Department for Business, Energy & Industrial Strategy

# Household Energy Efficiency

## Great Britain, Data to December 2021

## About this release

The annual report presents in-depth statistics on the government supported energy efficiency schemes in Great Britain (GB) and updated estimates of GB insulation levels.

## In this release



## Scheme Information

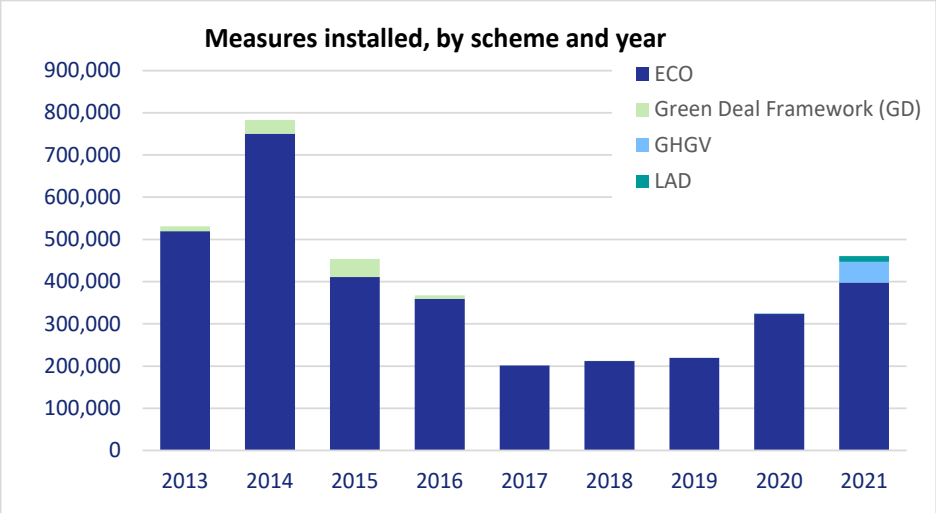
For information on the schemes please see the Technical Information.

## Data tables

The underlying tables are available in Excel format at HEE Statistics and GHG Statistics

This publication is based on data from the scheme administrators. New data are incorporated in line with the BEIS statistical revisions policy developed in accordance with the UK Statistics Authority Code of Practice for Statistics.

## Annual Energy Efficiency measures installations to 2021




## Key headlines

- Around 3.6 million energy efficiency measures were installed in 2.5 million properties through various government support schemes, including the Energy Company Obligation (ECO), the Green Deal (GD), Green Homes Grant Vouchers (GHGV) and Local Authority Delivery (LAD) to the end of 2021.
- During 2021, around 460,300 measures were installed through these schemes, an increase of 42 per cent compared with 2020.
- During 2021, the number of measures delivered through ECO was 398,200 – an increase of 23 per cent compared to 2020.
- Measures delivered through ECO accounted for 87 per cent of all measures installed in 2021.
- The provisional estimated lifetime carbon savings of measures installed under ECO, Cashback, GDHIF and GD Plans was up to 59 MtCO2 by the end of 2021. The provisional estimated lifetime energy savings were up to 221,800 GWh. Of these totals, an estimated 4.2 MtCO2 and 13,700 GWh were from measures installed in 2021.
- At the end of 2021, 14.5 million properties had cavity wall insulation (70 per cent of properties with a cavity wall), 16.8 million had loft insulation (66 per cent of properties with a loft) and 794,000 had solid wall insulation (nine per cent of properties with solid walls).

# 1. Benefits Monitoring

Tables 1.1 to 1.4

This section sets out the combined number of measures installed across the schemes, plus the estimated carbon and energy savings from those measures. The carbon and energy savings associated with measures installed through the GHGV and LAD schemes are excluded from this report, as these are based on annual savings rather than lifetime savings. Further information on GHGV and LAD carbon and energy savings can be found in their respective releases available here: https://www.gov.uk/government/collections/green-home-grant-statistics.

**Key Headlines**

- To the end of 2021, provisional estimated lifetime carbon savings of measures installed through ECO, Cashback, GDHIF and GD Plans was up to 59 MtCO2.
- To the end of 2021, provisional estimated lifetime energy savings of measures installed through ECO, Cashback, GDHIF and GD Plans was up to 221,800 GWh.
- For ECO measures installed in 2021, the provisional estimated lifetime carbon savings was 4.2 MtCO2 and the provisional estimated lifetime energy savings was 13,700 GWh.

## ECO and Green Deal Framework [1] Estimated Lifetime Carbon and Energy Savings

***Chart 1: Carbon Savings by Measure Type from the start of 2013 to end of 2021***


Across both ECO and GD schemes, from 2013 to the end of 2021, the provisional estimated lifetime carbon saving was 59 MtCO2. Cavity Wall Insulation contributed significantly to these savings, accounting for around 41 per cent of the provisional estimated savings (Table 1.4; Chart 1). As illustrated in Chart 1, the majority of the estimated lifetime carbon savings from boilers occurred through the ECO Affordable Warmth obligation, which is the only ECO sub-obligation to include boilers.

[1] The estimated carbon and energy savings relate to measures installed through the following schemes: ECO, Cashback, GDHIF and Green Deal Plans.

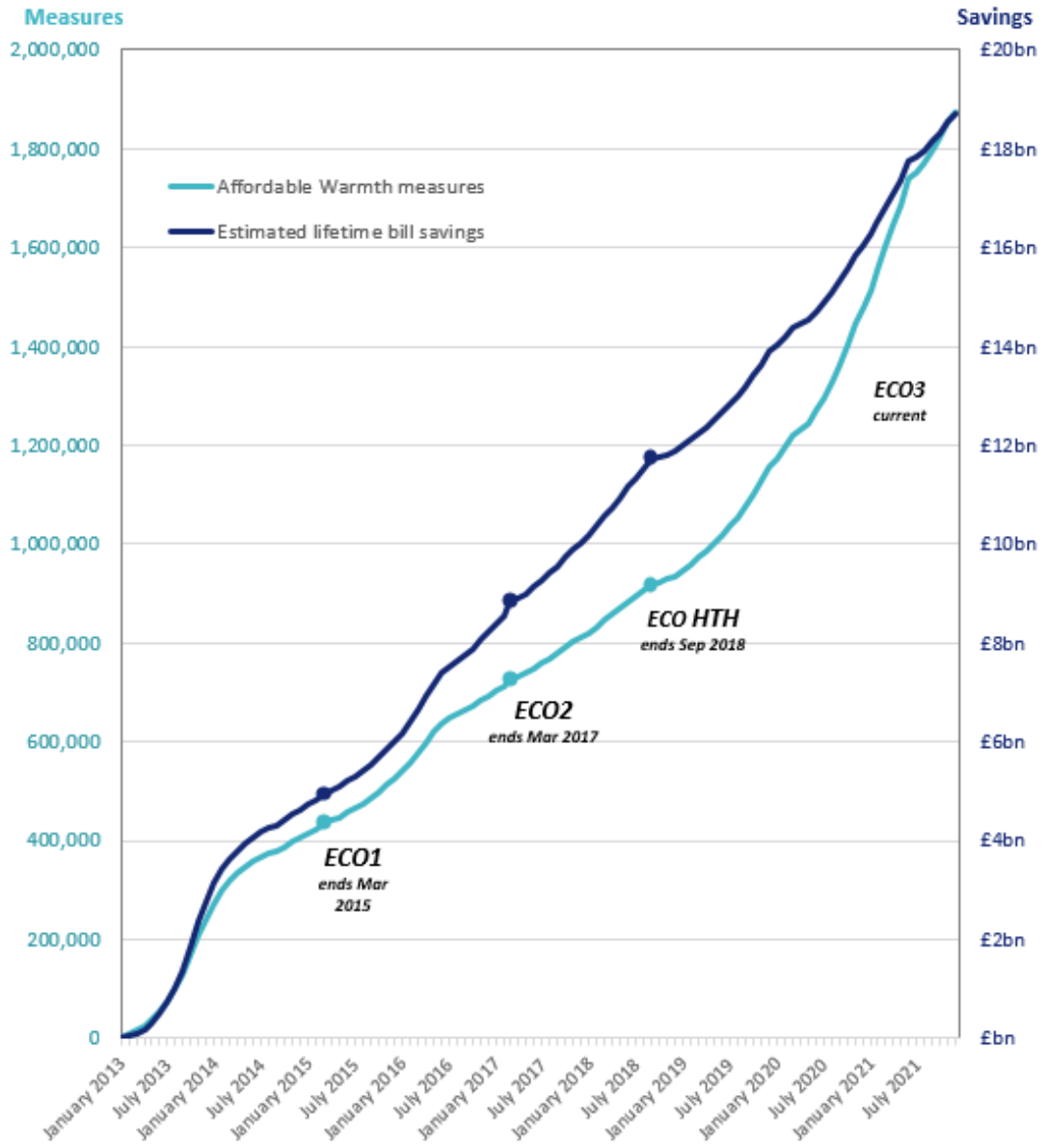
The estimated lifetime energy savings across the schemes was 221,800 GWh to the end of 2021. Similar to the carbon savings, Cavity Wall Insulation accounted for most of these savings at 43 per cent.

