongside a relevant primary insulation measure.
- 4.71. An 'inefficient' heating system (that is eligible for an upgrade) must meet the following criteria to be eligible under the scheme:
 - a central heating system, district heating connection, or electric storage heating which is not broken down, or if it is broken down, can be economically repaired; and
 - o central heating systems or district heating systems must be either a non-condensing boiler, or a system with a manufactured energy efficiency that is no better than a non-condensing boiler; or
 - electric heating systems (including electric storage heaters) must have a responsiveness rating equal to or less than 0.2 when assessed against the Standard Assessment Procedure (SAP).
- 4.72. Non-renewable inefficient heating system upgrades must be installed alongside primary insulation measures. Paragraphs 4.157-4.158 sets out which measures can be considered primary insulation measures.
- 4.73. The inefficient heating upgrade must be installed:
 - at the same premises where a primary insulation measure(s) has been installed;
 - by the same obligated supplier¹¹⁰ that notified the primary insulation measure(s);
 - on or after the date on which the primary insulation measure(s) was installed;
 - no more than six months after the date on which the primary insulation measure(s) is installed.
- 4.74. One primary measure can support multiple secondary measures within a single premises. For example, where a premises has multiple inefficient heating systems, they could all be upgraded and only one primary insulation measure would be required.

99

¹¹⁰ Or obligated supplier group where applicable

- 4.75. Suppliers should use and retain the relevant heating system checklist to evidence that the heating system replaced meets the definition of 'inefficient', as defined in paragraph 4.71, and we may decide to audit this evidence.
- 4.76. Electric storage heaters can be installed as ESH (room heater) upgrade measures without primary insulation in properties where the existing main heat source is not ESH, a central heating system or a district heating connection. Therefore where the existing main heat source of a property is room heaters of any fuel type including gas, LPG and solid fossil fuel fires to back boiler (where these do not meet the central heating definition), an ESH (room heater) upgrade measure can be installed without primary insulation. These measures should be notified as 'ESH upgrade'.

Smart Thermostats

- 4.77. Smart thermostats must meet the criteria set out in the Boiler Plus Standard. That is, they must incorporate **automation** and **optimisation**.
 - Automation means a control function which automatically adjusts time and temperature settings based on occupancy detection and/or stored data from user adjustments over time.
 - **Optimisation** means a control starts the boiler operation at the optimum time to achieve the setpoint temperature at the start of the occupancy period.
- 4.78. To be considered a smart thermostat for the purposes of ECO3, products installed must also offer some form of wider *connectivity*, such that consumers can remotely control their home temperature via a tablet, smartphone or desktop for greater control over the central heating system. Whilst there is no single definition of smart technology, the deemed score for this measure is based on field trials of smart thermostats which have this feature.

 $^{^{111}}$ All smart thermostats installed under ECO3 must meet these criteria, not only those installed to comply with Boiler Plus (which only applies in England)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/651 853/Boiler_Plus_final_policy_and_consultation_response.pdf

Time and Temperature Zone Control

- 4.79. Time and Temperature Zone Control (TTZC) is defined, in the Standard Assessment Procedure (SAP),¹¹² as a system that allows both the heating times and the temperatures of at least two zones to be programmed independently.
- 4.80. In the case of wet systems, TTZC can be achieved by:
 - Separate plumbing circuits, either with their own programmer, or separate channels in the same programmer.
 - Programmable, communicating or smart TRVs that are able to provide time and temperature zone control (as opposed to standard TRVs which only provide temperature control).
- 4.81. In line with SAP conventions, the TTZC score can only be claimed for smart, programmable, or communicating TRVs if the product is listed in the SAP Product Characteristics Database (PCDB).¹¹³

First Time Central Heating

- 4.82. First Time Central Heating (FTCH) is the installation of central heating systems (including a district heating connection or renewable heating) into insulated¹¹⁴ properties that do not have, and have not previously had, central heating systems.
- 4.83. A central heating system is 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'.¹¹⁵
- 4.84. To count as FTCH, a heating measure must be:
 - a) one of the following:
 - i. a central heating system (include renewable central heating); or
 - ii. a connection to a district heating system.

¹¹² Standard Assessment Procedure (SAP 2012) | BRE Group

http://www.ncm-pcdb.org.uk/sap/searchpod.jsp?id=17.

¹¹⁴ Roof area and cavity walls must be insulated. See 'Pre-conditions for FTCH measures' (from 4.99) for further information.

¹¹⁵ Article 2 of the ECO3 Order.

- b) and installed into a domestic premises that:
 - has never had a central heating system (including renewable central heating),
 or a connection to a district heating system;
 - ii. immediately prior to the installation does not contain any electric storage heaters which are working or repairable and have a responsiveness of more than 0.2 ie broken and not repairable or inefficient; and
 - iii. meets the relevant insulation pre-condition detailed in paragraphs 4.99-4.123.
- 4.85. Where a central heating system is installed, it must meet the definition outlined in paragraph 4.83 and the relevant building regulations, PAS or other relevant requirements, to be eligible.
- 4.86. FTCH installations are not included in the broken heating system cap and do not need to meet the same criteria as primary and secondary measures. However, FTCH installations are required to meet certain insulation pre-conditions (see paragraphs 4.99 to 4.116).
- 4.87. We have developed the deemed scores (see Chapter 6) so that the measure name reflects whether a measure is a FTCH measure. For example, the measure name 'B_First_time_CH_solid' will be used to identify a boiler measure has been installed into a solid walled property as a FTCH measure. This means that separate notifications will not be necessary for FTCH.
- 4.88. For the installation of FTCH into properties other than social housing,¹¹⁶ suppliers will need to collect a declaration to evidence this requirement. This should contain the following wording and be signed by the owner of the property:
 - "I, the owner of the premises, declare that to the best of my knowledge, at no point prior to the installation of the first time central heating, first time district heating system or first time renewable heating system, did the premises have a central heating system, district heating system, or renewable heating system nor, immediately prior to the installation, did the premises did have a working, efficient electric storage heater(s)."
- 4.89. Suppliers should evidence this on a private housing FTCH declaration.

¹¹⁶ See paragraph 3.141 for information on installing first time central heating into social housing.

- 4.90. The wording 'at no point prior' in the declaration refers to premises which do not, and never have had, a central heating system (including renewable central heating) or a district heating connection.
- 4.91. If premises have had a central heating system (including renewable central heating) or district heating connection in the past, but it is not present immediately prior to the delivery of an ECO measure, it is not eligible for FTCH.
- 4.92. Further, where a central heating system or district heating connection is present but not working, the premises is also ineligible for FTCH.
- 4.93. Presence of a central heating system (including renewable central heating), district heating connection, or an electric storage heater may be identified with reference to any available evidence within the premises or records relating to the premises. Examples include an old boiler, pipework, heating controls, radiators, storage heaters or records relating to the premises, such as a valid EPC.
- 4.94. This information is intended as a guide. Following notification of a FTCH measure, if evidence is subsequently found at audit that demonstrates a declaration provided by a social landlord was false and that premises had, at any point prior, a central heating system (including renewable and district heating), the measure will be rejected. Similarly, if it is found that immediately prior to installation the premises had an efficient, working ESH, the measure will be rejected. Evidence of social landlords making false declarations will be reported to the relevant bodies.¹¹⁷
- 4.95. The following are examples of some of the pre-main heating sources that indicate a property is eligible for the delivery of a FTCH measure (if there is no evidence of a prior central heating system):
 - a) electric room heaters, including direct acting room heaters, fan heaters and inefficient electric storage heaters (SAP rating of 0.2 or less);
 - b) gas room heaters;
 - c) gas fire with back boiler;
 - d) solid fossil fuel fire with back boiler;
 - e) direct electric underfloor or ceiling heating (not connected to an electric boiler);

 $^{^{117}}$ Where there is evidence of suspected fraud this will be reported to the Homes and Communities Agency or the equivalent bodies.

- f) bottled LPG room heating;
- g) solid fossil fuel room heaters;
- h) wood/biomass room heating;
- i) oil room heater;
- j) no heating at all.
- 4.96. The examples in paragraph 4.95 are non-exhaustive, and are based on heat sources that do not meet the definition of a 'central heating system'. Suppliers should contact Ofgem prior to installation if they have queries regarding the eligibility of a property for a FTCH measure.
- 4.97. If a premises is eligible for FTCH, the following, non-exhaustive list of heating measure types may be installed as a FTCH measure:
 - a) Gas Boiler
 - b) Biomass Boiler
 - c) Bottled LPG Boiler
 - d) LPG Boiler¹¹⁸
 - e) Air Source Heat Pump
 - f) Ground Source Heat Pump
 - g) Fuel cell mCHP
 - h) Electric Boiler, and
 - i) District Heating Connection New Connection (All measures types).
- 4.98. When installing first time central heating, there is a requirement to provide a full set of heating controls as part of this. This is met where there is a programmer, room thermostat and TRVs on all the radiators outside the room with the thermostat, or a timer and individual networked radiator controls in each room. In this case, the standard 'heating controls' score should be claimed alongside the FTCH score. Alternatively, this requirement can be met by installing a smart thermostat and TRVs on all the radiators

 $^{^{118}}$ The 'LPG Boiler' score is based on the savings achieved from bulk LPG and cannot be used for bottled LPG.

outside the reference room. In this case the scores that should be claimed are the 'smart thermostat no pre P&RT' score, and the TRV score.

Pre-conditions for FTCH measures

- 4.99. First time central heating measures can only be installed at premises which meet preconditions relating to cavity wall and roof (including room-in-roof) insulation.¹¹⁹
- 4.100. These pre-conditions apply for all FTCH measures, including the installation of a district heating connection in a premises which meets the first time central heating criteria as set out in paragraph 4.84.
- 4.101. Either new or pre-existing insulation, or a combination of both, may be used to meet the pre-conditions. Requirements for pre-existing roof and wall insulation are set out in paragraphs 4.103-4.108. Any pre-existing insulation cannot be claimed as an ECO measure.
- 4.102. All areas of cavity wall and roof that can be insulated must be insulated in order for the pre-conditions to be met. Paragraph 2.96 describes what constitutes 100% insulated for certain building elements such as room-in-roofs.

Cavity Wall insulation pre-condition

- 4.103. The cavity wall pre-condition applies to premises with exterior facing cavity walls, including multi-storey buildings and system build premises where exterior walls have a fillable cavity.¹²⁰
- 4.104. To meet the cavity wall pre-condition, all exterior-facing cavity walls¹²¹ of the premises must have insulation fitted, except for exterior-facing walls which:
 - a) are already insulated, or
 - b) have a cavity which cannot have insulation installed.

 $^{^{119}}$ Mobile homes are exempt from the FTCH pre-conditions for insulation.

¹²⁰ It is recognised that where the external walls of a system build premises contain a cavity, this is often not suitable for cavity wall insulation. However, this cannot be assumed and system build premises must be assessed individually to determine whether a fillable cavity is present.

¹²¹ Where a property is made up primarily of solid walls, the area made up of cavity walls must still be insulated.

Roof insulation pre-condition

- 4.105. The roof insulation pre-condition applies to all premises which include the top floor of the building in which they are located (ie premises with external roof area).
- 4.106. To meet the roof insulation pre-condition, premises must have roof insulation in place. We will consider that the pre-condition is met if the total roof area of the premises is insulated, except for any areas we judge cannot be insulated, in line with paragraphs 4.119–4.123.
- 4.107. For the purposes of this pre-condition, 'roof area' means:
 - a) for loft insulation, the area of the floor of the loft
 - b) for rafter insulation, the area of the rafters (when measured from inside the roof)
 - c) for flat roof insulation, the area of the roof, and
 - d) for room-in-roof insulation, the area of the room-in-roof including the common walls / stud walls, sloping ceilings, gable walls, party walls, ceiling, and residual areas.
- 4.108. The 'total roof area' includes any areas not suitable for insulation. For premises with more than one roof type, the total roof area is the sum of any of the areas listed in paragraph 4.107. For example, where the premises have a flat roof and a pitched roof, the percentage insulated is the percentage of the total roof area insulated with flat roof insulation and rafter insulation.

Determining whether the pre-conditions have been met

- 4.109. There are three possible methods for demonstrating that the pre-conditions have been met: a declaration from a retrofit coordinator; a relevant EPC; and documentary or photographic evidence.
- 4.110. If FTCH is being installed as part of a PAS 2030:2019 / 2035:2019 project, the retrofit coordinator can confirm that the pre-conditions have been met. In this case the retrofit

¹²² Roof insulation refers to flat roof insulation, loft insulation, rafter insulation or room-in-roof insulation.

coordinator must complete the declaration in the FTCH Checklist.¹²³ If this cannot be provided, the below paragraphs outline alternative forms of evidence.

- 4.111. Where a FTCH measure is not part of a PAS 2030:2019 / 2035:2019 project, a valid pre-installation EPC can be used to demonstrate that the insulation pre-conditions are met. The EPC report reference number (RRN) must be provided as part of the measure notification. Where an EPC identifies the presence of cavity walls, flat roofs, room-in-roofs, and inaccessible lofts,¹²⁴ the relevant element meets the insulation pre-conditions if it is described in the certificate as "insulated (assumed), or:
 - a) in the case of cavity walls, "with external/internal insulation", "filled cavity", or where a specific U value is entered this is less than or equal to 0.6; or
 - b) in the case of walls identified as 'system build' on an EPC and which contain a fillable cavity, "with external/internal insulation", or where a specific U value is entered this is less than or equal to 0.6; or
 - c) in the case of pitched roof/lofts, "150mm loft insulation" (or greater), or where a specific U value is entered this is less than or equal to 0.5; or
 - d) in the case of flat roofs and room-in-roofs, where a specific U value is entered this is less than or equal to 0.5.
- 4.112. We acknowledge that in some circumstances where there are multiple wall or roof types within a property, or very small areas of wall or roof, not all elements will be listed on the EPC. If it is clear from comparing the EPC to the property that building elements are present but not noted on the EPC, paragraph 4.113 should be followed to check for the presence of insulation. Please contact Ofgem if it is not clear.
- 4.113. Where there is no valid EPC, or where the EPC does not state the wording above, suppliers must demonstrate that retrofit insulation has been installed. Acceptable forms of evidence include the following:
 - Documentary evidence that retrofit insulation has been installed, ie building control certificate or guarantee for the insulation, or

^{123 &}lt;a href="https://www.ofgem.gov.uk/publications-and-updates/first-time-central-heating-ftch-checklist-0">https://www.ofgem.gov.uk/publications-and-updates/first-time-central-heating-ftch-checklist-0

¹²⁴ Applies only to lofts which cannot be accessed. Where there is access to the loft, please see paragraph 4.116.

- b) Geotagged and dated photographic evidence of retrofit cavity wall insulation in line with guidance produced by the ECO Reporting Working Group, or
- c) Geotagged and dated photographic evidence of loft insulation that shows a depth of at least 150mm.
- d) Geotagged and dated photographic evidence of room in roof or flat roof insulation. Where this is not clearly visible, intrusive inspection may be required to demonstrate the presence of insulation.
- 4.114. An EPC stating that cavity walls are 'partially insulated' would not be sufficient evidence to show that the pre-conditions have been met.
- 4.115. In line with the fabric first approach to energy efficiency, the installation of FTCH offers an opportunity to review and improve the fabric of a dwelling. This is to maximise the cost-saving benefit of installing FTCH, and help prepare the dwelling for future heat sources. We therefore expect that, where reasonable opportunities are identified to increase the insulation of a premises receiving FTCH, these are carried out.
- 4.116. In accordance with the above, where there is access to the loft, we expect the level of loft insulation to be topped up to current building standards. At minimum, we expect that where there is access to the loft, the loft insulation depth must be checked.
 - a) If the loft insulation depth is less than 150mm, we require this to be topped up to meet current building regulations, where possible,
 - b) if the loft insulation is equal to or greater than 150mm it does not need to be topped up to meet the pre-conditions.

We do not have a set depth requirement for room in roof and flat roof insulation.

Acceptable justification for not meeting the pre-conditions

4.117. Where the pre-conditions do not apply (ie if a property is made up entirely of solid walls and does not have any external roof area), we expect that this can be evidenced using documentation already collected by suppliers. For example, a completed pre-installation building inspection, or geotagged and dated photographic evidence.

4.118. In a small number of cases it may be impossible, or disproportionately difficult, for the pre-conditions to be met. This should always be assessed on a case by case basis.

Exemptions

- 4.119. We identify two types of exemptions; technical exemptions relating to the physical characteristics of the wall / roof that prevent insulation from being installed, and non-technical reasons.
- 4.120. Several non-technical exemptions, such as where the premises is a listed building and there are specific provisions that prevent CWI being installed, including the required evidence, are set out in Table 15. The reason must always be specific to the property and specifically prevent the installation of insulation to each element.
- 4.121. Additionally, technical reasons related to the physical characteristics of the wall / roof may make the installation of insulation impossible. For both cavity walls and roof, we identify two types of technical exemptions:
 - a) Safety it is not safe to install the insulation. We expect reasons related to safety to affect a limited number of cases. For measures installed in accordance with PAS 2030:2019 and 2035:2019, we will accept sign-off from the retrofit coordinator. The retrofit coordinator must complete the declaration in the FTCH Checklist. For PAS 2030:2017 measures, suppliers should contact Ofgem for advice prior to accepting a reason relating to safety.
 - b) Suitability of the wall / roof the wall or roof type is not suitable for insulation to be installed. For example, if the cavity is too narrow, or contains rubble. The completed FTCH Checklist should identify this reason, and the required supporting evidence should be provided, eg a report by an appropriately qualified chartered surveyor¹²⁵ or structural engineer.¹²⁶ Ofgem may accept alternative evidence to demonstrate that a system built property is non-treatable suppliers should contact Ofgem if they wish to propose alternatives.

¹²⁵ A chartered surveyor accredited with a Royal Institution of Chartered Surveyors (RICS) membership (MRICS) or a Fellow (FRICS) of the association who has qualified through the residential survey and valuation pathway.

¹²⁶ A structural engineer accredited with Chartered membership of the Institution of Structural Engineers (MIStructE), or an Associate (AIStructE) or Fellow (FIStructE) of the institution.

- 4.122.If FTCH is being installed as part of a PAS 2030:2019 / 2035:2019 project, we would accept confirmation from the retrofit coordinator that where small areas have been omitted there is an acceptable reason and all risks, such as ventilation issues, have been mitigated. As above, the retrofit coordinator must complete the declaration in the FTCH Checklist.
- 4.123.All roof or wall area that is to be exempt from the pre-conditions must be specifically covered by a reason listed above, and included in the completed FTCH Checklist. This means that for each type of insulation that could be used to treat the area, a reason must be given as to why it cannot be used. For example, areas of flat roof and pitched roof must be treated separately. All elements of the roof must be considered, a reason applicable to an area of flat roof does not necessarily exempt an area of pitched roof.

Table 15 Example non-technical exemptions for FTCH pre conditions

Why is the property exempt?	Which body must confirm this?	What evidence is required?					
The property is a listed building.	The planning department of your local authority, English Heritage, Historic Scotland, CADW or a chartered surveyor. 127	A letter stating that it is not possible to install cavity / loft insulation due to the building being a listed property.					
The property is in a conservation area.	The planning department of the local authority, English Heritage, Historic Scotland, CADW or a chartered surveyor. 128	A letter stating that it is not possible to install cavity / loft insulation due to the building being located in a conservation area.					
The property houses a protected species that would be materially affected by insulation. (most likely - though not necessarily - bats)	Natural England (Bat Conservation Trust), Scottish Natural Heritage, Natural Resources Wales or a chartered ecologist.	You can contact the national bodies for advice, but may need to arrange a site visit and report by a private ecologist. The letter needs to state which protected species is housed at your property and that					

¹²⁷A member of the Royal Institution of Chartered Surveyors (RICS). Please visit the RICS website to find a chartered surveyor: https://www.rics.org/uk/

¹²⁸For example a member of the Chartered Institute of Ecology and Environmental Management. For more information visit the CIEEM website: https://cieem.net/

		installing cavity / loft insulation would materially affect that species.
Due to local environmental conditions (for example regular exposure to driving rain).	The planning department of the local authority, or a chartered surveyor.	You will need to arrange for a chartered surveyor to visit your property and prepare a report. The report would need to outline what environmental conditions prevent the property from being insulated.
Because it would be otherwise unlawful.	The planning department of the property owner's local authority, English Heritage (the Historic Buildings and Monuments Commission for England), Historic Scotland, CADW, Natural England, Scottish Natural Heritage, the Natural Resources Body for Wales, a chartered surveyor / ecologist.	· ·

Measures installed at non-gas fuelled premises

4.124. Non-gas fuelled premises are premises where the pre-main heat source(s)¹²⁹ is not fuelled by mains gas or a district heating system. Where HHCRO measures are installed at non-gas fuelled premises that remain non-gas fuelled, the score may be subject to an uplift (depending on the type of measure). We outline below how suppliers can identify and evidence a non-gas fuelled premises.

Identifying non-gas fuelled premises

- 4.125. There may be more than one pre-main heat source in the premises. Premises will be considered gas fuelled if any of the premises' pre-main heat sources are:
 - a) fuelled by mains gas, or
 - a) a district heating system

4.126. Heat sources are:

- a) district heating systems
- b) central heating systems which have a boiler or warm air unit and system to distribute heat to more than one room
- c) electric storage heaters
- d) electric underfloor or ceiling heating systems that distribute heat to more than one room
- e) fixed room heaters which provide heat to individual rooms, either supplementing another heating system or providing the heating requirement for the particular room, and
- f) portable room heaters.
- 4.127. The fuel type of the pre-main heat source must be recorded in the declaration of conformity and completed installation. This document must be made available on request.

¹²⁹ Please see paragraphs 6.26-6.47 for more information on identifying the pre-main heat source(s) for a measure.

Microgeneration

- 4.128. When delivering microgeneration measures, the installer must be accredited under the Microgeneration Certification Scheme (MCS) or an alternative certification scheme to demonstrate appropriate skill and experience, and the installation must be carried out in accordance with the relevant scheme's requirements. Product safety must also be considered, and the product certified to ensure it meets any relevant standards.
- 4.129. For Solar PV measures, many variables can affect the cost saving achieved, such as the kilowatts peak (kWp) of the system installed. A methodology to appropriately adjust the Solar PV deemed score based on these variables can be found in paragraphs 6.150-6.159.

Oil and coal heating systems

- 4.130. The installation (including repair, replacement or upgrade) of coal fuelled heating systems are ineligible under the ECO scheme.
- 4.131. Oil fuelled heating systems are only eligible to be repaired or replaced if they are broken.
 All other oil fuelled heating measures are ineligible under the scheme. These restrictions include:
 - a) upgrading an existing system (including an existing oil boiler) to an oil fuelled system;
 - b) First time central heating using an oil fuelled system;
 - c) innovative heating measures fuelled by oil; and
 - d) district heating systems fuelled by oil.
- 4.132. Additionally, oil boilers that are delivered under the scheme cannot be delivered as part of a supplier's rural sub-obligation.
- 4.133. Systems that are only partly fuelled by oil, for example the installation of an air sourceoil hybrid heat pump, are subject to the same restrictions placed on oil boilers.

Renewables

4.134. A	renewable	system ¹³⁰	includes	those	where	the	sources	of	energy	and	technologi	es
aı	re:											

- a) biomass;
- b) biofuels;
- c) fuel cells;
- d) water (including waves and tides);
- e) solar power;
- f) geothermal sources;
- g) heat from air, water or the ground;
- h) combined heat and power systems (but only if the system's source of energy is a renewable source)
- i) biogas
- 4.135. The number of renewable heating systems installed is not capped under the 21.023% total obligation cap for broken heating systems.
- 4.136. This means that any heating system can be replaced with a renewable heating system.

Connections to district heating systems

4.137. The number of connections to district heating systems (DHS) installed is not capped under ECO3. This means that any heating system can be replaced with a connection to a DHS.

¹³⁰ Article 100(4) Energy Act 2008 - http://www.legislation.gov.uk/ukpga/2008/32/section/100

4.138. Following a DHS installation, the property must be left with a full set of functioning heating controls. This includes a programmer, room thermostat, and thermostatic radiator valves (TRVs) on all radiators outside of the room that contains the thermostat (a smart thermostat can be used in place of the programmer and room thermostat). Alternatively the requirement can be met with a timer and individual networked radiator controls in each room. Heating controls must be notified separately using the proxy for DHS as the pre-main heat source. More information on heating controls can be found in paragraph 6.98.

Defining a district heating system

- 4.139. A district heating system (DHS) is a system that delivers heat through pipes or conduits to at least two domestic premises in separate buildings or three domestic premises situated in a single building, provided that those premises are not all located within one house in multiple occupation (HMO), see paragraph 2.39.
- 4.140. DHS are eligible where they meet the relevant requirements associated with the measure.¹³¹ The following are deemed DHS measures:
 - a) a new connection to domestic premises, including a connection to an existing DHS or to a new DHS
 - b) an upgrade of an existing DHS where substantial replacement work is carried out to the plant and/or pipework, or
 - c) the installation of a heat meter to an existing connection. Suppliers cannot notify the installation of a heat meter as a separate measure where it is installed as part of new connection or upgrade (ie a. or b. above).
- 4.141. A boiler assessment checklist should only be completed for a broken DHS if the measure is the installation of a mains gas boiler that is replacing a broken DHS.

115

¹³¹ For more information on the definition DHS, see article 2 of the ECO3 Order.

- 4.142. Suppliers are required to contact us before undertaking a DHS connection in a multi-occupancy or shared property.¹³² If the DHS does not fall into one of these categories, the supplier is not required to contact us although they may do so if they wish using the ECO3 District heating systems (DHS) factsheet and summary of proposal form (SoP).¹³³
- 4.143. Under HHCRO Social E, F, or G, connections to DHS (as defined above) are eligible measures **only** where they are installed as FTCH and where the premises being connected meet both insulation pre-conditions. If the pre-conditions cannot be met for social E, F, or G properties, DHS connections are ineligible.

DHS Consumer Protection Standards

- 4.144. DHS measures must be accompanied by appropriate consumer protection standards.

 DHS projects will either need to be registered with heat sector consumer protection body Heat Trust, or demonstrate that they comply with equivalent standards to those provided by Heat Trust.
- 4.145. A Ground Source Heat Pump district heating connection, such as a system which has a shared ground loop connection where individual premises have their own heat pumps, generally are not required to have any further consumer protection standards such as registration with Heat Trust. Where there is a single Ground Source Heat Pump that supplies multiple premises, these connections would require appropriate consumer protection standards.

Working with Heat Trust

4.146. Heat Trust are the current industry standard for consumer protection of district heating systems and due to their role in DHS they have been specifically designated within the ECO3 Order. As such, the first step when considering the installation of a DHS measure should be to engage with Heat Trust early to better understand the requirements so that they can help with the particular circumstances of the installation.

¹³² For more information on property types, see Chapter 2.

¹³³ https://www.ofgem.gov.uk/publications-and-updates/eco3-district-heating-systems-dhs-factsheet-and-summary-proposal-sop

- 4.147. The ECO3 Order details that "arrangements for consumer protection which are equivalent to the requirements under the Heat Trust Scheme" will be required for DHS connections. We consider the term 'equivalent' in this context to mean equal, or the same. If there are situations that diverge from the Heat Trust requirements, suppliers may choose to discuss these with Heat Trust to work towards a solution, so that the evidence for any deviation can be demonstrated to Ofgem.
- 4.148. Heat Trust are keen to understand any new circumstances and to work with third parties so that a viable solution can be found so that third parties do not have to pursue a potentially administratively intensive equivalence route. The wealth of knowledge that they can provide, as well as the lead in times to become registered, means that Ofgem recommends anyone seeking to install a district heating system to engage with Heat Trust at the earliest possible opportunity.
- 4.149. Under these circumstances the measure notification would detail 'Heat Trust' for the DHS Consumer Protection field.

Equivalent requirements to Heat Trust

- 4.150. If choosing an alternative to Heat Trust, an independent audit report must be completed by a qualified Auditor. The third party auditor must be suitably qualified with relevant industry experience. They must be able to understand and suitably assess equivalence on every aspect of Heat Trust's requirements. ¹³⁴ As such, these requirements form the basis of any checklist or the requirements. To note, if standards go beyond what Heat Trust offers, we would consider the overall package as 'equivalent'.
- 4.151. The audit and report themselves will inevitably vary in scale depending on what is being assessed. However they need to be thorough, detailing not only how they meet the requirements at the time of installation, but also how they will meet the requirements that require ongoing actions such as 24 hour contact services and access to an Ombudsman in the event a complaint is made.
- 4.152. Improvements to Heat Trust standards would need to be incorporated at the time of a third party audit equivalence assessment. However, Ofgem would not expect these improvements to retrospectively take place on previously notified measures. Additionally, any failings on the expected ongoing consumer protection put in place

^{134 &}lt;a href="http://www.heattrust.org/index.php/the-scheme-rules">http://www.heattrust.org/index.php/the-scheme-rules

- would not be assessed by Ofgem, although ultimately we retain the right to audit and ultimately revoke measures if they failed to comply with scheme requirements.
- 4.153. Under these circumstances the measure notification would detail 'Equivalent' for the DHS Consumer Protection field.

Alternative organisations to Heat Trust

- 4.154. As ECO3 progresses, other organisations may seek to offer equivalent assessments.

 Once it can be shown, via an audit on equivalence, that an organisation can provide equivalent requirements to Heat Trust, and update these when Heat Trust updates them, then this organisation will be deemed as equivalent.
- 4.155. We would expect close engagement with any organisations seeking to offer services that are claimed to be equivalent.

Primary insulation and secondary heating measures

4.156. This section details which measures are considered to be primary insulation measures, the eligibility requirements for primary insulation and secondary heating measures as part of inefficient heating systems upgrades or broken heating system replacements, and the conditions which must be met for a primary insulation measure to support a secondary heating measure.

Primary insulation measures

- 4.157. The eligible primary insulation measures are:135
 - underfloor insulation (insulation of at least 50% of the floor area of the lowest storey of the premises containing a habitable room);
 - party wall insulation (insulation of a cavity wall which divides the premises from other premises under different occupation);
 - cavity wall insulation (including to partially-filled cavities), or internal / external
 wall insulation (wall insulation applied to at least 50% of the walls of the
 premises which are exterior facing); or

 $^{^{135}}$ Article 2 of the ECO3 Order. And as per paragraph 2.95, suppliers must install 100% of a measure unless there are reasonable grounds for not doing so.

- room in roof insulation (insulation of at least 50% of the walls and ceilings of a room in the roof space)
- flat roof insulation (flat roof insulation installed to at least 50% of the roof area of the premises);
- park home insulation (insulation applied to at least 50% of the ceiling, floor and walls of a mobile home);
- 4.158. We will consider the following measure types to meet the primary insulation measure criteria where the percentage of property treated (see paragraphs 6.57-6.100) is 50% or more: underfloor, cavity wall, solid wall, room in roof and flat roof insulation. In a small number of cases, room in roof insulation in premises with multiple roof types, there may be uncertainties as to whether the primary insulation measure complies with our percentage of property treated guidance. If a supplier believes they have encountered such a case, they should contact us.

Secondary heating measures

- 4.159. A secondary heating measure is a heating measure, other than a primary insulation measure, that is installed to the same domestic premises on the same day or within six months of the primary measure.
- 4.160. To be eligible under the scheme a secondary heating measure must meet the following criteria:
 - a) it is installed at the same premises where a primary insulation measure(s) has been installed
 - b) it is notified by the same supplier that notified the primary insulation measure(s) and is notified against the same licence as the primary insulation measure,
 - c) it is installed on the same day or no more than six months after the date on which the primary insulation measure(s) is installed, and
 - d) is not the installation of equipment for the generation of heat wholly or partly from oil.
- 4.161. Please note that a secondary heating measure cannot be claimed under ECO unless another primary measure can support it.
- 4.162. More information can be found on these heating measures in paragraph 4.69.

4.163. We refer to the primary insulation measure that *supports* a secondary heating measure as a 'related primary measure'.

Solid wall alternative measures

Uninsulated solid wall premises

- 4.164. An uninsulated solid wall premises is where a premises has at least one exterior facing wall, where at least 50%, by area, of the exterior facing walls are solid walls, and at least 50%, by area, of the exterior facing solid walls do not have internal or external insulation.
- 4.165. Note that internal and external insulation includes insulation installed during construction. For the purposes of meeting the solid wall minimum requirement, we consider solid walls with a pre-insulation U-value of 0.60 or lower as determined by Table 21 to have been insulated during construction.

Meeting the solid wall minimum requirement

- 4.166. For ECO3 the solid wall minimum requirement or 'SWMR' (paragraph 2.8) is achieved by promoting solid wall actions. Solid wall actions can be made up of either solid wall insulation (see paragraph 4.10) or other solid wall alternative measures that provide at least the same amount of savings as those that would be achieved by the installation of solid wall insulation to 95% of an uninsulated solid wall premises.
- 4.167. Any solid wall insulation installed to at least 50% of the external-facing solid walls of an uninsulated solid wall premises can count towards the minimum provided it meets all other eligibility requirements
- 4.168. For the purposes of SWMR, where a property has multiple different types of solid wall which are insulated on the same day they should be notified as separate measures. However, these measures can count toward SWMR as solid wall insulation if at least 50% of the external solid wall of the premises have been insulated.
- 4.169. For example, a property may have two solid wall types (each of which accounts for 50% of the total solid wall area) that are both insulated on the same day. This would be notified as two measures, both of which can count toward SWMR. The SWMR reference number would include the combined POPT of both measures.

Solid wall alternative measures

- 4.170. Solid wall alternative measures can include:
 - a) Insulation
 - b) Heating controls
 - c) Installation, but not the repair, of a renewable heating measure
 - d) A connection to a renewable DHS
- 4.171. A solid wall insulation measure installed to 50% or more of the exterior facing solid walls of a relevant premises counts towards SWMR directly, and cannot count as an alternative measure. Where such a measure has been installed, other measures installed after this date cannot count as alternative measures, as the property would no longer meet the definition of an uninsulated solid wall (though they will still count towards a supplier's HHCRO target). For example, if a premises has 60% solid walls and 40% cavity walls and the solid wall area is insulated, any insulation measure subsequently applied to the 40% cavity wall area cannot be counted towards SWMR.

4.172. The cost savings for these alternative measures must add up to at least the same cost saving as would be achieved by solid wall insulation installed to at least 95%, by area, of the exterior facing solid walls of the same premises. This comparison must be carried out using the scores for the measures with no uplifts applied, and all scores should be rounded to the nearest whole number. Below is the formula for determining the cost score threshold that solid wall alternative measures must meet.

95% cost score threshold = $A \times B$

Where:

A is the listed deemed score for SWI for that property with no uplift applied

B is the percentage of the exterior facing walls which are of solid wall construction

The factor of 95% corresponds to the 'average POPT' factor (see paragraph 6.57 onwards) for solid wall insulation measures, and is already included in the listed scores.

- 4.173. The U-values selected should be the relevant pre-installation U-value for that premises determined using Table 21. Note that the U-values 2.00, 1.70 and 1.00 are the only possible options. We consider walls with pre-installation U-values of 0.60 and better to be insulated, and therefore SWAM thresholds cannot be calculated based on these U-values. A finishing U-value of 0.3 should be used.
- 4.174. Scores from solid wall alternative measures in excess of the equivalent SWI savings would count towards the SWMR obligation. Note that SWI installed to less than 50% (by area, of the exterior facing solid walls of an uninsulated solid wall premises) can be a solid wall alternative measure, but would not count towards SWMR on its own.

¹³⁶ Although this comparison must be made between non-uplifted scores, if an uplift is applicable, it should be included in the alternative measures' scores when they are notified. The scores including the uplifts will count towards the Supplier's SWMR, provided all relevant criteria are met. See Chapters 5 & 6 for further information on scores and uplifts.

Insulation (not SWI to 50%) Solid Wall Heating Controls Insulation Solid Wall Solid Wall Minimum Actions Solid Wall Requirement Renewables Alternative (not repair) Measures **DHS Connection**

Figure 9: Measures that can contribute to SWMR

Notifying SWMR measures

- 4.175. Suppliers should generate a solid wall minimum requirement reference number ('SWMR RN') to provide us with the additional details we need to administer SWMR. The SWMR RN should reference the supplier code, pre-installation position of the SWI measure which could have been installed at the property, followed by percentage of the exterior facing walls which are of solid construction (whether they're insulated or not), followed by a reference number unique to the property. Where a collection of measures have been notified at the same property, this reference number is required to link the measures together. However, if any SWI is installed to 50% or more of the exterior facing solid walls, then any subsequent measures would not contribute towards the SWMR as the premises would no longer be defined as an uninsulated solid walled premises. All standard SWI measures must also enter this unique reference number.
- 4.176. Where the premise has multiple solid wall types that are being treated, the u-value which corresponds to the wall with the largest area should be used in the SWMR RN.
- 4.177. Suppliers should ensure each solid wall alternative measure set is notified against a single licence.
- 4.178. For SWAM measures, where the savings achieved by the measures installed do not exceed the solid wall score equivalent (for example, not enough measures have been installed) then the measures will not count towards a supplier's SWMR.

- 4.179. For SWAM measures, in the event that one of the relevant measures is not approved or is rejected then the other measures would not be counted towards SWMR, unless further measures are installed that meet the equivalent threshold.
- 4.180. In order to be eligible to be transferred between suppliers, all measures notified under a single unique SWI reference number must be transferred together.

Example 1

- 4.181. Premises is 100% external facing solid walls
 - a) Solid Wall Insulation is installed to 60% of the walls.
 - i. Premises is no longer classified as an 'uninsulated solid wall premises' as greater than 50% of the solid walls are now insulated.
 - ii. The SWI installed is a solid wall action and the score contributes towards the SWMR.

Example 2

- 4.182. Premises is 100% external facing solid walls.
 - a) Room-in-roof insulation is installed to 100%
 - Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 60%.
 - ii. Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. Score does not contribute towards the SWMR as it has not reached 95%.
 - b) Heating controls are installed
 - i. Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 5%.
 - ii. Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. The combined alternative measures do not contribute towards the SWMR as they do not add up to 95%.
 - c) Solid wall insulation is installed to 49%
 - i. The solid wall insulation counts as a "solid wall alternative measure"

ii. The combined solid wall alternative measures, including the solid wall insulation, are considered solid wall actions as the 95% cost score threshold has been passed, and the collective score counts towards the SWMR.

Example 3

- 4.183. Premises is 50% external facing solid walls and 50% external facing cavity walls.
 - a) Cavity wall insulation is installed to 100% of the cavity walls
 - Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 80%.
 - Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. Score does not contribute towards the SWMR as it has not reached 95%.
 - b) Room in roof insulation is installed to 100% of the roof
 - i. Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 60%.
 - Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. The combined solid wall alternative measures are considered solid wall actions as the 95% cost score threshold has been passed, and the collective score counts towards the SWMR.
 - c) Solid wall insulation is installed to 40% of the solid walls, and is considered a solid wall alternative measure
 - Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 42% (ie 40 / 95%).
 - ii. Premises remains an 'uninsulated solid wall premises' as 60% of the solid walls are uninsulated.
 - iii. The combined solid wall alternative measures are considered solid wall actions as the 95% cost score threshold has been passed, and the collective score counts towards the SWMR.
 - d) A renewable heating measure is installed
 - i. Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 120%.

- Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
- iii. The combined solid wall alternative measures are considered solid wall actions as the 95% cost score threshold has been passed, and the collective score counts towards the SWMR.

Example 4

- 4.184. Premises is 100% external facing solid walls.
 - a) Room-in-roof insulation is installed to 100%
 - Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 60%.
 - Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. Score does not contribute towards the SWMR as it has not reached 95%.
 - b) Heating controls are installed
 - Cost savings achieved for the measure (relative to the savings achieved if SWI was installed to 95% of the solid walls) are 5%.
 - ii. Premises remains an 'uninsulated solid wall premises' as 100% of the solid walls are uninsulated.
 - iii. The combined alternative measures do not contribute towards the SWMR as they do not add up to 95%.
 - c) Solid wall insulation is installed to 100%
 - i. Premises is no longer classified as an 'uninsulated solid wall premises'.
 - ii. The SWI installed is a solid wall action and its score contributes towards the SWMR.
 - iii. The SWI is not an alternative measure as it is installed to 50% or more of the external facing solid walls. As before, the combined alternative measures do not contribute towards the SWMR as they do not achieve the 95% cost score threshold.

Interactions with the Renewable Heat Incentive (RHI)

- 4.185. ECO and RHI funding cannot be combined for any measures except the installation of ground source heat pumps.¹³⁷ This means that all other qualifying renewable heating measures can only receive support under one of the schemes.
- 4.186. Ground source heat pumps can receive funding under both ECO and RHI when the rights to RHI payments have not been assigned to an obligated supplier or connected person.
- 4.187. Where a measure other than a ground source heat pump installation is claimed under ECO, it will only be approved if it is not accredited on either the Domestic or Non-Domestic Renewable Heat Incentive schemes. The measure will be revoked if accreditation is subsequently gained or discovered.
- 4.188. In the case of a ground source heat pump installation where an obligated supplier¹³⁸ is receiving payments from RHI through assignment of rights, it is not possible for this measure to also be eligible under ECO. Under these circumstances the ECO measure will be revoked.
- 4.189. When notifying a renewable heating measure other than a ground source heat pump installation, the customer should state in the Declaration of Conformity and Completed Installation (DOCC) that the measure has not been accredited under the domestic or non-domestic RHI schemes. In the case of a ground source heat pump installation, the customer should state that RHI payment rights have not been assigned to an obligated supplier or connected person.
- 4.190. The connection of a property to a district heating system (DHS) supplied with heat from an RHI accredited installation can still be an eligible ECO measure, however at minimum the connection to the DHS must not be part of the accredited RHI installation.¹³⁹

¹³⁷ Article 19(1)(d) of the ECO3 Order.

¹³⁸ Or a connected person. Article 19(2) of the ECO3 Order.

^{139 &}lt;a href="https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/key-terms-explained-non-domestic-rhi">https://www.ofgem.gov.uk/environmental-programmes/non-domestic-rhi/contacts-guidance-and-resources/key-terms-explained-non-domestic-rhi.

Interactions with the Green Homes Grant scheme

- 4.191. The ECO3 Order does not anticipate co-funding of ECO with the Green Homes Grant (GHG) scheme. 140 Notwithstanding, BEIS' policy position is that GHG measures must not be the beneficiary of ECO funding. 141 As such, the BEIS GHG terms and conditions 142 stipulate that GHG vouchers cannot be used to fund ECO measures that will be notified by suppliers to count towards their ECO obligations. Accordingly, appropriate action will be taken against installers who breach the GHG terms and conditions.
- 4.192. However, domestic premises will be able to receive support for separate measures under each scheme, for example loft insulation under ECO and cavity wall insulation under GHG.

Interactions with the Warm Home Discount scheme

4.193. ECO and WHD funding cannot be combined for any measures. 143 Under the WHD boilers may be installed as part of the non-core spending industry initiatives and suppliers should have robust processes in place to identify and prevent any potential overlaps.

¹⁴⁰ https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme

¹⁴¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/9
06544/ghg-additional-information.pdf

¹⁴² https://green-homes-grant.service.gov.uk/customer-terms-and-conditions

¹⁴³ See Article 26 of the Warm Home Discount Regulations 2011

5. Determining ECO savings

- 5.1. Each measure receives a score which determines the contribution that the measure makes towards a supplier's HHCRO obligation. This chapter covers:
 - a) an introduction to ECO savings
 - b) methodologies for determining savings
 - c) measure lifetimes
 - d) demonstrating the accuracy of savings, and
 - e) decimal places.

Introduction to ECO savings

- 5.2. A 'score' means the contribution that a qualifying action makes towards a supplier's total Home Heating Cost Reduction (HHCRO) obligation (£). 144
- 5.3. When notifying us of completed measures, suppliers must provide the score for the measure.
- 5.4. Scores are based on the cost saving likely to be achieved by a qualifying action when installed in a domestic premises, over the lifetime of the measure. In certain circumstances, the legislation provides for 'uplifts' multiplication factors to be applied to the cost savings when determining a score. These are provided to encourage delivery of specific measures or treatment of certain property categories.

Methodologies for determining savings

- 5.5. In ECO3 there are four ways to score measures:
 - a) deemed scores
 - b) SAP/RdSAP (DHS only)
 - c) demonstration actions, innovation measures, and monitored measures
 - d) alternative methodology.

¹⁴⁴ Article 2 of the ECO3 Order.

- 5.6. In general, non-DHS measures should be scored using a deemed score. Deemed scores have been developed to be easy to use and to minimise administrative burden.
- 5.7. DHS measures should be scored using SAP/RdSAP.
- 5.8. Demonstration actions are scored using a bespoke formula that is specified in the regulations, and detailed in Section 4 of the ECO3 Guidance: Innovation. Innovation measures and monitored measures should be scored using a deemed score in the first instance. Innovation measures will receive an uplift to their deemed score, and monitored measures will be rescored in line with a proposed methodology, subject to certain conditions being met. For further information, suppliers should refer to the ECO3 Guidance: Innovation.¹⁴⁵
- 5.9. Where there is no deemed score for a non-DHS measure, and sufficient evidence exists to allow a deemed score to be developed, suppliers can apply for an alternative methodology.

Deemed scores

- 5.10. As per the requirements in the ECO3 Order, Ofgem must publish a methodology through which qualifying actions (other than DHS, innovation and surplus actions) should be scored.
- 5.11. Before publishing a methodology, we must have regard to the following:
 - a) SAP
 - b) RdSAP, and
 - c) the desirability of the methodology being easy to use. 146
- 5.12. In accordance with the above we have developed and published the deemed scores methodology, which includes scores for all major measure types except DHS. See Chapter 6Deemed scores for more information on deemed scores.

¹⁴⁵ See https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation

¹⁴⁶ Article 33(3) of the ECO3 Order.

Calculating the savings for district heating systems (DHS)

- 5.13. There are no deemed scores available for district heating systems (DHS) measures. They must be scored either with SAP (Standard Assessment Procedure), RdSAP (Reduced data Standard Assessment Procedure), or a suitable alternative methodology.
- 5.14. When calculating savings using SAP or RdSAP, the software used must be approved. A list of approved software is available on the BRE website. 147 The most up to date version of SAP/RdSAP must be used.
- 5.15. To calculate savings for a measure through SAP or RdSAP, a supplier must first assess the performance of the premises before the measure is installed, and then assess the performance of the premises after the measure has been installed. The savings are the difference between the before and after cases.
- 5.16. To obtain the full score, the annual cost saving must be multiplied by the relevant measure lifetime, and, if applicable, the uplift in Table 16 (see paragraph 5.4).

Table 16: DHS uplifts and eligibility

Uplift	Amount	Eligibility
LA flex F&G non-PRS uplift	1.25	DHS measures installed in owner-occupied
		properties listed in an LA declaration,
		where a pre or post installation EPC shows
		the property is rated F or G.

- 5.17. When calculating savings for a DHS measure, the calculations should take account of the pre-existing insulation (including the pre-conditions).
- 5.18. When using SAP or RdSAP to calculate savings, suppliers must follow the guidelines for the use of those methodologies unless our guidance specifically states otherwise. When using SAP and RdSAP, suppliers must ensure they take the following into account:
 - a) **Location** savings must be calculated using the appropriate weather region, where the methodology allows

¹⁴⁷ For SAP/RdSAP 2012: http://www.bre.co.uk/sap2012/page.jsp?id=2759.

- b) **Occupancy assessment** suppliers should not calculate savings for measures in the 'occupancy assessment' mode
- c) **Product Characteristics Database (PCDB)**¹⁴⁸ fuel prices in the PCDB change every six months and savings must be calculated using the PCDB which was valid at the time of either initial assessment or installation. When 'before' and 'after' cases are used to calculate savings, they must both use the same PCDB and fuel prices
- d) **Percentage of the measure installed** calculations for partial installations can be carried out using any method that forms part of SAP/RdSAP standard practices.

Scoring using Energy Performance Certificates

- 5.19. Suppliers may choose to use the inputs used to produce an Energy Performance Certificate (EPC) as the basis of the SAP or RdSAP savings calculation for a DHS measure. However, suppliers cannot use the estimated savings identified on an EPC.
- 5.20. If score monitoring or an audit of a premises shows that information derived from an EPC and entered into a SAP or RdSAP calculation was inaccurate (with respect to the actual characteristics of the premises), we will treat this as a score monitoring or audit fail.
- 5.21. We are aware that there are existing guidelines in England and Wales for using a sample of EPC assessments to create EPCs for dwellings of a similar type and construction ('sampling' or 'cloning'). When deciding whether or not to use sampling, suppliers should note that, as above, if score monitoring or an audit of premises shows that information derived from sampling and entered into a SAP or RdSAP calculation was inaccurate, we will treat this as a score monitoring or audit fail.
- 5.22. Where the inputs are used to calculate the savings the EPC must be lodged.

District heating system upgrade measures

5.23. The upgrade of a DHS system where substantial replacement work is carried out to the plant and/or pipework can be an eligible measure type under ECO3.

¹⁴⁸ See: http://www.ncm-pcdb.org.uk/sap/searchpod.jsp?id=17.

- 5.24. When calculating the heating cost for a premises connected to a DHS, the only type of upgrade which would be assigned a non-zero cost saving using SAP/RdSAP is the installation of CHP in a DHS system which does not currently include CHP.
- 5.25. Other types of upgrade may in some circumstances provide a heating cost saving to connected households connected to a DHS. Where a supplier wishes to promote such measures (or other DHS measure types which cannot be scored in SAP/RdSAP), they may apply for an alternative methodology in order to score the measures.

Measure lifetimes

- 5.26. The lifetime score for a measure reflects the expected savings that the measure will make over its lifetime. Some of these are prescribed by the ECO3 Order. 149
- 5.27. The ECO3 Measures Table provides the lifetime for each measure.¹⁵⁰ We deem the lifetimes in this table as 'standard'. These lifetimes have been accounted for in the Deemed Scores Matrix but should be used by suppliers when calculating the score through SAP or RdSAP (when calculating scores for District Heating System measures, for example).

Alternative methodologies

- 5.28. Where it is not possible to score a measure using one of the previously described methods (SAP / RdSAP in the case of DHS measures, and deemed scores in the case of non-DHS measures), a supplier may apply to us for approval of an 'alternative methodology'.
- 5.29. Should a supplier wish to apply for an alternative methodology, they should contact us to request an application form.

¹⁴⁹ Article 33 of the ECO3 Order.

¹⁵⁰ See https://www.ofgem.gov.uk/publications-and-updates/eco3-measures-table

DHS alternative methodology

- 5.30. Where SAP or RdSAP do not contain a methodology for calculating the savings for a particular DHS measure, a supplier may apply to us for approval of an 'alternative methodology' to calculate the savings.
- 5.31. Suppliers should apply to us for approval in writing, and include the information required to approve or reject the application. The alternative methodology must include a lifetime for the measure.
- 5.32. A supplier may install measures that require an alternative methodology from the day after it submits the application. However, the supplier will be carrying out the activity at its own risk until the date that we approve the alternative methodology. Measures should not be notified until we have assessed the application.
- 5.33. The following reasons are insufficient for us to approve an alternative methodology: 151
 - a) The alternative methodology produces a higher saving for a measure than SAP or RdSAP, or
 - b) aspects of the SAP or RdSAP methodology are inaccurate for the measure.
- 5.34. We will notify the supplier whether the alternative methodology has been approved or rejected. If we approve an alternative methodology for a particular supplier we will publish it on our website and other suppliers may then use that methodology. Other suppliers that wish to use this methodology must apply to us in writing.

Non-DHS alternative methodology

5.35. Where no suitable deemed score is published for a certain measure type, a supplier may apply for a new set of deemed scores or an alternative scoring methodology. Applications should propose a general description of the measure type, for example by

¹⁵¹ Article 27(4) and 27(6) of the ECO3 Order.

- reference to function, product standards and / or performance. A score or scoring methodology cannot be reserved for a specific named product.
- 5.36. A supplier should explain in its application whether the measure can be scored using SAP/RdSAP and therefore whether a new deemed score could be created based on SAP/RdSAP.
- 5.37. If it can, then the application is for a new deemed score. If not, an alternative scoring methodology should be proposed which has regard to SAP / RdSAP.
- 5.38. We must ensure that the complete set of scores are easy to use, and as such the deemed scores represent averages across a range of products for each measures type. Where a deemed score application relates to an improvement on an existing measure type, the application should include information on the level of improvement, with regard to the existing deemed score. We will only consider new scores where the current deemed scores do not already consider the technology and where the technology provides an improvement which is significantly better than achieved in the existing deemed score.
- 5.39. Deemed score applications must include information relating to the projected scale of delivery of the measure in question.
- 5.40. Where there is no deemed score for a measure and SAP / RdSAP do not contain a methodology for calculating the savings for a particular measure or property type, suppliers may propose an alternative scoring methodology to calculate the savings.
- 5.41. An application for an alternative scoring methodology should set out the methodology clearly and robustly, such that it could be applied consistently by other participants to any relevant installation. Applications must consider the likely performance of the measure once it is installed in domestic premises.
- 5.42. All applications for a new deemed score or an alternative scoring methodology must include a lifetime for the savings. Existing measure lifetimes can be found in the measures table.
- 5.43. Article 33 of the ECO3 Order (as amended) specifies an expected lifetime for wall, underfloor, room-in-roof or park home insulation measures. Applications relating to a variant of one of these measures must use the specified lifetime.

- 5.44. All other applications should include an expected lifetime and supporting evidence. Where the measure is a variant of one which exists within the measures table, the lifetime may be different to that given in the table. A significantly improved lifetime can be sufficient justification for an alternative methodology application.
- 5.45. Suppliers wishing to make an application for a new deemed score or alternative methodology should contact us to obtain an application form. Completed forms should be returned to us for review, and we may request additional information as required.

 The ECO3 Order requires us when reviewing an application to have regard to SAP / RdSAP and the desirability of the methodology being easy to use.
- 5.46. The following would not be considered sufficient justification for a new deemed score or alternative scoring methodology:
 - a) the property assumptions used in the deemed scores are not accurate for a specific property where a measure is to be installed (eg the thermal performance before installation differs from our standard assumptions),
 - b) the measure assumptions used in the deemed scores are not accurate for a specific measure to be installed (eg the improvement caused by a measure differs from our standard assumptions for a measure/measure variant), or
 - c) aspects of the SAP or RdSAP methodology are inaccurate for the measure.
- 5.47. Other reasons which might result in us declining an application include:
 - a) the saving is not sufficiently high to require an alternative score separate to the current deemed score for the measure type, or
 - b) in the case of an alternative scoring methodology application, SAP or RdSAP include a suitable methodology for scoring the measure.
- 5.48. Where suppliers have submitted an application, affected measures may be installed from the day after the application is submitted to us. However, the supplier will be carrying out this activity at its own risk until the application is approved. Measures should not be notified until we have approved the application. Where the measure is at

risk of missing the notification deadline due to this assessment the supplier may apply to us for an extension request. 152

5.49. If the application is approved, the new deemed scores or alternative methodology will be published on our website for use by any supplier.

Guarantee dependent lifetimes for wall, park home, underfloor and room in roof insulation

- 5.50. A wall insulation measure (solid wall insulation or insulation of a cavity wall, including party cavity wall insulation) or a park home insulation measure (insulation of a mobile home, including insulation applied to the floor, walls and ceiling) receives the relevant standard lifetime if the installation is accompanied by an appropriate guarantee.
- 5.51. Additional financial protection is required for underfloor insulation (UFI) and room-in-roof insulation (RIRI). This will entail having an appropriate guarantee of 25 years or more which meets the below criteria. It is a mandatory requirement to have an appropriate guarantee in place for the UFI and RIRI measures completed on or after 1 July 2020.
- 5.52. An appropriate guarantee¹⁵³ is one which meets the following criteria:
 - a) Financial assurance: there must be a mechanism that gives assurance that funds will be available to honour the guarantee
 - b) Duration: lasts for at least 25 years
 - c) Coverage: provides for repair or replacement of a failed measure where appropriate and covers the costs of remedial and replacement works plus materials, and
 - d) Quality Assurance Framework: there must be an assurance framework for the quality of the installation and the product used in the installation. We will assess the suitability of this framework and we may require verification through independent assessment by an independent UKAS-accredited organisation or other appropriate body.

 $^{^{152}}$ See Appendix 1 – Documents and data to be made available on request for more information on extension requests.

¹⁵³ This is referred to as an 'appropriate warranty' in article 33(4) of the ECO3 Order.

- 5.53. Appropriate guarantees, which have been reviewed and are considered to meet the above criteria, are listed on TrustMark's website.¹⁵⁴ If a supplier chooses to use a guarantee not included in the list, which it considers to meet these criteria, TrustMark will assess whether it is an appropriate guarantee. As of 1 January 2020, TrustMark is responsible for reviewing and assessing appropriate guarantee applications.
- 5.54. Suppliers will be required to continue to notify the appropriate guarantee code as part of a measure notification as outlined in the data dictionary. The codes will be available via TrustMark's website once the guarantee has been reviewed.
- 5.55. Where the installation of internal or external wall insulation is accompanied by an appropriate guarantee, the standard lifetime of the measure will be deemed to be 36 years. 155
- 5.56. Where the installation of park home insulation (including insulation applied to the floor, walls or ceiling) is accompanied by an appropriate guarantee, the standard lifetime of that measure will be deemed to be 30 years.
- 5.57. Where the installation of cavity wall insulation and party wall insulation is accompanied by an appropriate guarantee the standard lifetime of these measures will be deemed to be 42 years.
- 5.58. Where a wall installation or park home insulation measure is not accompanied by an appropriate guarantee, the measure will be awarded a zero-year lifetime and subsequently be rejected as it is not achieving the expected cost savings. 156,157

Demonstrating the accuracy of calculations

5.59. Suppliers are required to notify the lifetime scores for completed qualifying actions, and it is our duty to attribute savings to eligible notified actions. If we are not satisfied that a saving is accurate we will ask the supplier to provide the information we need to determine the correct saving.

^{154 &}lt;a href="https://www.trustmark.org.uk/ourservices/financial-protection">https://www.trustmark.org.uk/ourservices/financial-protection

¹⁵⁵ Article 33(2) of the ECO3 Order.

¹⁵⁶ https://www.ofgem.gov.uk/publications-and-updates/response-our-eco2-technical-requirements-consultation

¹⁵⁷ Article 26 of the ECO3 Order¹⁵⁸ See https://www.ofgem.gov.uk/publications-and-updates/eco3-deemed-scores-decision

- 5.60. After receiving this information we will attribute what we consider to be the correct savings to the measure. Until we receive this information, we are unable to attribute savings to a qualifying action.
- 5.61. Score monitoring agents may check the accuracy of scoring inputs when assessing measures. We will also assess the accuracy of savings when they are notified, and we may audit a sample of savings calculations to assess accuracy.
- 5.62. More information on audit and score monitoring is provided in Appendix 1 Documents and data to be made available on request.

Decimal places

5.63. All scores should be notified as whole numbers in pounds sterling with no decimal places (as per the Deemed Scores Matrix). If any calculations are made then rounding to the nearest number should only take place as the final step to produce this score.

6. Deemed scores

- 6.1. This chapter is for any measures scored using a deemed score. For other scoring methodologies see Chapter 5.
- 6.2. Deemed scores determine the contribution certain measures make towards a supplier's HHCRO obligation. Deemed scores are fixed scores for each measure type that are determined using three or four variables.
- 6.3. The deemed scores are published on our website and the information in this chapter should be used together with the scores.¹⁵⁸ The 'Deemed Scores Matrix' contains the lifetime scores for measures, taking into account the average treatable area for the measure type and any uplift (see paragraph 5.4) where applicable.

Using the deemed scores

- 6.4. To determine the appropriate deemed score for a measure, installers must first select the appropriate measure type. They must then identify the basic attributes of the property in which the measure has been installed.
- 6.5. For insulation measures, these attributes are split into three main variables:
 - a) the type of property
 - b) the number of bedrooms in the property, and
 - c) the main heating source of the property.
- 6.6. For heating measures the main wall type of the property (either solid or cavity) is also relevant.
- 6.7. Consideration should also be given to whether any uplifts might apply.
- 6.8. In some cases, the percentage of measure installed and percentage of property treated must also be determined to ensure the correct score is notified.¹⁵⁹

¹⁵⁸ See https://www.ofgem.gov.uk/publications-and-updates/eco3-deemed-scores-decision

¹⁵⁹ See 6.57 onwards for information on how to determine POMI and POPT.

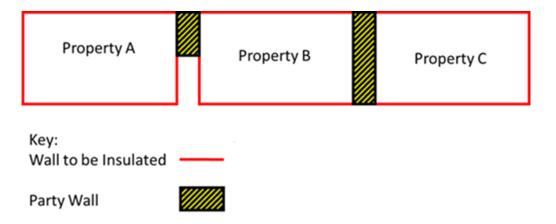
- 6.9. In ECO3, an 'average treatable area' approach is used to simplify reporting. Where the percentage of property treated is at least 67%, the published deemed score can be notified without modification. Where it is not, the score to be notified must be calculated as described from paragraph 6.57.
- 6.10. The rest of this chapter outlines further guidance on how the variables and measure variants should be identified.

Identification of property type

- 6.11. When determining the correct deemed score for an ECO measure, suppliers should select the appropriate property type. The property types in the deemed scores are:
 - a) Semi-detached house
 - b) Detached house
 - c) End-terrace house
 - d) Mid-terrace house
 - e) Semi-detached and end-terrace bungalow
 - f) Detached bungalow
 - g) Mid-terrace bungalow
 - h) Flat with two or fewer external walls
 - i) Flat with three or more external walls
 - j) Maisonette with two or fewer external walls
 - k) Maisonette with three or more external walls
 - I) Single park home (only for use with park home insulation measures)
 - m) Double park home (only for use with park home insulation measures)
- 6.12. In the majority of cases we expect it will be straightforward to identify the relevant property type. However, there may be some instances where it is less clear. Further guidance and some examples of more unusual situations are listed below.
 - a) A maisonette is considered to be similar to a flat, in that they are both dwellings that do not extend to all storeys of the building, but with two or more storeys. We do not consider an enclosed 'porch' area consisting of an external door leading to a staircase

- to be a full storey and in these cases the property should be considered a flat rather than a maisonette.
- b) We would not consider a room-in-roof to be a separate storey. Where a bungalow has a room-in-roof, the bungalow property type should be selected.
- c) For a property to be considered as detached, it should be completely detached from any neighbouring properties. Otherwise the 'semi' property type should be selected.
 Properties that are connected by a garage only would be considered as detached.
- d) For terrace properties, the same principle as for detached/semi-detached as above applies. This is demonstrated in the diagram below. In this example, properties A and C are considered end-terrace and property B would be classed as a mid-terrace property:

Figure 10: Example of terraced properties



- e) For flats and maisonettes the '2 external wall' score should be selected for properties with two or fewer external walls. The '3 external wall' score should be selected for properties with three or more external walls. Any walls adjacent to corridors should not contribute towards the count of external walls. The two variants reflect approximately a 50% external wall area and a 75% external wall area respectively. Where there is ambiguity over which of the two property variants should be selected, the percentage of external heat loss area should be rounded to the nearest option (either 50% or 75%).
- f) Note that whilst the previous paragraph should be used to select the most appropriate deemed score, we expect that for wall insulation measures, all heat loss walls are treated. This includes a perimeter or wall of a flat or maisonette which is adjacent to a communal corridor.
- g) For measures which are the insulation of the walls, floor or roof of a park home, two property types are available. The 'single' park homes are roughly 12 metres long

- and 3 metres wide $(36m^2)$. The 'double' park homes are roughly 12 metres long by 6 metres wide $(72m^2)$. Where the total floor area is different to these standard dimensions the score for the closest floor area should be selected.
- h) Where a measure other than a park home insulation measure (for instance a heating measure or draught proofing) is installed in a park home, the detached bungalow archetype (selecting the heating measure with solid walls) should be used as a proxy. The number of bedrooms selected should be the number of bedrooms in the park home. For example, when selecting a score for a heating measure installed in a park home with two bedrooms, the two bedroom detached bungalow archetype should be selected.
- i) For studio flats (flats with a living room, bedroom and kitchen within one room), the one-bedroom flat score should be selected
- j) For enclosed (back to back) end-terrace properties, the end-terrace score should be selected
- k) For enclosed (back to back) mid-terrace properties, the mid-terrace score should be selected
- 6.13. If there are other situations where it is unclear which property type should be selected, suppliers should contact us prior to notification of the measure.

Identifying the number of bedrooms

- 6.14. To determine the number of bedrooms in a property, the rooms that were designed to be used as a bedroom when the property was built, or have been permanently converted for use as a bedroom (eg through a loft conversion) should be counted.¹⁶⁰
- 6.15. If there is uncertainty regarding the number of bedrooms in the dwelling, the following definition can be used as a guide. 161
- 6.16. All rooms designed to be used as a bedroom, even if they are currently not being used as a bedroom should be included. For example, rooms built as bedrooms but currently used as offices or living space should still be counted as bedrooms.

¹⁶⁰ Or, if the property was converted to a dwelling or has otherwise undergone a major alteration to its floor plan, those rooms which were designed as bedrooms at this point.

¹⁶¹ The definition has been derived from the English Housing Survey (2016-2017).

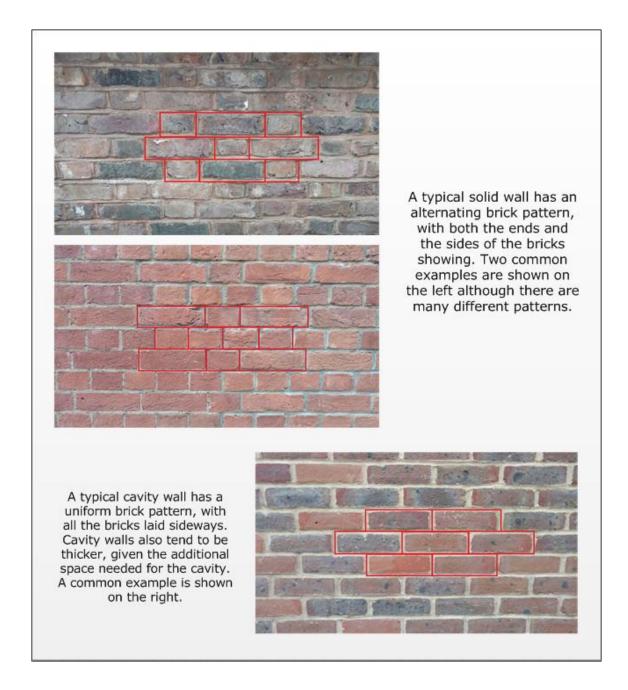
- 6.17. A bedroom also needs to meet all the below criteria;
 - a) it meets the SAP definition of a habitable, 162
 - b) it can accommodate a standard sized single bed horizontally, and
 - c) it is not a conservatory.
- 6.18. For clarity, the following are some examples of rooms that would not be considered as bedrooms:
 - a) any room without a window, and
 - any room that is intended for use as a lounge, kitchen, dining room, kitchen-diner, conservatory, sunroom, utility room, bathroom, en-suite, cloakroom, hallway, stairs, landing or garage, and
 - c) living rooms or dining rooms currently being used for sleeping, unless it is a bedsit.
- 6.19. Suppliers should be satisfied that the number of bedrooms selected is correct. If there are situations where it is unclear whether a room should be considered a bedroom, suppliers should contact us prior to notification of the measure.

Identification of wall type for heating measures

- 6.20. For heating measures, the wall type of the property must be identified to select the correct deemed score, specifically whether the house is predominantly made up of cavity or solid walls.
- 6.21. The identification and evidencing of the main wall type of the property is simple. In many cases as it can be identified from the brick pattern of the walls. Figure 11 shows typical brick patterns for cavity and solid walls.

¹⁶² SAP 2012, S9.1, pp. 141: http://www.bre.co.uk/filelibrary/SAP/2012/SAP-2012 9-92.pdf.

Figure 11: Example cavity wall and solid wall brick patterns



- 6.22. A solid wall can also be non-brick. Examples of what we consider a solid wall are outlined in Chapter 4Information on specific ECO measures.
- 6.23. Where a property is made up of multiple wall types, the wall type that makes up the greatest proportion of the external wall area should be used when selecting the deemed score. For example, for a heating measure installation where the total external wall area is 100m², with 60m² made up of cavity wall and 40m² made up of solid wall, the cavity wall variant of the deemed score should be selected.

- 6.24. Where the wall type is difficult to identify suppliers should seek expert advice prior to notifying the measure.
- 6.25. Note that a more detailed identification is necessary for selecting deemed scores for the installation of internal / external wall insulation. See paragraph 6.101 for more information.