Up to the end of 2021, Affordable Warmth has delivered 55 per cent of all ECO measures but only delivered 39 per cent of the estimated lifetime carbon savings from ECO. This is due to the high share of boiler and heating measures delivered under the Affordable Warmth obligation, which produce a lower amount of lifetime carbon savings compared to insulation measures because of their shorter lifetime of around 12 years (Chart 1, T1.4). Similarly, 12 per cent of all ECO measures were delivered in 2021, but which only accounted for seven per cent of ECO estimated lifetime carbon savings. This is also due to the higher share of boiler and heating measures in 2021.

Further information on the method behind the carbon and energy savings estimates is available in the Technical Information and the Methodology Note, published here: https://www.gov.uk/government/publications/household-energy-efficiency-statistics-methodology-note.

## ECO Affordable Warmth Lifetime Bill Savings

### *Chart 2: Cumulative Affordable Warmth measures and associated estimated lifetime bill savings, to end of 2021*



Under ECO Affordable Warmth, each measure is given an associated score which is used to calculate these lifetime bill savings. Therefore, the lifetime bill savings are dependent on the number and type of measures installed. Around 1.9 million Affordable Warmth ECO measures were installed up to the end of 2021, which are estimated to deliver £18.7 billion worth of notional lifetime bill savings (Table 2.1; Chart 2).

In 2021, Affordable Warmth delivered around 398,200 measures, resulting in an estimated £2.7 billion of lifetime bill savings. This was an increase in measures installed of 23 per cent compared to 2020, and an increase of 23 per cent of lifetime bill savings compared to 2020.

Through ECO3, measure delivery has been very high, though the estimated lifetime bill savings have not had the same rate of increase. This trend reflects the types of measures being installed and their associated saving.

# 2. ECO Trends

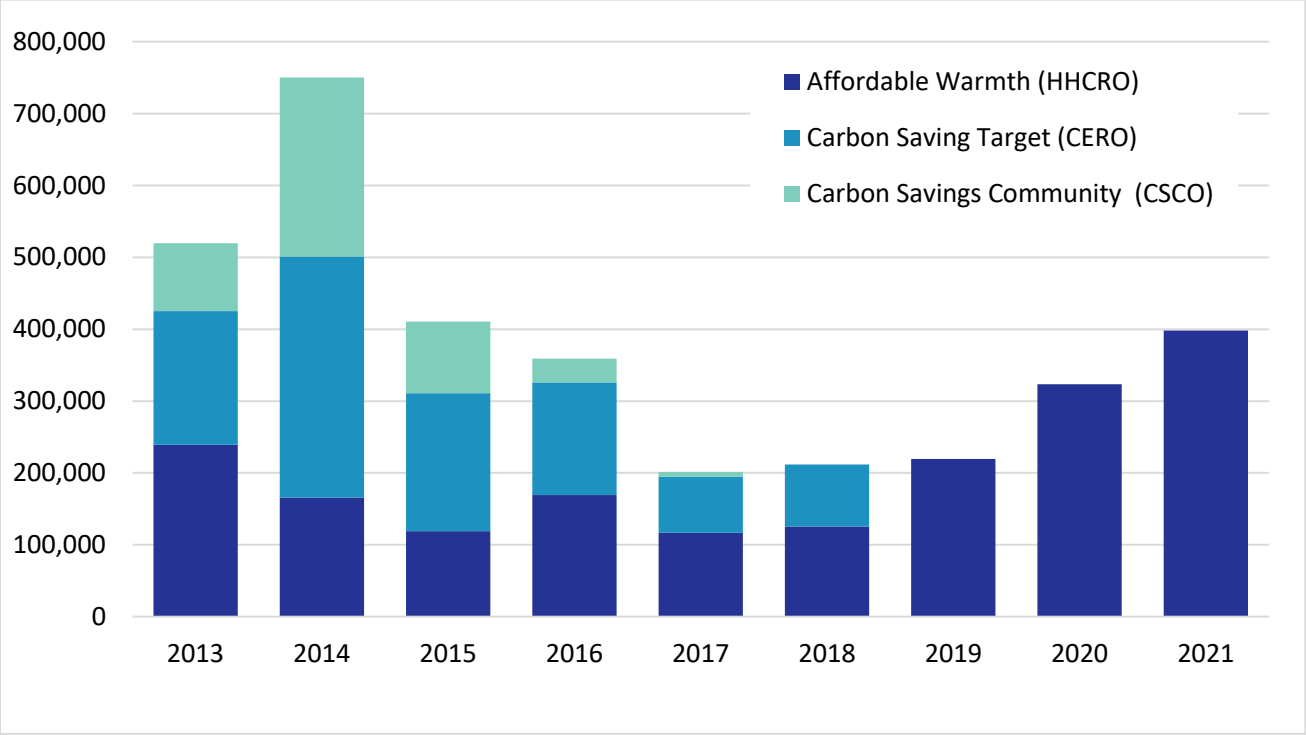
Tables 2.1 to 2.4 and 4.1 to 4.5

The number of measures installed for each phase of ECO, and the number of households receiving ECO measures.

**Key Headlines**

- 3.4 million measures installed in 2.4 million households under ECO.
- Under ECO3, a total of 1.04 million measures installed.
- In 2021, 398,200 measures were installed with 187,000 households receiving a measure in 2021.
- Of these households receiving a measure in 2021, 153,100 received a measure for the first time.

***Chart 3: ECO measures installed by obligation, by year, to end 2021***




Overall, 2021 represents the highest number of measures delivered in a year since the start of ECO3 in October 2018, at 398,200 measures which was 23 per cent higher than in 2020. Through 2021, 187,000 households received an ECO3 measure, which was 14 per cent higher than in 2021. Suppliers have until March 2022 to deliver their ECO3 obligations.

During 2021, the key trends in ECO delivery were:

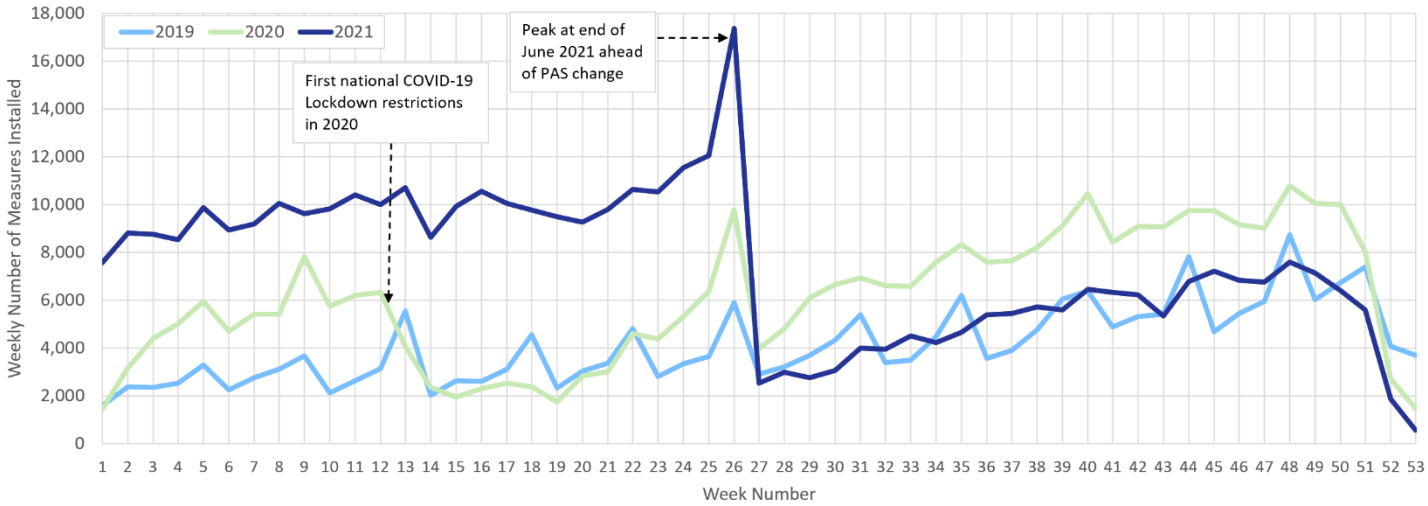
- Quarter 1 (Jan to Mar) 2021, 122,300 measures were installed – an increase of 6 per cent in measure delivery relative to quarter 4 (Oct to Dec) 2020.
- Quarter 2 (Apr to Jun) 2021, 139,700 measures were installed – an increase of 14 per cent in measure delivery relative to quarter 1 (Jan to Mar) 2021.
- Quarter 3 (Jul to Sep) 2021, 56,400 measures were installed – a decrease of 60 per cent in measure delivery relative to quarter 2 (Apr to Jun) 2021.
- Quarter 4 (Oct to Dec) 2021, 79,700 measures were installed – an increase of 41 per cent in measure delivery relative to quarter 3 (Jul to Sep) 2021.

The number of households in Table 2.3, reflects the number of properties to receive at least one measure in the associated year. However, the total number of unique properties to have received an ECO measure overall does not equal the total number of properties receiving a measure each year, as some properties will have had measures installed in prior years and under previous ECO phases. The total number of unique properties

to receive an ECO3 measure, up to the end of 2021 was 560,600 with around 83,800 (15 per cent) of these properties also having received an ECO 1, 2 or Help-to-Heat measure.

In 2021, measures were installed in 187,000 households, and of these 153,100 households received an ECO measure for the first time. This household number reflects the number of unique properties to receive an ECO measure in this year and discounts those households that have previously received an ECO measure in an earlier quarter.

### *Chart 4: ECO measures installed by week for 2019 to 2021*




Delivery in 2021 occurred with two major trends: through the first six months there was high and increasing delivery up to 30th June, when weekly delivery peaked with almost 17,400 measures installed at the end of June. This increasing level of delivery was ahead of the PAS changes on 1st July. Subsequently, delivery levels decreased, with delivery through July 2021 the lowest since May 2020. While the average monthly delivery through 2021 was around 33,200, average delivery in the first six months was around 43,700, with average delivery in the last six months around 22,700.

Measure delivery recovered steadily through the latter months of 2021, with a reduction at the end of December again reflecting seasonal bank holidays. A comparison of the average daily number of measures installed indicates that the rate was nearly half in the second six months of 2021 (740 measures per day) compared to the first six months (1,450 measures per day).

Chart 4 illustrates the trend in weekly measure delivery throughout 2019, 2020 and 2021. In 2019 (light blue line), the number of measures installed by week was relatively stable over the first six months, with an increase over the second sixth months. In 2020 (green line), the number of measures installed increased from low levels at the start of the year, when Trustmark requirements were introduced. Delivery decreased significantly from around week 14 of 2020 (mid-March), when the first national COVID-19 lockdown restrictions were introduced and remained low until week 20 2020 (mid-May), when restrictions eased. Weekly delivery increased over the rest of the year. In 2021 (dark blue line), measure delivery was very high over the first six months of the year, peaking in week 26 (end of June), ahead of the PAS change. Weekly measure delivery then decreased significantly and for the second six months was very similar to the levels observed in 2019.

## ECO Help-to-Heat (ECO HTH) Surplus Actions to ECO3

In this release, as with the February 2022 quarterly release, the ECO HTH surplus actions were transferred from counting towards the ECO HTH delivery to count towards ECO3. If a supplier achieved savings that exceeded its ECO2 obligations, then it could apply to move excess measures to count towards its ECO3 obligations instead, if certain criteria were met. Details on these criteria are provided in Ofgem's ECO3 Guidance on supplier administration[2]. All surplus actions were notified to Ofgem by 30 November 2019, with most of these measures requiring additional information to comply with ECO3 requirements.

[2] https://www.ofgem.gov.uk/sites/default/files/docs/2020/01/eco3_supplier_adminstration_guidance_v1.3_0.pdf

There were 82,165 surplus actions in total, with 99.7 per cent of these approved. There are 287 surplus actions that were not yet fully approved for ECO3, but these have been included as ECO3 measures in this release. All these surplus actions are now categorised as ECO3 and Affordable Warmth measures. While the delivery of these measures occurred between April 2017 and September 2018, the measures count towards the ECO3 obligation, which commenced from October 2018. The status of these measures will be monitored, and a further revision made in a subsequent quarter.

Around 44 per cent of the measures re-elected from ECO HTH to ECO3 were cavity wall insulation, with a further 31 per cent loft insulation and 11 per cent solid wall insulation. Heating measures accounted for 14 per cent of the surplus actions, which resulted in a small decrease to the overall share of heating measures contributing to the ECO3 obligation.

The 82,165 surplus action measures accounted for 7.9 per cent of ECO3 measures installed. These surplus actions had associated estimated lifetime bill savings of £1.1 billion, accounting for 13 per cent of the ECO3 estimated lifetime bill savings.

Of the surplus actions, 4,800 were identified as Flexible Eligibility measures, accounting for just 2.7 per cent of all ECO3 Flexible Eligibility measures. These surplus action Flexible Eligibility measures had associated lifetime bill savings of £56.2 million (3.8 per cent of Flexible Eligibility estimated lifetime bill savings).

# 3. ECO Measures by Type

Tables 2.1 to 2.4 and 3.1 to 4.6

The number of measures installed for each phase of ECO, for monthly and quarterly time series.

**Key Headlines**

- Across all of ECO, 60 per cent of measures were for insulation and 40 per cent for heating.
- In 2021, the most popular measure group was 'other heating', with 152,100 measures installed - the majority of which were heating controls.
- The second most popular measure group was boilers, with 103,200 measures installed.

## Measures by Type

Of all notified ECO measures installed to the end of 2021, around 60 per cent were insulation measures and 40 per cent were heating measures (Table 2.4).

Under ECO3, the share of heating measures has increased, with 56 per cent of ECO3 measures being heating, compared to 40 per cent for both ECO overall and for the previous phase, ECO Help-to-Heat (ECO HTH).

For ECO3 to the end of 2021, boilers represented 25 per cent of measures installed with a further 31 per cent from other heating measures, of which 90 per cent were heating controls (Chart 5). This chart includes the surplus actions under ECO3. This increase in the share of heating measures under ECO3 is largely due to the Affordable Warmth obligation, which is the only sub-obligation to include boilers. The Affordable Warmth obligation covers the whole of ECO3 (Table 2.4).

In ECO3, the share of 'Other Insulation' measures increased to 12 per cent, compared to one per cent under ECO1 and 2, plus ECO Help-to-Heat, resulting in the share for ECO overall being four per cent. The increase in 'Other Insulation' measures is due to under floor insulation being the most popular associated insulation measure with a broken boiler. To date, the scheme has delivered nearly 138,200 broken boiler replacements with an associated insulation measure, which has been under floor insulation in 82 per cent of cases (Table 2.4).

***Chart 5: ECO3 measure types as proportions of total ECO3 measures installed, to end 2021***

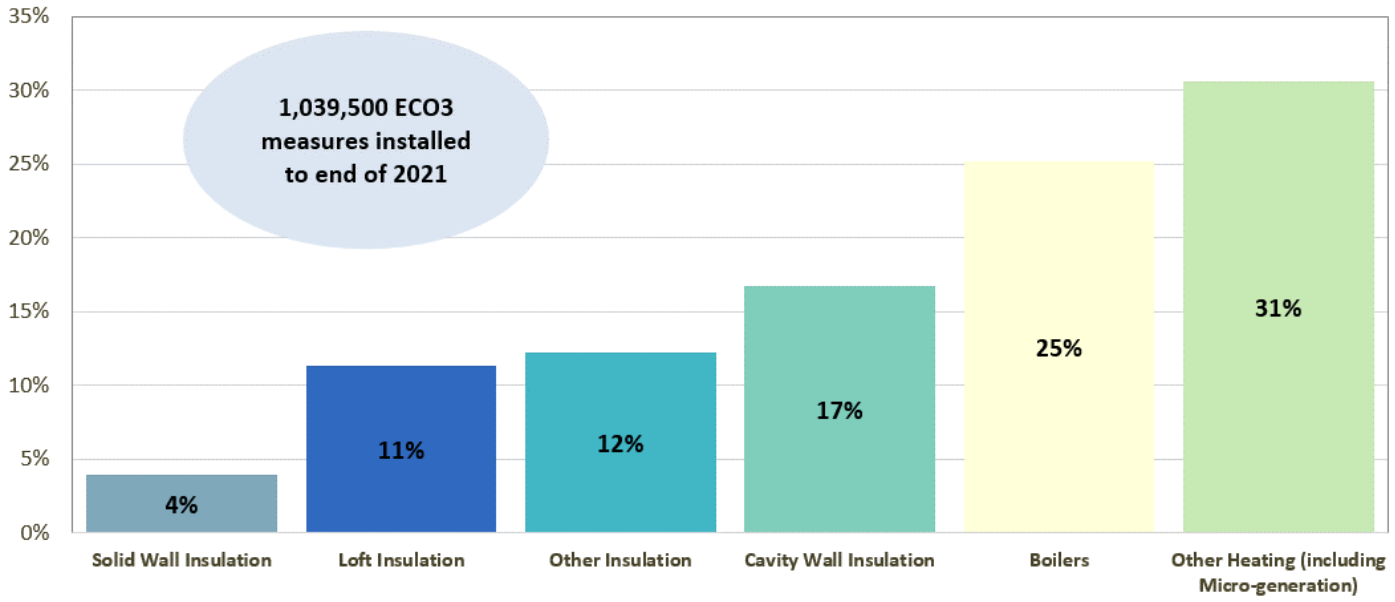
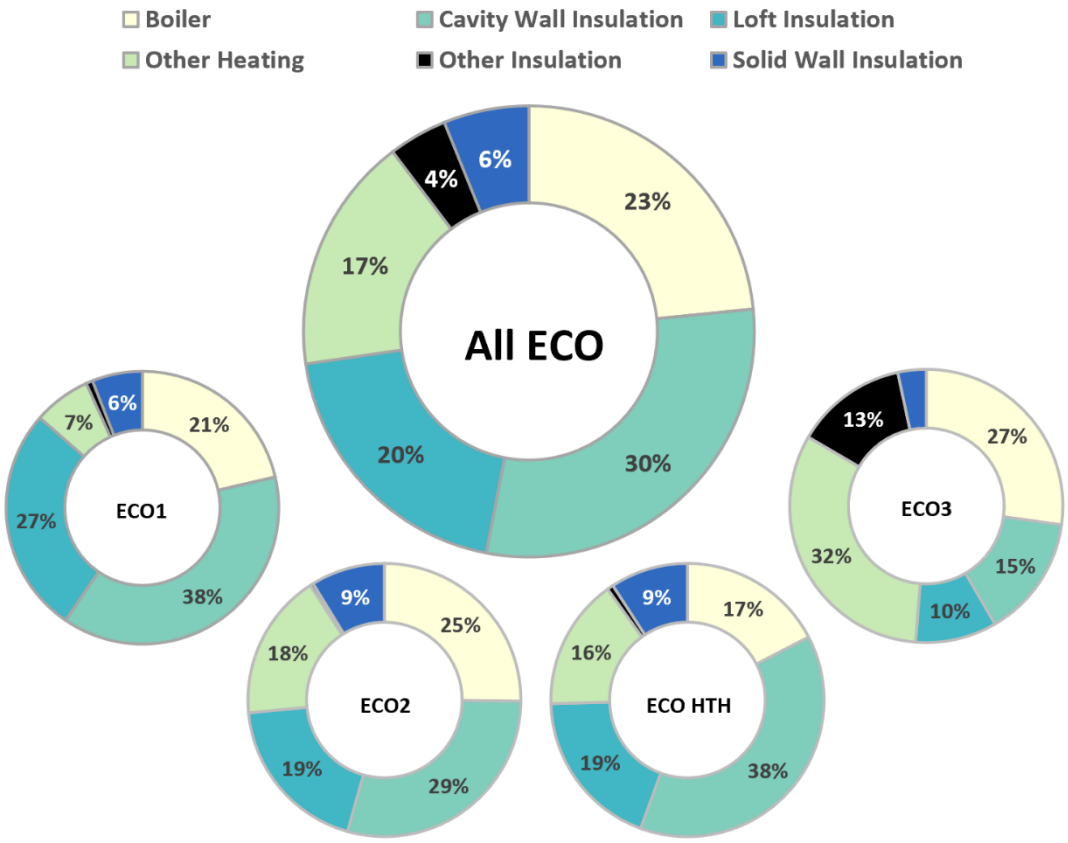