Identification of the pre-main heating source for the property

6.26. The pre-main heating source must be identified to select the correct deemed score for the measure being installed. Selecting the appropriate pre-main heat source for the property can be seen as a tiered system. Table 17 shows these three tiers and the heating systems which fall into each of them.

Table 17 Tiers for identification of the pre-main heat source

Tier	Heating Systems
Tier 1	Central heating systems, including: Boiler based systems Heat pumps Back boiler to radiators Wet underfloor heating systems Warm air systems District heating systems Electric storage heaters
Tier 2	 Room heaters, including: Electric/gas/oil room heaters Fire with no back boiler, or a back boiler which only supplies hot water Underfloor heating using electric coils
Tier 3	No fixed heating system present (eg portable room heaters)

6.27. If a tier 1 heating system is present, this will be considered the pre-main heat source for the property, even if it does not heat the entire property, is broken down, or where the heat source or other component has been removed.

- 6.28. Where there are no tier 1 heating systems in the property, a tier 2 (room heaters) heating system is considered the pre-main heat source, even if it does not heat the entire property, is broken down, or where the heat source or other component has been removed.
- 6.29. Tier 3 relates to properties with no fixed heating system. This includes portable room heaters, which are not considered a space heating system due to being movable and the fact they may not remain in the premises. If no other heating system is present in the property, the proxy "electric room heaters*" should then be used as the pre-main heat source for the entire property.
- 6.30. If the property has two or more heating systems in the same tier heating separate areas of the property, heating measures should be notified as two separate measures with the POPT¹⁶³ for each measure recorded as the proportion of the property heated by each main heating system. For insulation measures the pre-main heat source selected should be the heating system which heats the largest proportion of the property.
- 6.31. Where multiple heat sources on the same tier heat the same area of a property (for example, the same rooms), the system which can achieve the cheapest running costs when functioning should be considered the pre-main heating source for that area ie the heat source which gives the lowest score for the relevant measure should be selected. If suppliers are uncertain which system has the cheapest running costs, they should contact us.
- 6.32. If the property is partially heated by fixed room heaters, and the remainder of the property has no heating, or portable room heaters, then the fixed room heaters should be notified as if they heated the entire property. An example of how this is calculated is provided below paragraph 6.98.
- 6.33. Where the heating source, or part of a heating system such as a boiler has been removed for less than one year, for example due to renovations or where it has been replaced or upgraded, the pre main heat source is the heat source that was in place prior to any removal (and any non-permanent heating should be disregarded).
- 6.34. If a heating source has been removed for over one year, we will not consider this the pre-main heat source. In this case, the heating source currently used in the property is considered the pre-main heat source. Evidence to demonstrate the current heat source

¹⁶³ Percentage of Property Treated – please see paragraphs 6.57-6.100 for further information.

has been in place for at least one year will be considered on a case by case basis. Evidence should be provided as stand-alone files and not embedded within other documents or files. The following is a non-exhaustive list of examples, which may demonstrate the pre-main heat source for a property:

- a) Photos showing the current heating system present at least one year previous. The image file properties must have a record of the date and GPS coordinates, these must not be manually entered or edited,
- b) electricity bills to show a sudden increase from a change in fuel use for space heating,
- c) EPCs, and
- d) Boiler/ESH decommissioning documentation.
- 6.35. The evidence should show that the current heating system has been in place for over one year. For example, an EPC from two years ago which shows gas room heaters are the only heating system in the property. This would demonstrate that gas room heaters have been the PMHS for over one year.
- 6.36. If issues arise that raise doubts around the accuracy of the evidence and data provided, measures will be investigated and may be rejected. Any fraudulent activity, including misrepresenting photographic evidence, may also be reported to law enforcement agencies.
- 6.37. The tiered system will continue to apply in these scenarios, for example if a tier 1 heating system has been removed and a tier 2 heat source is currently being used, the tier 1 heating system will be considered the pre-main heat source for one year following the date of removal. After this, the tier 2 heat source would be considered the pre-main heat source.
- 6.38. Conversely if a tier 2 heat source was upgraded to a tier 1 system, the tier 1 system would be considered the pre-main heat source from the date of installation as it is in a higher tier.
- 6.39. Note that broken or inefficient boilers or ESH which are being replaced under ECO should not be removed until the necessary evidence has been collected to enable the intended

measure to be notified. Where this is not done, it may no longer be possible to carry out the intended measure under ECO.

- 6.40. When installing heating controls, the pre-main heat source is the heating system that will be affected by the controls being installed.
- 6.41. The Deemed Scores Matrix provides scores for common heating sources used in the Great British housing stock. The pre-main heating sources used for the deemed scores are:
 - a) gas boiler
 - b) electric storage heaters
 - c) oil boiler
 - d) LPG boiler
 - e) solid fossil fuel boiler
 - f) electric boiler
 - g) electric room heaters
 - h) gas room heaters, and
 - i) solid fossil fuel room heaters
- 6.42. For heating measures the following pre-main heating sources are also used:
 - a) gas fire with back boiler, and
 - b) gas back boiler to radiators
- 6.43. For park home insulation measures the following pre-main heating sources are also used:
 - a) bottled LPG boiler, and
 - b) bottled LPG room heaters
- 6.44. Where a supplier installs a measure and the pre-main heating source is not reflected in the Deemed Scores Matrix, Table 18 should be used to determine which heating source to use as a proxy for the actual heating source.

Table 18: Deemed scores proxy heating sources

ASHP central heating source ASHP central heating system Biomass district heating system Biomass/wood central heating Biomass/wood room heaters Bottled LPG back boiler to radiators Bottled LPG central heating Bottled LPG shack boiler Bottled LPG range cooker boiler Bottled LPG room heaters Bottled LPG room heaters Bottled LPG range cooker boiler Bottled LPG room heaters Electric room heaters Electric ceiling heaters Electric underfloor heating Electric sorage heaters Electric warm air system Electric boiler* Electric boiler* Electric room heaters* Electric room heaters* Electric room heaters* Electric varm air system Electric boiler* Fuel cell mCHP Gas boiler* Gas boiler* Gas boiler* Gas poom heaters* Gas district heating system Gas boiler* Gas poom heaters Gas poom heaters Gas room heaters* Gas room heaters* Gas room heaters* Gas room heaters* Gas boiler* Gas room heaters* Gas boiler* Gas varm air system Gas boiler* Gas boiler* Gas boiler* Gas boiler* LPG boiler or adiators LPG boiler - Special Condition 184 LPG boiler - Spe	Table 18: Deemed scores proxy neating	
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Solid fossil fuel back boiler to radiators Solid fossil fuel boiler*	Oil room heaters	Gas room heaters*
	Oil warm air system	Oil boiler*
Solid fossil fuel fire with back boiler Solid fossil fuel room heaters*	Solid fossil fuel back boiler to radiators	Solid fossil fuel boiler*
	Solid fossil fuel fire with back boiler	Solid fossil fuel room heaters*

¹air-to-water ASHP or air-to-air ASHP

²In the case of park home insulation measures, a proxy must not be used for these heat sources. The deemed scores matrix contains variants of park home insulation scores with the pre main heat sources bottled LPG boiler' and 'bottled LPG room heater'.

³In the case of heating measures, a proxy must not be used for these heat sources. The deemed scores matrix contains variants of heating measures scores with the pre-main heating sources 'Gas back boiler to radiators' and 'Gas fire to back boiler' where applicable.

⁴Special Condition 18 applies only if the property receives LPG at mains gas prices¹⁶⁴

⁵ Heating controls, smart thermostats and TRV measures installed alongside ASHPs and GSHPs should use the LPG boiler* proxy

¹⁶⁴ See: https://www.ofgem.gov.uk/ofgem-publications/50140/7940-independentnetworksopenletterpdf

- 6.45. When selecting the score for a measure using a proxy heat source from the deemed scores matrix, suppliers should take care to include the asterisk. This indicates to us that a proxy heat source is being used. It also ensures that the correct eligibility and uplift rules can be applied: these should be based on the actual heat source, not the proxy. For example, for insulation measures where the pre-main heat source is 'Gas boiler', there are no scores which incorporate the non-mains gas insulation uplift as these measures would clearly be ineligible for the uplift. However, there are scores which include this uplift for the pre-main heat source 'Gas boiler*'. This is because the actual heat source in this case could be an 'oil range cooker boiler'. Furthermore, a new rare heating source may be identified in future which is not fuelled by mains gas and which requires the Gas boiler* proxy.
- 6.46. Where a heating source is identified which is not included in either the Deemed Scores Matrix or Table 18, suppliers should contact us to determine the most appropriate course of action.
- 6.47. Only certain heating sources are eligible for First Time Central Heating (FTCH), see paragraph 4.97 for more information.

Identification of the post-main heating source for the property

- 6.48. The deemed scores matrix includes scores for installing the following heating sources:
 - a) Air source heat pump
 - b) Bottled LPG boiler
 - c) Biomass boiler
 - d) Electric boiler
 - e) Electric storage heaters
 - f) Fuel cell mCHP
 - g) Gas boiler
 - h) Ground source heat pump
 - i) LPG boiler
 - j) Oil boiler

- 6.49. Guidance on rules and limitations covering the installation of each of these heat sources is given in Chapter 4.
- 6.50. The 'Bottled LPG Boiler' heat source represents boilers fuelled by bottled LPG. The 'LPG Boiler' heat source represents boilers fuelled by bulk LPG only, and cannot be used for bottled LPG. This is due to the differences in savings achieved between bulk LPG and bottled LPG.
- 6.51. If a supplier wishes to notify the installation a heat source which is not on this list, they should refer to the scoring options set out in Chapter 5 and contact us prior to any installations taking place.

Uplifts for deemed scores

- 6.52. Uplifts are applied to scores where required by legislation, and mean that the score for a measure is higher than would be the case were it is based on cost savings alone. They replace the ECO2t concept of "multiplier". Uplifts are set out in Table 19 below, divided into two tiers according to how they are to be applied.
- 6.53. Where a deemed score measure is eligible for a 'Tier 1' uplift, there will be a version of the score for that measure in the deemed score matrix which incorporates the uplift. Note that the reverse is not true: the presence of an 'uplift' version of the score for a measure in the matrix does not mean that all instances of this measure are eligible for the uplift. The uplift can only be claimed for installations which meet the relevant criteria
- 6.54. Tier 1 uplifts cannot be combined. Where a measure is eligible for more than one tier 1 uplift, the largest should be selected.
- 6.55. Tier 2 uplifts are not included in the deemed scores matrix, and are applied manually. Tier 2 uplifts can be combined: for example, where a measure meets the all the relevant criteria, one tier 1 and both tier 2 uplifts can be applied to its score.
- 6.56. Where a measure is eligible for one or both tier 2 uplifts, the score must be calculated by multiplying the score from the matrix (including a tier 1 uplift if applicable) by the relevant values from Table 19. The uplifts should be applied separately and the score rounded to the nearest whole number once the final uplift is applied.

Calculation of deemed scores with tier 2 uplifts

Score = $A \times B \times C$

Where:

'A' is the score for the measure (with a tier 1 uplift if applicable)

'B' is the PAS 2019 uplift if applicable

'C' is the Innovation uplift if applicable

Table 19: Uplifts - eligibility and evidence requirements

Tier 1 Uplifts	Amount	Eligibility
Non-mains gas insulation uplift	1.35	Insulation measures installed to properties in which the primary heat source is not fuelled by mains gas, and which do not have a DHS connection.
Broken central heating uplift (broken cap and renewables)	4.00	Measures which are the replacement of a broken boiler with a new boiler, where the measure either falls within the broken heating system cap or is a renewable heating measure.
Broken central heating uplift (secondary measures)	2.00	Measures which are the replacement of a broken boiler with a new boiler, where the measure is installed as a secondary measure and does not count towards the broken heating system cap.
Broken ESH uplift	2.40	Measures which are the replacement of broken electric storage heaters with new electric storage heaters.
LA flex F&G non-PRS uplifts	1.25	Measures which are installed to owner- occupied properties listed in a LA Declaration, where a pre or post installation EPC shows the property is rated F or G.
Tier 2 Uplifts	Amount	Eligibility
Innovation measure uplift	1.25	Measures installed in accordance with the terms of an approved innovation measure application (provided that innovation caps have not been exceeded - see Chapter 4 of the ECO3 Guidance: Innovation). ¹⁶⁵
PAS 2030:2019 uplift	1.20	Measures which are installed on or after 1 January 2020 and before 30 June 2021 in accordance with PAS 2030:2019 and by a TrustMark registered installer.

¹⁶⁵ https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation.

Average Treatable Area and Percentage of Property Treated

- 6.57. The published deemed scores take account of the fact that it is often not possible to treat 100% of a property when installing a particular measure.
- 6.58. For most measure types, on average less than 100% of the property is treated. An average percentage of property treated has been developed for each different measure type. The published deemed scores incorporate this average percentage.
- 6.59. Suppliers may claim the score in the deemed scores matrix provided that at least 67% of the property is treated. This is intended to simplify the scheme. Note that 100% of a measure must always be installed unless there are reasonable grounds for not doing so.
- 6.60. Where less than 67% of the property is treated, suppliers will be required to calculate a more appropriate score using the exact percentage of property treated. The calculation is described in paragraph 6.61.

Percentage of measure installed and percentage of property treated

6.61. Percentage of measure installed (POMI) and Percentage of property treated (POPT) are determined using the formulae below. Where POMI is less than 100%, suppliers should retain evidence of the reasons for this. Our intention is to incorporate any relevant industry technical guides once finalised and published, and we will communicate directly on these as they are published. Until then, for IWI measures completed on or after 1 April 2021, suppliers should also retain evidence to demonstrate that the IWI Interim Approach Flowchart¹⁶⁶ has been followed. When notifying a measure for which POPT is less than 67%, we require the exact POPT to be included in the notification. Where POPT is 67% or more, it can be notified as "67+". However, it may still need to be calculated to ensure that the 67% requirement is met.

¹⁶⁶ https://www.theiaa.co.uk/partial-insulation-for-iwi/

Percentage of Measure Installed (POMI)

POMI =
$$(A \div B) \times 100$$

Where:

'A' is the area that the measure is installed to

'B' is the total area that the measure could be installed to

Percentage of Property Treated (POPT)

POPT =
$$(A \div C) \times 100$$

Where:

'A' is the area that the measure is installed to

'C' is the total 'similar' area of the property:

- o For EWI, IWI and CWI this is the total heat loss wall area.
- o For party wall insulation this is the total party wall area.
- For roof insulation, loft insulation and room-in-roof insulation this is the total roof area.
- For heating measures this is the total floor area of the property that should be heated.

Process for calculating the score to be notified where POPT is less than 67%

- 6.62. The deemed scores are published with the average POPT already applied. Where the actual POPT is less than 67%, the published deemed score must be divided by the average POPT then multiplied by the actual POPT to calculate the correct value.
- 6.63. This calculation is expressed as a formula below. The symbol x denotes the published deemed score; actual POPT is the percentage of property treated by the measure; average POPT is the average POPT factor which applies to the measure, which is listed in the deemed score matrix. Where the actual POPT is less than 67%:

$$\frac{x}{average\ POPT} \times \ actual\ POPT = deemed\ score\ to\ be\ notified$$

6.64. For example, installer A installs an external wall insulation (EWI) measure to a 3 bedroom semi-detached house, with a gas boiler as its primary heating source. The walls of the property are of both cavity and solid construction, such that 50% of the wall

area is cavity wall and the other 50% is solid wall. The cavity wall is already fully insulated, and installer A installs EWI to the solid wall. *Actual* POPT for this measure is therefore 50%, below the 67% threshold.

- 6.65. Average POPT for EWI measures is 95%, written as 0.95 in the published deemed scores. The deemed score (assuming the wall U value is improved from 1.0 to 0.28 W/m^2K and no uplift applies) is £4,116.
- 6.66. The deemed score that would be notified for this example is thus:

$$\frac{£4,116}{0.95} \times 0.50 = £2,166$$
 (to the nearest £)

6.67. Note that actual POPT when expressed as a decimal (eg for use in calculations) should be rounded to two decimal places. Similarly, if expressed as a percentage (eg for notification) it should be to the nearest whole number. For example, where 50.3% of a property is treated, then 0.50 should be used in calculations and 50% in notifications. Other than this, rounding should only be carried out at the end of the calculation. If, in the above formula, the division by average POPT is carried out as a separate step, the answer should not be rounded before multiplication by actual POPT.

Measure specific POPT principles

6.68. When calculating POPT there are some general measure-specific principles which should be taken into account. These principles are outlined in the following sections, along with examples.

Wall insulation POPT principles

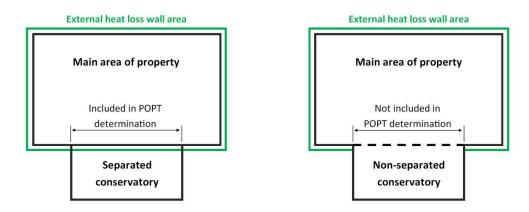
- 6.69. For wall insulation, POPT is 100% when the total external heat loss wall area of the property is insulated as part of the measure. Note that the wall(s) of a flat which are adjacent to a corridor may be considered as an external heat loss wall for the purposes of determining the POPT.¹⁶⁷
- 6.70. If the measure does not insulate all external heat loss wall areas, the POPT would be less than 100%. So long as the POPT is at least 67%, the published score can be claimed

 $^{^{167}}$ Walls adjacent to corridors should not be counted when selecting the appropriate property type, as outlined in paragraph 6.12.

- without modification. If it is less than 67%, however, the score to be notified should be calculated in accordance with paragraph 6.63.
- 6.71. Where some of the external heat loss wall area is already fully insulated prior to the installation of an ECO wall insulation measure, the percentage of the previously insulated wall should be removed from the POPT.
- 6.72. Where some of the external heat loss wall cannot be insulated as part of the installation, the percentage of that wall area should be removed from the POPT. This includes external heat loss wall areas of a different wall type. For example, when installing a cavity wall insulation measure, any solid wall area of the property should be removed from POPT. It also includes areas relating to chimneys, where the chimney forms part of the external heat loss wall area.
- 6.73. For CWI installations, if a property has cavity walls which are partially covered by cladding, tiles, or wooden panelling, these areas must be insulated where possible, either by using a lance, internal drilling, or by removing and replacing exterior cladding. In line with the above paragraph, if these areas are of solid wall construction, then they should be removed from the POPT.
- 6.74. Where a property's external heat loss wall area is both of cavity wall construction and some solid wall construction, and both are insulated, this should be claimed as two separate measures. The average treatable area approach still applies: if POPT for one measure meets the 67% minimum requirement, the relevant deemed score for that measure can be notified without modification.
- 6.75. If a property has external heat loss walls of two types of solid wall construction, and both are insulated, where one construction type has a POPT of ≥67% (meeting the average POPT criteria), only the 67+ SWI measure can be notified. This stands even if there are different initial u-values.
- 6.76. The wall area of separated conservatories (those which are accessible via an external quality door) is not included in this determination. In this case, the wall area between the conservatory and the main part of the property is considered to be the external heat loss wall, and should be insulated.
- 6.77. Where a property has a non-separated conservatory (with an internal quality door), the wall area between the main part of the property and the non-separated conservatory is

not considered to be an external heat loss wall and should not be included in the POPT determination. Both of these scenarios are shown in Figure 12.

Figure 12: POPT diagram for properties with fully glazed conservatories



- 6.78. Please note that where a non-separate conservatory has one or more full-height walls, these are considered external heat loss walls and thus should be included in the POPT determination.
- 6.79. There may be some cases where non-separate conservatories have partial wall areas which could be insulated, such as dwarf walls. Savings are likely to be negligible in such cases. We therefore do not require that dwarf walls of conservatories are considered when calculating POPT. Where a property has a conservatory with dwarf walls, the guidance in paragraph 6.77 should be followed.
- 6.80. Where a property has a garage that is not thermally separate from the dwelling, the wall area of the garage is considered as part of the external heat loss wall.
- 6.81. Where a property has a garage that is thermally separate from the dwelling, the outer walls of the garage are not considered as part of the external heat loss wall. The wall area between the main property and garage is considered to be the external heat loss wall.
- 6.82. For party cavity wall insulation, 100% POPT is the insulation of all party cavity walls. POPT should be calculated based on the area of the party cavity walls that has been insulated divided by the total area of party cavity wall.

6.83. Below are some examples of how to calculate POMI and POPT for wall insulation.

Wall insulation: examples of calculating POMI and POPT

- Where all external heat loss walls are the same type and all are treated with the same measure, both the percentage of measure installed (POMI) and the percentage of property treated (POPT) is 100%.
- For instance if all of a property's external heat loss walls are cavity walls and they are all treated with CWI, then 100% of the measure has been installed and 100% of the property has been treated. The published score should be notified without modification, and POPT can be notified as "67+".
- Another property has solid walls with a total heat loss wall area of 50m² and is to be treated with EWI. One wall with an area of 15m² is tile hung and cannot be treated. The POMI in this case is 100% but POPT is 70%. This still meets the 67% minimum requirement, and the published score should be notified without modification. POPT can be notified as "67+".
- An example of a situation where POPT may be lower than the minimum requirement is where the external heat loss walls are of different construction types. Note that POPT is always the proportion of the total external heat loss wall area of the property which is treated by a measure.
- Consider an uninsulated property which has a total heat loss wall area of 50m², of which 15m² is of cavity wall construction and 35m² is solid wall:
 - o If the total external heat loss cavity wall area is treated with CWI, the POMI is 100% and the POPT is 30%. This does not meet the 67% minimum requirement. Therefore, the score to be notified must be calculated in accordance with paragraphs 6.60-6.67, and the exact POPT notified.
 - o If 20m² of the solid walls were insulated of the available 35m², the POMI is 57%. The POPT is 40%. This does not meet the 67% minimum requirement. The score to be notified must be calculated in accordance with paragraphs 6.60-6.67, and the exact POPT notified. The measure should be notified with a solid wall minimum requirement RN (paragraph 4.175), so that it can be counted towards the supplier's SWMR.

- o If all of the heat loss walls are treated, then the insulation of the cavity wall and solid wall areas should be claimed as separate measures. In both cases POMI is 100%. The POPT for the CWI measure is 30%, and the relevant CWI score to be notified must be calculated in accordance with paragraphs 6.62-6.67. The POPT for the SWI measure is 70%. This meets the 67% minimum requirement, and the published score for the relevant SWI measure should be notified without modification. POPT can be notified as "67+".
- As an example of party cavity wall insulation, consider a mid-terrace property with two party cavity walls; one wall with 10m² party cavity wall and another 40m² party cavity wall.
 - o If only the 10m² party wall was insulated with cavity wall insulation, the POPT for this would be 20%, as 20% of the total area of part wall has been insulated. This would not meet the 67% minimum requirement and the score would need to be modified accordingly.
 - If instead only the 40m² was insulated with cavity wall insulation, the POPT would be 80%. This would meet the 67% minimum requirement and the score could be claimed without modification.

Roof insulation POPT principles

- 6.84. For roof insulation, POPT is considered to be 100% when the entire heated area of the property has received roof insulation. If the measure does not insulate some heated area of the property, the POPT would be less than 100% as only a proportion of the property is treated as part of the measure. As with other measure types, the published score would only be adjusted and exact POPT notified if the 67% minimum requirement is not met.
- 6.85. When calculating POPT for a roof insulation measure, the plan area (ie the footprint) of the roof should be used. Where a property has multiple roof types (eg a pitched roof and a flat roof) the area of all roof types should be taken into account when calculating POPT. Where part of the heated area of the property is not the top storey of a building (for example a ground floor flat with a single storey extension at the rear), this must also be taken into account and POPT reduced proportionately.

- 6.86. When installing additional insulation to a roof area which is already partially insulated, where the existing insulation does not meet the relevant standards, the POPT does not need to be reduced.
- 6.87. The roof area of conservatories (separated or non-separated) should not be included in the determination of POPT.
- 6.88. The roof area of a garage should only be included in the determination of POPT where the garage is not thermally separated from the main property.
- 6.89. Note that where a property has a mansard roof, the sloped area should be considered as roof area if the slope is at an angle of less than 70°. If the angle is more than 70° it is considered to be a wall and shouldn't be considered as part of the roof area. If a sloped area with an angle of more than 70° is being insulated, the score should be determined using the process for external / internal wall insulation from paragraph 6.93 onwards. The wall type will generally be timber frame.
- 6.90. Calculating POPT for room-in-roof insulation (RIRI) is more complex than other roof insulation measures and involves two separate considerations:
 - a) if a property has a single roof space containing a room-in-roof (RIR), the maximum POPT would be 100%. If a property has multiple roof spaces, the percentage of the roof area which is made up of the roof containing the RIR, should be considered. In these cases the maximum POPT for a RIRI measure is less than 100%.
 - b) the percentage of the RIR insulated, not including the residual loft area (the POMI). Where this is less than 100%, the POPT calculated in a) should be scaled down. Paragraph 6.123 explains what is considered to be 100% of a RIRI measure.
- 6.91. The residual area of a RIR is considered as the residual loft area contained within the same roof as a RIR. To be considered as being in the same roof, it should share the same continuous air space. Generally, a common/stud wall, rather than a masonry wall, would separate the RIR from the residual loft areas. Roof areas separated by masonry walls are considered to be separate roofs for this determination.
- 6.92. The determination of the residual area is the same regardless of whether the RIRI 'residual area insulated' score or the RIRI 'residual area uninsulated' score is being claimed. To claim the 'residual area insulated' score, the entire residual area must be insulated.

6.93.	If there is no residual loft area surrounding the RIR, the 'residual area insulated' score should be claimed.

Roof insulation: examples of calculating POMI and POPT for dwellings with different roof constructions

- Where the total heated area of the property has a roof of one type and this is fully insulated using one measure (eg loft insulation or flat roof insulation), both the POMI and the POPT is 100%.
- Where the property has multiple roof types (eg a flat roof and a pitched roof) all roof areas should be taken into account when calculating POPT.
 - For example, a property has a total roof area of 100m², where 28m² is flat roof and 72m² is pitched roof. If the entire flat roof was insulated, the POMI would be 100% and the POPT would be 28%. This does not meet the 67% minimum requirement. Therefore, notification of the measure should include the score calculated in accordance with paragraphs 6.60 to 6.67, and the exact POPT.
 - o In the above example, the loft area within the pitched roof is 72m² of the total 100m² roof area. In this case, if the loft is fully insulated, the POMI will be 100% and the POPT will be 72%. This meets the 67% minimum requirement, therefore the published deemed score can be notified without modification and the exact POPT is not required.
 - Where both the flat roof and pitched roof areas are insulated, these should be claimed as separate measures. The average treatable area approach would still apply: assuming all of the pitched roof area is insulated, the published score for this measure can be notified without modification.
- A ground floor flat has a single storey extension which comprises 20% of the heated area of the property. If the extension roof is insulated, POMI would be 100% and POPT would be 20%. This does not meet the 67% minimum requirement, and notification of the measure should include the score calculated in accordance with paragraphs 6.60 to 6.67.
- A property with a single pitched roof of 80m² containing a RIR with a floor area of 20m². If a supplier insulates only the loft area surrounding the RIR (ie not as part of a RIRI measure), the POMI is 100%. The POPT would relate to the loft area insulated, which is 60m² of the total 80m², 75% of the overall roof. This meets the 67% minimum requirement, therefore the published deemed score can be notified without modification, and the exact POPT is not required. This situation should only apply where the supplier is carrying out loft insulation only and is not insulating the RIR as well.

Room-in-roof insulation: examples of calculating POMI and POPT for dwellings with different roof constructions

- A property has a single pitched roof containing a RIR. If all elements of the RIR are insulated but the residual area is not, the measure type is 'room-inroof insulation - residual area uninsulated'. POMI and POPT are 100%. This meets the 67% minimum requirement, therefore the published deemed score can be notified without modification and exact POPT is not required.
 - If in the above example the residual area is insulated, the deemed score for 'room-in-roof insulation - residual area insulated' should be selected.
 - o If, in either of the above examples, only 63% of the RIR is insulated, then the POMI is 63%. POPT in this case would also be 63%, which does not meet the 67% minimum requirement. The score to be notified should be calculated in accordance with paragraphs 6.60 to 6.67. The exact POPT must be included in the notification.
- A property has two roofs, where one is a pitched roof containing a RIR and the other is a flat roof. The total roof area is 100m², of which the pitched roof containing the RIR has a plan area of 72m² (this includes any residual areas) and the flat roof has a plan area of 28m². If a supplier installs a RIRI measure, they must first consider the percentage of the overall roof area which is taken up by the roof containing the RIR in this case 72%. Then, if any element of the RIR is not insulated, POMI is less than 100%. POPT is obtained by multiplying the 72% by POMI.
 - o If in the above example, all elements of the RIR are insulated but the residual area is not insulated, the POMI is 100% and the deemed score for 'room-in-roof insulation residual area uninsulated' should be selected. POPT is obtained by multiplying the percentage of the overall roof area containing the RIR by POMI, so in this case is 72%. This meets the 67% minimum requirement, therefore the published deemed score can be notified without modification, and the exact POPT is not required.
 - If in the above example, the residual area is insulated and all elements
 of the RIR are insulated, the deemed score for 'room-in-roof insulation
 residual area insulated' should be selected. POMI and POPT are
 unchanged.

- o If, in either of the above examples, only 80% of the RIR is insulated, the POMI is 80%. Therefore the POPT is 80% of 72%, which is 58%. This does not meet the 67% minimum requirement. The score to be notified should be calculated in accordance with paragraphs 6.60 to 6.67, and the notification should include the exact POPT.
- Were both the flat roof and RIR to be insulated, these should be claimed as separate measures. The average treatable area approach would still apply: assuming all of the RIR is insulated, the published score for this measure can be notified without modification.

Heating measure POPT principles

- 6.94. For heating measures, POPT is 100% when the entire property is heated by the new heating measure. We expect the property to be adequately heated in line with the relevant standards following the installation of a heating measure. If the measure supplies radiator(s) or heater(s) for a room, the measure can be counted as heating the entire room.
- 6.95. We expect scenarios where the POPT of the notified heating measure is less than 100% to be limited to properties with multiple pre-main heat sources in the same tier¹⁶⁸ as the installation may have to be notified as two or more separate measures. However, we still expect the property to be adequately heated following the installation.
- 6.96. The percentage should be determined in terms of the floor area across all floors of the entire property. As with other measure types, the published score would only be adjusted and the exact POPT notified if the 67% minimum requirement is not met.
- 6.97. Where a heating system is being replaced in a property with multiple pre-main heat sources, the POPT should be calculated by identifying the proportion of the floor area of the property that is being heated by the new system.
- 6.98. For heating controls, the percentage of property treated should be the same as the heating system installed in the property. All the heating controls at a property do not have to be replaced to claim 100% of POMI. Suppliers can claim 100% of the measure by bringing the property up to standard. A full set of heating controls should include (as a minimum) a timer, a room thermostat, and thermostatic radiator valves (TRVs)

¹⁶⁸ For information on identifying the pre-main heat source, see paragraphs 6.26-6.38.

installed on all radiators outside of the room that contains the thermostat. Alternatively, the requirement can be met with a timer and individual networked radiator controls in each room.

Examples of calculating POMI and POPT for installation of heating measures

- A mains gas boiler is replaced where 60% of the dwelling is heated by mains gas and 40% is heated by electric storage heaters (ESHs). In this example POMI is 100% and POPT is 60%. This does not meet the 67% minimum requirement. The score to be notified should be calculated in accordance with paragraphs 6.62-6.67, and the notification should include the exact POPT.
- In the above example, if all ESHs are replaced, POMI is 100% and POPT is 40%.
 This does not meet the 67% minimum requirement. The score to be notified
 should be calculated in accordance with paragraphs 6.60 to 6.67, and the
 notification should include the exact POPT.
- Further ESH examples are provided in paragraphs 6.145 and 6.146.

Examples of calculating POMI and POPT for installation of heating measures

- A FTCH measure is installed in a property where 30% of the property is heated by electric room heaters (ERH), 20% is heated by gas room heaters (GRH), and the remaining 50% is unheated or only contains portable room heaters. In this example, a heating measure should be notified as two separate measures one with ERH as the pre-main heat source at 60% POPT, and the other with GRH as the pre-main heat source at 40% POPT.
- Neither of these measures meet the 67% minimum requirement, so the score to be notified should be calculated in accordance with paragraphs 6.62-6.67, and the notification should include the exact POPT.
- 6.99. The deemed scores for boiler measures (including heat pumps) assume that they provide 80% space heating and 20% water heating. In some cases a boiler measure may be installed that is capable of heating the hot water but only provides space heating. In such cases POPT must be reduced by 20%. This would only impact the score to be notified if it reduced POPT below the 67% minimum requirement.

6.100. Where a boiler measure is installed and there are multiple existing heating systems that provide a combination of space and water heating, the supplier should contact us prior to notification to determine the correct POPT.

Measure specific guidance

External / Internal Wall Insulation (E/IWI)

- 6.101. Due to the substantial differences in the thermal conductivity of different wall substrates and differences in E/IWI installations there are more deemed score options for E/IWI than for other ECO measures. The E/IWI variants are expressed in terms of U-value change (for example a change in U-value from 2.0 to 0.3 or from 1.7 to 0.55). All of the variants are listed in Table 20. The assumed starting wall U-values are shown in the left hand column and the assumed finishing U-values are shown in the columns on the right.
- 6.102. Table 21 specifies the starting U-value that should be selected based on wall type and age. Table 22 shows the thickness of insulation necessary for each finishing U-value to be met.

Table 20: E/IWI U-Value variants for deemed scores

Starting wall U-	Finis	hing wall	U-value (W/m²K)		
value (W/m²K)						
2.0	0.6	0.35	0.3	0.25	0.18	
1.7	0.6	0.55	0.32	0.3	0.23	0.18
1.0	0.6	0.45	0.3	0.28	0.21	0.17
0.6	0.35	0.3	0.24	0.18	0.15	
0.45	0.3	0.21	0.17	0.14		4

- 6.103. To select the correct E/IWI score the starting wall U-value should be determined, using the wall type and approximate age of the property in conjunction with the country.
- 6.104. The correct wall type can be identified in line with paragraph 6.21.

Table 21: Starting U values of various wall constructions by age and location

	England and	Wales	Scotland	
Wall Type	Age	Starting U-Value	Age	Starting U-value
	Before 1976	1.7	Before 1976	1.7
Solid brick	1976 - 1982	1	1976 - 1983	1
	1983 - 1995	0.6	1984 - 1991	0.6
	From 1996	0.45	From 1992	0.45
	Before 1976	1.7	Before 1976	1.7
Cavity as built	1976 - 1982	1	1976 - 1983	1
cavity as built	1983 - 1995	0.6	1984 - 1991	0.6
	From 1996	0.45	From 1992	0.45
	Before 1967	2.0	Before 1965	2.0
	1967 - 1975	1.7	1965 - 1975	1.7
System build	1976 - 1982	1	1976 - 1983	1
	1983 - 1995	0.6	1984 - 1991	0.6
	From 1996	0.45	From 1992	0.45
	Before 1976	1.7	Before 1976	1.7
Stone	1976 - 1982	1	1976 - 1983	1
Stolle	1983 - 1995	0.6	1984 - 1991	0.6
	From 1996	0.45	From 1992	0.45
Cob	Before 1996	0.6	Before 1999	0.6
COD	From 1996	0.45	From 1999	0.45
	Before 1949	2.0	Before 1949	2.0
Timbor framo	1950 - 1966	1	1950 - 1964	1
Timber frame	1967 - 1975	0.6	1965 - 1975	0.6
	From 1976	0.45	From 1976	0.45
Filled cavity	Before 1976	0.6	Before 1976	0.6
Filled Cavity	From 1976	0.45	From 1976	0.45

6.105. The finishing wall U-value should be determined using the thickness of external / internal wall insulation installed. Each E/IWI score in the Deemed Scores Matrix assumes a certain thickness of mineral fibre insulation. However, the thickness required to achieve a specified level of thermal improvement will vary depending on the insulation material used.

- 6.106. Table 22 outlines the thickness of insulation required to claim the E/IWI deemed score for different materials. Values have been generated using typical thermal conductivities for each material and rounded up to the nearest 10mm in thickness.
- 6.107. The intention of Table 22 is to show that higher performing materials may not require the same depth of insulation as those outlined in the Deemed Scores Matrix. As such, it is not intended to be a definitive guide and the list of materials in this table is non-exhaustive. However, this information should remove the need for bespoke U-value calculations in the majority of cases.

Table 22: Minimum insulation thickness required to achieve each U-value change (and associated deemed score)

	Minimum	thickness (mm) requi	red to achiev	e U-value	e change
Deemed Score				Graphite		
(U-value	Mineral	EPS 70,		Enhanced		
change)	Fibre	100, 150	EPS 200	EPS	PIR	Phenolic
2 -> 0.6	60	50	40	40	40	30
2 -> 0.35	110	90	90	80	70	50
2 -> 0.3	130	110	100	90	80	60
2 -> 0.25	160	140	120	110	100	80
2 -> 0.18	230	200	180	160	140	110
1.7 -> 0.6	50	50	40	40	30	30
1.7 -> 0.55	60	50	50	40	40	30
1.7 -> 0.32	120	100	90	80	70	60
1.7 -> 0.3	130	110	100	90	80	60
1.7 -> 0.23	170	150	130	120	100	80
1.7 -> 0.18	220	190	170	150	130	110
1.0 -> 0.6	30	30	30	20	20	20
1.0 -> 0.45	60	50	50	40	40	30
1.0 -> 0.3	110	90	80	70	70	50
1.0 -> 0.28	120	100	90	80	70	60
1.0 -> 0.21	170	150	130	120	100	80
1.0 -> 0.17	220	190	170	150	130	110
0.6 -> 0.35	60	50	50	40	40	30
0.6 -> 0.3	80	70	60	50	50	40
0.6 -> 0.24	110	100	90	80	70	60
0.6 -> 0.18	180	150	140	120	110	90
0.6 -> 0.15	220	190	170	150	130	110
0.45 -> 0.3	50	50	40	40	30	30
0.45 ->0.21	120	100	90	80	70	60
0.45 ->0.17	170	140	130	110	100	80
0.45 ->0.14	220	190	170	150	130	110

- 6.108. The thickness values in Table 22 are the minimum required to achieve the corresponding u-value change. Therefore, where the E/IWI measure has a thickness that is between two values in the table the u-value that corresponds to the lower numbered measurement value should be selected.
- 6.109. The minimum thickness values in Table 22 relate to the insulation material alone. We are aware that the entire insulation system is likely to require additional elements, such as render finish and so the final thickness of the system may be greater than the associated value in the table. Note that this applies even to insulation bonded to plasterboard.
- 6.110. Some insulation systems may not be adequately covered by Table 22, for example because they incorporate multiple materials; a version of a material with significantly different thermal characteristics; or a material not included by the table. In these situations, suppliers may calculate the U-value of the wall. Suppliers must contact us if they intend to notify a measure with a calculated post-installation U value, and provide brief details of the system used.
- 6.111. A person of appropriate skill and experience¹⁶⁹ must carry out the U-value calculations. The thermal properties for the existing wall structure used in the calculation must be determined from Table 20, rather than based on an assessment of the actual structure, in order that the overall U-value change is not misrepresented. Where the post-installation U-value is different to the U-values in the Deemed Scores Matrix, the score can be selected based on the nearest U-value achieved by the installation. To select the correct score the finishing U-value should always be rounded up. For example, where the starting U-value is 1.7 and the finishing U-value is 0.5 the value for a U-value change of 1.7 to 0.55 should be selected. Suppliers must retain the calculation and the details of the operative who carried it out.

IWI measures with POMI of less than 100%

6.112. It is recognised that current technical guidance for IWI measures is limited, particularly around installing less than 100% of the measure. As such, a detailed technical guidance document is being produced by BEIS and the wider insulation industry to address this,

¹⁶⁹ Evidence of suitable qualification is through membership of a recognised U-value calculation competency scheme (BBA/TIMSA (UK)), OCDEA membership (England & Wales, Northern Ireland) or any other scheme formally agreed between Accreditation Schemes/Approved Organisations and Government.

and mitigate some of the risks. Until this guide is produced, the IWI Interim Approach Flowchart¹⁷⁰ must be followed, in order to reduce the risk of condensation and mould growth as a result of thermal bridging. The interim approach must be used for all IWI measures completed on or after 1 April 2021. Suppliers should retain evidence to demonstrate that measures have been installed in accordance with the flowchart.

Cavity wall insulation (CWI)

- 6.113. There are currently four types of CWI measures, as shown in Table 23. From 1 April 2019, the first three can only be claimed for CWI measures installed to uninsulated cavities. Where CWI is installed to the remaining air gap in a partially filled cavity, the fourth measure type must be used.
- 6.114. Where CWI is installed to an uninsulated cavity, the correct measure type must be selected based on the thermal conductivity of the CWI product. This information should be available on the product's test certificate. Suppliers should carry out the selection using Table 23.

Table 23: Thermal conductivity for CWI

Cavity Wall Insulation - All values given in units of W/mK				
		Associated range of		
Existing insulation	Measure type	thermal conductivity for		
		products		
	CWI_0.040	0.045 - 0.035		
Uninsulated cavity	CWI_0.033	0.034 - 0.029		
	CWI_0.027	≤ 0.028		
Cavity with partial-fill insulation	CWI_partial_fill	All		

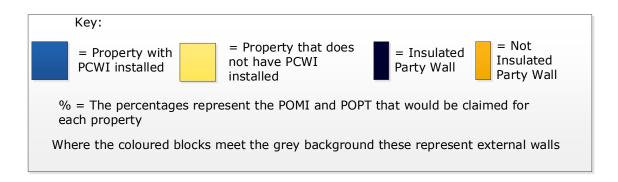
Party cavity wall insulation (PCWI)

6.115. A party wall measure can be claimed for each property adjacent to any walls that are treated, as long as all other eligibility criteria are met for all premises. The installer must obtain the necessary consent from all properties adjacent to the wall before the measure is carried out.

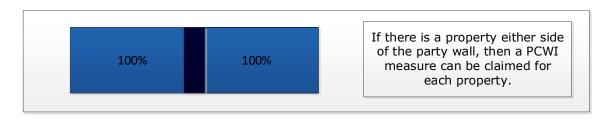
¹⁷⁰ https://www.theiaa.co.uk/partial-insulation-for-iwi/

- 6.116. When claiming for multiple adjacent party wall measures, suppliers should ensure that all the party walls in each property are treated, unless there are reasonable grounds for not doing so. For clarity, if consent cannot be obtained this would be reasonable grounds for not completing 100% of the measure.
- 6.117. If all the party walls in a property are treated this counts as both 100% for percentage of measure installed as well as 100% of property treated. As with other measures, if POPT is 67% or more then the published deemed score can be notified without modification.
- 6.118. The below examples of PCWI installations show how the percentage of measure installed changes depending on the number of party walls which have been insulated. This determination impacts the scoring of the measure. If suppliers are unsure as to how much of the score to claim they should contact us prior to notification of the measure.

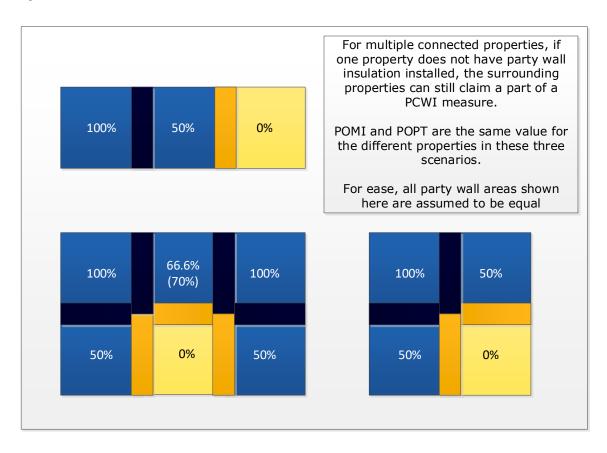
Figure 13: Examples of calculating the percentage of property treated for ECO PCWI measures



Example 1:



Example 2:



- 6.119. The above example assumes all party cavity walls have the same area. However, where there are multiple party cavity walls within the property with different areas, the POPT must be calculated based on the total area (not the number) of party cavity walls that have been insulated, and those that have not.
- 6.120. Note that the POPT of 66.6% which occurs in example 2 would be rounded to 67% and therefore meets the minimum requirement. When notifying the measure for this property, the score should be adjusted using the process in paragraphs 6.60 to 6.67.

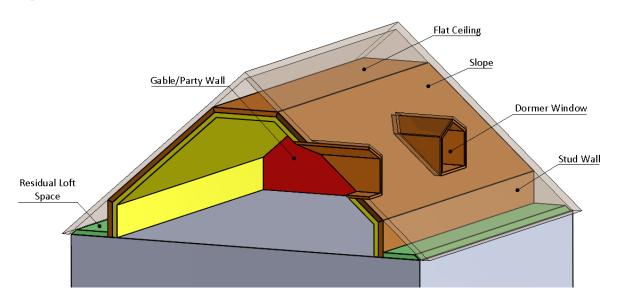
Room-in-Roof insulation (RIRI)

- 6.121. The RdSAP convention on 'Roof room/Attics' should be used to determine whether an area is a room-in-roof or a separate storey. ¹⁷¹ This states that for a room-in-roof to be classed as such and not as a separate storey, the height of the common wall must be less than 1.8m for at least 50% of the common wall (excluding gable ends and party walls).
- 6.122. Where a flat is entirely contained within a room-in-roof, a RIRI measure can be claimed for insulating the relevant elements.
- 6.123. 100% of a RIRI measure includes, where present, the stud wall, sloping ceiling, flat ceiling, dormer windows, party walls and gable walls. As with all measures, they must be PAS compliant and 100% of the measure must be installed unless there are reasonable grounds for not doing so. Where POPT is 67% or more, then the published deemed score can be notified without modification. If it is less than 67%, the score to be notified should be calculated in accordance with paragraphs 6.60 to 6.67.
- 6.124. The party wall always counts towards the POMI and POPT. However, where it is a solid wall adjacent to a heated space, this would be accepted as reasonable grounds for not completing 100% of the measure (ie it could be left uninsulated, but the POMI and POPT would need to be reduced accordingly).
- 6.125. Room-in-roof insulation has two measure variants relating to residual loft space: residual area insulated and residual area uninsulated. The residual area is defined as the loft area in the same continuous air space as the room-in-roof. In Figure 14, it is the area highlighted green, behind the stud walls.

¹⁷¹ See topic 2.06 in https://www.bre.co.uk/filelibrary/SAP/2012/RdSAP-Conventions.pdf

- 6.126. For clarity, insulation of the residual loft area should be completed to the same building regulations standards as a typical loft insulation measure.
- 6.127. Any pipework in the residual area should always be insulated where appropriate and this will be checked during a technical monitoring inspection.

Figure 14: Areas in a room-in-roof



Boilers and heating controls

- 6.128. There should always be a full set of functioning heating controls in the property following a boiler installation. The requirement for heating controls is that they should include (as a minimum) a timer, a room thermostat and thermostatic radiator valves (TRVs) on all radiators outside of the room that contains the thermostat. Alternatively, the requirement can be met with a timer and individual networked radiator controls in each room.
- 6.129. In some cases it may not be necessary for a TRV to be fitted to a heated towel rail in a bathroom. A suitably qualified operative should determine this on a case-by-case basis. In such cases, a full set of heating controls can still be claimed subject to all other relevant standards being met.
- 6.130. All boiler measures (excluding FTCH) have two different scores based on whether heating controls are installed. One is to be claimed where, prior to installation, a full set of heating controls which meet the minimum requirement are already present and functioning ('preHCs'). The other is to be claimed where a full set of controls are not

present or functioning ('noPreHCs'). In the latter case, heating controls must be completed to at least the minimum requirements. The appropriate scores from Table 24 can be claimed alongside the relevant boiler score. For example, when the boiler measure is scored using the 'noPreHCs', a heating control measure can be claimed. Heating control measures can also be claimed when carried out as part of a FTCH installation.

- 6.131. Where no boiler measure is being carried out but heating controls are completed or improved, the appropriate scores from Table 24 may be claimed.
- 6.132. Where a property already has a full set of functioning heating controls, the standard heating controls measure may not be claimed. This applies even where the heating controls are replaced because they are incompatible with a new boiler or heating system which is being installed. This is because there is no cost saving associated with the replacement of working heating controls. A smart thermostat, weather compensation or TTZC measure may still be notified, provided these were not already present.

Table 24: Selection of correct heating controls scores

Measure	Pre-installation heating controls	Score(s) to be claimed
Completion of incomplete standard heating controls (properties which don't have / aren't receiving a smart thermostat)	Incomplete/none (missing programmer, room thermostat and/or missing TRVs)	Heating controls score
Smart thermostat installation	No programmer or room thermostat	Smart thermostat no pre P&RT score
	Programmer & room thermostat	Smart thermostat pre P&RT score
Installation of TRVs (in properties with / receiving a smart thermostat)	Smart thermostat, incomplete / no TRVs	TRV score
Installation of weather / load compensation (properties which don't have / aren't receiving a	Incomplete / none (missing programmer, room thermostat and / or missing TRVs)	Compensation no pre HCs score
smart thermostat)	Standard heating controls	Compensation pre HCs score
TTZC installation	Incomplete/none	TTZC score and heating controls score
	Full standard heating controls	TTZC score

6.133. The installation of a smart thermostat can be an eligible measure under ECO3 where the smart thermostat meets the criteria set out in the Boiler Plus Standard. For the definition of automation and optimisation see paragraph 4.77.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/651_853/Boiler_Plus_final_policy_and_consultation_response.pdf

¹⁷²

- 6.134. To be considered a smart thermostat for the purposes of ECO3, installed products must also offer some form of wider *connectivity*, such that consumers can remotely control their home temperature via a tablet, smartphone or desktop for greater control over the central heating system. Whilst there is no one definition of smart technology, the deemed score for this measure is based on field trials of smart thermostats which have this feature.
- 6.135. The three sets of deemed scores associated with this application are outlined in Table 25.

Table 25: Outline of the deemed scores for smart thermostats

Measure description	Measure type for notification	
Smart thermostat (pre-existing	Smarttherm_[walltype]_preP&RT	
programmer and room Thermostat)	Smarttherm_twantypej_prerkk1	
Smart thermostat (no pre-existing	Smarttherm_[walltype]_nopreP&RT	
programmer or room thermostat)	Smarttherm_[wantype]_noprer &x1	
TRV	TRV_[walltype]_smarttherm	

- 6.136. Two are smart thermostat scores covering different installation scenarios: the first should be claimed where a smart thermostat is installed in a property which, prior to installation, has a standard programmer and room thermostat. The second should be claimed if the property does not currently have a programmer or room thermostat.
- 6.137. The TRV (smart thermostat) score can only be claimed when fitting TRVs alongside a smart thermostat installation or when installing TRVs in a property with a pre-existing smart thermostat, such that the property is left with a full set of heating controls.
- 6.138. The standard heating controls score remains valid, but can no longer be claimed where a property has or is receiving a smart thermostat.
- 6.139. Where weather or load compensation is installed in a property the compensation measure can be claimed, provided that:
 - weather or load compensation is not currently present;
 - the property has not had and is not receiving a smart thermostat measure.

- 6.140. The compensation score can be claimed where compensation controls are added to a compatible boiler alone or as part of a standard heating controls measure, or where a boiler is installed which incorporates the functionality and the functionality is activated. The compensation measure cannot be combined with a smart thermostat measure as the smart thermostat score assumes the unit includes weather compensation functionality.
- 6.141. Time and Temperature Zone Control (TTZC) is defined, in the Standard Assessment Procedure (SAP),¹⁷³ as a system that allows both the heating times and the temperatures of at least two zones to be programmed independently. For more information on the definition of TTZC see paragraph 4.79.
- 6.142. To claim the TTZC score for smart, programmable, or communicating TRVs, the devices should be installed on all radiators outside the room with the thermostat. This is in line with the requirements for standard heating control measures.
- 6.143. The TTZC scores assume the property has a full set of functioning heating controls (programmer, thermostat and TRVs) as a baseline. If the property does not have a full set of heating controls, the TTZC measure should be installed alongside a programmer and room thermostat. Both the TTZC score and the heating control score can then be claimed.

Electric Storage Heaters (ESH)

- 6.144. An electric storage heater (ESH) measure can only have 100% POPT if all electric storage heaters in the property are repaired, replaced or removed as relevant, and the entire property is adequately heated. ESHs may not always need to be replaced on a one-for-one basis, or on a one per room basis. The number, size and placement of the electric storage heaters should be selected based on the heating requirements of the specific property. This may mean installing more or fewer electric storage heaters than were previously present, to adequately heat the entire property. A suitably qualified operative should use the appropriate industry and manufacturer guidelines to determine if the installation will adequately heat the entire property.
- 6.145. Where only some of the ESH in a property are eligible for replacement, or where all are being replaced but for different reasons, POPT must be reduced accordingly. In a scenario where 3 out of 5 ESHs (all of which adequately heat an equal area of the

¹⁷³ Standard Assessment Procedure (SAP 2012) | BRE Group

property) are broken and not economically repairable, and the other two are inefficient, the POPT for the broken ESH replacement would be 60% and the POPT for the inefficient ESH upgrade would be 40%. In either case the 67% minimum requirement is not met, and the scores to be notified should be calculated in accordance with paragraphs 6.60 to 6.67. Note that it would not be necessary for 5 new ESHs to be installed, it could be a different number, provided that the entire property is adequately heated.

- 6.146. In a second example, one efficient ESH heats 40% of the area of a property, two inefficient ESHs heat a further 50% between them, and the remaining 10% is not adequately heated. Two ESHs are installed to upgrade the inefficient ESH, and are sized and positioned to ensure that all parts of the property are adequately heated. The proportion of the property heated by the efficient ESH should be removed from the POPT. This gives a POPT for the measure of 60%. POMI for the measure is 100%, as all the areas of the property heated by inefficient ESH were addressed and the whole property is now adequately heated.
- 6.147. There are two categories of electric storage heaters (ESH) which may be installed under ECO3: fan storage, and high heat retention. There are specific deemed scores for each. Where there is uncertainty as to which category a certain ESH falls into then the manufacturer should be contacted to ensure that the correct score is claimed.
- 6.148. 'Fan storage' electric storage heaters, also known as fan-assisted storage heaters, contain a fan-assisted heat emitter. This enables greater control over the release of the heat stored. This category also includes 'integrated storage+directing-acting' heaters; SAP codes: 404, 407, 408.
- 6.149. 'High heat retention' electric storage heaters deliver the highest savings. To claim this score, suppliers should ensure that the heater meets the current SAP definition; SAP code: 409.

Solar photovoltaics (Solar PV)

6.150. Many variables can have an effect on the efficiency of the Solar PV measure, such as the kilowatts peak (kWp) of the system installed. For this reason, Percentage of Property Treated (POPT) for Solar PV measures should be calculated using the following methodology, rather than the average treatable area approach used for other measures.

- 6.151. Solar PV is an eligible measure where electric heating is the primary heat source of the premises, currently and in future. A Solar PV measure should not be installed in the following situations:
 - a) Where it is planned to install a non-electric primary heat source. Non-electric heating measures cannot take place after a Solar PV measure. This is because PV measures are only eligible where they reduce heating costs, which would not be case with a non-electric primary heat source. In this context, electric heat source includes GSHP and ASHP.
 - b) Where it is planned to be installed alongside an inefficient electric heating system. This is to avoid an instance where the inefficient electric heating system is replaced under FTCH and the Solar PV is no longer utilised to power the primary heating system. We would recommend collecting evidence where Solar PV is installed that the electric heating system in the property is efficient.
- 6.152. The current deemed scores developed for Solar PV are based on the following assumptions;
 - The installed capacity is 2.5kWp;
 - The solar panels are installed in a south facing orientation with an inclination of 30°, and
 - There is modest over-shading
- 6.153. These factors will vary by installation and they can have a material impact on the saving achieved by the measure. In this methodology, the first two factors are used to adjust the POPT for Solar PV measures, such that the score for a given installation better reflects the saving.

Installed capacity

6.154. The current deemed score is based on an installed capacity of 2.5 kWp. If an installation is greater or less than 2.5 kWp, the POPT should be adjusted on a pro-rata basis up to a maximum of 10 kWp. For example, where an installation has an installed capacity of 5 kWp, POPT should be increased to 200% to reflect that the installation has an installed capacity which is 200% of what the deemed score assumes.

Orientation and inclination

- 6.155. The current deemed score is based on solar panels in a south-facing orientation with an inclination of 30°. If installed outside of these parameters, the power generated by the installation could be significantly different to that assumed in the deemed score. To recognise this, the POPT should be adjusted based on an orientation and inclination factor (OI factor). The OI factor represents the expected energy yield when considering the orientation and inclination values of a particular installation.
- 6.156. Suppliers should select the appropriate OI factor based on the orientation and inclination of a specific installation using Table 26. The orientation of a system should be selected on the horizontal axis and the inclination on the vertical axis. Where these points meet will identify the correct band. The key should then be used to identify the OI factor for that band.
- 6.157. Where more than one array of PV panels is being installed (ie a split array), and the OI factor is different for each array, the POPT calculation should be performed for each array and added together to give the total POPT for the measure.
- 6.158. Where the inclination or orientation factors are not listed in Table 26 the figure should be rounded to the nearest figure provided.

Table 26: OI Factors for Solar PV installation of different orientation and inclination

		Orientation																								
			North		North West			West			South West		South			South East			East			North East			North	
		-180°	-165°	-150°	-135°	-120°	-105∘	∘06-	-75∘	∘09-	-45∘	-30∘	-15°	°0	15°	30∘	45∘	∘09	75∘	∘06	105°	120°	135°	150°	165°	180°
	90°																									
Inclination	80°																									
	70°																									
	60°																									
	50°																									
	45°																									
	40°																									
	35°																									
	30°																									
	20°																									
	10°																									
Inc	0°																									

Key:									
Band	OI factor								
colour	(%)								
	35								
	55								
	74								
	86								
	93								
	100								

POPT Calculation Methodology for Solar PV

6.159. POPT for Solar PV is calculated using the formula below:

Solar PV POPT = Installed Capacity / 2.5 (kWp) x OI Factor (%)

Where:

- Installed capacity is the capacity of the system installed in kWp.
- *OI Factor* is the average % energy yield or power generation as determined using Table 26.

As the average treatable area approach does not apply, the score to be notified is calculated simply by multiplying the published score by POPT.

Worked examples of Solar PV methodology

Example 1: A 4 kWp Solar PV installation with an inclination of 20° and orientation of 35° south-east. Table 26 provides an OI factor of 93%.

Solar PV POPT = $4 (kWp) / 2.5 (kWp) \times 93 = 148.8$

POPT is rounded to the nearest whole number giving a POPT of 149%.

Example 2: A 2 kWp Solar PV installation with an inclination of 35° and an orientation of 60° south-east. Table 26 provides an OI factor of 86%.

Solar PV POPT = $2 (kWp) / 2.5 (kWp) \times 86 = 68.8$

POPT is rounded to the nearest whole number giving a POPT of 69%. The average treatable area approach does not apply to Solar PV, so the published deemed score should be multiplied by 0.69 for notification.

Example 3: A 3 kWp Solar PV installation with an inclination of 35° and an orientation of -15° south/south-west. Table 26 provides an OI factor of 100%.

Solar PV POPT = $3 (kWp) / 2.5 (kWp) \times 100 = 120$

POPT is rounded to the nearest whole number giving a POPT of 120%

Example 4: Array one is a 2 kWp Solar PV installation with an inclination of 35° and an orientation of 60° south-east. Additionally, at the same property, array two, a 3 kWp Solar PV array is installed with an inclination of 35° and an orientation of -15° south/south-west.

As detailed in the calculations above, array one results in a POPT of 68.8% and array two results in a POPT of 120%. If these were both installed at the same property as part of the same measure the POPTs should be added together to give a POPT of 188.8%.

Extensions

- 6.160. ECO measures cannot be delivered to an unfinished new build extension. If a measure is installed to a property that has an on-going new build extension then the measure can only be claimed for the existing part of the property. The percentage of property treated must be reduced accordingly. See paragraphs 2.65-2.70 for more information.
- 6.161. As an example, where flat roof insulation is installed to a property with a flat roof, but 20% of the roof area is part of an unfinished extension, the percentage of property treated must be reduced by 20%. This would only affect the score if POPT is reduced below the 67% minimum requirement.

Delivery of multiple measures to a single property

- 6.162. Multiple measures may be installed at the same property, such as measures installed as part of a retrofit project under PAS 2035:2019 or primary and secondary measures. For measures completed on or after 1 January 2020, the pre main heat source for each measure should reflect the heat source of the property at the time it is completed, determined in accordance with paragraphs 6.26 to 6.46. This applies even where it is intended to carry out a subsequent measure which will change the pre main heat source.
- 6.163. For example, if a cavity wall insulation measure was completed at a property heated by an oil boiler, and shortly afterwards a gas boiler is installed, the pre main heat source for both would be the oil boiler. Any subsequent measures would reflect the new heat source.
- 6.164. Different rules apply to measures completed prior to 1 January 2020. In this case, where the main heating source is changed and one or more insulation measures are also installed as part of a single project, the score for the insulation measure(s) should reflect the new heating source.
- 6.165. If the measures in the example above had been installed prior to 1 January 2020 as part of a single project, the pre main heat source for the cavity wall measure would be the gas boiler rather than the oil boiler.

7. Notification of completed measures

- 7.1. For a supplier to achieve its obligations, once a measure is completed it must be notified to us by that supplier.¹⁷⁴ We use the information provided at notification to determine whether or not we will approve a measure. This chapter explains the following:
 - a) when measures must be notified to us
 - b) how measures should be notified
 - c) what information must be notified for each measure
 - d) what happens when a successful notification contains errors
 - e) our approach to late measures, and
 - f) information processing.

When a supplier must notify us of completed measures

7.2. Suppliers must notify us of measures completed on or after 1 January 2020 by the end of the month following the month in which installation of a measure was completed. For example, if a measure is completed in January 2020, its notification deadline is 29 February 2020.¹⁷⁵

When is installation of a measure complete?

- 7.3. The installation of a measure, excluding demonstration actions, is deemed to be complete at handover, at which point it must be able to deliver savings at a level expected for that measure. This will normally be the date on which the installer finishes work on the measure. For demonstration actions, the completion date is the date on which the planned monitoring of the entire demonstration action is completed. Please see the ECO3 Guidance: Innovation for more information.
- 7.4. For measures installed in accordance with PAS 2030:2017, 2030:2019 and 2035:2019,¹⁷⁸ the meaning of handover is defined within these documents.¹⁷⁹ Broadly

¹⁷⁴ Article 24(1) of the ECO3 Order.

¹⁷⁵ Article 25 of the ECO3 Order.

¹⁷⁶ Article 24(3)(b) of the ECO3 Order.

¹⁷⁷ Article 21(3)(a)

¹⁷⁸ See paragraphs 2.75 for information on which version of PAS to refer to.

 $^{^{179}}$ Paragraph 4.2.6 and 5.8.1 of PAS 2030:2017, paragraph 6.9.1 of PAS 2030:2019 and 12.1.2 of PAS 2035:2019.

it includes, where required, any explanation by the installer on the safe, efficient operation of the system, as well as any guidance on care and maintenance. The date of handover must be specified in a Declaration of Conformity and Completed Installation ('DOCC'). 180

- 7.5. For measures that do not need to be installed in accordance with PAS, or if no Declaration of Conformity is produced, the date of handover will be the date on which:
 - a) work on the installation of the measure is finished, and
 - b) any relevant information or documents relating to operating and maintaining the measure are provided to the consumer.
- 7.6. In this case, a declaration of completed installation should be obtained instead. 181 We expect handover to take place within four calendar weeks of the installer finishing work on each measure. However, we understand this may not be feasible where a particular type of measure is installed in multiple premises, where those premises are owned by the same landlord. For example, a block of flats, a row of houses, or where flats and/or houses are on the same estate.
- 7.7. In these circumstances, the installer may hand over to the landlord or its agent (rather than to the tenants of the premises) and may do a single handover for all measures installed of that type. Therefore, all the measures of that type can be notified in the same monthly notification because all the measures will have the same handover date. We expect handover to take place within four weeks of the installer finishing work on the last measure.
- 7.8. Suppliers must be able to evidence the date on which a measure was completed. The documentation a supplier must be able to make available on request to do this is explained in Appendix 1 Documents and data to be made available on request.

¹⁸⁰ Chapter 8 of PAS 2030:2017, chapter 9 of PAS 2030:2019, and chapter 15 of PAS 2035:2019.

¹⁸¹ The declaration must be signed by the occupant, or if unoccupied, the landlord, to confirm the date on which the installer finished work on the installation of the measure as well as the date the measure was handed over.

Notifying a completed measure

- 7.9. Suppliers must use the notification template, ¹⁸² in accordance with the formatting prescribed in the data dictionary, when notifying us of a completed measure. Installers can familiarise themselves with the format and type of data required in the notification template to ensure they understand what we require of suppliers for notifications to be successful. The data dictionary is a reference tool for completing the notification template. ¹⁸³
- 7.10. Suppliers must include all the information as listed in the notification template. Suppliers provide this information to us securely through the ECO Register, which is used to notify measures.
- 7.11. If the information in the notification template is incomplete, the measure can still be notified.¹⁸⁴ However, we are unable to process that measure until the information is complete and, in some cases, we may refuse or revoke approval of a measure if the supplier is not able to provide the required information.
- 7.12. We will review each measure that is successfully notified to us and will inform suppliers of our decision to approve or refuse to approve the savings for that measure. We may require a supplier to clarify the information notified, or provide further information for a notification, before we can make a decision regarding the notified measure.
- 7.13. We intend to process notified measures in a reasonable timeframe (usually one month). Suppliers can use the ECO Register to check the status of a measure, including which measures are being processed, which are on hold and which have been approved or had approval refused or revoked. Suppliers will also be able to view and download notification errors. Our ability to process measures will depend on the quality and completeness of the information provided at notification.
- 7.14. To ensure measures are installed in accordance with PAS 2030:2019 and PAS 2035:2019, TrustMark will issue a Certificate of Lodgement once the project retrofit coordinator has signed off the project and submits a lodgement.

¹⁸² See https://www.ofgem.gov.uk/publications-and-updates/eco3-notification-template

¹⁸³ See https://www.ofgem.gov.uk/publications-and-updates/eco3-data-dictionary

¹⁸⁴ As long as suppliers provide all of the core fields outlined in paragraph 7.21 of the ECO3 guidance: Supplier Administration.

- 7.15. For PAS 2030:2017 the installer submits the lodgement that will generate the Certificate of Lodgement. Any measures installed in accordance with PAS 2030:2017 will not be valid after 30 June 2021.
- 7.16. It is important to note that although measures must be notified after installation, each measure cannot be approved as a qualifying action until the Certificate of Lodgement has been issued for the relevant project.
- 7.17. Suppliers must obtain the TrustMark licence number and TrustMark unique reference number in order to notify the measure to the ECO register. The measure will remain in 'Notified incomplete' status until the certificate ID has been notified.
- 7.18. Once we are satisfied that the information notified is correct, all relevant fields of the notification template are complete and the eligibility criteria are met, we will approve the measure in the ECO Register.
- 7.19. Where a measure does not meet the relevant eligibility criteria, we will refuse to approve or revoke approval of that measure.
- 7.20. It is the responsibility of each supplier to ensure that the information contained in all notifications is true and to manage any third parties involved in the delivery of ECO measures.
- 7.21. Errors in the notification of a completed measure may lead us to refuse or revoke approval of a measure and may lead to enforcement action.
- 7.22. Where the results of any of our checks show that completed measures are not eligible ECO measures, we may refuse or revoke approval of those measures. To demonstrate the eligibility of these measures, suppliers may need to collect more data from the supply chain. Suppliers should ensure that they can readily access the relevant data and documents and provide them within a reasonable timeframe. Once suitable evidence of sufficient quality is provided we will process these measures within a reasonable timeframe. Where such evidence is not provided we may refuse or revoke approval of those measures.
- 7.23. Where we revoke or refuse approval of a measure, we will inform the supplier in writing. Our decision notice will provide details, including the measure reference numbers and reason, for our decision.

Notifying late measures

- 7.24. Where a supplier is not going to notify a measure within the notification deadline, there are two routes to resolve the late notification:
 - a) for a maximum of 5% of measures, the notification deadline can be automatically extended for up to three months, or
 - b) a supplier can apply for an extension to the notification deadline. 185

Automatic extensions for 5% of measures

- 7.25. Up to 5% of the number of measures installed in a particular calendar month, and notified on time, can be given an automatic extension of three months to the notification deadline (the automatic 5%). The first 5% of late measures notified to us for a particular calendar month without an extension request are given this automatic extension.
- 7.26. Where the number of late measures notified exceeds the 5% threshold, these measures will be flagged and an extension request must be submitted.
- 7.27. Where a supplier exceeds the 5% automatic extension quota in a single notification for any given month (ie where there is no distinction between which measures were notified before or after the 5% threshold) these measures will be flagged to the supplier. The supplier must provide us with an initial indication of which measures they wish to be included in the automatic 5% and which will be subject to an extension request within 15 working days of the measures being returned to them.
- 7.28. Measures submitted as late as part of the 5% quota must be notified with a Purpose_of_Notification of 'Automatic Late Extension'.