Chart 6 shows the share of ECO measures by measure type, both overall for all of ECO and for each phase of ECO. This chart includes measures under the phase they were originally installed under, not under the phase a measure may have moved under as part of surplus actions. The overall share of Boiler measures is 23 per cent and this has remained fairly consistent across the four ECO phases. However, for other measure types, the share of those measures has varied across phases. Under ECO1, the measures with the largest share were CWIs (38 per cent) and Loft Insulations (27 per cent). While under ECO3, the share of CWIs has dropped to 15 per cent and Loft Insulations down to 10 per cent. Under ECO3, it has been 'Other Heating' (32 per cent) and 'Other Insulation' (13 per cent) measures that have seen a far larger share than under prior phases of ECO. The specific measure types that have led to this change under ECO3 are an increase in heating controls ('Other Heating') and under-floor insulation ('Other Insulation).

***Chart 6: Share of ECO measures by measure type, by phase of ECO and overall*** *(original phase installed under, not surplus action phase)*




## Innovation Measures

Under ECO3, suppliers can deliver up to 10 per cent of their obligation through Innovation measures. Innovation was slow to take off. Since the first measures were approved by Ofgem in March 2019, nearly 6,400 innovation measures were installed (Table 2.3). In 2021, 4,200 measures were installed, almost doubling the innovation delivery from 2020.

Of all ECO3 innovation measures, the majority were smart heating controls accounting for 63 per cent. A further 20 per cent of innovation measures were cavity wall insulation and nine per cent for underfloor insulation (see the quarterly statistical release for more detail on innovation measure types (Table 2.8)).

## Multiple Measures

Since the start of ECO, an average of 1.44 measures were installed per household receiving measures. This ratio has steadily increased, from 1.22 at the end of ECO1 (March 2015), to 1.26 at the end of ECO2 (March 2017) and ECO HTH (September 2018).

Under the Affordable Warmth obligation, the ratio of measures installed per property has increased from 1.39 measures per households at the end of ECO HTH, to 1.70 measures per household in December 2021. This increase reflects a tendency for the installation of a heating measure to often be accompanied with heating controls as a secondary measure.

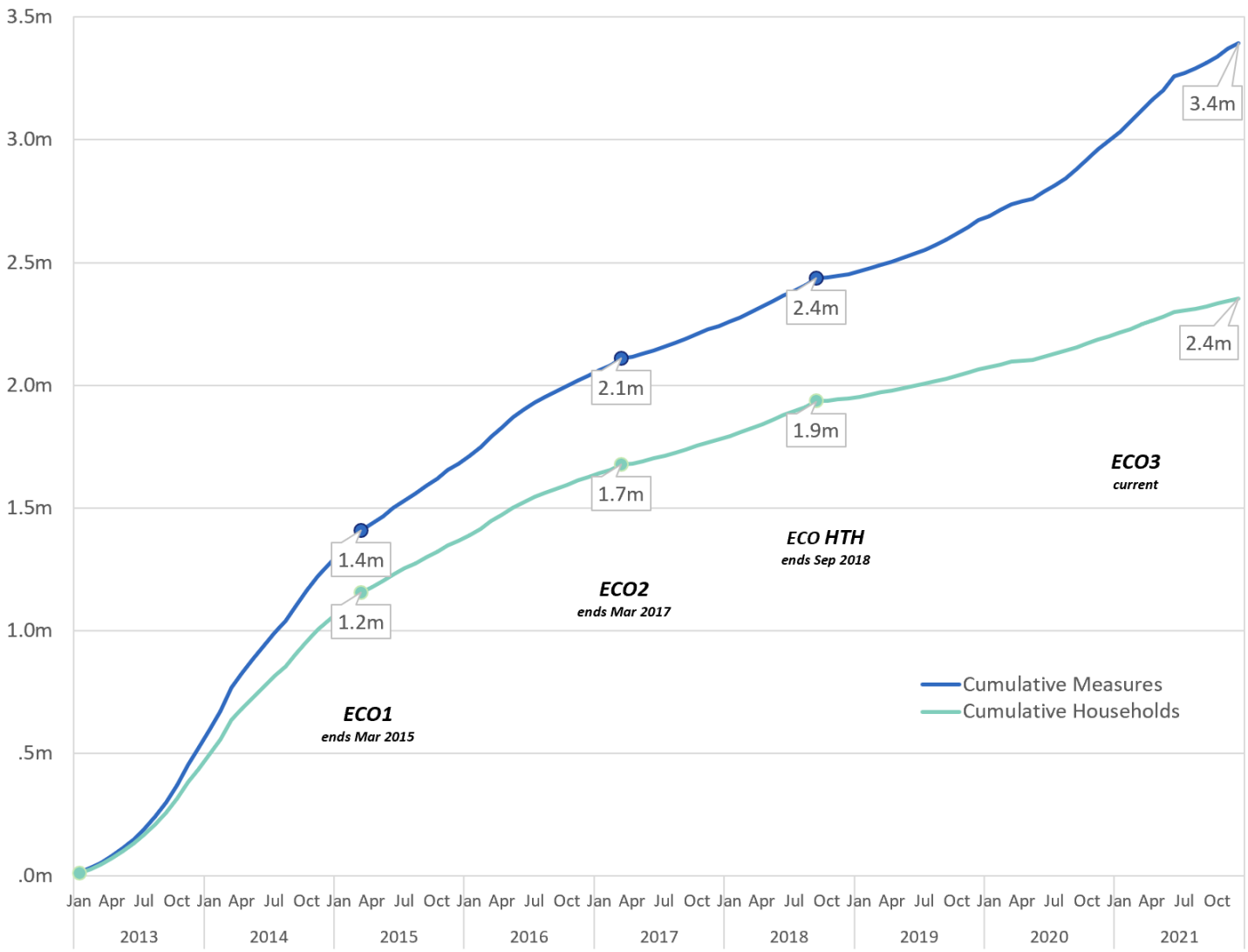
Across the whole of ECO3, the cumulative ratio of measures installed per household increased from 1.06 in October 2018 to 1.85 December 2021. For the surplus action measures installed prior to October 2018, the cumulative ratio of measures installed per household was 1.05.

In 2021, the average number of measures per household was 2.13, up from the 1.96 in 2020, when the total number of households to receive at least one measure in the year is used (Table 2.3). This increase is largely a result of more individual households receiving three or more measures in 2021 when compared to 2020.

ECO3 has also seen an increased likelihood of measures being installed in homes that also received ECO measures in earlier phases of the scheme. Throughout 2021, around 398,200 measures were installed in around 187,000 households, of which around 33,800 households (18 per cent) had received an ECO measure in a previous year.

Chart 7 illustrates the cumulative number of measures installed and unique households across ECO, indicating the different rates of increase.

### *Chart 7: Cumulative number of ECO measures installed and unique households receiving measures by month, to end of 2021*



## Solid Wall Minimum Requirement (SWMR) sub-obligation

Suppliers are required to deliver £721m of lifetime bill savings through the Solid Wall Minimum Requirement (SWMR). This can either be through installing solid wall insulation or solid wall alternative measures which achieve the same saving as would have been achieved by solid wall insulation.

Under ECO3 to the end of 2021, nearly 39,900 solid wall insulation and solid wall alternative measures were delivered under this sub-obligation to date. These represented estimated lifetime bill savings equivalent to the installation of around 38,900 SWI measures. The estimated deemed lifetime bill savings for these SWMR measures was £742 million, equivalent to nearly nine per cent of the ECO3 obligation. These savings have surpassed the SWMR sub-obligation requirement of £721 million.

Note that from November 2021, the method for calculating those measures that count towards SWMR was updated to reflect a change in the reporting of these measures to Ofgem.

# 4. ECO Household Characteristics

Tables 3.2 and 4.2 to 4.3

The number of measures installed and households receiving an ECO measure by household characteristics, including heating source, property type and tenure.

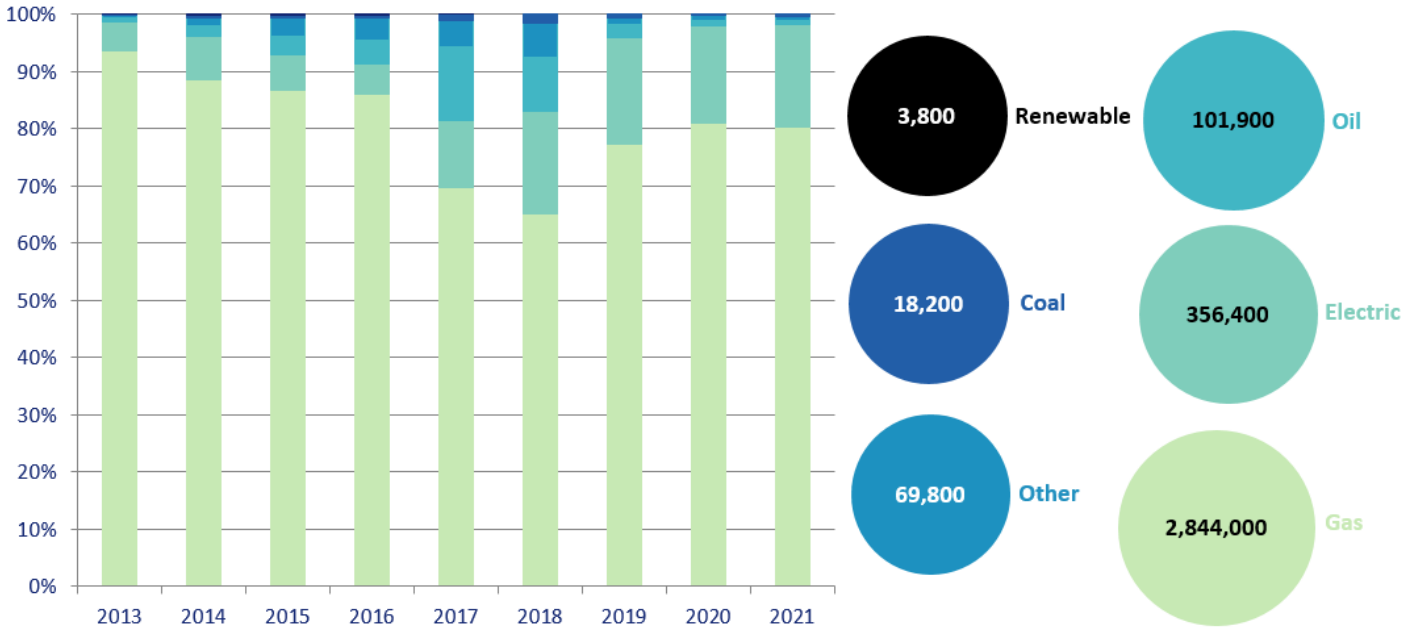
### Key Headlines

- Under ECO, 84 per cent of measures were installed in properties using gas.
- The majority (around 72 per cent) of measures were installed in houses.
- The most common tenure was owner-occupied, accounting for 70 per cent of households.

## ECO measures by property main fuel type

In total, to the end of 2021, 2.84 million measures (84 per cent) were installed in properties that used gas as their main fuel type. The proportion of gas properties has decreased over the course of the scheme, from 94 per cent in 2013 when ECO started, to its lowest share of 65 per cent in 2018, before steadily rising to 80 per cent in 2021. (Table 3.2, Chart 8).

***Chart 8: ECO Measures by main fuel type of property, by year, to end of 2021***




## Household receiving measure – property type and tenure

Over the whole of ECO, around 2.4 million households have received a measure through the scheme. Of these households, 1.7 million properties (72 per cent) were the house property type, with a further 18 per cent of properties being flats. In 2021, 65 per cent of properties receiving a measure were houses, with 21 per cent being flats. (Table 4.2).

For the whole of ECO, the most common tenure is owner-occupied with around 1.6 million households (70 per cent). The remainder of households were rented, with socially rented households accounting for 16 per cent and private rented households 14 per cent. (Table 4.3).

# 5. ECO Regional

Tables 3.3 to 3.6, 4.1 and 4.4 to 4.5

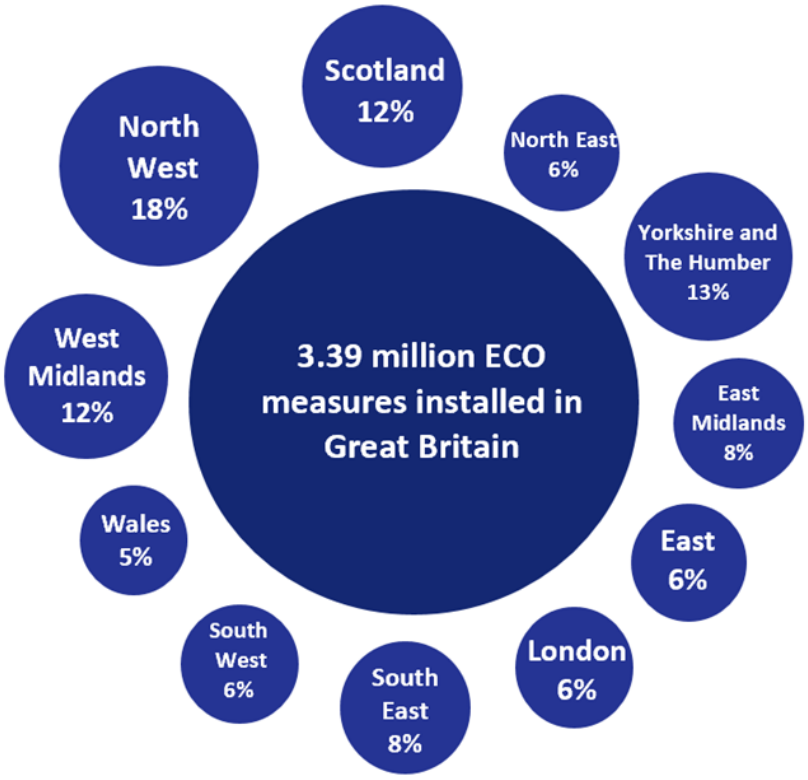
The number of measures installed and households receiving an ECO measure by region, local authority and parliamentary constituency on a quarterly basis.

**Key Headlines**

- Across ECO, nearly one fifth of ECO measures were installed in the North West of England.
- To date, around nine per cent of households in Great Britain had an ECO measure installed.
- Under the Flexible Eligibility (Flex) mechanism, 81 local authorities had more than 500 measures installed.
- Scotland had the highest regional share of Flex measures at around 19 per cent.