Determining if measures fall within a supplier's 5% automatic extension quota

7.29. Below is the formula for determining whether measures can be notified within a supplier's automatic extension quota for a given notification period. A late measure falls within a supplier's quota if at the time the measure is notified, the result of the following calculation is less than or equal to 0.05. The calculation uses figures for measures installed in the same month, and is calculated on a group company level.

¹⁸⁵ Article 25(4) of the ECO3 Order

$$\frac{A-B}{C}$$

Where:

A is the total number of late measures notified

B is the number of measures included in an approved extension request that were notified after the original deadline but within the agreed extended period.

C is the number of measures which were notified by the supplier on time

7.30. Where a supplier notifies a late measure that is included in an approved extension request, the measure would not be included in the automatic 5% allowance for that particular month.

Example

- 7.31. Supplier A notifies 3,000 measures with a notification period of January 2020 on time. This would allow Supplier A to notify 150 measures in the following three months (February 2020, March 2020 and April 2020), without needing an extension request.
- 7.32. In February 2020, Supplier A submits 140 measures with a notification period of January 2020. These measures are included in the automatic 5% and processed as normal.
- 7.33. In March 2020, Supplier A submits a further 50 measures with a notification period of January 2020. As these take Supplier A over its automatic extension quota, all 50 of these measures are returned to the supplier.
- 7.34. Supplier A then decides which of these 50 measures it wants to include in the automatic 5% (a maximum of 10) and for which it will submit an extension request. Any subsequent measures notified with a notification deadline of January 2020 will require an extension request.
- 7.35. The 5% calculation is undertaken by the ECO Register on the first day of the month.
- 7.36. Late measures are attributed to the supplier that originally notified the measure, and will continue to form part of that supplier's automatic extension quota. Where a supplier accepts a transfer containing late measures without an extension request, these

measures will not be included in the receiving supplier's automatic extension quota for the relevant notification period. Transferring measures does not affect the automatic extension quota for the original supplier that notified the measure.

- 7.37. The 5% automatic extension quota is calculated on a group company level (ie not a licence level).
- 7.38. For measures to be included in a supplier's automatic extension quota they must be notified by the earlier of:
 - a) the end of the fourth calendar month after the calendar month the measure was completed, or
 - b) the end of June 2022.

Applications for an extension to the notification deadline

- 7.39. Suppliers can also apply to us for an extension to the notification deadline for a completed measure. The application must be in writing and must explain why the extension is being requested. The reason should be supported by evidence.
- 7.40. Once a supplier becomes aware that it has, or will, fail to notify a measure by the notification deadline it should take all reasonable steps to ensure that the measure is notified as soon as possible. We cannot guarantee that an extension request will be approved.
- 7.41. Suppliers seeking an extension should submit a request using the 'Application for Extension' template.¹⁸⁶ Any relevant supporting evidence, such as emails, screenshots or other correspondence should be sent to us at the same time as the extension request. We will process extension requests within a reasonable timeframe, where sufficient evidence is provided.
- 7.42. We are not obliged to grant an extension to suppliers and we will consider each application on an individual basis. We will grant an extension to the notification deadline if a supplier satisfies us that there is a reasonable excuse for missing the notification deadline. Further information about what is a 'reasonable excuse' is provided below.

194

¹⁸⁶ Suppliers can obtain this template on request. Suppliers should contact the ECO Team: eco@ofgem.gov.uk.

Reasons for an extension request

- 7.43. A reasonable excuse is an unexpected or unusual event that:
 - a) is either unforeseeable or beyond the supplier's control, and
 - b) prevents the supplier from notifying a measure by the notification deadline.
- 7.44. We will judge the actions of a supplier from the perspective of a prudent supplier exercising reasonable foresight and due diligence, and having proper regard for its responsibility under the ECO3 Order.
- 7.45. If a supplier relies on a third party to provide the information needed to notify a completed measure, the supplier is responsible for ensuring that party carries out its task correctly. We expect the supplier to take reasonable care to explain to the third party what it requires them to do and to set deadlines for the task. We expect the supplier to have processes in place for eliminating or mitigating any risk of the third party failing to carry out its task correctly or within the agreed deadlines.
- 7.46. Where similar issues are raised more than once by the supplier as a reason for a delay in measure notification, this may not satisfy our requirements for granting an extension. A supplier is expected to make the necessary updates to its processes to ensure issues are not repeated.
- 7.47. As each extension request is considered on a case-by-case basis, we do not intend to provide an exhaustive list of eligible reasons for extension.

Determining the period of extension

- 7.48. If we are satisfied that an event occurred that gives a supplier reasonable excuse for failing to notify a measure by the notification deadline, we will expect the supplier to take all reasonable steps to submit the notification at the earliest possible time. We will grant an extension to this point in time.
- 7.49. Measures submitted as part of an approved extension request must be notified with a 'Purpose_of_Notification' of 'Extended Notification'.

Fair and transparent processing

- 7.50. When fulfilling its ECO3 obligations, a supplier may obtain information about the occupant or landlord of the premises. Some of this information will need to be provided to us either as part of the monthly notification or in the course of our audits. In addition, in the course of the transfer of a qualifying action, one supplier will disclose this information to another supplier.
- 7.51. A supplier should ensure that its processing of this information complies with all applicable data protection laws. A supplier should also ensure that any member of the supply chain acting on its behalf complies with the data protection laws.
- 7.52. In particular, it is the responsibility of a supplier to ensure the person who lives at the premises where the ECO measure is delivered knows how and why their information will be processed, including who the information will be disclosed to and for what purpose. This includes telling them that their data will be shared with us.
- 7.53. The General Data Protection Regulation (UK GDPR) requires anyone collecting personal data to give the data subject (ie in the case of ECO the occupant or the landlord) a Privacy Notice.
- 7.54. So that we are able to process the data that suppliers provide, we require suppliers to provide the occupant under ECO3 with the ECO3 Working Group Privacy Notice Document, available on our website. This is an ECO Reporting Working Group document and not an Ofgem document. Full details of Ofgem's ECO Privacy Policy can be found on our website. 188
- 7.55. The wording in the Privacy Notice is intended to discharge some of our obligations under the UK GDPR. It is not intended, and should not be relied on, to discharge suppliers' obligations for that legislation or other data protection laws. Further guidance on what information Privacy Notices should contain can be found on the Information Commissioner's Office website. 189

¹⁸⁷ The ECO3 Privacy Notice is published as an ECO Reporting Working Group Document: https://www.ofgem.gov.uk/publications-and-updates/eco-reporting-working-group-eco3-standardised-templates. This is an ECO Reporting Working Group document and not an Ofgem document.

¹⁸⁸ See https://www.ofgem.gov.uk/publications-and-updates/eco3-privacy-notice

¹⁸⁹ See http://ico.org.uk/

8. Technical monitoring, score monitoring, audit and fraud prevention

8.1. As per our ECO3 Improving consumer protection consultation and the decision document published by BEIS for these changes, the responsibility for technical monitoring and some aspects of score monitoring will be transitioned to TrustMark from 1 July 2021.

Measures installed from 1 July 2021

- 8.2. Measures installed and lodged on the TrustMark data warehouse from 1 July 2021 will not be subject to Ofgem technical monitoring and will instead be subject to TrustMark's Quality Assurance framework. For more information, please see the TrustMark ECO3 Quality Assurance Guidance.¹⁹⁰
- 8.3. The responsibility for score monitoring of measures installed and lodged on the TrustMark data warehouse from 1 July 2021 will be divided between TrustMark and Ofgem, with TrustMark collecting the data necessary for score monitoring and Ofgem using this data to make an assessment against the data notified by suppliers. More information can be found in our upcoming guidance for post transition TrustMark lodgements, due to be published on the ECO3 Monitoring webpage¹⁹¹ in the coming months.
- 8.4. Measures installed from 1 July 2021 that are not lodged in the TrustMark data warehouse will continue to be subject to the existing Ofgem monitoring programme. More information can be found in our upcoming guidance for post transition non-TrustMark lodgements, due to be published on the ECO3 Monitoring webpage¹⁹² in the coming months.

Measures installed prior to 1 July 2021

8.5. For any measure installed prior to 1 July 2021, paragraphs 8.5 to 8.62 should be consulted, alongside our upcoming guidance for pre transition measures, due to be

 $^{^{190}}$ https://www.trustmark.org.uk/docs/default-source/energy-company-obligation/202126-trustmark-qa-guidance-v1-1.pdf?sfvrsn=95fa9707 $\,2\,$

https://www.ofgem.gov.uk/publications/eco3-monitoring

¹⁹² https://www.ofgem.gov.uk/publications/eco3-monitoring

published on the Ofgem ECO3 Monitoring webpage¹⁹³ in the coming months, to understand the requirements of Ofgem monitoring.

- 8.6. We carry out various checks to ensure that the relevant eligibility requirements have been met and that the savings reported by suppliers are accurate. These include monitoring the quality of installation and the accuracy of scores (technical and score monitoring respectively). We also conduct audits of the measures notified to us by suppliers and have a counter fraud team that works to detect, prevent and deter fraudulent activity.
- 8.7. Technical monitoring verifies whether a measure has been installed to the relevant installation standards by a person of appropriate qualification and expertise.
- 8.8. Score monitoring verifies that the installer has selected the correct deemed score based on the characteristics of the property where the measure was installed. Where we refer to *scoring* and *re-scoring* in this chapter it refers to the score for a measure.
- 8.9. Auditing verifies whether the processes and requirements we outline in our guidance documents have been followed. This includes, for example, documentation to prove that a person is a member of the help to heat group.
- 8.10. This chapter outlines the following for measures installed prior to 1 July 2021:
 - a) the monitoring requirement
 - b) the monitoring process
 - c) the monitoring timelines
 - d) how to deal with monitoring fails
 - e) our response to poor performance
 - f) audit requirements, and
 - g) our approach to fraud.

¹⁹³ https://www.ofgem.gov.uk/publications/eco3-monitoring

The monitoring requirement

- 8.11. By the end of the first month following a quarter, a supplier must report the results of monitoring conducted on at least 5% of each measure type for both technical and score monitoring. Innovation measures are considered a separate measure type for the purposes of technical and score monitoring.
- 8.12. The 5% monitoring requirement for a quarter is determined with reference to measures that either:
 - a) have a notification deadline within the quarter AND are notified before the end of the quarter, OR
 - b) have a notification deadline in a previous quarter, but were notified in the current quarter (ie 'late measures').
- 8.13. Monitoring must be conducted on the measures described in paragraph 8.8-8.12. Where a measure fails monitoring, and as a result the supplier chooses not to notify that measure, that inspection must be included in the supplier's monitoring report and will still contribute to its monitoring requirement.
- 8.14. A supplier's overall monitoring sample (ie all measures monitored in relation to a quarter) must also be representative of the installers that installed the measures notified by that supplier in a quarter. Generally we will deem the overall monitoring sample representative if it includes at least 3% of the measures installed by each installer, and notified by the relevant supplier, in that quarter. To ensure representativeness, we require that the supplier monitor:
 - a) at least 3% of all measures notified by installers who have notified 100 or more measures in the quarter ('large installers'), and
 - b) at least 1 measure of installers who have notified fewer than 100 measures in the quarter ('small installers').
- 8.15. Technical monitoring and score monitoring can, but do not have to, be conducted on the same measure. Both must be conducted through site audits and can be carried out during the same visit by the same agent, provided the agent has appropriate qualifications.

- 8.16. Where several suppliers are members of the same group of companies ('energy group') we will be satisfied that each supplier within the group has met the monitoring requirement if the group as a whole met the monitoring requirement.
- 8.17. The monitoring requirement applies irrespective of how a supplier acquires the measure (eg through a bilateral contract, Brokerage or an in-house installer).
- 8.18. The monitoring requirement does not apply to measure types that do not have monitoring questions. We have published a questionnaire with all the monitoring questions on our website.¹⁹⁴

The monitoring process

Who conducts monitoring?

- 8.19. Monitoring inspections must be conducted by a suitably qualified monitoring agent who is independent from:
 - a) the supplier
 - b) the installer
 - c) any party involved in the installation of the measure
 - d) any party involved in the assessment of the measure, and
 - e) any party that has control or ownership of the premises.
- 8.20. We will be satisfied that a monitoring agent is independent if he or she is not an employee of any of the parties listed above. 195
- 8.21. We expect suppliers to ensure the independence of a monitoring agent even if that monitoring agent has been contracted by one of their supply chain.
- 8.22. For technical monitoring, the monitoring agent must be suitably qualified. We may audit the due diligence processes a supplier has in place to ensure that its monitoring agents are suitably qualified.

¹⁹⁴ See https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring for information on technical monitoring questions.

¹⁹⁵ This may be subject to audit.

- 8.23. For score monitoring, the agent must either be:
 - a) in England and Wales, a qualified Domestic Energy Assessor (DEA), or
 - b) in Scotland, members of Approved Organisations. 196
- 8.24. Where a supplier would like to use an agent with a different / equivalent qualification, it should contact us before commissioning this agent to conduct score monitoring.

How is monitoring conducted?

- 8.25. We provide a list of monitoring questions which must be used by the monitoring agent. From Quarter 2 onwards to the end of June 2021 the existing ECO3 question set should be used, which can be found on our website.¹⁹⁷
- 8.26. The required technical monitoring rate is split between mid and post-installation inspections, depending on the type of measure being monitored. For measures that require both mid- and post-installation inspections, at least 2% of the relevant measures should be inspected at mid-installation stage and 2% at post-installation stage. We will provide further clarity on which measures require mid-installation or post-installation inspections, or both, in our upcoming guidance, to be published on the Ofgem website in due course. 198
- 8.27. Score monitoring is only carried out post installation.
- 8.28. Monitoring agents must select a random sample of measures for monitoring by measure type and installer. They must not choose measures that have been recommended to them by the installer or supplier.
- 8.29. Monitoring agents should submit inspection results, including answers to all relevant monitoring questions, directly and unaltered to the supplier.

¹⁹⁶ Approved Organisations are those that have entered into protocols with Scottish Government to deliver Energy Performance Certificates. See http://www.gov.scot/Topics/Built-

Environment/Building/Building-standards/enerperfor/epcorgprg for a list of approved organisations

¹⁹⁷ See https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring

¹⁹⁸ https://www.ofgem.gov.uk/publications/eco3-monitoring

The monitoring reports

- 8.30. Suppliers should collate the inspection results submitted by monitoring agents in the technical and score monitoring templates we provide.
- 8.31. Once completed, the templates, known as 'monitoring reports', will contain the required information on the monitoring carried out on the measures notified in the previous quarter. This information should include details of any fails from that quarter that have been overturned, remediated or re-scored (discussed in *Monitoring fails* below).
- 8.32. Monitoring reports must be submitted to us by the end of the first month following the end of the quarter in which the measures monitored were notified (the 'submission deadline').

Monitoring timelines

8.33. This section illustrates the timelines suppliers should keep to when conducting technical and score monitoring.

Example

- 8.34. The second quarter of monitoring for ECO3 measures relates to measures:
 - a) that have a notification deadline¹⁹⁹ in February 2019, March 2019 or April 2019 AND were notified at any time on or before 30 April 2019, OR
 - b) with a notification deadline in a previous quarter AND were notified in February 2019, March 2019 or April 2019
- 8.35. A measure installed on 14 January 2019 would have a notification deadline of 28 February 2019. This measure is counted as part of the second quarter's monitoring requirement regardless of whether the measure is notified in January or in February. Post-installation monitoring of this measure can take place at any time between the installation date and the report submission deadline, ie 31 May 2019.

¹⁹⁹ The notification deadline is the date by which the supplier must notify the completed measure, ie the end of the calendar month after the month in which installation of the measure was completed.

Monitoring fails

- 8.36. If a measure fails monitoring, this suggests that the measure has not been installed in accordance with the relevant standards of installation for that measure (technical monitoring fail) or that the deemed score is incorrect (score monitoring fail). This will mean that we are unable to attribute savings unless the supplier is able to demonstrate that the measure is generating savings and/or that it has been scored correctly.
- 8.37. We expect measures to be remediated or re-scored within three months of the last day of the month in which the failure was identified by the monitoring agent.
- 8.38. If a measure is not remediated or re-scored, and in the case of technical monitoring reinspected, within six months of the last day of the month in which the failure was identified by a monitoring agent, we will revoke an earlier decision to attribute savings to the measure or refuse to attribute savings to the measure.

Remediating technical monitoring fails

- 8.39. To avoid losing the savings for a measure, a supplier must ensure that remedial works are carried out to address the areas where that measure failed technical monitoring. A supplier should re-inspect the installation after remedial work is completed and confirm to us that the remedial work is complete and that the measure now meets the relevant standards of installation.
- 8.40. Re-inspections must be carried out by suitably qualified monitoring agents.²⁰⁰ The reinspection should establish that the fail that caused the measure to fail technical monitoring has been remediated and that the measure has now passed technical monitoring.
- 8.41. Monitoring agents should submit the results of re-inspection, detailing that remediation work has successfully addressed the fail, directly and unaltered to the supplier.
- 8.42. If a measure fails re-inspection, a supplier may continue to attempt remedial works until the measure is successfully remediated, as long as this is within the timelines outlined in paragraph 8.38.

²⁰⁰ Re-inspections can be carried out by the same monitoring agent that conducted the original monitoring inspection.

- 8.43. Re-inspections are in addition to the normal technical monitoring process and do not contribute to a supplier's monitoring requirement.
- 8.44. We expect a supplier to make reasonable efforts to contact the occupant in order to conduct remedial work or re-inspection. If this is not completed within six months then we will revoke or refuse savings for a measure (see paragraph 8.38).
- 8.45. However, in some instances a supplier may be unable to access premises ('non-access'). If non-access (supported by sufficient evidence) prevents a supplier from remediating a fail, and the measure fails to meet a standard of installation in a way that affects the ability of the measure to generate savings, it will not be eligible and we will refuse or revoke approval for that measure.
- 8.46. Where non-access (supported by sufficient evidence) prevents a supplier from reinspecting a measure, that measure will be awarded the score as notified to Ofgem, assuming the measure is eligible in all other respects.
- 8.47. More details of how a supplier can evidence instances of non-access and our response to these instances can be found in Ofgem's upcoming supplementary guidance documents, to be published on the Ofgem website in due course.²⁰¹

Re-scoring score monitoring fails

- 8.48. Where a potential error in the inputs used to determine the deemed score of a measure is identified through score monitoring, a supplier must correct and/or verify the score to avoid losing savings for that measure. A supplier may do this by:
 - a) using evidence provided by the score monitoring agent
 - b) using additional documentary evidence provided by the original assessor, and/or
 - c) conducting an additional inspection of the premises to establish the correct inputs (using a score monitoring agent).
- 8.49. A supplier may re-determine the score of the measure in-house or by a third party. The supplier must be satisfied that the score it re-submits is correct.

²⁰¹ https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring

Challenging a monitoring fail

- 8.50. A supplier may challenge the outcome of a monitoring inspection with the monitoring agent. If the monitoring agent accepts that a measure should not have failed, this will be deemed an 'overturn'. A supplier should retain written evidence from the monitoring agent detailing why the result of an inspection has been overturned. We may require such evidence at audit.
- 8.51. Overturned monitoring fails will no longer be considered a fail and, therefore, do not require remediation or re-scoring.
- 8.52. At the end of each month we will issue suppliers with an 'unresolved fails report' that lists all failed measures that have not yet been successfully remediated or re-scored. Suppliers should use the unresolved fails report to update us on failed measures that have successfully been remediated, re-inspected or re-scored, and indicate where a fail has been overturned.
- 8.53. A supplier should return the updated failed measures report to us on a monthly basis alongside its other monitoring submissions for that month. More information can be found in the upcoming supplementary guidance documents, to be published on the Ofgem website in due course.²⁰²
- 8.54. Any failed inspection that has been successfully overturned prior to the inspection being notified to Ofgem, can be submitted as a pass in the first instance.

Our response to poor performance

- 8.55. The following section outlines our response to poor performance. All of the following requirements apply on a supplier basis. Each installer will be considered separately in respect of each supplier.
- 8.56. For further information on our response to poor performance suppliers should refer to the upcoming supplementary guidance documents, to be published on the Ofgem website in due course.²⁰³

²⁰² https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring

²⁰³ https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring

Where a supplier fails to achieve the monitoring requirement

- 8.57. Where a supplier fails to meet the monitoring requirement for a particular quarter, we will not have sufficient confidence in the quality or accuracy of all the measures installed by the supplier in that quarter. This may lead us to refuse or revoke approval of these measures. In addition, we may consider taking enforcement action.
- 8.58. When this occurs, the supplier will in the first instance be given the opportunity to address the monitoring deficiency by conducting further monitoring on the measures notified within this quarter.

Where the technical monitoring failure rate is high

- 8.59. If, for any one quarter, the technical monitoring failure rate for a particular installer is higher than 10% we will consider one or more of the following actions on that subset of measures notified in that quarter:
 - a) require the supplier to conduct additional monitoring, and/or
 - b) require the supplier to provide us with additional assurance.
- 8.60. While the supplier is still in the process of providing additional monitoring or additional assurances, we will suspend approval of all measures in that subset and may initiate an audit.
- 8.61. If, as a result of any of the actions listed in paragraph 8.59 above, we remain concerned that the measures under consideration are not eligible ECO measures, we will continue to take one or more of the actions listed above until we have sufficient confidence in the quality of these measures.

Where the score monitoring failure rate is high

8.62. If, for any one quarter, the score monitoring failure rate for a particular installer is higher than 10%, we will consider one or more of the actions listed in paragraph 8.59 until we have sufficient confidence in the accuracy of the scores of these measures.

Audit

- 8.63. We may audit a qualifying action promoted by a supplier, and that audit may relate to any of the requirements in the ECO3 Order and in our guidance, including our ECO3 Guidance: Supplier Administration. The documents and data that a supplier must make available to us are detailed in Appendix 1 Documents and data to be made available on request and Appendix 2 Evidencing the premises and occupant requirements.²⁰⁴
- 8.64. We do not require suppliers to hold or retain these documents and data. A supplier may choose to enter into an arrangement with a third party (such as an installer), under which the third party agrees to hold these documents and data and make them available to the supplier on request. It is for each supplier to choose how it will ensure that it is in a position to make the documents and data available, within the required timeframes, to an auditor.

Fraud prevention

- 8.65. Ofgem takes a zero tolerance approach to fraud and scheme abuse. A dedicated Counter Fraud Team undertakes activities to detect, prevent and deter fraudulent activity across ECO. All suppliers are expected to work closely with the Counter Fraud Team to ensure a collaborative and targeted approach. In the context of ECO, fraudulent activity is any dishonesty or misrepresentation in relation to the ECO3 Order or our guidance that undermines the government's policy intent or our administration.
- 8.66. A supplier is expected to mitigate the risk of fraud within its ECO activity. This should include, but is not exclusive to:
 - a) identifying and mitigating fraud risks
 - b) controls to ensure savings determined using deemed scores, SAP/RdSAP or alternative/appropriate methodologies are correct
 - c) sufficient requirements within third party contracts to ensure that work is completed in accordance with the ECO3 Order and our guidance. This must include the activity of the whole supply chain, including all sub-contractors

²⁰⁴ In certain circumstances, for example where we suspect scheme abuse, fraud, or misreporting, we may require a supplier to provide other information not listed in Appendix 1 – Documents and data to be made available on request and Appendix 2 – Evidencing the premises and occupant requirements, as per article 37 of the ECO3 Order.

- d) robust processes for getting regular, reflective activity reports from in-house installers and third parties
- e) the continued scrutiny of in-house and third party activity to ensure compliance with the ECO3 Order and our guidance
- f) suitable, senior manager oversight of activity and reporting
- g) processes to ensure accurate and reflective reporting to us, and
- h) processes for handling, investigating and reporting suspected fraud cases. Processes in place for receiving allegations of fraud/whistleblowing from the public or supply chain.
- 8.67. A supplier is required to submit its fraud prevention strategy to us on an annual basis.
- 8.68. We will work closely with a supplier to ensure that its fraud prevention strategy is appropriate, effective and robust. A supplier should be able to demonstrate the steps it has taken, and is taking, to eliminate fraud and should provide sufficient evidence to us to demonstrate those steps.
- 8.69. All suppliers are invited to attend the ECO Industry Fraud Prevention and Compliance Committee,²⁰⁵ a forum for discussing common fraud risks and issues across the industry and to drive best practice.
- 8.70. Suppliers should, in all instances, promptly report any instances of suspected fraud to the Ofgem Counter Fraud team at: counterfraud@ofgem.gov.uk.
- 8.71. A supplier must ensure its own investigations into suspected fraud cases are thorough and completed in a timely manner. A supplier should contact us if they have any questions regarding its investigation plan, approach or results.
- 8.72. During the investigation of suspected fraud cases we may suspend approval of the subset of measures to which the fraud relates while we establish if it is an isolated incident or if further ECO measures are involved. Depending on the nature of the investigation, we may also suspend similar measures installed by that installer or third

208

²⁰⁵ The ECO Industry Fraud Prevention & Compliance Committee (EIFPCC) provides a forum for the ECO suppliers, together with Ofgem and other representatives agreed by the group, to discuss fraud and compliance risks relating to instances of fraud within the ECO programme and to agree mitigating actions encompassing prevention, detection and response.

party. Where evidence of fraud is found we may refuse or revoke approval of the fraudulent ECO measures.

8.73. In addition, where evidence of fraud is found this should be reported by the obligated supplier to Action Fraud²⁰⁶ or the Police.²⁰⁷ We will also refuse or revoke approval of fraudulent ECO measures.

Documentation guidelines

- 8.74. As the administrator of ECO, Ofgem must ensure that energy suppliers comply with the legislation and meet the requirements regarding eligibility and installation set out in our guidance. A supplier is responsible for ensuring that it, and any member of the supply chain acting on its behalf, complies with the applicable requirements of the law and industry standards.
- 8.75. This section outlines the existing requirements and expectations when it comes to the completion of documentation used to support the eligibility and compliance of an ECO measure. Key instructions and guidelines from other previously available ECO documents have been consolidated here to form a single piece. As a result, this section replaces the following documents:
 - a) Quality of Documentation Guide
 - b) ECO Digital Software Guidelines
- 8.76. This section also reiterates some of the information provided in the ECO Amidst COVID-19 guidance.²⁰⁸ Note that the information provided in this section does not replace the ECO Amidst COVID-19 document.
- 8.77. The below information outlines the minimum standards that Ofgem expects to be met currently when completing any ECO documentation. Any measures installed during ECO3 where documentation hasn't met these standards may be considered for rejection.

²⁰⁶ Action Fraud provide a central point of contact for reporting fraud in the UK. See: http://www.actionfraud.police.uk/ for more information.

²⁰⁷ If the fraud is ongoing, it should be reported directly to the Police.

²⁰⁸ https://www.ofgem.gov.uk/publications-and-updates/eco-amidst-covid-19

8.78. We will be minded to reject measures installed from **2 August 2021** where the associated documentation does not meet these standards, regardless of whether alternative supporting evidence can be provided.

Quality of Documentation

8.79. We have worked with energy suppliers to develop the below standards which must be followed as a minimum. Please note that these are not new requirements and have been available on Ofgem's website since December 2019.

Evidence must be complete

- 8.80. Documentation must be completed fully. All pages of any documentation must be present unless you have prior agreement from the energy company/funding supplier.
- 8.81. All documentation must also be legible, including where photographic evidence of documents (eg benefit letters) is taken. All forms must be clear and comprehensible and therefore where possible abbreviations should be kept to a minimum and no 'text message' language should be used. Where conclusions or comments are required on documentation these must be detailed and not one-word answers.
- 8.82. Information provided in documentation should be consistent across documents.
- 8.83. If you need to make changes or additions to any of document you must get prior agreement from the energy company / funding supplier. Forms may be branded provided the agreed template wording stays the same as the forms published on the Ofgem website.
- 8.84. Don't hide any mistakes; any errors in documentation should be scored through with a single line and the correction written alongside, signed (by the original signatory) and dated. Correction fluid should not be used.
- 8.85. Evidence should be provided as stand-alone files (in `.pdf' format where possible) and not embedded within other documents/files.
- 8.86. All photos used to support the eligibility or compliance of a measure must be time/date and geo-stamped. Photos used as evidence should retain accurate information and not have their details tampered with.

Digital software use

- 8.87. Some obligated energy suppliers may request confirmation of which electronic application or software is being used in the delivery of ECO measures. Please check with the relevant supplier(s); a demo of the software may be required.
- 8.88. It must not be possible to auto-populate fields which require information specific to a premises or measure such as dates or customer signatures. Fields which apply in all cases such as the installer's PAS certification number & address/contact details of the consumer can be auto-populated.
- 8.89. Software must ensure that any fields cannot be modified at a later date. Documents must be saved automatically once completed and, where there is a need for an update, documents should be version controlled and a record of any changes stored. It must not be possible to change the date of documents that were completed electronically.
- 8.90. The format of any document must be compatible with standard software so that they can be opened and read by Ofgem and suppliers without the need to purchase new or additional software.
- 8.91. If it is not possible to use an electronic app to obtain particular documents and customer signatures, the branded electronic paperwork should not be used, ie the 'App' brand should not show on paperwork which has been manually completed and signed.
- 8.92. Where customers have signed documents electronically, they must have access to documents after any works are completed. This can include paper versions of documents.

Signature application

- 8.93. Signatures and dates must only be used where they are embedded/consistent in the documentation. Wet signatures must be applied with a pen and electronic signatures preferably with a stylus, though use of a finger is also acceptable. Signatures must not be copied and pasted.
- 8.94. All documentation must be completed, signed and dated by the appropriate individual, eg operative, landlord, customer or householder. Signatures should not be applied on behalf of someone else, eg by other operatives or by office staff, and there should be no amendments to signatures or dates.

- 8.95. Signature and signature boxes within documents should be user-friendly and consumers should receive instructions on how to complete these correctly if required. The software used to produce electronic documents must not be capable of assigning a customer signature to a document which they have not signed. The signature must be independently embedded and not copied or replicated. Individual signatures must be obtained for each individual document. It is recommended that the operative is equipped with a stylus to ensure satisfactory signature is captured.
- 8.96. Should any instances of replicated or copied signatures occur when using electronic paperwork or a digital application, this should be investigated and rectified prior to sending to the obligated supplier.
- 8.97. Where Ofgem detects signatures have been assigned or auto-populated by software, eg as the result of purpose built software or 'software glitches', those forms will not be accepted and may result in the associated measures being rejected.

GDPR considerations

8.98. Compliance with data protection law, including the UK GDPR Principles, is essential. In particular, data must be accurate, processed lawfully, fairly, and in a transparent manner. This applies to both hard copies and electronic copies of any documentation. Where hard copies, photocopies or photographs of customer documents are provided, such as benefit letters, personal information not relevant to ECO should be redacted.

ECO Amidst COVID-19

- 8.99. Due to impact on delivery of ECO measures during the COVID-19 pandemic, Ofgem published the guidance document 'ECO Amidst COVID-19 v3'. This was produced to provide greater clarity and expand on guidance around how businesses could continue operating, particularly where activities involve entering homes and properties. This guidance includes a section titled 'Signing Documentation'. We have reiterated those guidelines and expectations below to aid understanding of Ofgem's expectations with regards to completion of ECO documentation during a pandemic.
- 8.100. We appreciate the installation process of measures may be disrupted due to the ongoing situation and the actions being taken to minimise the spread of COVID-19. Installers

- and energy suppliers should not be carrying out any activities that go against the latest government guidance for Scotland, England and Wales.²⁰⁹
- 8.101. We also, however, need to maintain assurance that installation work is still being completed properly and to the appropriate standards, and that an effective handover is completed to the customer's satisfaction. We are particularly concerned about the need to ensure that appropriate warranties / guarantees are not invalidated by the lack of wet / electronic signatures.
- 8.102. We will not be removing the requirement to issue and / or collect any of the documentation usually required under ECO. Records for all relevant documentation should be retained.
- 8.103. Where it is possible to do so in line with the relevant government guidance, wet / electronic signatures should be obtained from the relevant individual. Where this is not possible, we have outlined below some alternative options that we will accept. Please note that these alternatives apply until we specify otherwise.
- 8.104. For handovers occurring from 6 June 2020, we require that a completed version of the ECO3 Declaration of Conformity and Completed Installation (DOCC) is emailed to the householder. The householder must respond to the installer with the DOCC attached to an email confirming they have read and understand the relevant documentation, and endorse the content. The DOCC does not need to have been signed by the homeowner.
- 8.105. We have provided specific wording that should be used where an email declaration is relied upon, below:
 - I **<insert name>** at **<insert address>** confirm that all applicable statements within the "Customer Declaration" section of the attached document "ECO3 Declaration of Conformity and Completed Installation" are true and that a guarantee for the work, which meets all relevant ECO3 requirements, has been provided or will be issued to me shortly.
- 8.106. The email should be from the householder's personal email address if they do not represent an official body, so that the individual can be identified. For official bodies an official email address should be used rather than a personal email address. Email

²⁰⁹ https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19

- declarations from householders must be provided as attachments rather than having been forwarded on and records of all email declarations must be retained by suppliers.
- 8.107. Where email isn't an option, we are content for suppliers to accept recorded phone calls to the relevant individual as confirmation of their receipt and endorsement of documentation. The documentation should be posted to them initially and explained to them over the phone. Their verbal agreement will act as confirmation. Such phone calls will need to have metadata attached that includes the phone number of the individual so that their identity and property can be verified.
- 8.108. If neither of the above are possible, we are also open to other proposals not already mentioned. Please contact us with any such proposal.
- 8.109. Once we are satisfied all other options have been explored, we will allow an extension to the four calendar week period between installation and handover that is normally considered the maximum appropriate time.
- 8.110. It should be observed that in any case, all relevant paperwork should be provided to the homeowner (by posting through the letterbox if necessary) regardless of whether a signature can be obtained or not.
- 8.111. Where handover occurred before 6 June 2020, please refer to the ECO Amidst COVID-19 guidance.²¹⁰

Notes on completion of specific documentation

- 8.112. The guidance above outlines what is expected when it comes to the provision of signatures on ECO documents. It also notes practices that should not take place, such as the copying and pasting of signatures or software auto-populating documents with a signature from another document or part of the same document.
- 8.113. Many of the documents required with measure submission are declarations and in signing, the party is confirming the information recorded in the form is true and accurate. It is a criminal offence to knowingly make a false declaration and such an offence may be punishable by a fine, imprisonment or both.