## Regional Trends

***Chart 9: ECO measures by region, up to the end of 2021***

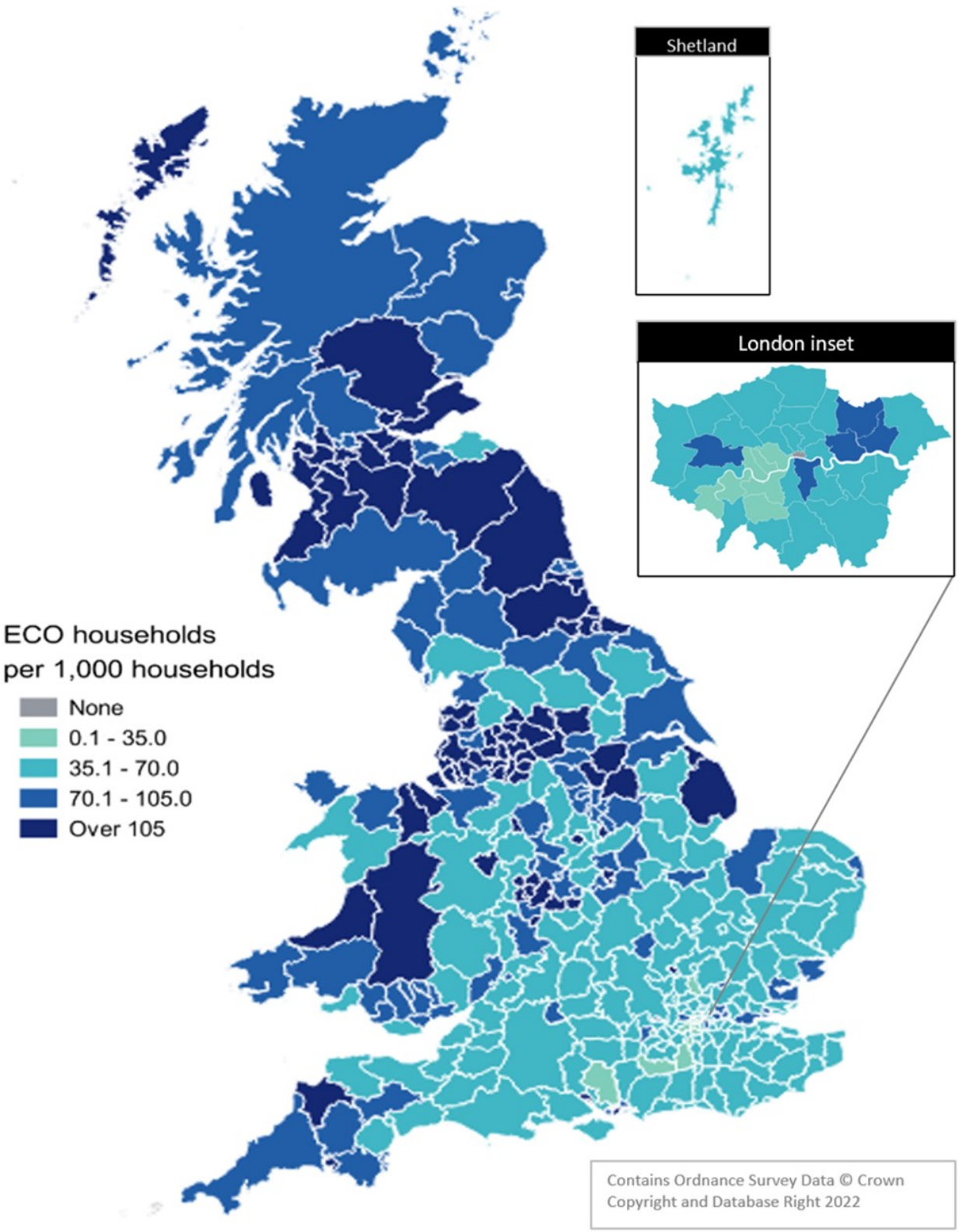



In 2021, ECO3 measure delivery by nation or region was:

- 346,900 measures in England, equivalent to 87 per cent of measures installed in 2021.
- 36,200 measures in Scotland, equivalent to nine per cent of measures installed in 2021.
- 15,100 measures in Wales, equivalent to four per cent of measures installed in 2021.
- North West England had the highest regional delivery in England, with 77,600 measures installed equivalent to 20 per cent of measures installed in 2021. (Table 3.3)

Around nine per cent of all households in Great Britain had a measure installed under ECO, this is equivalent to 88 per 1,000 households, up to the end of 2021. For England, there were around 84 measures per 1,000 households, with five regions (North West, North East, West Midlands, Yorkshire and the Humber, East Midlands), each having a rate above the England average. The North West and North East regions had the highest rates in England, with 130 and 119 households with ECO measures per 1,000 households, respectively. There were around 126 measures per 1,000 households in Scotland and 88 per 1,000 households in Wales (Map 1, Table 4.1, and Table 4.4).

***Map 1: Households in receipt of ECO measures by Local Authority per 1,000 households, to end of 2021***

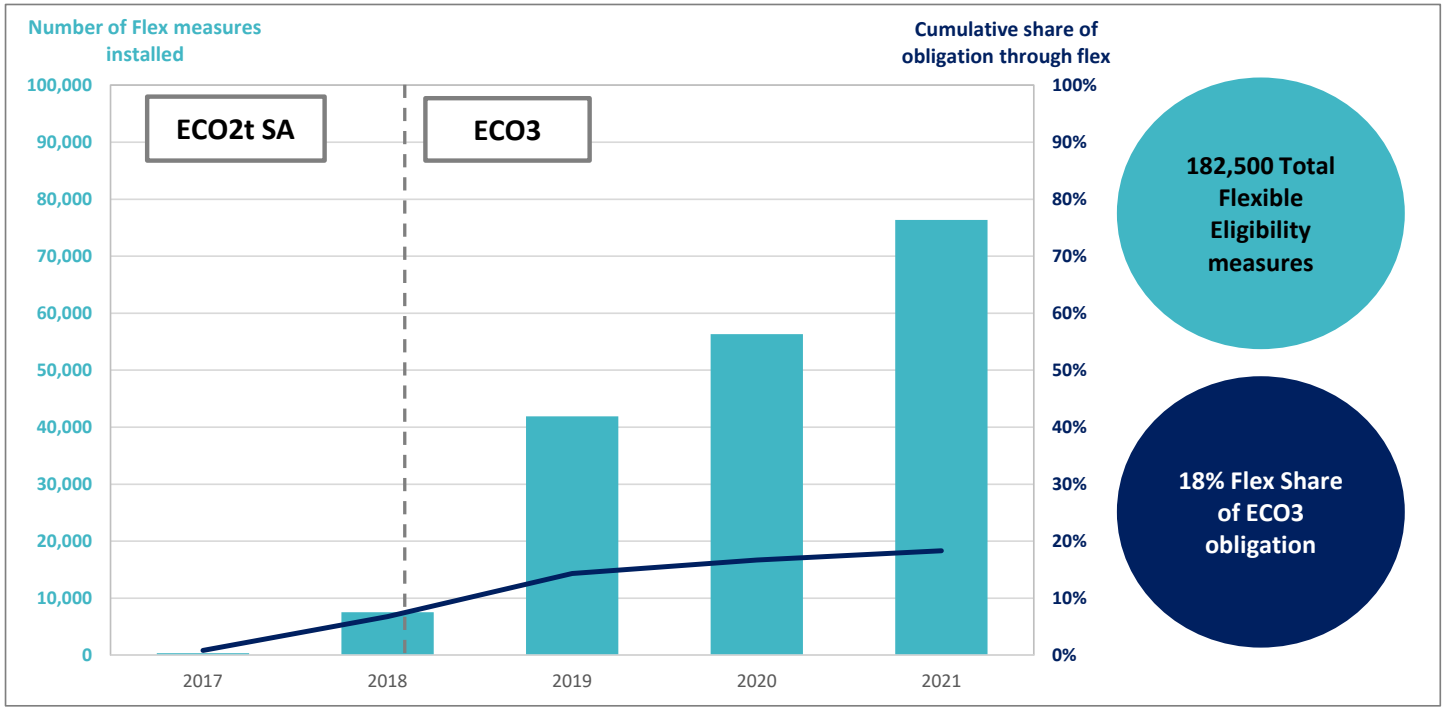


## Flexible Eligibility

Local Authorities can determine eligible homes under the 'Flexible Eligibility' mechanism (Flex). The Affordable Warmth Obligation is measured through lifetime savings and up to 25 per cent of the ECO3 lifetime bill savings can be delivered through 'Flexible Eligibility'.

Since the introduction of Flexible Eligibility at the start of ECO HTH, 193,500 measures were delivered by this mechanism until the end of 2021 (Tables 2.3, 3.5). For ECO3, 18 per cent of the obligation in deemed lifetime savings has been delivered through Flex[3] (Chart 10; Table 2.2).

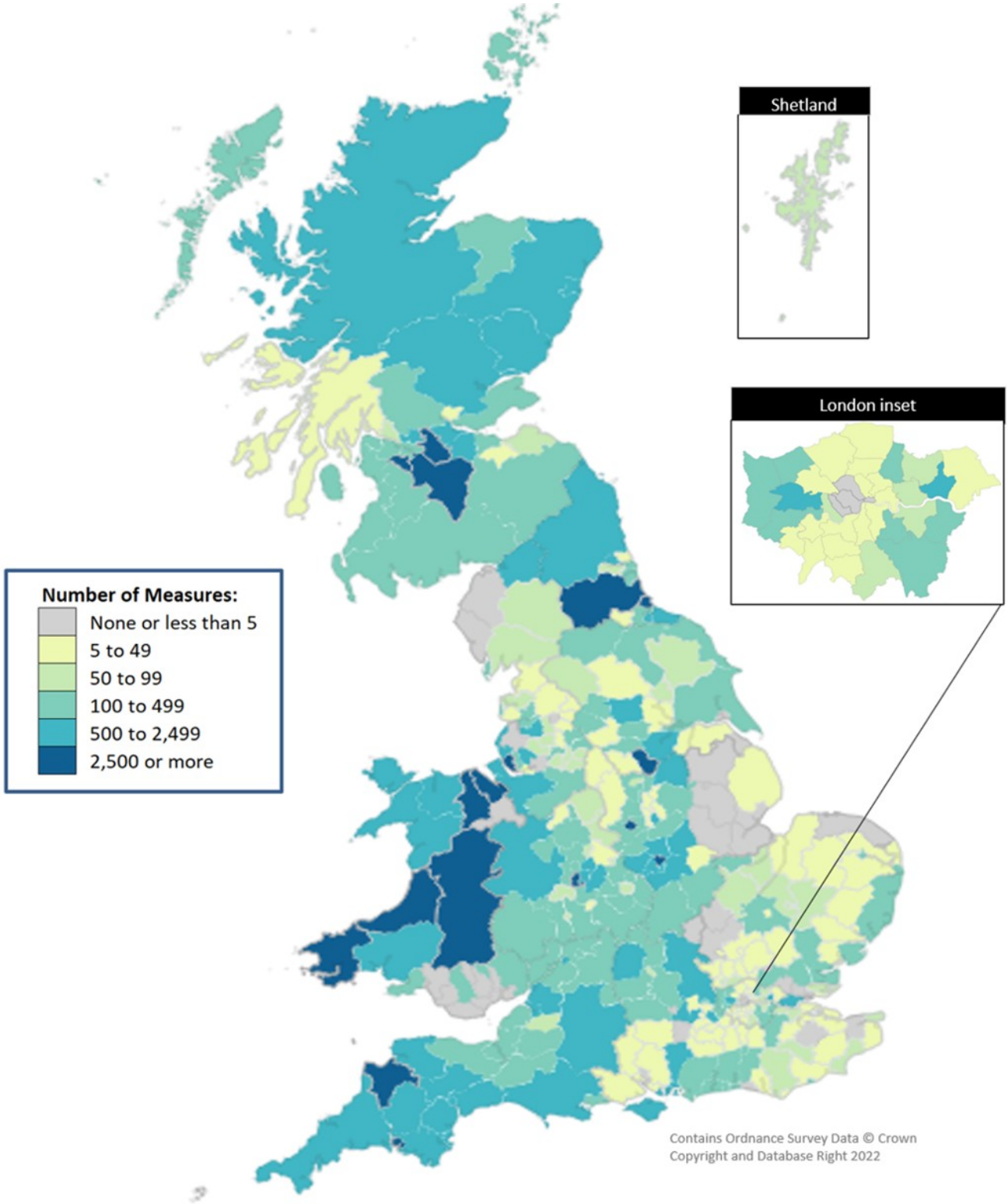
### *Chart 10: ECO3 Flexibility Eligibility Measures by installation year and share of ECO3 obligation delivered through Flex, to end of 2021*




To the end of 2021, 232 local authorities had 50 or more measures installed through Flexible Eligibility, of which 81 local authorities had over 500 measures installed. Scotland had the highest number of Flex measures installed of any region, with around 19 per cent of the Flex measures in Great Britain, whereas Wales had around 10 per cent. The East Midlands had the highest share amongst regions in England, having around 17 per cent of all Flex measures installed in Great Britain (Map 2, Table 3.5).

[3] The share of obligation delivered through Flexible Eligibility only covers ECO3 because a different cap of 25 per cent is allowed under this phase. Approximately 14 per cent of the ECO HTH Affordable Warmth Obligation was delivered through Flexible Eligibility, which exceeded the 10 per cent cap for that phase but the excess is expected to be re-elected into ECO3.

***Map 2: ECO Measures installed through Flexible Eligibility, by Local Authority from quarter 2 2017 to end of 2021***

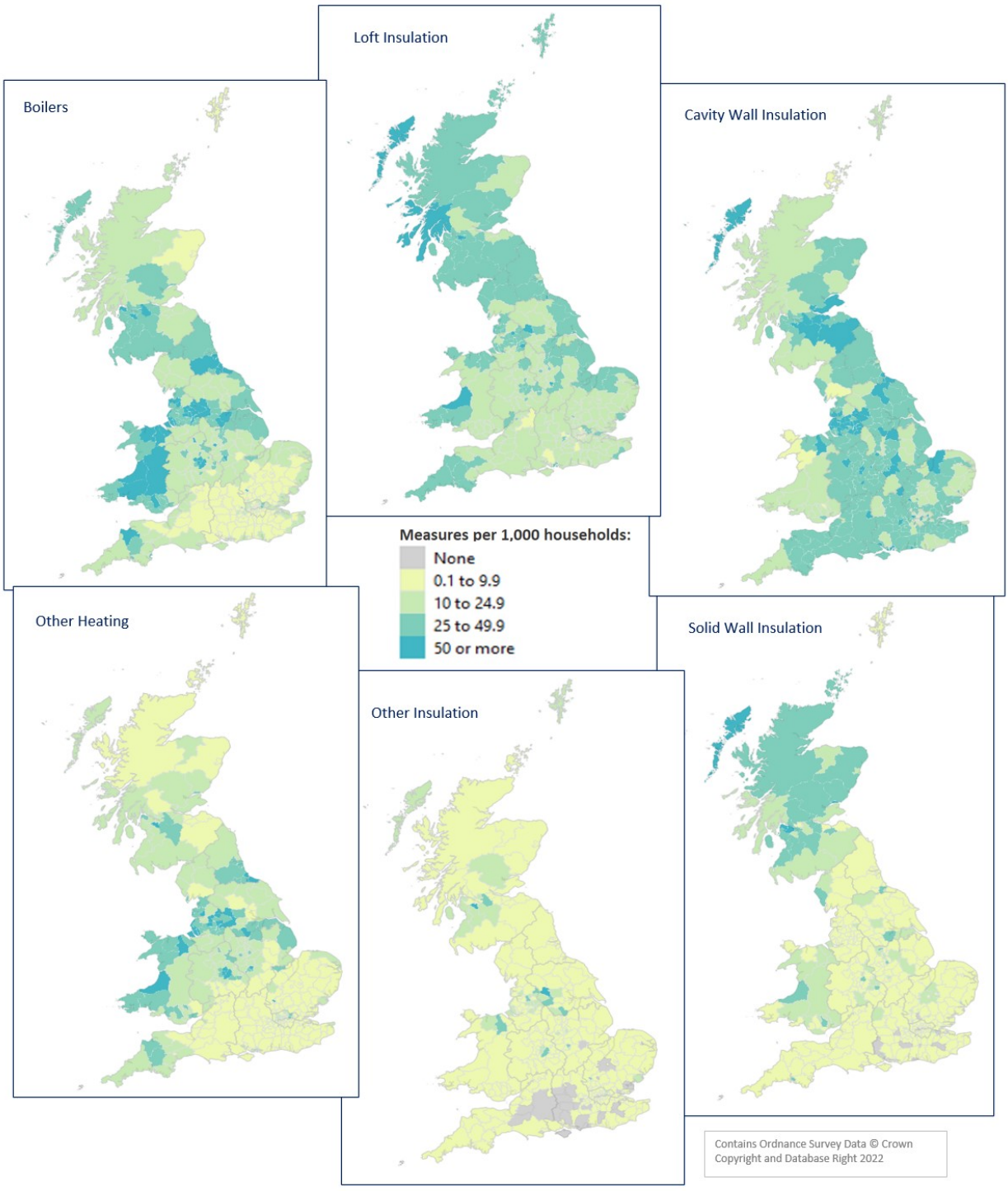



Local Authorities are shown only if they have at least 5 flexible eligibility measures. In total, 334 Local Authorities had at least 1 flex measure up to December 2021.

## Regional ECO Measures by Measure Type

In addition to variation in regional delivery overall and under Flex, there is further variability in the types of measures installed. Map 3 illustrates the different types of measures installed by Local Authority, at the rate of ECO measures installed by 1,000 households. For the insulation measure types, loft insulation and cavity wall insulation (CWI) have been installed across the country, with slightly higher rates in parts of Scotland and the North East and North West of England. Solid wall insulation (SWI) has seen greater concentrations in Scotland and to some extent Wales also; while 'Other Insulation' numbers are generally currently low across the country, aside from clusters of local authorities in Scotland, Wales and parts of Northern England. Boiler and 'Other Heating' installation has been greater away from the South East of England, and aside from CWI this has also been true of the insulation measures.

### *Map 3: ECO Measures per 1,000 households, by measure type and Local Authority, up to end December 2021*



## Rurality of measures installed under ECO

Analysis of ECO measures installed by rural and urban classification is completed based on a standardised classification of areas from the 2011 census[4]. The rural sub-obligation was initially part of CSCO until March 2017, then CERO (April 2017 – September 2018) and Affordable Warmth since October 2018. Table 3.8 shows the number of measures installed under the rural sub-obligation across these phases.

Across the whole of Great Britain, around 14 per cent of measures were installed in "rural" areas.[5] This varies across the country, with 36 per cent of measures in Wales installed in rural areas, compared to 14 per cent in Scotland and 12 per cent in England. Within the English regions there is also large variation, with South West and East regions having 31 per cent and 26 per cent of their measures installed in rural areas respectively. North West and West Midlands regions had only 5.4 per cent and 7.9 per cent of installations in rural areas respectively. This is to an extent down to the general urban/rural make-up of households in those areas, as illustrated by the London region having 99.8 per cent of measures installed in urban areas. (Table 3.9).

[4] Measures are assigned as urban/rural based on postcode and using the '2011 Census Rural -Urban Classification' from the National Statistics Postcode Lookup (NSPL). NSPL user-guide: https://geoportal.statistics.gov.uk/search?collection=Document&sort=-modified&tags=DOC_NSPL_UG.

[5] Includes the groups, rural town and fringe, rural town and fringe in a sparse setting, rural village, rural village in a sparse setting, rural hamlet and isolated dwellings, rural hamlet and isolated dwellings in a sparse setting, or in Scotland Accessible Rural, remote rural, and very remote rural. This summary is not based on the rural sub-obligation.

# 6. ECO Costs

Tables 6.1 to 6.6

The costs of delivering and administering the ECO scheme as reported by energy suppliers.

ECO costs are updated in the monthly headline release following a quarterly publication. The figures below are from the March headline release, including all reported cost data to the end of 2021.

**Key Headlines**

- The total ECO costs reported by suppliers (both delivery and administrative) to the end of 2021 were £5.94 billion.
- Delivery costs in 2021 (£724m) were the highest of ECO3, reflecting the highest annual measure delivery.
- The average cost of delivery under ECO3 at the end of 2021 was 24 pence per pound of lifetime bill savings.