²¹⁰ https://www.ofgem.gov.uk/publications-and-updates/eco-amidst-covid-19

8.114. Users of ECO documents should therefore always read the wording on each as they will find text outlining where signatures are required and from whom they are required. It is critical to ensure the correct person signs the appropriate sections of the various documents. Below are some examples we would like to draw particular attention to.

Declaration of Conformity and Completed Installation (DOCC)

- 8.115. Both a customer signature and operative signature are required. If a party is signing on behalf of the customer, this must not be the installer, energy supplier or any other party in the supply chain responsible for the measure.
- 8.116. With regards to the operative signature, a person who has completed the install should sign the 'Operative Signature' field in the installer declaration area and this should be done so onsite, at the address of the installed measure. If the operative signing is not the PAS certified installer, then a PAS certified installer must countersign the DOCC but this can be done remotely using available evidence.

Energy Company Obligation (ECO3) Boiler Assessment Checklist (BACL)

- 8.117. The operative that has completed the assessment must sign the BACL to confirm the connected Appendix 1 Documents and data to be made available on request has been completed accurately. In completing the checklist, the operative should ensure they sign the document, provide details of their accreditation and, where applicable, their company's accreditation.
- 8.118. Operative signatures are required in both sections F and K of the BACL. With section F it is explicit that it is to be completed by the operative conducting the assessment. Similarly, section K also notes clearly that it is to be completed by the operative who repaired / replaced the boiler or installed the new first time central heating.

ECO3 housing declarations and landlord permission

8.119. Signatures are also required on the 'ECO3 Private housing FTCH declaration & Private Rented Sector Landlord Permission' and 'ECO3 Social housing EFG declaration & Landlord Permission' documents. Both documents include pre-written declarations confirming the signatory is the landlord / management company for the property / properties in question. Therefore the signature on these documents must have been provided by either the landlord or appropriate person from the management company when applicable.

ECO: less than or equal to 100mm pre-existing loft insulation declaration (LDEC)

- 8.120. This declaration requires the signature of the occupier / landlord but may also be completed by the landlord's authorised property management agent or someone signing on behalf of the occupier.
- 8.121. Similar to the DOCC, when the declaration is signed on behalf of the occupier / landlord, it must not be the installer, energy supplier or any other party in the supply chain responsible for the measure.

Signature practices that are not permitted

8.122. The following section outlines activity in relation to signature provision on ECO documents that should not take place. If Ofgem uncovers any of the following in connection with signatures on measure documentation, we will be minded to refuse or revoke approval of the impacted ECO measures.

Signature forgery

- 8.123. The forging of any signature on an ECO document is wholly unacceptable. In relation to this we refer to article 37 of the ECO3 Order and Section 2 of the Fraud Act 2006.
- 8.124. Any fraudulent activity including falsifying statements and falsifying signatures may be reported to the Police/Action Fraud or other law enforcement agencies such as Trading Standards.

Operative signatures being signed 'on behalf' of the operative

- 8.125. As highlighted in various parts of this guidance, signatures should be given by the appropriate party in question. In the case of documents that must be completed by the operative, the wording of the relevant ECO document will outline where operative signatures are required and it must be the operative who signs these fields. This provides Ofgem with the necessary assurance that the appropriate party has read the document, the recorded contents of the document are accurate and that by signing they understand fully any written declaration present.
- 8.126. The signature should not be provided by any other individual, eg a colleague or office staff, 'on behalf' of the operative.

Copy and Pasting

- 8.127. As highlighted in the Quality of Documentation Guide and ECO Digital Software Guidelines, signatures must not be copied and pasted and wet or permitted electronic signatures must be applied individually in each case.
- 8.128. Householders may be required to sign multiple documents but in doing so it provides Ofgem the assurance the customer has seen, read and understood the content on each. In addition, the DOCC is a declaration and so it is imperative that it is signed by the correct party to provide assurance the details recorded are accurate.
- 8.129. In the case of multiple DOCCs for different measure types carried out by the same operative, these must also be signed individually.
- 8.130. Copying and pasting of signatures across documents must not take place. Administrative misunderstandings or the actions of 'rogue individuals' will not be acceptable excuses for documentation that does not meet the requirements we have outlined.

Photocopying

- 8.131. Every form should be completed manually to ensure that the information provided is accurate to the property and relevant measure. We would draw particular attention to completion of the BACL. Photocopying or copying and pasting from other BACLs should not be used to complete any part of this form.
- 8.132. To reiterate, signatures must be obtained for each individual document whether it is the signature of the operative, customer, landlord or property management company.
- 8.133. Photocopying to duplicate a signature and apply it elsewhere is not acceptable. Administrative misunderstandings or the actions of 'rogue individuals' will not be acceptable excuses for documentation that does not meet the requirements we have outlined.

Appendices

Table 27: Index

Appendix	Name of Appendix	Page No.
1	Documents and data to be made available on request	219
2	Evidencing the premises and occupant requirements	236
3	Boiler information pack	269
4	Electric Storage Heaters (ESHs) information Pack	280
5	Process for new scores and alternative scoring methodologies	286
6	Abbreviations	287
7	Glossary	290

9. Appendix 1 – Documents and data to be made available on request

- 9.1. In this appendix we set out the documents and data which a supplier must be able to make available for the purpose of an audit or other compliance check at any time before 30 September 2022.
- 9.2. The information in this appendix is presented in Table 28 which is laid out as follows:
- 9.3. The second column refers to the relevant ECO requirement, the third column refers to the documents (if any) that a supplier will need to make available to demonstrate compliance with that requirement, and the fourth column refers to the data (if any) that a supplier will need to make available to demonstrate compliance with that requirement.

Table 28: Documents and data to be made available on request

	ECO	Documents to be made available on	Data to be made
	requirement	request	available on
			request
1.	Promotion of the measure	Documentation sufficient to establish 'promotion'. For example, in the case where a supplier contracts a person to install a measure at premises, a supplier should produce: • the contract(s) or other document(s) which establish the relationship between the supplier and the installer, under which the installation was performed (this includes documents which demonstrate that the installation was completed under an oral contract), AND • where appropriate, evidence of the supplier's payment of, or contribution towards, the fees and other costs of the installation. For example, an invoice and a payment slip.	
2.	Specification of the measure	Documentation which includes the relevant measure data.	To include: measure type manufacturer name product name product serial number (where available)

	ECO requirement	Documents to be made available on request	Data to be made available on request
3.	Installation in accordance with PAS 2030 / PAS 2030 certification	The contractual agreement or equivalent (containing the requirement to cooperate with an Ofgem auditor). Suppliers must notify the PAS certification number that relates to the relevant annex for the measure installed. Where multiple measures are installed in a property, suppliers must notify the PAS certification number that relates to the relevant annex for each measure installed. Suppliers must retain supporting evidence for all relevant PAS 2030 annexes.	PAS certification number and / or certificate where relevant Version of PAS installed in accordance with
4.	Installation by a person of appropriate skill and experience for measures not referred to in PAS 2030	For microgeneration measures, including shared ground loops, suppliers should notify the certification number for the relevant certification scheme. We would anticipate this will be MCS in most cases, and suppliers should notify the MCS certification number that relates to the measure installed. Where an alternative certification scheme is used to demonstrate appropriate skill and experience for measures not referred to in PAS 2030, suppliers must notify the certification number under 'Other_Certification' for each measure installed. Suppliers must retain supporting evidence for all relevant certifications.	MCS or other relevant certification number and / or certificate where relevant Version of MCS standards installed in accordance with

	ECO	Documents to be made available on	Data to be made
	requirement	request	available on
			request
5.	Installation or	For any measures that involve the removal,	Name of Operative
	repair of	repair, or installation of natural gas heating	and Gas Safe
	measures	systems, evidence of the operative's Gas Safe	Licence Number
	involving	licence number must be retained.	Cas Safa register
	natural gas		Gas Safe register number of the
			company the
			operative belongs to
	Installation of		Certification
6.	DHS	Documentation that demonstrates the	number and / or
	measures by	installation was by a person of appropriate skill	qualification where
	a person of	and experience, and at a minimum holds a	relevant
	appropriate	Level 2 or 3 NVQ in gas, plumbing and / or	refevente
	skill and	mechanical engineering.	
	experience	Certification schemes which require this	
		qualification (such as Gas Safe) can be used.	
7.	Installation in	Documentation that demonstrates that a	
	accordance	product or system used in installation is	
	with building	compliant with building regulations including:	
	regulations	United Kingdom Accreditation Service	
		(UKAS) accreditation	
		Agrément certificate	
		European Technical Approval with additional	
		documentation to show compliance with	
		building regulations	
		approval by a building control body, or	
		self-certification schemes.	
8.	Address	Documentation which includes the relevant	House / flat number
3.	where the	address data.	Street
	measure is		Town / city
	installed		Country
			Postcode
			Unique property
			reference number

Date of completion
 a copy of the declaration of completed conformity and installation (DOCC) described at Chapter 8 of PAS 2030:2017, or Chapter 9 of PAS 2030:2019, where such

declaration has been produced and signed

OR

by the installer

 a declaration including the details listed below.

Either declaration must be signed by the occupant, or if unoccupied, the landlord, to confirm the date on which the installer finished work on the installation of the measure as well as the date the measure was handed over. This can be in an electronic form (we understand that some suppliers will capture this information electronically).

We recommend the following wording is included in the declaration for the purpose of obtaining confirmation from the occupant or landlord, as applicable: For completion by the occupant, or if unoccupied, the landlord:

- Confirmation that information provided by the installer is accurate
- Date the installer finished work on the measure
- Date of handover of all information relating to the measure
- Occupant / landlord (print)
- Occupant / landlord signature
- Date

The declaration can be signed by someone acting on behalf of the occupant or landlord as

	ECO requirement	Documents to be made available on request	Data to be made available on request
		long as they are not the installer, supplier or any other party in the supply chain.	request
10.	Percentage of installation that must be completed	Where less than 100% of a measure has been installed, documentation which supports the reasons for judging that 100% cannot be installed. For example, there may be technical reasons why 100% of a measure cannot be installed. Suppliers should retain appropriate documentation such as technical survey completed by a suitably qualified operative.	Percentage of measure installed If less than 100% of the measure was installed, the reasons why
11.	Insulation of a solid wall	_	Age of the building The type of walls treated (ie brick, stone, timber frame etc)
12.	CWI_0.027/3 3/40 measures can only be installed to uninsulated cavities from 1 April 2019	A Pre-Installation Building Inspection document that shows cavity was uninsulated. Cavity wall insulation installed to cavities with partial fill insulation must be notified as CWI_partial_fill	

	ECO requirement	Documents to be made available on request	Data to be made available on request
13.	Evidencing pre-existing loft insulation	Documentation that demonstrates that the loft was accessed and that no pre-existing insulation was present at that time. The declaration of conformity and completed installation recording the level of pre-existing insulation. A declaration signed by the installer, operative or assessor, and the consumer, confirming that the level of pre-existing insulation was ≤ 100mm and that no loft insulation was recently removed, before the ECO loft insulation measure is installed.	
14.	Connection to a district heating system	Documentation which includes the relevant DHS data. Where the premises the DHS connection is installed meets the first time central heating criteria, see also rows 22 and 23.	Specification of the existing heating system – fuel type, supply, controls, efficiency Specification of the replacement system – fuel type, supply, controls, efficiency, and Heat load before and after installation.
15.	Secondary heating measures	Documentation which includes the relevant measure data.	Date of completion of secondary measure Date of completion of related primary measure(s)

	ECO requirement	Documents to be made available on request	Data to be made available on request
16.	Replacement and upgrade of boilers	An accurate, completed and signed Boiler Assessment Checklist. In the case of the installation of a boiler, a copy of the warranty and the occupier declaration. In the case of the repair of a boiler, a copy of the warranty.	Information relating to operative competency (see Appendix 3)
17.	Replacement and upgrade of qualifying electric storage heaters	An accurate, completed and signed Electric Storage Heater Assessment Checklist. In the case of replacement or upgrade of an ESH, a copy of the warranty and the occupier declaration. Alongside the TrustMark warranty requirements, the supplier will require a declaration to demonstrate that a warranty has been provided to the occupier free of charge.	Information relating to operative competency (see Appendix 4)
18.	Pre-main heat source identification	Documentation that demonstrates the premain heat source has been the main heating system used in the property for at least one year previous (see paragraph 6.34).	
19.	Help to heat group	See Appendix 2.	
20.	Private domestic premises	See Appendix 2. Only required where the measure is being delivered to someone in the help to heat group or where the household is listed in a local authority declaration.	

	ECO	Documents to be made available on	Data to be made
	requirement	request	available on
			request
21.	Insulation	Documentation that shows that the premises	Pre-installation fuel
	measures	where the insulation measure is installed are	type, OR
	receiving a	`non-gas fuelled':	
	non-mains	• the pre or post installation SAP or RdSAP	Post installation fuel
	gas insulation	assessment used to demonstrate the fuel	type.
	uplift	type(s) of the pre-main heat source(s),	
		provided the assessment was conducted by	
		an accredited SAP or RdSAP assessor. This	
		assessment should take the form of a	
		lodged EPC, OR	
		The declaration of conformity and	
		completed installation form.	

	ECO requirement	Documents to be made available on request	Data to be made available on
			request
22.	The score of	1) SAP/RdSAP (including bespoke systems	
	a measure (if	that use a SAP/RdSAP engine)	
	a deemed		
	score cannot	Report(s) or screen shots showing:	
	be applied)		
		Input data	
		Output data (including `before' and `after'	
		cases where relevant)	
		• Score	
		Software information (name of the software	
		organisation, software name, version)	
		Name of suitably qualified assessor,	
		assessor number (where applicable) and	
		company	
		Documentation of additional calculations	
		(lifetime, in-use factor)	
		2) Alternative methodology	
		Input data	
		Output data	
		• Score	
		Alternative methodology ID	
		Documentation of additional calculations	
		(lifetime, in use factor)	
		Independent report on the methodology	

23. Flexible eligibility

- A signed copy of the Local Authority declaration listing the relevant households and confirming that each household is either:
- living in fuel poverty
- low income and vulnerable to the effects of living in a cold home, or
- SWI in-fill.

The LA declaration must:

- be dated on or after the date of publication of the LA's statement of intent (SoI), AND
- contain a valid URN

In-fill properties should be listed on the same LA declaration as the households living in fuel poverty or low income and vulnerable to the effects of living in a cold home, which allow them to be eligible.

2) A publicly available statement of intent (SoI). Suppliers can provide evidence by either producing a hardcopy of the SoI, a screenshot of a published and dated SoI, or any other means agreed with Ofgem.

The SoI must:

- be published and dated prior to any declarations being made by that LA, AND
- include a methodology on how the LA intends to target households in FP or LIVC.

Where measures are installed to owner-occupied properties listed in a LA Declaration with an EPC rating of F or G, the score notified can include an uplift of 25% (where no other uplift is already being claimed). If this uplift is claimed, suppliers must provide either a *pre-*

Whether the household is:

- a. Living in fuel poverty
- b. Low income and vulnerable to the effects of living in a cold home
- c. SWI in-fill

The URN on the declaration

Written
confirmation in
relation to preinstallation EPC
(where relevant)

ECO	Documents to be made available on	Data to be made
requirement	request	available on
		request
	installation or a post-installation EPC RRN as	
	part of the notification.	
	Where a pre-installation EPC is provided, the	
	supplier must retain written confirmation from	
	the owner or occupier confirming that, to the	
	best of their knowledge and belief, no changes	
	were made to the premises, after the pre-	
	installation EPC was issued and before the	
	qualifying action was installed, which would	
	increase the energy performance rating of the	
	premises to band E or higher.	

	ECO requirement	Documents to be made available on request	Data to be made available on request
24.	Social housing D/E, F or G	In England and Wales, documentation evidencing that the relevant interest is registered on the Land Registry as belonging to a social housing landlord.	The pre- or post- installation EPC RRN
		In Scotland, documentation evidencing that the relevant interest is registered on the Land Register of Scotland or recorded in the Register of Sasines as belonging to a social housing landlord.	Signed declaration
		When notifying measures installed to social housing, suppliers must provide either a <i>pre-installation</i> or a <i>post-installation</i> EPC RRN.	
		A declaration signed by the social landlord confirming the following:	
		 Where a pre-installation EPC is used, that, to the best of its knowledge and belief, no changes were made to the social housing, after the pre-installation EPC was issued and before the measure was installed, which would increase the energy performance rating of the social housing beyond band D or E as appropriate. An EPC cannot retrospectively be changed if an issue is discovered with an EPC after the measure has been installed. The pre-installation EPC must be lodged before the measure takes place. That the property is let at below market rate, and if unoccupied, has previously been and will be let at below market rate. 	

	ECO requirement	Documents to be made available on request	Data to be made available on request
25.	First time central heating (FTCH)	A document signed by either a social landlord, owner occupier or private rented sector (PRS) landlord where applicable, declaring that at no point prior to the installation of the first time central heating measure did the social housing premises or private housing premises have a central heating system, district heating connection, or immediately prior to installation contain a working, efficient electric storage heater(s). See also rows 22 and 23. An accurate, completed and signed First Time Central Heating Checklist.	
26.	First time central heating measures, or DHS installations meeting the first time central heating criteria – roof insulation pre-condition	A pre-installation EPC RRN can be provided at notification for FTCH measures where it is used to demonstrate that the pre-conditions have been met. A pre-installation EPC RRN must be provided where it is required to demonstrate eligibility (eg in PRS properties with an EPC rating of A-E). Where less than 100% of the roof area of premises has been insulated, documentation which supports the reasons for judging the uninsulated area 'cannot be insulated'. Where the EPC does not show pre-existing insulation is in place, suppliers may demonstrate this through alternative means such as a guarantee.	Percentage of the total roof area of the premises that is insulated Reason(s) the roof area of the premises cannot be insulated (if applicable). Pre-installation EPC RRN, or photos with date and GPS embedded to evidence pre-existing insulation.

	ECO requirement	Documents to be made available on request	Data to be made available on request
27.	First time central heating measures, or DHS installations meeting the first time central heating criteria – Cavity wall pre-condition	A pre-installation EPC RRN can be provided at notification for FTCH measures where it is used to demonstrate that the pre-conditions have been met. A pre-installation EPC RRN must be provided where it is required to demonstrate eligibility (eg in PRS properties with an EPC rating of A-E). Where the exterior facing cavity wall of a premises has not been insulated, documentation which supports the reasons for judging the wall area 'cannot be insulated'. Where there is a technical reason for not insulating a cavity wall, a technical report from a suitably qualified chartered surveyor or structural engineer confirming that the cavity cannot be filled for technical reasons. Where the EPC does not show pre-existing insulation is in place, suppliers may demonstrate this through alternative means such as a guarantee.	Reason(s) the wall area of the premises cannot be insulated (if applicable). Pre-installation EPC RRN, Appropriate Guarantee, or photographs with date and GPS embedded to evidence pre-existing insulation.
28.	Private Rented Sector (PRS) A-E	When notifying measures installed to PRS properties occupied by a member of the help to heat group with an initial EPC efficiency rating of A, B, C, D, or E, suppliers must provide a pre-installation EPC RRN.	Pre-installation EPC RRN

29. New build properties

Where the property is erected prior to 1 October 2018:

 A declaration of conformity and completed installation (DOCC) confirming that the building was pre-existing before 1 October 2018.

Where the above is not completed in the DOCC, evidence of occupancy or evidence that the building is pre-existing must be available. Such evidence may include:

- In England and Wales, a Land Registry search, where a title has been registered prior to 1 October, 2018
- In Scotland, a search of the Land Register of Scotland or Register of Sasines, where a title has been registered prior to 1 October, 2018
- Certificate of title or deeds dated prior to 1
 October 2018
- EPC listed on the Landmark EPC register dated prior to 1 October 2018
- Building control completion certificate.

Where a measure is delivered to properties erected post October 2018:

Occupancy must be evidenced. This can be through either

- confirmation of a help to heat group member at the premises.
- a declaration on the DOCC to be completed and signed by the occupant.

Where unoccupied, a declaration from a landlord or non-resident owner must be signed on the DOCC to confirm that premises were previously occupied.

ECO	Documents to be made available on	Data to be made
requirement	request	available on
		request
	If the DOCC is signed by a landlord or non-	
	resident owner, additional evidence must be	
	collected to demonstrate date of building	
	completion, as well as current or previous	
	occupancy.	
	Evidence to confirm the date of building	
	completion can include:	
	a building control completion certificate, or	
	in Scotland, notification from a local	
	authority of acceptance of a completion	
	certificate.	

10. Appendix 2 – Evidencing the premises and occupant requirements

Introduction

10.1. This appendix supports Eligibility, outlining the documents and data that a supplier must be able to make available to us to demonstrate that the premises and occupant requirements have been met for all measures.

The premises requirement

- 10.2. This section of this appendix provides an overview of the evidence which can be used to demonstrate that the premises are private domestic premises. It provides information on:
 - a) Registered relevant interest
 - b) Unregistered relevant interest
 - c) Identifying social landlords
 - d) Determining market rate
 - e) Evidence for mobile homes

The occupant requirements

- 10.3. This section provides an overview of the evidence which can be used to demonstrate a person is a member of the help to heat group (HTHG), and that that person is an occupant of the premises. It provides information on:
 - a) Evidencing each of the eligible HTHG benefit types
 - b) Other official documents which can evidence occupancy
 - c) Documents relating to a change of name

Premises requirement

- 10.4. You should note the following when collecting evidence to prove the premises requirement:
 - a) Documents should be from official organisations (eg bank or mortgage society) or government departments, with the exception of Ofgem templates and tenancy agreements
 - b) The necessary information on the documents should be clearly visible
 - c) The dates on the documents should fit within the given timeframe as indicated throughout this guidance note
 - d) Letters or other documents that include other pieces of personal information not relevant to ECO should be redacted. We do not need to see the cost of the premises, the amount of mortgage outstanding, bank details or anything else that does not affect the eligibility of the premises requirement
 - e) Suppliers should ensure that the data they collect complies with all applicable data protection laws. A supplier should also ensure that any member of the supply chain acting on its behalf complies with the data protection laws,²¹¹ and
 - f) We may need to audit suppliers' compliance with their legislative requirements up to and after the end of the scheme. Suppliers must ensure that they are able to make documents available for the purpose of an audit or other compliance check at any time before 30 September 2022 as stated in the ECO3 Guidance: Delivery.

Evidencing registered relevant interest

- 10.5. A supplier must provide evidence that the relevant interest does not belong to a social landlord by providing the full title register extract from one of the following:
 - a) the Land Register maintained by Her Majesty's Land Registry for England and Wales,
 or
 - b) the Land Register of Scotland or the Register of Sasines for Scotland.

²¹¹ For more information on Fair and Transparent Processing see Chapter 7 of the ECO3 Guidance: Supplier Administration

- 10.6. Where it is not possible to download a copy of the full title register on the Land Register of Scotland, the supplier must provide a screenshot of the search results.
- 10.7. Where the registry states that the premises have been leased or sub-leased, further evidence will be required to demonstrate that the premises are not let by a social landlord.
- 10.8. The extract must be dated no more than 18 months prior to the date of completion of the measure.
- 10.9. The extract may be dated after the measure was completed where it shows that the date on which the relevant interest was acquired was prior to the completion of the measure. We will assume that the person to whom the relevant interest belongs had not changed in the period in between.
- 10.10. Documents that show who owns or rents the premises must relate to the person who has the current right to occupy these premises. In England and Wales an owner may be a freeholder, a leaseholder, or a sub-leaseholder.²¹² A tenant may be a leaseholder or a sub-leaseholder. In Scotland premises are generally owned in arrangement which is similar to an English freehold while long leases are less common.
- 10.11. Where the premises are subject to a shared ownership arrangement between a private individual and a social landlord, we consider this arrangement to be a private domestic premises as the private individual is a 'freeholder' or 'owner' of the premises. The full title register extract would need to show this.
- 10.12. Where a customer has entered into an agreement with a bank where the bank buys the property and sells it back to the customer over a period of time (for example, due to the customer's religious beliefs) the following documentation should be obtained by the supplier:
 - a) If it is the bank alone that has a registered interest in the property:
 - a letter from the bank confirming the terms of their arrangement with the occupier, or

²¹² Or in Scotland, the owner's interest or right, tenant's or sub-tenant's interest.

- ii. a completed Ofgem template (Template 2: Landlord and occupier statement where no written tenancy agreement exists).²¹³
- b) If the occupier shows on the title extract as the 'registered owner' and the bank has a charge registered against the property then this should be treated as a standard mortgage and the supplier should follow the guidance in paragraph 10.5.
- 10.13. Where a customer has a Lifetime Mortgage Equity Release Scheme, the property is treated as owner-occupied and the premises requirement can be evidenced through the same documents. For Home Revision Plan Equity Release Scheme, properties are considered on a case-by-case basis if they are owner-occupied or private rented sector. The evidence required will be dependent on the circumstances of each case.
- 10.14. Generally, where the relevant interest is registered as belonging to an individual person, we will be satisfied the premises are private domestic premises. If the search results prove inconclusive, ie the registered relevant interest belongs to a corporation and not an individual, the supplier must use other means to ensure that that entity is not a social landlord (see Appendix 2 Evidencing the premises and occupant requirements).
- 10.15. Towards the end of the land registry extract there may be a 'schedule of notices of leases'. If the dates show that the premises are currently being leased, it would need to be identified whether the leaseholder is a 'social landlord'.
- 10.16. Where the registered relevant interest belongs to a social landlord, the premises may still be eligible as private domestic premises if they are rented at market rate or above. See Appendix 2 Evidencing the premises and occupant requirements for more information on determining market rate.
- 10.17. If only the plot of land is registered, rather than the premises, it must be confirmed that the address where the measure will be installed matches the general address (eg street name/area) of the plot on the land registry. To do this, the full title register extract needs to be accompanied by a proof of residence. The address on the proof of residence must match the address on the land registry, with the addition of the building name or number and postcode. If the person living at the premises is an owner-occupier, you

239

²¹³ See https://www.ofgem.gov.uk/publications-and-updates/eco3-templates-evidence-private-domestic-premises.

will need to ensure the name on the land registry matches the name of the proof of residence.

Evidencing unregistered relevant interest

- 10.18. Land registry evidence will need to be provided for each individual premises. Where a building has been converted into flats but is showing on the land registry as one property we would not accept the land registry extract as sufficient evidence to demonstrate the registered relevant interest in each premises. In this scenario, the steps below would need to be followed.
- 10.19. Where the relevant interest is not registered, the supplier must prove this by providing a snapshot of the land registry search. The supplier must then prove that the relevant interest does not belong to a social landlord, or that the premises are leased under the 'Right to Buy', 'Right to Purchase' or 'Right to Acquire' schemes.²¹⁴
- 10.20. Where the relevant interest is not registered, the supplier must provide different evidence depending on whether:
 - a) the person who owns the relevant interest occupies the premises ('the owner occupier'), or
 - b) the person who owns the relevant interest lets the premises to a tenant ('the owner landlord').

Owner occupiers

10.21. For owner-occupiers, the supplier must provide evidence of the relevant interest in the premises and, where applicable, proof of residence²¹⁵ to demonstrate that the owner-occupier has the current right to occupy the premises (ie the premises have not been leased to another person). The supplier will need to provide a copy of one of the following:

²¹⁴ The leases for these premises, which show they are under either 'Right to Buy', 'Right to Purchase' or 'Right to Acquire' schemes, can be used as evidence that the premises are private domestic premises. ²¹⁵ Proof of residence can be in the form of a benefit letter, or the list of official documents referenced in Appendix 1 – Documents and data to be made available on request.

1. Title deeds

(We will accept other deeds and legal declarations that explicitly state that the person owns the premises) 216

OR

2. A mortgage statement for the premises which is addressed to the owner occupier

(The mortgage statement must be dated within 18 months prior to the date of completion of the measure. Where the mortgage statement is older or is not addressed to the owner occupier, it must be accompanied by proof of residence dated within 18 months prior to the completion of the measure)

OR

- 3. A completed Ofgem template²¹⁷ and evidence proving that the owner occupier resides at the premises which:
 - a) provides a declaration from a professional third party confirming they hold the title deeds for the premises and those deeds name the occupier as the freeholder/ the person holding the owner's interest or right, OR
 - b) provides a declaration from a professional third party confirming that, following an investigation, the title deeds have been lost or destroyed and he/she is satisfied that the occupier is the freeholder/ the person holding the owner's interest or right.

Owner landlords

10.22. In the case of owner landlords, the supplier must provide information on the tenancy in order to demonstrate that the tenant has the current right to occupy the premises.

²¹⁶ Examples of documents that can prove ownership include title deeds, deeds of conveyance, deeds of gift, conveyance documents, or a grant of admission, where they explicitly state that the person owns the premises. Where suppliers are not certain whether a document is eligible, they should contact us before installing a measure.

²¹⁷ See https://www.ofgem.gov.uk/publications-and-updates/eco3-templates-evidence-private-domestic-premises.

- 10.23. Evidence proving the tenant resides in that premises is required to show that the tenancy agreement is still valid. The supplier will need to provide a copy of one of the following:
 - a) a written tenancy agreement between the owner landlord and the tenant demonstrating that the named tenant resides there. Where an extract from a written tenancy agreement is provided, the extract must show the:
 - i. address of the premises
 - ii. term of the tenancy, and
 - iii. names and signatures of the tenant and landlord.

OR

- b) a completed Ofgem template²¹⁸ and evidence proving that the named tenant resides there. These templates are:
 - i. in the case where the written tenancy agreement has expired, signed by both landlord and tenant confirming the occupancy agreement, OR
 - ii. in the case where no written tenancy agreement exists, signed by both landlord and tenant confirming the occupancy agreement,
 - iii. in the case where there is no tenancy agreement, an occupancy agreement signed by the executor/administrator of the estate and the occupier.

Supporting information for demonstrating the relevant interest

- 10.24. If the documentation listed proves inconclusive, ie the relevant interest belongs to a corporation, the supplier must ensure the entity is not a social landlord (see paragraph 10.26).
- 10.25. If the owner-occupier or the tenant is the HTHG member, benefit letters addressed to the premises will be sufficient to demonstrate that the HTHG member resides at the premises. If the owner occupier or the tenant is not the HTHG member, a supplier will need to produce evidence to demonstrate that the HTHG member resides at the relevant domestic premise (see paragraph 10.50)

²¹⁸ See: https://www.ofgem.gov.uk/publications-and-updates/eco3-templates-evidence-private-domestic-premises.

Identifying social landlords

- 10.26. A social landlord means, in respect of premises in **England and Wales**:
 - a) a local housing authority, within the meaning of section 1 of the Housing Act 1985
 - b) a housing association, within the meaning of section 5 of the Housing Act 1985
 - c) a housing trust, within the meaning of section 6 of the Housing Act 1985
 - d) a charity, within the meaning of section 1 of the Charities Act 2011
 - e) a person listed in section 80(1) of the Housing Act 1985 (Wales only), or
 - f) a body registered as a social landlord under Chapter 1 of Part 1 of the Housing Act 1996 (Wales only).
- 10.27. A social landlord means, in respect of premises in **Scotland**, a person so described in section 165 of the Housing (Scotland) Act 2010.
- 10.28. A supplier may use one of the registers below to establish whether a corporate body falls under one of the above definitions of a social landlord. These registers do not contain an exhaustive list of social landlords and suppliers should be aware that these registers may not be completely up to date.

England

- 10.29. The Homes and Communities Agency provide a list of registered providers of social housing. This can be accessed at:
 - https://www.gov.uk/government/publications/current-registered-providers-of-social-housing.
- 10.30. The Charity Commission holds a register of organisations that have been recognised as charitable in law. Not all charities must register. The register can be accessed at: http://www.charitycommission.gov.uk/showcharity/registerofcharities/registerhomepage.aspx?&=&.

Wales

10.31. The Welsh Ministers maintain a public register of social landlords. The register can be accessed at:

http://wales.gov.uk/topics/housing-and-regeneration/publications/registered-social-landlords-in-wales/?lang=en.

Scotland

10.32. The Scottish Housing Regulator maintains a register of social landlords. The register can be accessed at:

https://www.housingregulator.gov.scot/landlord-performance/landlords

Determining market rate

- 10.33. Where it is established that the relevant interest belongs to a social landlord, but a supplier wishes to establish HHCRO eligibility, the supplier must demonstrate that the premises were let at or above market rate, or where the premises are currently void, has not and will not be let at below market rate. In order to do this it must produce:
 - a. a tenancy agreement, and
 - b. statistics showing the premises were rented at or above market rate. See below for more information on demonstrating rent above market rate.
- 10.34. When determining whether the property is let at below market rate the rent figure should not include the additional cost of service charge.

England

10.35. We consider market rate to be any monthly rent that is equal to or greater than the 'lower quartile value' for premises with the same number of bedrooms for the administrative area that the premises are located in. These statistics should be taken from the most recent table of VOA Private Rental Market Statistics at the time of completion of the measure. These statistics can be found here: https://www.gov.uk/government/collections/private-rental-market-statistics#history.

Scotland and Wales

- 10.36. We consider market rate to be any monthly rent that is equal to or greater than the 30th percentile market rent for premises with the same number of bedrooms in the Broad Rental Market area the premises are located in. The supplier must use the most recent statistics at the completion of the measure. The 30th percentile for an area can be found on the following pages:²¹⁹
 - Scotland: The 30th percentile of market rents can be found in column 3 of the
 Local Housing Allowance methodology table found at the bottom of the
 following page: http://www.gov.scot/Topics/Built-
 Environment/Housing/privaterent/tenants/Local-Housing-Allowance/figures.
 - Wales: The 30th percentile of market rents can be found in column 2 of the LHA table available at: http://gov.wales/topics/housing-and-regeneration/welfare-reform/rentofficers/publications/?lang=en.
- 10.37. In instances where the rent paid is below these figures and a supplier believes that this rent is market rate, a supplier may provide us with alternative statistics in writing for consideration. Suppliers should get alternative statistics approved by us before delivering a measure to that tenant.

Evidence for mobile homes

- 10.38. It is our understanding that, generally speaking, mobile homes are not provided by social landlords as social housing. As a result, we do not require proof of ownership to determine whether or not the premises are private domestic premises. Therefore, for mobile homes, only evidence demonstrating that an eligible person resides at the premises is required (ie an HTHG member or a household identified as eligible by a local authority). See below for more information on how to evidence this.
- 10.39. Where supplier is seeking to install a measure into a park home, which is provided as social housing, they must contact us prior to installation.

²¹⁹ The 30th percentile is a mathematical value which represents the level of rent where around 3 in 10 properties are let at or below LHA. The list of rents is a representative sample of private sector rents paid across the BRMA, including those from the lower end through to the upper ends of each rental market.

Occupant requirements

Evidence to demonstrate each of the eligible help to heat group benefit types

- 10.40. Documents must establish that an occupant of the premises was an HTHG member at some point during the course of the promotion of the measure.
- 10.41. You must be able to provide evidence that the HTHG member lives at the premises where the measure is being installed. In most cases, this will be the benefit letter.
- 10.42. There are several ways to show the customer is an HTHG member. The supplier can produce one of the following:
 - a) a WHD Core Group notice dated from 1 April 2019
 - b) a matched DWP reference number
 - c) an HTHG benefit letter
 - d) a self-declaration for Child Benefit (if the above three routes are not available)
- 10.43. Further information on the WHD Core Group notice and the DWP match eligibility route can be found from paragraph 3.50.
- 10.44. If using benefit letters to prove HTHG eligibility, with the exception of a WHD core group notice, Child Benefit award notices and Industrial Injuries Disablement Benefit letters, the letters must show that the person received the benefit (and any qualifying components) within 18 months prior to the date of completion of the measure. If the documents are older, suppliers must be able to provide updated evidence. Suppliers can use either the date the letter was sent or the start or end date of the benefit, if stated on the letter. Sometimes this may not correspond with the date the benefits started, in which case:
 - a) If the benefit letter is sent before the benefit starts, we will accept the letter from that date if the person will receive the benefit at some point within 18 months before the completion of the measure, or
 - b) If the benefit letter confirms the end of entitlement, it can only evidence HTHG eligibility when the end date of the award falls within 18 months before the completion of the measure.

- 10.45. Online services are available for UC recipients which provide customers' up-to-date benefit entitlement information.
- 10.46. Where DWP data-matching verification is not used, only official HMRC, DWP/Jobcentre Plus, Pensions Service, MOD and HM Government documents are deemed acceptable. This includes online confirmations from government departments, such as the HMRC online service and the Universal Credit full service. Use of any other documents must be agreed in writing with us before installing a measure.
- 10.47. We do not require full 'proof of benefit' letters or award notices. To evidence HTHG eligibility, we only need the page(s) that show:
 - a) official letter headed paper from HMRC, DWP/Jobcentre Plus, MOD, HM Government or the Pension Service
 - b) name and address matching where the measure was installed. Where the address is different, official documents proving they resided at the premises where the measure was installed
 - c) relevant date (either of the letter, start or end of the benefit), and
 - d) confirmation that a customer receives a qualifying benefit
- 10.48. The HTHG benefit types for the purposes of ECO²²⁰ are:
 - a) Armed Forces Independence Payment
 - b) Attendance Allowance
 - c) Carer's Allowance
 - d) Child Benefit (on the condition that the household's relevant income does not exceed the amount set out in Table 4 corresponding to the type of claim and the number of qualifying children)
 - e) Constant Attendance Allowance
 - f) Disability Living Allowance
 - g) Pension Guarantee Credit
 - h) Income-related Employment and Support Allowance (ESA)
 - i) Income-based Jobseeker's Allowance (JSA)

²²⁰ Provided that all applicable criteria laid out in Schedule 2 to the ECO3 Order are met.

- j) Income Support
- k) Industrial Injuries Disablement Benefit
- I) Personal Independence Payment
- m) Severe Disablement Allowance
- n) Tax Credits (Child Tax Credits and Working Tax Credits)
- o) Universal Credit (UC)
- p) War Pensions Mobility Supplement

Other official documents which can evidence occupancy

- 10.49. Where the above benefit documentation is not addressed to the private domestic premises, further evidence showing that the HTHG member resides there will be required.
- 10.50. Any official documents addressed to that person at the address where the measure is to be installed, such as:
 - a) an extract from the electoral or open register
 - b) a utility bill,²²¹ a landline phone bill, or a tv license
 - c) a mortgage statement, a bank statement, or
 - d) any other official documentation as agreed with Ofgem.
- 10.51. Where the recipient of benefits is a child and a parent or guardian is claiming the benefit on behalf of the child, a Child Tax Credit award notice can be used to evidence that the child lives at the premises where the measure is being installed. The evidence needed is shown in paragraph 10.71; it needs to state both the child's name and parent who is claiming the benefit on behalf of the child.
- 10.52. The documents must be dated within 18 months prior to the date of completion of the measure. ²²²

²²¹ We are aware that utility bills for park home residents are often developed and provided by the park home site owner. We would not consider these types of utility bill as being appropriate to evidence occupancy.

²²² For more information on the date of completion, see paragraphs 7.3 to 7.7.

Documents relating to a change of name

- 10.53. There are cases where a person changes their name, with the result that:
 - a) the person's old name appears on the title deeds or the mortgage statement if the person is a freeholder/leaseholder/owner or the tenancy agreement if the person is a tenant, AND
 - b) the person's new name appears on HTHG benefit documents or other official correspondence (described above).
- 10.54. In such cases, a supplier will need to produce a signed declaration from the person that their name has changed. The declaration should be prepared using the ECO3 Templates to evidence private domestic premises.²²³

Children and qualifying young persons

How to confirm responsibility for children and qualifying young persons?

10.55. Responsibility for a child or qualifying young person is defined in regulation 3 of the Child Tax Regulations 2002. Generally, a person shall be treated as responsible for a child or qualifying young person who is normally living with them. If fostering a child through a council the child's accommodation or maintenance is borne by local authority funds. They are also not a responsible for a child for the purposes of ECO if they are being looked after by a local authority,²²⁴ and that authority has placed them in the home of someone proposing to adopt them.

Guidance on redacting information

10.56. The document(s) that should be made available to us on request should contain a minimum amount of information to prove eligibility under the HTHG. This would be a letter-headed document that states the customer's name and address, and shows receipt of the qualifying benefit(s). It is not necessary to provide the entire document, only the relevant pages.

^{223 &}lt;a href="https://www.ofgem.gov.uk/publications-and-updates/eco3-templates-evidence-private-domestic-premises">https://www.ofgem.gov.uk/publications-and-updates/eco3-templates-evidence-private-domestic-premises

For Tax Credit Recipients see, article 3, paragraph 2.2 (Rule 4) of the Child Tax Credit Regulations 2002. For Universal Credit Recipients see article 4(6) of the Universal Credit Regulations.

- 10.57. Letters that include other pieces of personal information not relevant to ECO should be redacted. What can be redacted depends on the customer's HTHG qualification route. Consider the following when submitting documents to us:
 - a) The amount the customer receives from their benefit. You only need to show that they receive that benefit.
 - b) For HTHG routes which are not means tested (eg Income Support or State Pension Credit), you do not need to show the customer's income or savings.
 - c) National Insurance numbers should not be visible. These are often shown on the front page, and should not be used as a unique identifier.
- 10.58. When processing any personal data or sensitive personal data, suppliers are reminded of their duties to comply with the requirements of data protection law.
- 10.59. We may need to audit suppliers' compliance with their legislative requirements up to and after the end of the scheme. Suppliers must ensure that they retain information up to the 30 September 2022. It is the suppliers' responsibility to keep up to date with any changes to requirements.

Example letters

- 10.60. These are some examples of different types of letters that you may encounter.
- 10.61. We indicate whether or not the documents are suitable to evidence HTHG eligibility. We have highlighted certain parts of these documents that need to be considered when determining eligibility.
- 10.62. This is non-exhaustive list of the eligible benefits or scenarios for HTHG eligibility. This is a sample to be used to demonstrate some of the letters that may be provided.
- 10.63. For further clarification about whether or not a document is eligible, suppliers should contact the ECO team at Ofgem on eco@ofgem.gov.uk.

Example letters

- a) Armed Forces Independence Payment (AFIP): notification letter
- b) Child Benefit Award Notice
- c) Constant Attendance Allowance/ War Pensions Mobility Supplement: annual uprating letter
- d) Constant Attendance Allowance/ War Pensions Mobility Supplement: pension breakdown letter
- e) Income Support, Income-related Employment and Support Allowance and Incomebased Jobseeker's Allowance letter
- f) Child Tax Credit/Working Tax Credit: annual review award notice
- g) Child Tax Credit/Working Tax Credit: amendment award notice
- h) Child Tax Credit/Working Tax Credit: amendment award notice for use of proof of residency for children.
- i) Warm Home Discount (WHD) Core Group notice: 'Matched'
- j) Warm Home Discount (WHD) Core Group notice: 'Unmatched'
- k) The Pension Service: 'proof of benefit' letter
- I) Universal Credit live service award notification/full service clerical letter
- m) Universal Credit full service statement

Example A: Armed Forces Independence Payment (AFIP) customer entitlement notice letter

10.64. This document shows receipt of Armed Forces Independence Payment (AFIP).

If you contact us, use this reference: AA******B - AFIP11

Department for Work & Pensions

Mr ***** Address

Armed Forces Independence Payment Room C210, Warbreck House Warbreck Hill Road Blackpool FY2 0UZ

www.gov.uk

Telephone: 0845 850 3322 Textphone: 0845 601 6677

Date:

Armed Forces Independence Payment

About your Armed Forces Independence Payment

Dear Mr

You have been awarded Armed Forces Independence Payment by the Service Personnel and Veterans Agency.

Please keep this letter for your records.

Period of award

We can confirm you've been awarded Armed Forces Independence Payment from and including (DATE)

Your first payment of £xxxx will be paid into your account on (DATE)

This is for the period (DATE) to (DATE)

From (DATE) you will receive (AMOUNT) every 4 weeks.

Remember, you must tell us straightaway about any changes. Based on these changes your benefit may be delayed or stop.

03/13 Page 1 of 4

Example B: Child Benefit Award Notice (1 page)

10.65. This document shows receipt of Child Benefit.





Child Benefit Office HM Revenue and Customs BX9 1GT

Phone 0300 200 3300

Web www.gov.uk



Date 28 November 2018 NI number ChB number

Dear

About your Child Benefit

You contacted us recently to ask about your Child Benefit award.

Child Benefit is paid at a standard weekly rate of £20.70 for the eldest or only child. This is known as the higher rate. Child Benefit is paid at a standard weekly rate of £13.70 for each additional child. This is known as the lower rate.

Details of your Child Benefit award are shown below

Child Benefit was awarded for this child	Date of birth	Higher or lower weekly rate	Awarded from	Due to end on
		Higher		

These details are based on the information we hold at the date of this letter and may change if there is a change in circumstances.

If you contact us, we can deal with you more quickly if you quote the National Insurance number and provide a daytime phone number.

You can go online at GOV UK and access your Personal Tax Account to tell us about any changes to your circumstances.

Please note that our new address is Child Benefit Office, HM Revenue and Customs, BX9 1GT. If you write to us but do not use this address then we may not get your post.

Information is available in large print, audio and Braille formats. Text Relay service prefix number – 18001



Example C: Constant Attendance Allowance/ War Pensions Mobility Supplement: annual uprating letter (2 pages)

10.66. This document shows receipt of Constant Attendance Allowance and War Pensions Mobility Supplement.



Please read the parts marked with an X

X	Basic War Pension	£185.40
1	Treatment Allowance	٤
×	War Pension Constant Attendance Allowance	£69.90
1	Unemployability Supplement	£
1	Additional Allowance Spouse	٤
1	Allowance for Child paid with Unemployability Supplement	£
X	Comforts Allowance	£15.05
1	Invalidity Allowance	٤
X	Age Allowance	£38.20
1	Age 80 Allowance	£
1	Exceptional Severe Disablement Allowance	£
1	Severe Disabled Occupation Allowance	£
1	Allowance for Lowered Standard of Occupation	£
X	War Pensioners Mobility Supplement	£66.75
1	Gallant Conduct Award	£
1	Pension Increase Warrant	£
1	Service Rank Addition	£
	Total	6375.30

2 UPR1

Example D: Constant Attendance Allowance/ War Pensions Mobility Supplement: pension breakdown letter (1 page)

10.67. This document shows receipt of Constant Attendance Allowance and War pensions Mobility Supplement.



Veterans UK War Pensions Scheme Tomlinson House Norcross Thornton-Cleveleys FY5 3WP

Freephone: 0808 1914 2 18 Overseas: +44 1253 866043 Textphone: 0800 169 34 58 Email: Veterans-UK@mod.uk

Name Address line 1 Address line 2 Address line 3 Address line 4 Postcode

Date: 18 July 2018

Contact us: Your reference: Our reference:

Dear

Pension breakdown for Insert name

Below is the breakdown of pension payment you requested.

From insert date From insert date War Disablement Pension Age Allowance Unemployability Supplement (Unsupp) Allowance for wife paid with Unsupp Allowance for children paid with Unsupp Invalidity Allowance Comforts Allowance Constant Attendance Allowance War Pensioners Mobility Supplement Allowance for Lowered Standard of Occupation Exceptionally Severe Disablement Allowance Severe Disablement Occupational Allowance Gallant Conduct Award Service Rank Addition War Widows Pension War Widower's Pension Widows Age Allowance 65 Supplementary Pension Child Allowance for Child Allowance for Child Allowance for Rent Allowance

We have deducted money for:

MOD Adjustment

Motability Agreement

3rd Party Compensation

Child Support Allowance Article 6

IIDB

N.I. Age 80 Addition

07/16

WPS0230

Example E: Income Support, Income-related Employment and Support Allowance and Income-based Jobseeker's Allowance letter

10.68. This document shows receipt of Income Support, Income-related Employment and Support Allowance (ESA) and Income-based Jobseeker's Allowance (JSA).

f you call or wri Reference num	ite to us, please aber or NINO]	use this refere	nce:	Department for Work & Pensions
Addre Addre Addre	Initial, Surname ess Line 1 ess Line 2 ess Line 3 ess Line 4 code			Building/Office location Office type Street Town Post Code www.gov.uk
nformatio	a about voi	ır honofitz	s payments	Telephone: 0000 000 0000 Textphone: 0000 000 0000
Select Option Select Option Select Option Select Option Your payment			the following dates:	If you have any questions about this letter, or you need it in Braille, large print or audio, please call us on the telephone number at the top of this letter.
Start Date	End Date	Rate	Frequency	
delete this text i	f second benefit p	payment details	ails are not required / are required* ween the following Frequency	
Confirm all drop	odown options			

Page 1 of 2

Example F: Child Tax Credit/Working Tax Credit Annual Review Award Notice (1 page)

10.69. This document shows receipt of Child Tax Credit or/and Working Tax Credit.



MR FRANK PEACH
1 ANY STREET
ANYTOWN
ANYWHERE
AB1 2CD

Renew online with this reference number 000 000 123 456 789 go to www.gov.uk/managetaxcredits

 Online
 www.gov.uk/managetaxcredits

 Helpline
 0345 300 3900

 Textphone
 0345 300 3909

For our opening hours go to www.gov.uk/contact-hmrc

Tax Credit Office Preston PR1 4AT

Date 06/04/2016

Check now no later than 31/07/2016

Please keep this for your records

Tax credits - Annual Review for year ended 05/04/2016

Your tax credits award for 06/04/2015 to 05/04/2016

MR FRANK PEACH MRS PAULINE PEACH National Insurance number AB 34 56 78 D National Insurance number EF 46 56 09 G

We told you that we would be contacting you to review your tax credits award. We want to:

- · make sure we paid you the correct amount for the award period shown above, and
- ask you to make a tax credits claim for 2016-2017.

We need you to review your personal circumstances during the whole award period shown above and check your income.

If you need to tell us about anything once you have completed your Annual Review, please contact us.

If you do not have anything to tell us you need do nothing more and you will not receive another notice from us for this year. This TC603R Tax credits Annual Review is also your Award Notice and the amount of your award is shown below.

We will decide on 31/07/2016 that:

- The final amount of your tax credits award for the period 06/04/2015 to 05/04/2016 is £5494.08.
- Your tax credits award for 2016-2017 will be as shown in the Payments section.

If later, you think those decisions are wrong, you will have 30 days from 31/07/2016 to ask us to look at the decision again. We call this mandatory reconsideration. If you do think something is wrong, you do not have to wait until then to contact us.

Tax credits will be gradually be replaced by Universal Credit. You cannot receive tax credits and Universal Credit at the same time. For more information, go to www.gov.uk/universalcredit

You have an overpayment of tax credits. Please see the Overpayment section.

TC603R v1.0

Page 1 of 4

Example G: Child Tax Credit/Working Tax Credit Amendment Award Notice (2 pages)

10.70. This document shows receipt of Child Tax Credit or/and Working Tax Credit when issued outside of the review period, due to a change of circumstances, correction or payment only.

HM Revenue & Customs MISS ELSA FROZEN 3 ANY STREET ANYTOWN

AA00 0XX

Helpline 0345 300 3900 Textphone 0345 300 3909

For our opening hours go to www.gov.uk/contact-hmrc

Tax Credit Office Preston PR1 4AT

Date 7 September 2016

Amended tax credits award for 06/04/2016 to 05/04/2017

MISS ELSA FROZEN National Insurance number AA 11 10 11

Summary

Tax credit for the period - see Part 2

 Working Tax Credit
 £2041.68

 Child Tax Credit
 £13271.40

Amounts still to be paid to you for the period shown above - see Part 3

Working Tax Credit to MISS ELSA FROZEN £2041.68
Child Tax Credit to MISS ELSA FROZEN £6652.10

Tax credits are based on your personal circumstances and income for the whole tax year. After the end of the tax year, when all the information is known, we make a final decision about how much you are entitled to receive.

- Part 1 shows your circumstances, including your income. Please check this part and tell us immediately if anything is wrong, missing or has changed.
- Part 2 is for information. It shows how we calculate your tax credits.
- Part 3 gives details about any payments we will make for the period shown above.

Your rights and obligations

Your Charter explains what you can expect from us and what we expect from you. For more information go to www.gov.uk/hmrc/your-charter

Why we are writing to you

The person receiving Working Tax Credit has changed. Details are given in Part 3 of this notice.

What to do now

Please check the details on this award notice and tell us if anything is wrong, missing or incomplete.

It's important that you tell us about any changes to your circumstances when they happen Otherwise you could be overpaid and face a penalty.

TC602(C) 2/2016

Page 1 of 8

Has your income changed?

Please tell us if your income goes up or it goes down. This helps us to keep your payments on the right track.

Income gone down? - tell us now, you may be due more tax credits

If you are due more tax credits, we will increase your remaining payments straightaway.

After 5 April 2017 we will send you a Renewal Pack. Once you have told us your actual income for the year from 6 April 2016 to 5 April 2017, we will check your whole award. If we owe you any money we will pay it

Income gone up? - tell us now to keep your payments on the right track

This does not usually affect your tax credits payments for this year. They will stay the same until 5 April 2017 as long as there are no other changes in your income or circumstances.

From 6 April 2017 your payments will be based on the income you have told us about. If your income has gone up and you do not tell us until you complete your Renewal Pack, you may be paid too much from 6 April 2017 onwards. If you are, we will reduce your payments to collect back any overpaid amount

What to do if you think that something is wrong

If you think that something on this award notice is wrong or missing then contact us straightaway and we will try to put it right. If we cannot resolve your problem and you are not satisfied, write to us at the address on page 1 and ask us to look at the decision again. You must do this within 30 days of the date of this award notice. We call this mandatory reconsideration.

When we have looked at the decision again, we will send you a notice to tell you what we have done. If you are still unhappy with the decision, the notice will tell you how to appeal. For more information:

- go to www.gov.uk/tax-credits-appeals-complaints or
- phone our helpline and ask for our factsheet WTC/AP What to do if you think our decision is wrong

Part 2 How we work out your tax credits

The amounts shown in this Part are provisional until your actual income and personal circumstances are known and we make a final decision after 5 April 2016.

Tax credits are made up of elements. The elements you receive and the periods you receive them for are shown below. Your income may reduce the amount of tax credits you receive. We show any reductions below.

Working Tax Credit elements

£1002.32
£1028.50
£2030.82
£0.00
£2030.82

--- 04/40/0040 t- 05/04/0047 (407 J---)

TC602(C) 2/2016

Page 4 of 8

04000 00

Example H: Child Tax Credit/Working Tax Credit Amendment Award Notice for use as proof of residency for children (1 page)

10.71. This document can be used to evidence that a child in receipt of benefits, but is not named on the benefit document, lives in the same premises where the measure is being installed.



Amended tax credits award for 06/04/2016 to 05/04/2017

MISS ELSA FROZEN

National Insurance number AA 11 10 11 A

Continued

Child Tax Credit elements

A child element may be paid for a child from birth until the day before 1 September following their 16th birthday.

After that, a child element may be paid for a young person under 20 who is studying for a qualification up to and including A level, NVQ level 3 or Scottish national qualifications at higher or advanced level or equivalent, or who is on an approved training course. This does not include studying for a university degree or similar qualification.

You must tell us straightaway if a child over 16 and under 20 enters or leaves full-time non-advanced education or approved training. A child element for a young person aged 16, 18 or 19 will automatically stop each year unless you tell us they are continuing in full-time non-advanced education or approved training. If you are receiving the child element for a young person aged 17 and they are continuing in full-time non-advanced education or approved training, you will automatically continue to receive the child element.

A child element may also be paid for 20 weeks after a young person leaves full-time non-advanced education, provided they are still under 18 and have registered for work or training with a careers service, Connexions or equivalent. To claim this, you must tell us about that registration within 3 months of the date they leave full-time non-advanced education.

Child elements for children

OLAF FROZEN, SVEN FROZEN

2 qualifying children from 06/04/2016 to 15/04/2017 (365 days) £5548.00

Child elements for qualifying young people

1 qualifying young person from 06/04/2016 to 15/04/2017 (365 days) £2774.00

Disability elements

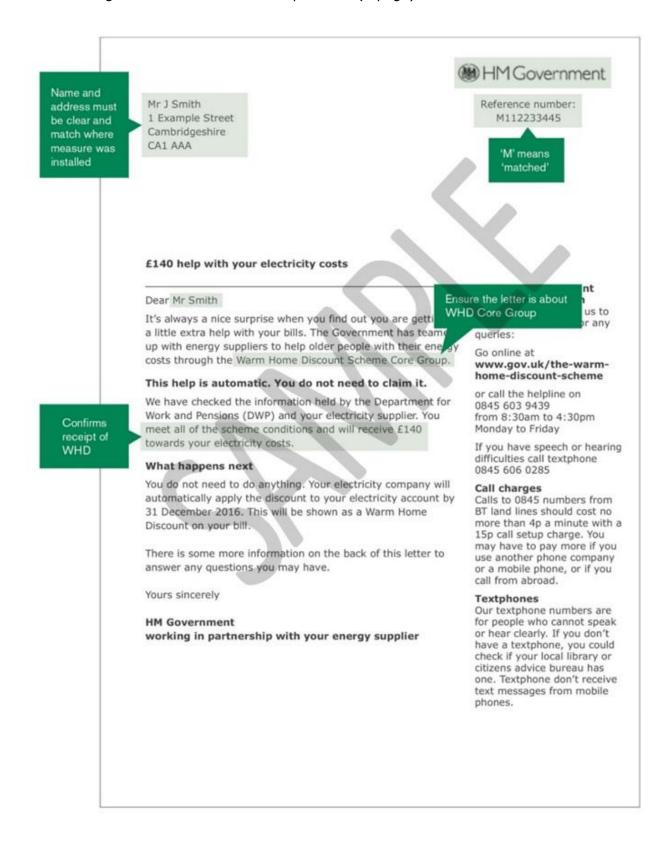
1 disability element from 06/04/2016 to 15/04/2017 (365 days) £3131.70 1 severe disability element from 06/04/2016 to 15/04/2017 (365 days) £1273.85

TC602(C) 2/2016

Page 5 of 8

Example I: Warm Home Discount (WHD) Core Group notice: 'Matched' (1 page)

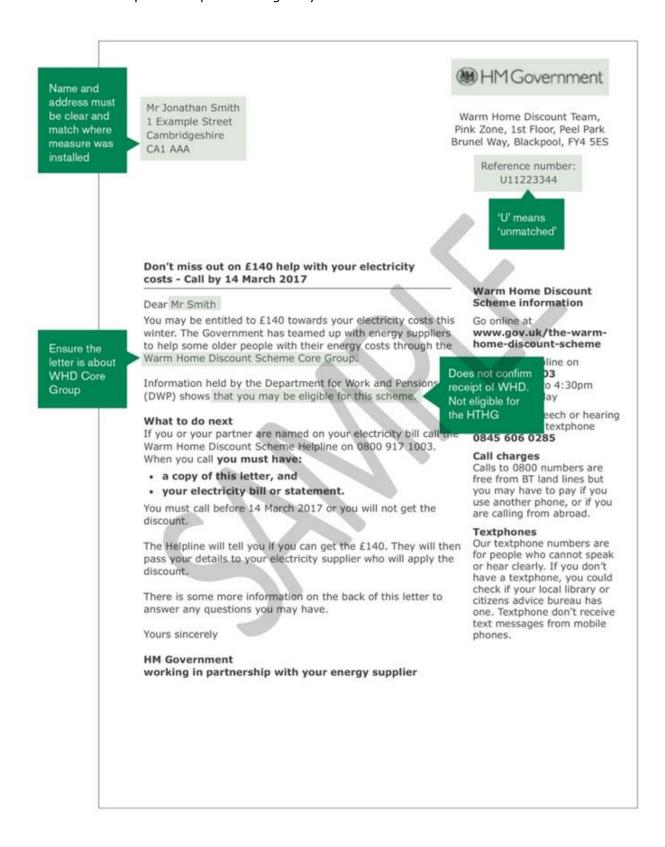
10.72. This document shows Warm Home Discount (WHD) Core Group notice: 'Matched'. This is eligible for the HTHG from 1 April 2019 (1 page)



Example J: Warm Home Discount (WHD) Core Group notice: 'Unmatched' (1 page)

10.73. This document shows Warm Home Discount (WHD) Core Group notice: 'Unmatched'.

Not acceptable as proof of eligibility.



Example K: The Pensions Service 'proof of benefit' letter (2 pages)

10.74. This document shows receipt of Pension Savings Credit, not Pension Guarantee Credit.

This claimant would not be eligible under the HTHG criteria.



Example L: Universal Credit Live Service Award Notification/Full Service Clerical Letter (3 pages)

10.75. This document shows receipt of Universal Credit Live Service or Full Service for those without an online account.



Universal Credit Post Handling Site B Wolverhampton WV99 1AJ

Title, Initial, Surname Address Line 1 Address line 2 Address line 3 Address line 4 Postcode

If you call or write to us, please use this reference:

www.gov.uk

Telephone: 0800 328 9344 Textphone: 0800 328 1344

Your Universal Credit payments

Information about your payments

Dear Select Option

Please read this letter in full as it has important information about your payments.

If you have any questions about this letter or you need it in Braille, large print or audio please call us.

Thank you for giving us the information we need and accepting your claimant commitment.

We've looked at your claim and decided we can pay you Universal Credit.

What this means for you

Based on what you've told us, your first payment will be paid on for £

After this, you will get paid on the day of every month. If your payment is due on a bank holiday or a weekend, you'll be paid on the last working day before this. You will be paid the same amount each month unless your circumstances change.

Your Universal Credit payments could be reduced if you don't keep doing the things listed on your claimant commitment.

The table on page 3 tells you how we've worked out your payment. If you need more information about this you can contact us using the phone number or address at the top of the letter.

Please tell us about any changes

You must tell Universal Credit **straightaway** if there is a change in your circumstances. If you give wrong or incomplete information or you don't report changes straight away you may be paid more

UC370 Page 1 of 6

Universal Credit is operated by the Department for Work and Pensions

How your Universal Credit payments are worked out	
This is based on your circumstances between xx Month and xx Month.	
1. First, we bring together the basic parts of Universal Credit that a	pply to you.
Please Select]	£
Housing amount	£
Child amount	£
Insert Child names - Select number of childr ▼	
Select Option •	
Confirm all dropdown options	
You will not be paid an extra amount of Universal Credit for a 3rd or furth young person(s)* in your household who is born on or after 6 April 2017 circumstances apply. For more information on when special circum see www.gov.uk/guidance/claiming-benefits-for-2-or-more-children	unless special stances may apply,
Disabled child amount	£
Childcare amount	£
Carer amount	£
Limited Capability for Work amount	£
Amount	£
Next, we look at any non-work income and other benefits you ge savings and capital.	t, as well as your
Insert type of Income] Income from savings and capital. We take £4.35 into account for every £250 yo have over £6000.	u £
The total we take off for these items is:	£
3. We then look at your take-home pay	
Take-home pay is what's left after tax, National Insurance and any pension confeducted.	tributions have been
Your take-home pay for this period is £	
The first £ of your take-home pay doesn't affect your Universal Credit monthly amount. Every £1.00 you earn in take-home pay over this £ redu your Universal Credit by * Delete as appropriate if assessment period starts bef 10/04/17 populate - 65 pence / If assessment period starts on or after 10/04/17 populate 63 pence pence.	fore £

UC370 Page 3 of 6

4. Lastly, we look at any loans, advances, sanctions, penalties, deducthird party payments you have.	tions, overpayments
[insert reason/s for deduction]	E
The total we take off for these items is:	£
Total adjustments	£
Your Universal Credit monthly payment for this period	E-SYXX XXX



Example M: Universal Credit Full Service Statement (1 page)

This document shows receipt for Universal Credit Full Service, for those with an online account.



11. Appendix 3 - Boiler information pack

Introduction

- 11.1. This information pack provides an overview of the different eligible boiler measures in ECO. It also details how to assess boilers and outlines the warranty requirements for the repair and replacement of boilers. This appendix should be read in conjunction with Chapter 4.
- 11.2. This appendix provides information on the following:
 - a) Defining boilers and heating systems
 - b) Replacement boilers
 - c) Eligible boiler measures in ECO
 - d) Determining whether a boiler is broken down or inefficient
 - e) Carrying out boiler assessments
 - f) Warranty requirements for boiler measures

Defining boilers and heating systems

Boilers

- 11.3. A boiler is defined as a gas, liquid, solid fuelled or electric appliance designed to provide hot water for space heating through a heat distribution system. It may (but does not need to) be designed to provide domestic hot water as well. A boiler may comprise some or all of the following components:
 - a) heat exchanger
 - b) the fuel supply system
 - c) boiler and burner control system
 - d) air supply and exhaust fans
 - e) flue connections within the boiler case
 - f) expansion vessel and/or fill and expansion header tanks
 - g) programmer/timer (one that is integral to the boiler)
 - h) circulation pump

- i) condensate drain system
- j) burner assembly
- k) ancillary equipment and any connections within the case necessary to supply central heating and/or instantaneous hot water.

Heating systems

- 11.4. A heating system is a central heating system, which will normally comprise some or all of the following components:
 - a) radiator circuit
 - b) heating circuit
 - c) heat emitters (radiators as well as underfloor or vents)
 - d) flue
 - e) room thermostats and thermostatic radiator valves (TRVs)
 - f) mains boiler or other heat source (indoor or outdoor unit)
 - g) cold water tank
 - h) expansion tank
 - i) hot water storage tank
 - j) control valves
 - k) heating system pump.
- 11.5. An air based central heating system is an appliance designed to distribute heat to multiple rooms within a property, and emit heat as warm air through vents. Examples include some warm air heating systems and air-to-air heat pumps.

Replacement boilers

- 11.6. A replacement boiler is a boiler, connected to a working heating system, that has been installed and which replaces a previous heating source.
- 11.7. A central heating system with a heat source which does not meet the definition of a 'boiler' in paragraph 11.3, may be eligible for a boiler replacement under the cap without the uplift applied.

- 11.8. Room heaters and properties with no heating may be eligible for a boiler replacement under the cap without the uplift applied, provided it can be evidenced that they have been the main heat source for at least one year.²²⁵
- 11.9. Where there is no heating system present prior to installation we consider that the replacement boiler replaces direct-acting portable electric heaters, as this is the assumed pre-main heat source.
- 11.10. Replacement boilers must be installed in accordance with the relevant Publicly Available Specification 2030 (PAS) and as per the boiler manufacturer's instructions.

Eligible boiler measures in ECO

- 11.11. There are four eligible boiler measures in HHCRO. The way in which a boiler measure is categorised depends on the heating source present in the premises before the measure is installed.
- 11.12. The four eligible boiler measures are:
 - a) Broken boiler replacement, either installed under the broken heating system cap or alongside a primary insulation measure
 - b) Upgrade of an inefficient boiler installed alongside a primary insulation measure
 - c) Boiler repair
 - d) Boiler replacement, installed under the broken heating system cap without the uplift applied.
- 11.13. Additionally, all boilers can be replaced with a district heating system or a renewable heating system.
- 11.14. Air based systems (or any central heating system that does not include a boiler) can in some circumstances be replaced as a boiler upgrade or broken boiler measure. In the latter case, they cannot receive the associated broken heating system uplift. Evidence that the system is inefficient or broken must be retained.

²²⁵ See paragraphs 6.26-6.47 for more information

- 11.15. Room heaters²²⁶ can have a boiler replacement measure if the property is not eligible for FTCH due to having a central heating system in the past. These measures are only eligible under the broken heating system cap without the uplift applied.
- 11.16. The scoring methodology that should be used to calculate the score for the replacement or repair of a boiler depends on the type of heating source already present at the premises and/or the measure being installed.
- 11.17. The boiler assessment checklist must be completed for all boiler measures, regardless of the pre-main heat source.

Determining whether a boiler is broken down or noncondensing

Broken down

- 11.18. A boiler is 'broken down' if, when connected to electric and fuel supplies, it does not respond appropriately to any demand for heat as required by the central heating or domestic hot water system.
- 11.19. The operative must list the symptoms observed and state the steps taken to reach his/her conclusion in the **Energy Company Obligation (ECO): Boiler Assessment Checklist** ('the boiler checklist').²²⁷ See paragraph 11.34 below for more information on the boiler checklist.

Non-condensing

- 11.20. Non-condensing boilers or a system with a manufactured energy efficiency that is no better than a non-condensing boiler are eligible for an upgrade if installed alongside a primary insulation measure.²²⁸
- 11.21. The boiler checklist sets out a list of faults which can be used to determine and evidence whether or not a boiler is broken down and a section for completion on evidencing non-condensing. In all cases, the operative must state the steps taken to reach his/her conclusion in the boiler checklist. This may include documenting test results, symptoms

 $^{^{226}}$ Refer to 'Identification of the pre-main heating source for the property' section, paragraph 6.26-

²²⁷ See https://www.ofgem.gov.uk/publications-and-updates/eco3-boiler-assessment-checklist.

²²⁸ See paragraphs 4.70-4.75 for more information.

- observed or any other method used to identify the faults or information on how they concluded a boiler is non-condensing.
- 11.22. The operative must use their expertise and available evidence to assess whether the boiler is non-condensing.

Cannot be economically repaired

- 11.23. Broken boilers should only be replaced where they cannot be economically repaired. If a boiler is economically repairable, it must be repaired or can be replaced as an inefficient upgrade if the boiler is non-condensing. The boiler will only be eligible for replacement as a broken heating system or an inefficient upgrade where:
 - a) the required replacement parts for the boiler are not available (ie unavailable for purchase at a reasonable cost or within a reasonable timeframe. What is considered a reasonable timeframe and cost will depend on all the circumstances including the nature of the repair required), OR
 - b) the actual cost of repair is greater than the cost of replacing the boiler, OR
 - c) the actual cost of repair is greater than the relevant threshold on the Boiler Economic Repair Cost Comparison Tables

Boiler Economic Repair Cost Comparison Tables

- 11.24. As described above in option c, a boiler cannot be economically repaired where the actual cost of repair is greater than the relevant threshold on the Boiler Economic Repair Cost Comparison Tables.
- 11.25. These tables can be found in the boiler assessment checklist. There is also a guide to using the tables at the end of the checklist.
- 11.26. The tables display the maximum cost of repair for boilers of varying ages or it to be considered economic for the boiler to be repaired rather than replaced. If the actual cost of repair, as calculated by the operative, is higher than the maximum cost of repair outlined in the table, the boiler cannot be economically repaired and can therefore be replaced. The maximum cost of repair depends on the boiler type, age and condition. See 'Assessing boiler condition' below for more information.

- 11.27. When assessing the condition of the boiler, the operative should make this assessment based on what they would reasonably expect the condition of a boiler of that age and type to be.
- 11.28. When assessing the boiler age, the estimate age should be rounded down eg a boiler that is 4.7 years old should be assessed as a 4-year-old boiler. The boiler age can be determined by assessing the following information:
 - a) the boiler name plate
 - b) installation certificates
 - c) warranty documentation.
- 11.29. The maximum cost of repair for each boiler type is based on the estimated replacement cost of a boiler and depreciation over time. The estimated replacement cost includes, but is not limited to, the cost of the boiler, extras (eg flue), fittings, water treatment inhibitor, central heating controls, sub-contract electrician, quotation, re-connecting and commissioning the boiler, and labour.
- 11.30. The costs that are taken into account by the operative when calculating the actual cost of repair should, where applicable, include those listed above, plus the cost of a warranty of at least two years. The operative must specify the cost of the warranty provided for the boiler in the actual cost of repair. Where, in addition to the repair work itself, further boiler works are necessary at the time of repair to protect the boiler for the life of the warranty, the cost of these works should be included in the actual cost of repair (subject to those works being carried out). See paragraph 11.44 for the expected costs of a warranty.

Carrying out boiler assessments

11.31. The operative must complete the boiler checklist to assess whether the boiler should be repaired or replaced.

Who is considered to have appropriate skill and experience?

11.32. For boilers that are replaced and referred to in PAS 2030, the boiler must be assessed and replaced by operatives who meet the competency requirements listed in the boiler-

specific annex to that specification. For boilers not in PAS, and for boiler repairs, the assessment and repair/replacement must be carried out by operatives who meet industry competency standards for that particular fuel type.

11.33. All operatives undertaking boiler repair / replacement work must also meet regulatory requirements to work with the relevant fuel type. For example, in the case of gas-fuelled boilers, operatives must be Gas Safe registered in accordance with regulation 3 of the Gas Safety (Installation and Use) Regulations 1998. There is no requirement for the assessment and repair / replacement to be carried out by the same person. Each appropriately qualified operative should sign the relevant section of the boiler checklist. See paragraph 2.74 for more general information on installation standards.

Using the boiler checklist

- 11.34. As stated above, Ofgem has prepared a boiler assessment checklist which should be completed, signed, and dated by the relevant operative and made available by the supplier for subsequent audits by us. The information provided in the boiler checklist will form the basis of our determination of whether the boiler is broken down, and can/cannot be economically repaired or whether it is non-condensing. The boiler checklist (BACL) does not need to be completed for FTCH measures the FTCH checklist must be completed instead.
- 11.35. The relevant operative specified in the document must complete the boiler assessment checklist. This will either be the assessor who inspected the boiler on-site or the operative who repaired or replaced the boiler. Another person must not sign it on behalf of this person. When filling in the BACL assessment, details should not be copied from other BACLs, ie photocopying or copying and pasting should not be used to complete any part of the form.
- 11.36. A supplier may adapt the format of the checklist to match its own systems, as long as the content is not changed. Suppliers may submit adapted checklists to us before use for confirmation that the content is acceptable.
- 11.37. It is important to note that the operative's decision to repair or replace a boiler on the basis that they consider that it is broken down and can/cannot be economically repaired or non-condensing does not necessarily mean that we will reach the same conclusion, particularly if we consider that an assessment has been incorrectly carried out. For this reason, suppliers should ensure that the operative, in assessing the boiler, accurately completes the boiler checklist.

- 11.38. Monitoring and auditing will be undertaken by us to ensure that boiler assessments are carried out in accordance with our requirements. To effectively protect against fraudulent activity, monitoring initiatives will include inspection of boiler repair and replacement measures.
- 11.39. A detailed breakdown of the costs incurred in either repairing or replacing a broken boiler is required. The breakdown of costs must be specific to the boiler being assessed. The breakdown of costs must be itemised as set out in the Actual Costs of Repair and Replacement section of the BACL. Appendix 1 of the boiler assessment checklist should be used to record this information. If agreed with the relevant supplier, an alternative format that provides the same information can be used, so long as the itemised costs are retained for audit purposes.

Warranties requirement for boiler measures

- 11.40. All boilers repaired or installed in ECO must be accompanied by a warranty as per the TrustMark requirement²²⁹. TrustMark requires that all Registered Businesses provide a minimum two-year financial protection mechanism for all works carried out in and around the home. This includes but is not limited to product warranties and workmanship. The requirements that the warranty must meet are dependent on the boiler measure being delivered.
- 11.41. Alongside the two years warranty, suppliers must continue to collect the installation warranty as a confirmation that the consumer has not been charged for the warranty. The person providing the warranty must have explained what it does and does not cover.
- 11.42. The repair of a boiler measure completed on or after 1 January 2020 must be accompanied by warranty of at least two years.
- 11.43. Where the supplier is aware that the repair or replacement of the existing boiler is covered by a guarantee or warranty provided under ECO or another government scheme (eg Warm Front), the savings from the new measure cannot be claimed under ECO.

276

²²⁹ More information on the TrustMark requirements can be found in their <u>Framework operating</u> requirements document.

Warranties for the repair of a boiler

- 11.44. In the case of the repair of a boiler, the repair must be accompanied by a warranty of at least two years. The warranty must relate to the proper functioning of the entire boiler, and must not be limited to the part of the boiler that has been repaired or replaced. The cost of a warranty of at least two years should be included when calculating the cost of a boiler repair and must also be provided in the boiler checklist. The warranty should, as a minimum, provide cover for total repair works, during the life of the warranty, valued up to the greater of:
 - a) the financial level indicated in the Boiler Economic Repair Cost Comparison Tables, for a boiler of that type, age and condition, OR
 - b) £500 (excluding VAT).
- 11.45. Operatives will need to obtain the householder's written confirmation that they have been provided with a warranty and the operative has:
 - a) informed them that the boiler is under a warranty from the date of repair, and the duration of that warranty, and
 - b) explained the nature of the warranty.
- 11.46. A copy of the warranty provided to the householder must be made available to us on request.
- 11.47. Where a supplier issues a warranty in respect of the repair of a boiler, any subsequent repair of the boiler under that warranty will not be eligible for savings.

Warranties for the replacement of boiler installations

- 11.48. All replacement boilers installed under ECO3 must be accompanied by a warranty.
- 11.49. A warranty is one that:
 - a) provides for the rectification of problems notified to the person(s) providing the warranty within two years of the replacement boiler being installed

- b) accompanies the replacement boiler at the time the installation is complete. We will be satisfied that the warranty has been provided when the installation was completed if a warranty of at least two years is in place at the date of handover²³⁰
- c) provides for the rectification, free of charge, of problems which affect the functioning of the boiler or heating system, and which relate to the replacement boiler's installation and/or design work carried out by the operative(s). Generally, the scope of work required to install a boiler is as described in the manufacturer's instructions for installation. The design work is the suitability of the replacement boiler for the heating system it is intended to serve, including appropriate sizing, and
- d) is accompanied by a declaration by or on behalf of the occupier of the premises demonstrating that to the occupier's knowledge no one²³¹ has been charged for the warranty.
- 11.50. The warranty is not required to provide for the rectification of a problem which is covered by the manufacturer's warranty for the replacement boiler. Such warranties are likely to be limited to parts and manufacturing faults.
- 11.51. The warranty is not required to provide for the rectification of a problem by a person other than the operative(s), the warranty provider or a person acting on behalf of the operative(s) or warranty provider, which arises after the replacement boiler is installed where that problem arises from one or more of the following:
 - a) negligence
 - b) accident
 - c) misuse of the replacement boiler
 - d) repair of the replacement boiler

Additional information for warranties for replacement boilers

11.52. Where a warranty that meets the TrustMark requirements has been issued for the replacement boiler, any repair of the boiler under that warranty or under the manufacturer's warranty cannot be claimed under ECO as a heating qualifying action.

²³⁰ Refer to paragraph 7.5 for more information on 'date of handover'.

²³¹ This does not include the installer, supplier or any other party in the supply chain.

	Signed	Date
	"To my knowledge no one has been charged for providing the warranty has explained what it does a	, .
	will accept a copy of the qualifying warranty, marked wi occupier which states:	th a signed declaration by the
11.53	. To demonstrate that a warranty has been provided to t	he occupier free of charge we

11.54. The declaration **must** be on a copy of the qualifying warranty rather than on a separate document.

12. Appendix 4 - Electric Storage Heaters (ESHs) Information Pack

Introduction

12.1. This information pack provides an overview of the different eligible electric storage heater (ESH) measures in ECO. It also details how to assess ESHs, and outlines the warranty requirements for the repair and replacement of ESHs. This appendix should be read in conjunction with Chapter 4.

Replacement electric storage heater (ESH)

- 12.2. A replacement ESH is an ESH that has been installed which replaces a previous heating source.²³²
- 12.3. Where a property has no heating system, we consider that the replacement ESH replaces direct acting portable electric heaters, as this is the assumed space heating system (note that this does not apply in the case of properties which are temporarily without a heating system as the old one has been removed in anticipation of the replacement).
- 12.4. Replacement ESHs must be installed in accordance with Publicly Available Specification (PAS) 2030²³³ and as per the ESH manufacturer's instructions.

Eligible ESH measures in ECO

- 12.5. The scores achieved through replacing, and in some cases repairing ESHs, can be credited against a supplier's HHCRO.
- 12.6. There are three eligible ESH measures in HHCRO. The way in which an ESH measure is categorised depends on the heating source present in the premises before the measure is installed.

²³² For example, an inefficient boiler, fixed room heaters or an electric storage heater.

 $^{^{233}}$ This is available for purchase on the BSI website:

http://shop.bsigroup.com/ProductDetail/?pid=00000000030297314.

- 12.7. The three eligible ESH measures are:
 - a) Broken ESH replacement
 - b) Broken ESH repair
 - c) Upgrade of an inefficient ESH with an efficiency of equal to or less than 0.2, when installed alongside a primary insulation measure.
- 12.8. Additionally, all ESHs can be replaced with a district heating system or a renewable heating system.
- 12.9. The scoring methodology that should be used to calculate the score for the installation, replacement or repair of an ESH depends on the type of heating source already present at the premises.
- 12.10. Electric storage heater installations will not be considered complete unless the property is on an off-peak electricity tariff.

Determining the functional condition of an ESH

Broken down

- 12.11. An ESH is 'broken down' if, when connected to an electric supply, it does not store heat or does not deliver any heat.
- 12.12. The operative should list the symptoms observed and the steps taken to reach his/her conclusion that the ESH is broken down in the *Energy Company Obligation (ECO):*Electric Storage Heater Assessment Checklist ('the ESH checklist'). 234 See paragraphs 12.24-12.27 for more information on the ESH checklist.

Cannot be economically repaired

12.13. Broken ESH should only be replaced where they cannot be economically repaired. If an ESH is economically repairable, it must be repaired or can be replaced as an inefficient

²³⁴ See https://www.ofgem.gov.uk/publications-and-updates/eco3-electric-storage-heater-assessment-checklist.

upgrade if the ESH has a responsiveness rating equal to or less than 0.2 when assessed against SAP.

12.14. An ESH cannot be economically repaired where:

- a) the required replacement parts for the ESH are not available (ie unavailable for purchase at a reasonable cost or within a reasonable timeframe. What is considered a reasonable timeframe and cost will depend on all the circumstances including the nature of the repair required)
- b) the insulation in the ESH contains asbestos and therefore cannot be removed to access broken part
- c) the actual cost of repair is greater than the cost of replacing the ESH
- d) the actual cost of repair is greater than the relevant threshold on the ESH Economic Repair Cost Comparison Table.

ESH Economic Repair Cost Comparison Table

- 12.15. When using option d. above to determine that an ESH with a responsiveness of more than 0.2 cannot be economically repaired, the ESH Economic Repair Cost Comparison Table should be used.
- 12.16. This table can be found in the ESH checklist.
- 12.17. The table displays the maximum cost of repair for it to be considered economic for the ESH to be repaired rather than replaced. If the actual cost of repair, as calculated by the operative, is higher than the maximum cost of repair outlined in the table, the ESH cannot be economically repaired and can therefore be replaced. The maximum cost of repair depends on the type and age of the ESH.
- 12.18. The maximum cost of repair for each ESH type is based on the estimated replacement cost of an ESH and depreciation over time. The estimated replacement cost includes the cost of the ESH, fittings, quotation, cost of electric phase connection to match the load capacity required by the ESH, and labour.
- 12.19. The costs that are taken into account by the operative when calculating the actual cost of repair should, where applicable, include those listed above, plus the cost of a warranty of at least two years. Where, in addition to the repair work itself, further ESH works are

necessary at the time of repair to protect the ESH for the life of the warranty (eg replacing damaged insulation), the cost of these works should be included in the actual cost of repair (subject to those works being carried out). See paragraph 12.31 for more information on warranties.

Carrying out ESH assessments

- 12.20. In order to determine whether an ESH should be replaced or repaired, the ESH must be assessed by a person of appropriate skill and experience ('the operative').
- 12.21. The operative must complete the ESH checklist to demonstrate to us whether the ESH is broken down and to assess whether the ESH can be repaired or whether it should be replaced.
- 12.22. This section provides information on:
 - a) who is considered to have appropriate skill and experience, and
 - b) using the ESH checklist.

Who is considered to be have appropriate skill and experience

12.23. The assessment and the repair or replacement of an ESH must be carried out by a person with the appropriate skill and experience (the 'operative'). Appropriate skill and experience can be demonstrated by the operative meeting the competency requirements for domestic electrical installation work listed in the 'measure specific requirements for electric storage heaters' in Annex D1 of PAS 2030. There is no requirement for the assessment and repair / replacement to be carried out by the same person. Each appropriately qualified operative should sign the relevant section of the ESH checklist.

Using the ESH checklist

12.24. As mentioned above, the ESH checklist should be completed, signed and dated by the relevant operative(s) and must be made available to us on request. All steps taken by the operative in determining if the ESH is broken down or inefficient should be recorded in the checklist, as well as the operative's recommendation as to whether the ESH should be repaired or replaced. The information in the checklist will form the basis of our

determination of whether the ESH is broken down and can/cannot be economically repaired or whether it is inefficient. The ESH checklist does not need to be completed where the storage heaters are being replaced by a FTCH measure – in this case, the information should be recorded on the FTCH checklist.

- 12.25. A supplier may adapt the format of the ESH checklist to match its own systems, as long as the content is not changed. Suppliers may submit adapted checklists to us before use for confirmation that the content is acceptable.
- 12.26. It is important to note that the operative's decision to repair or replace an ESH on the basis that they consider that it is broken down and can/cannot be economically repaired does not necessarily mean that we will reach the same conclusion, particularly if we consider that an assessment has been incorrectly carried out. For this reason, suppliers should ensure that the operative, in assessing the ESH, accurately completes the ESH checklist.
- 12.27. Monitoring and auditing will be undertaken by us to ensure that ESH assessments are done in accordance with our requirements.

Warranty requirements for ESH measures

- 12.28. On or after 1 January 2020, all ESHs repaired in ECO must be accompanied by a warranty of at least two years as per the TrustMark requirement.²³⁵ TrustMark requires that all Registered Businesses provide a minimum two-year financial protection mechanism for all works carried out in and around the home. This includes but is not limited to product warranties and workmanship. The requirements that the warranty must meet is dependent on the ESH measure being delivered.
- 12.29. Alongside the two years warranty, suppliers should continue to collect the installation warranty as a confirmation that the consumer has not been charged for the warranty where possible. The person providing the warranty must have explained what it does and does not cover.
- 12.30. Where the supplier is aware that the repair or replacement of the ESH is covered by a guarantee or warranty that meets the TrustMark requirements under ECO or another

²³⁵ More information on the TrustMark requirements can be found in their <u>Framework operating</u> requirements document.

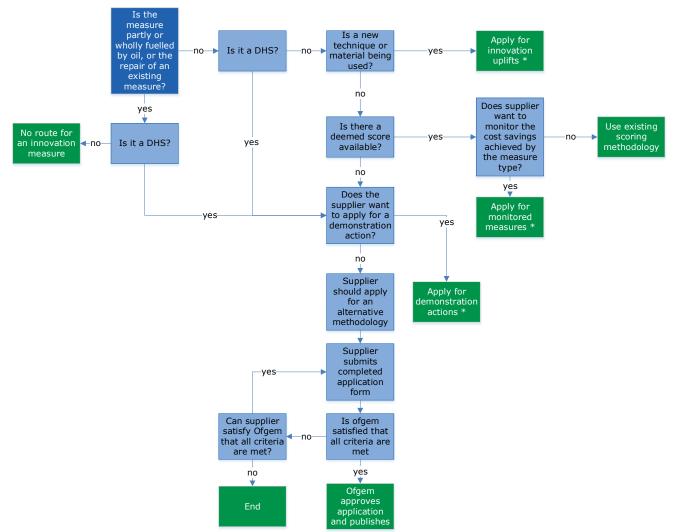
government scheme (eg Warm Front), the savings from the new measure cannot be claimed under ECO.

Warranties for replacement ESHs

- 12.31. All replacement ESHs installed under ECO must be accompanied by a warranty of at least two years.²³⁶ The requirements that the warranty must meet is dependent on the ESH measure being delivered.
- 12.32. The warranty that accompanies a replacement ESH must reflect the proper functioning of the entire ESH that has been installed.
- 12.33. This requirement can be met by a manufacturer's warranty and this can cover all ESHs installed in property as long as the details of the individual heaters, such as the serial numbers or any other unique identifier, are included in the warranty.
- 12.34. Installation of an ESH must adhere to the requirements in the manufacturer's instruction manual. If these are not met, the manufacturer's warranty or the TrustMark approved warranty may become invalid. In such cases, the ESH would be ineligible as there is no valid warranty in place.
- 12.35. One way that a supplier can assure themselves that an ESH has been installed to the manufacturer's requirements and therefore the warranty is valid, is through using an installer registered with a Competent Person Scheme.
- 12.36. If more than one ESH is installed in premises suppliers may choose to provide one warranty covering all replacement ESHs, as long as the details of the individual heaters (such as the heater serial number or any other unique detail to identify each heater) are included in the warranty.
- 12.37. A copy of the ESH warranty provided to the occupier must be made available to us on request.
- 12.38. Where a warranty has been issued for the replacement ESH, any repair of the ESH under that warranty will not be eligible for ECO savings.

²³⁶ See https://www.ofgem.gov.uk/publications-and-updates/eco3-electric-storage-heater-assessment-checklist.

13. Appendix 5 – Process for new scores and alternative scoring methodologies



^{*} More information on demonstration actions, monitored measures and innovation uplifts will be published in the Innovation Guidance.

14. Appendix 6 – Abbreviations

Abbreviation	Explanation
AA	Attendance Allowance
AFCS	Armed Forces Compensation Scheme
AFIP	Armed Forces Independence Payment
AIStructE	Associate of the Institution of Structural Engineers
ASHP	Air Source Heat Pump
AW	Affordable Warmth
BEIS	Department for Business, Energy and Industrial Strategy
BRE	Building Research Establishment
CERO	Carbon Emissions Reduction Obligation
СНР	Combined Heat and Power
СТС	Child Tax Credit
CWI	Cavity Wall Insulation
DEA	Domestic Energy Assessor
DHS	District Heating System
DLA	Disability Living Allowance
DOCC	Declaration of Conformity and Completed Installation
DWP	Department for Work and Pensions
ECO	Energy Company Obligation
EPC	Energy Performance Certificate
ESA	Income Related Employment and Support Allowance
ESH	Electric Storage Heater
EST	Energy Saving Trust
EWI	External Wall Insulation
FIStructE	Fellow of the Institution of Structural Engineers
FP	Fuel Poor
FTCH	First Time Central Heating
GDPR	General Data Protection Regulation
GIP	Guaranteed Income Payment
GSHP	Ground Source Heat Pump
HHCRO	Home Heating Cost Reduction Obligation
HMRC	Her Majesty's Revenue and Customs

Abbreviation	Explanation
НМО	Houses of Multiple Occupation
нтн	Help to Heat
HTHG	Help to Heat Group
IUF	In-use Factor
IWI	Internal Wall Insulation
JSA	Jobseeker's Allowance
kWp	Kilowatts Peak
LA	Local Authority
LIVC	Low income and vulnerable to the effects of living in a cold
	home
LPG	Liquid Petroleum Gas
MCS	Microgeneration Certification Scheme
MEES	Minimum Level of Energy Efficiency
MIStructE	Membership of the Institution of Structural Engineers
MOD	Ministry of Defence
OA	Output Area
PAS	Publicly Available Specification
PCDB	Product Characteristics Database
PCWI	Party Cavity Wall Insulation
PHI	Park Home Insulation
PIP	Personal Independence Payment
POMI	Percentage of Measure Installed
POPT	Percentage of Property Treated
PRS	Private Rented Sector
RdSAP	Reduced data Standard Assessment Procedure
RHI	Renewable Heat Incentive
RICS	Royal Institution of Chartered Surveyors
RIR	Room-in-Roof
RIRI	Room-in-Roof Insulation
RRN	Report Reference Number
SAP	Standard Assessment Procedure
SoI	Statement of Intent
SWI	Solid Wall Insulation

Abbreviation	Explanation
SWMR	Solid Wall Minimum Requirement
TRV	Thermostatic Radiator Valve
UC	Universal Credit
UKAS	United Kingdom Accredited Service
WHD	Warm Home Discount
WTC	Working Tax Credit

15. Appendix 7 - Glossary

Α

Affordable Warmth In-fill is a mechanism which can be used when installing SWI or DHS measures to make it easier to treat eg a terrace or block of flats. Where at least 67% of properties in the same building, terrace or immediately adjacent buildings are eligible for ECO, the remaining properties can be treated as 'in-fill'. Measures installed to in-fill properties also count towards a supplier's obligation.

A wall insulation measure accompanied by **appropriate guarantee** receives the relevant standard lifetime. An appropriate guarantee must meet the criteria listed in our guidance. Appropriate guarantees that TrustMark have reviewed, and consider meet the criteria, are listed on TrustMark's website.

B

Building regulations covers the Building Regulations 2013 in England and Wales, and the Building (Scotland) Regulations 2004 in Scotland.

C

A **caravan** means any structure designed or adapted for human habitation which can be moved from one place to another (whether by being towed, or by being transported on a motor vehicle or trailer) and any motor vehicle so designed or adapted, but does not include (a) any railway rolling stock which is for the time being on rails forming part of a railway system or (b) any tent.

A **chartered surveyor** is a RICS-qualified chartered surveyor.

Cost savings means, in relation to a measure:

- The money that would be saved by that measure over its expected lifetime in heating domestic premises to 21 degrees Celsius in the main living areas and 18 degrees Celsius in all other areas, and
- Where it also results in savings in the cost of heating water, the money that
 would be saved by the measure over its expected lifetime in heating water in
 those premises, and
- Where it also results in the generation of electricity the money that would be saved by the measure over its expected lifetime in generating electricity for use at those premises, excluding any electricity generated for the purpose of heating the premises or for heating water.

A **croft** is a relatively small piece of agricultural land, unique to the Scottish Highlands. Crofts are normally held in tenancy and may or may not have buildings associated with it. All crofts must be registered with the Crofting Commission and the occupant must comply with the legislative duties of Crofting. These include a duty to reside on or near the land and to cultivate the land. More information on crofts can be found on the Crofting Commission's website.

D

Date of completion is the date on which installation of a measure was completed.

The **date of handover** is, for measures installed in accordance with PAS 2030, the meaning of handover is defined within PAS 2030. Broadly it includes, where required, any explanation by the installer on the safe, efficient operation of the system, as well as any guidance on care and maintenance. For measures that do not need to be installed in accordance with PAS 2030, or where no Declaration of Conformity is produced, the date of handover will be the date on which work on the installation of the measure is completed, and any relevant information or documents relating to the operation and maintenance of the measure have been provided to the consumer.

Deemed scores determine the contribution certain measures make towards a supplier's HHCRO obligation. Deemed scores are fixed scores for each measure type that are determined using three or four variables.

Domestic customer means a person living in domestic premises in Great Britain who is supplied with electricity or gas at those premises wholly or mainly for domestic purposes.

Domestic premises are separate and self-contained premises used wholly or mainly for domestic purposes. A mobile home is considered domestic premises if it is a caravan and is used as a dwelling.

E

ECO Brokerage is an auction-based mechanism designed to enable suppliers to buy forward contracts delivering ECO measures by participating authorised sellers.

The **ECO Register** is our IT system which suppliers can use to notify and manage completed ECO measures, and submit applications for approval of transfers.

F

First Time central heating (FTCH) is the installation of central, district or renewable heating systems in properties that do not have, and have not previously had, central heating systems.

Н

The Home Heating Cost Reduction Obligation (HHCRO) is the installation of heating qualifying actions, including insulation and the repair and replacement of boilers and electric storage heaters, to households deemed to be low income or living in fuel poverty. Measures can be delivered to premises that are occupied by someone in receipt of specific benefits (the help to heat group), listed in a local authority declaration, or social housing premises with an EPC energy efficiency rating of E, F or G.

Help to heat group (HTHG) means a group of people receiving at least one of the benefits outlined in Schedule 2 to the ECO3 Order.

Ι

Immediately adjacent buildings are building that do not physically join but are separated by an alleyway, footpath, side garden or fence, for example roads that contain terraced houses only would be considered immediately adjacent. If there are buildings separated by a road on which motorised vehicles travel these are not considered adjacent, although if the alleyway is used by motorised vehicles for parking purposes only then this would be allowed.

L

Lifetime is the estimated lifetime for measures. Standard lifetimes will be available in the ECO3 Measures Table which will be made available on our website.

Loft insulation \leq **100mm** is where there is less than or equal to 100mm pre-existing insulation, or

Loft insulation > 100mm is where there is greater than 100mm pre-existing insulation.²³⁷

М

A **measure** is a qualifying action, including adjoining installations.

The **Microgeneration Certification Scheme (MCS)** is a nationally recognised quality assurance scheme that certifies installation companies to ensure the microgeneration products have been installed and commissioned to the highest standard for the customer.

A **mobile home** is considered to be domestic premises, if it is a caravan and is used as a dwelling.

 $^{^{237}}$ In some instances, pre-existing insulation may be removed and new insulation installed. However, the pre-installation assessment accounts for the pre-existing insulation and so the measure should be notified as loft insulation > 100mm.

Ν

A 'new building' is a building erected on or after 1 October 2018 where there is evidence that confirms that the premises were occupied or previously occupied before a measure was installed.

Non-gas fuelled premises are premises where the pre-main heat source(s) is not fuelled by mains gas or a district heating system. There may be more than one pre-main heat source in the premises.

The **non-mains gas insulation uplift** is a 35% score uplift which applies to insulation measures carried out at a non-gas fuelled premises.

The **notification deadline** is the end of the month following the month in which installation of the measure was completed.

The **notification template** describes the information that suppliers must include as part of the monthly notification for a particular type of completed measure.

0

An **obligated supplier** is a 'supplier' as defined in this guidance.

The **occupant requirement** is a requirement for HHCRO where premises must be occupied by a member of the help to heat group.

The **overall obligation period** is the period from 3 December 2018 to 31 March 2022.

P

PAS means Publicly Available Specification

Phase means one of the four phases of the scheme as follows:

- Phase 1: 3 December 2018 to 31 March 2019,
- Phase 2: 1 April 2019 to 31 March 2020,
- Phase 3: 1 April 2020 to 31 March 2021, and
- Phase 4: 1 April 2021 to 31 March 2022.

The **premises requirement** is a requirement where measures must be installed at private domestic premises.

A 'pre-existing building' is a building erected before 1 October 2018.

Pre-main heating source is the heating system that was previously in place at the premises, prior to installation of a new heating system, regardless of its condition.

Private domestic premises are domestic premises that are, in general, not owned or let by a social landlord.

Promotion is where a supplier is a cause of a measure being installed. This is normally where a supplier funds all or part of the measure and funding is arranged prior to installation.

Q

A **qualifying action** means a heating qualifying action (HHCRO).

All replacement boilers installed under ECO3 must be accompanied by a **qualifying** warranty. The requirements that a qualifying warranty must meet are explained in Appendix 3.

R

The **Reduced data Standard Assessment Procedure (RdSAP)** is a simplified version of SAP that requires fewer data inputs. RdSAP 2012 should be used for all ECO3 measures, where RdSAP is used to calculate the score.

A **Related primary measure** is a primary insulation measure that supports a secondary heating measure.

The **relevant interest** is the legal right to occupy the premises. In England and Wales the relevant interest may be freehold, leasehold or sub-leasehold. In Scotland, the relevant interest may be that of the owner or the lessee or the sub-lessee. A relevant interest is 'registered' where it is registered with the land registry ie Her Majesty's Land Registry in England and Wales, or the Land Register of Scotland and the Register of Sasines in Scotland.

A **rural area** is an area in England and Wales classified as rural in the *2011 rural-urban classification of output areas*, or an area in Scotland classified as rural in the *Scottish Government Urban Rural Classification 2013-2014*. See paragraphs 3.143-3.144 for more information.

The **rural sub-obligation** requires suppliers to achieve at least 15% of their total HHCRO by promoting measures to premises in a rural area. Where a supplier fails to meet this requirement, it will fail to achieve its HHCRO. Suppliers must install measures against this sub-obligation by 31st March 2022.

S

Savings refers to scores.

A **score** is the contribution that a measure makes towards a supplier's total HHCRO in pounds sterling (£). The score is calculated using the cost saving and the relevant uplift, where applicable.

Score monitoring verifies, through site visits, whether certain inputs used to calculate measure savings, relating to the characteristics of the premises or the measure, are accurate.

A **secondary heating measure** includes heating measures installed alongside primary insulation measure(s). Secondary heating measures must be installed at the same premises as a primary insulation measure. A secondary heating measure excludes oil boiler replacements.

Solid wall insulation (SWI) means internal or external insulation applied to a wall of solid wall construction (ie internal wall insulation (IWI) or external wall insulation (EWI)). It does not include insulation of a mobile home, which is a separate eligible ECO measure.

The **solid wall minimum requirement (SWMR)** is a requirement that means the amount of cost savings (as detailed in Table 5 of the Supplier Administration Guidance) must be achieved through the delivery of solid wall insulation (SWI) or to solid walled properties achieving the equivalent savings as SWI.

In order for a property to count as a **solid wall property**, and therefore be eligible to count towards the new minimum, at least 50% of the property's exterior wall area

must be constructed of solid wall, and at least 50% of the solid wall area must be uninsulated.

The **Standard Assessment Procedure (SAP)** is a methodology developed by the Building Research Establishment (BRE) on behalf of the Government, to calculate the energy and environmental performance of dwellings. SAP 2012 should be used for ECO2 measures.

A **supplier** is a licence-holder where on 31 December of either 2017, 2018, 2019 or 2020:

- it was supplying more than the minimum number of customers outlined for each stage in Chapter 2 of the ECO3 Guidance: Supplier Administration and,
- had supplied more than the threshold amount of electricity and/or gas (outlined in Chapter 3 of the ECO3 Guidance: Supplier Administration) to domestic customers during the year ending on that date.

A **surplus action** is a measure that:

- is an ECO2 qualifying action (ie is a notified ECO2 measure) and was achieved by the supplier applying for the surplus action
- is not required by that supplier to meet its obligations under the 2017 Order, and
- is an ECO2 qualifying action in respect of the ECO2 obligation it is intended to be credited towards.

T

Technical monitoring verifies, through site visits, whether a measure has been installed to the relevant installation standards by a person of appropriate qualification and expertise, and whether it complies with the relevant ECO eligibility criteria.

TrustMark means the scheme of that name operated by TrustMark (2005) Limited, a company registered in England and Wales with company number 05480144.

U

Uplifts are applied to scores where required by legislation, and mean that the score for a measure is higher than would be the case were it based on cost savings alone. They replace the ECO2t concept of "multiplier". Where a deemed score measure is

eligible for an uplift, there will be a version of the score for that measure in the deemed score matrix which incorporates the uplift. Uplifts in ECO3 include:

- non-mains gas insulation uplift
- broken central heating and broken ESH uplifts
- LA flex F&G non-PRS uplifts
- innovation uplifts

U-value is the rate of heat transmission through a material or building element in W/m²K, and is widely referred to in building standards and SAP/RdSAP.

Used as a dwelling means a structure being used as a home.

W

Wall insulation means insulation of a cavity wall and solid wall insulation.