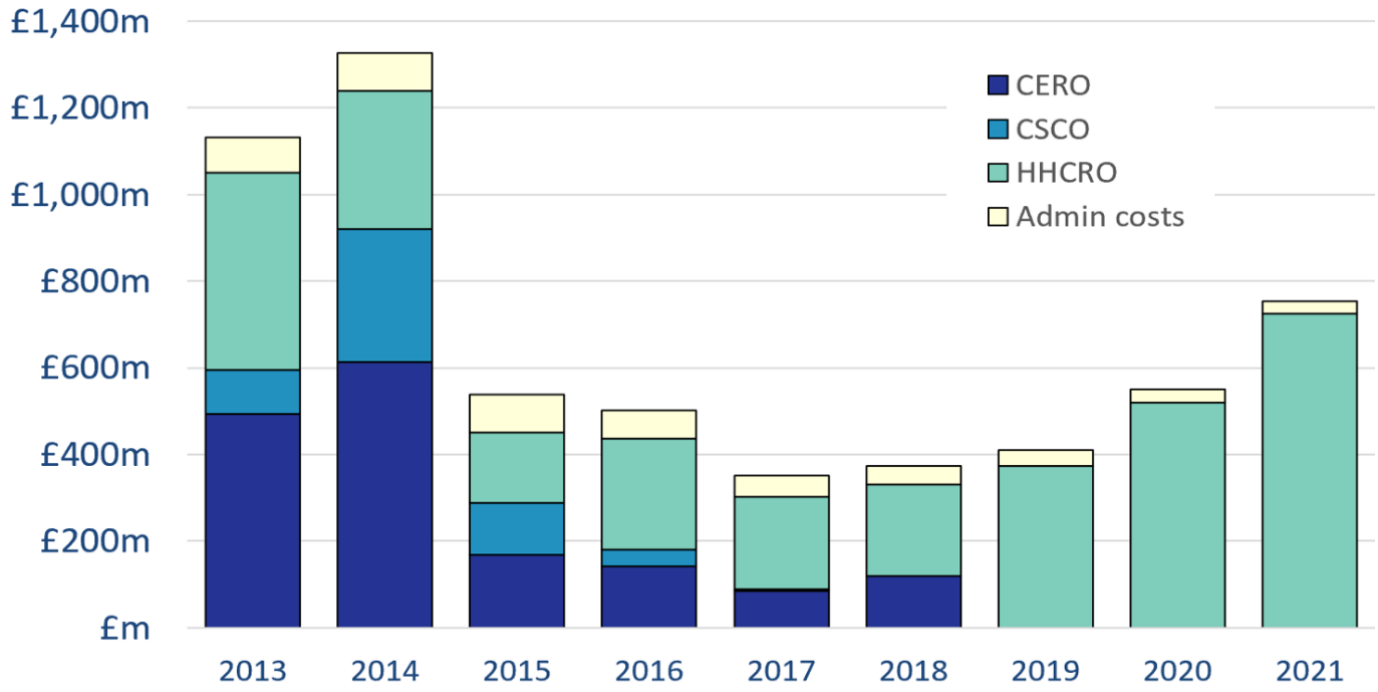
## ECO Costs

The total ECO delivery costs up to the end of 2021 were around £5.43 billion, with an additional £506 million in administrative costs. Therefore, the total cost of ECO was £5.94 billion. (Table 6.1). The delivery costs for ECO3 up to the end of 2021 were £1.64 billion, with 32 per cent of these costs funding boiler and 'other heating' measures. (Table 6.6)

As the measure delivery profile and volumes have varied over the course of ECO, so have the associated costs, as illustrated in Chart 11. Overall, 2021 (£753m delivery and administration costs) represents the highest yearly costs level since 2014 (£1.3 billion). The 2021 overall costs figure was a 37 per cent increase on the 2020 equivalent figure.

Up to the end of 2021, the average cost of delivering the ECO3 Affordable Warmth obligation was 24 pence per pound of lifetime bill savings, up from 15 pence per pound during ECO Help-To-Heat (Tables 6.3 & 6.4).

***Chart 11: ECO costs, by obligation, by year, up to end 2021***



# 7. Green Deal

Tables 7.1 to 7.3

The number of Green Deal Plans and measures installed. Table 7.1 contains monthly data up to December 2021, with Chart 11 illustrating the delivery for complete years.

**Key Headlines**

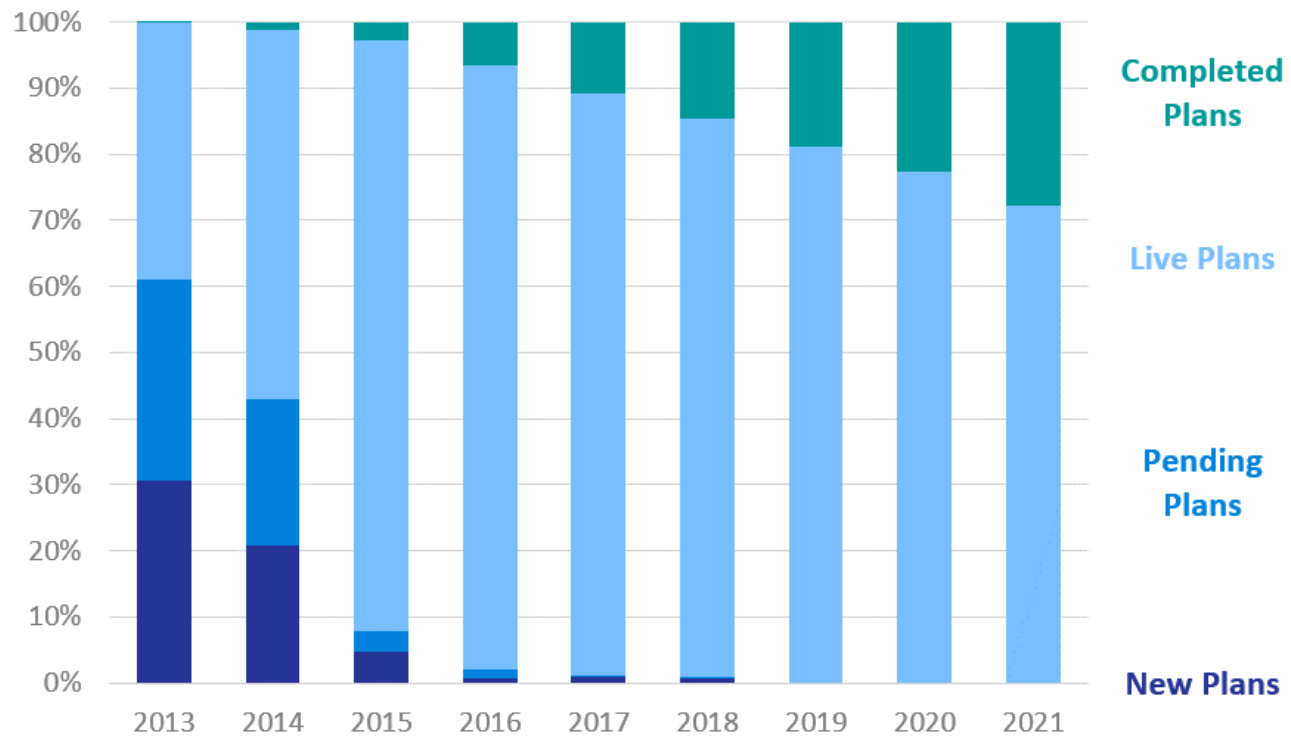
- A total of 13,867 Green Deal Plans.
- Just over a quarter of plans (28 per cent) classified as 'Completed'.
- In 2021, 710 plans were 'Completed'.

Under the Green Deal scheme, a total of 13,867 Plans were classified as either 'Live' or 'Completed' at the end of 2021. Of these, 10,021 were 'Live' (all measures installed) and 3,846 were 'Completed' (all measures installed and paid off). At the end of 2021, around 72 per cent of all plans were 'Live'. (Chart 12).

In 2021, 710 plans were 'Completed', compared to 511 'Completions' in 2020 (Table 7.1).

We estimate that the total initial loan amounts (excluding APR interest payments) associated with all 'Live' plans was around £38.1m as of December 2021, with 'Completed' plans accounting for around a further £11.2m. The estimated average initial loan amount per GD Plan was around £3,600.

***Chart 12: Domestic Green Deal Plans, by 'Completed', 'Live', 'Pending', or 'New' status, by year, to end of 2021***



# 8. Estimates of Home Insulation Levels in Great Britain

Tables 8.1 to 8.7

This section presents estimates of the number of homes in Great Britain (GB) with loft, cavity wall and solid wall insulation. It gives headline estimates for the number of insulated properties and sets out the remaining potential for insulation to be installed in properties in GB. Estimates of insulation levels are based from April 2013 to reflect information available in the English, Welsh and Scottish Housing Surveys close to the start of the Energy Company Obligation and Green Deal schemes. Adding on the observed delivery of measures is considered more accurate than re-basing to more recent surveys.

These estimates show the share of homes with loft, cavity wall and solid wall insulation separately for England, Wales and Scotland. Full details on how these estimates were constructed, based on the new methodology, can be found in the Methodology note.

**Key Headlines**

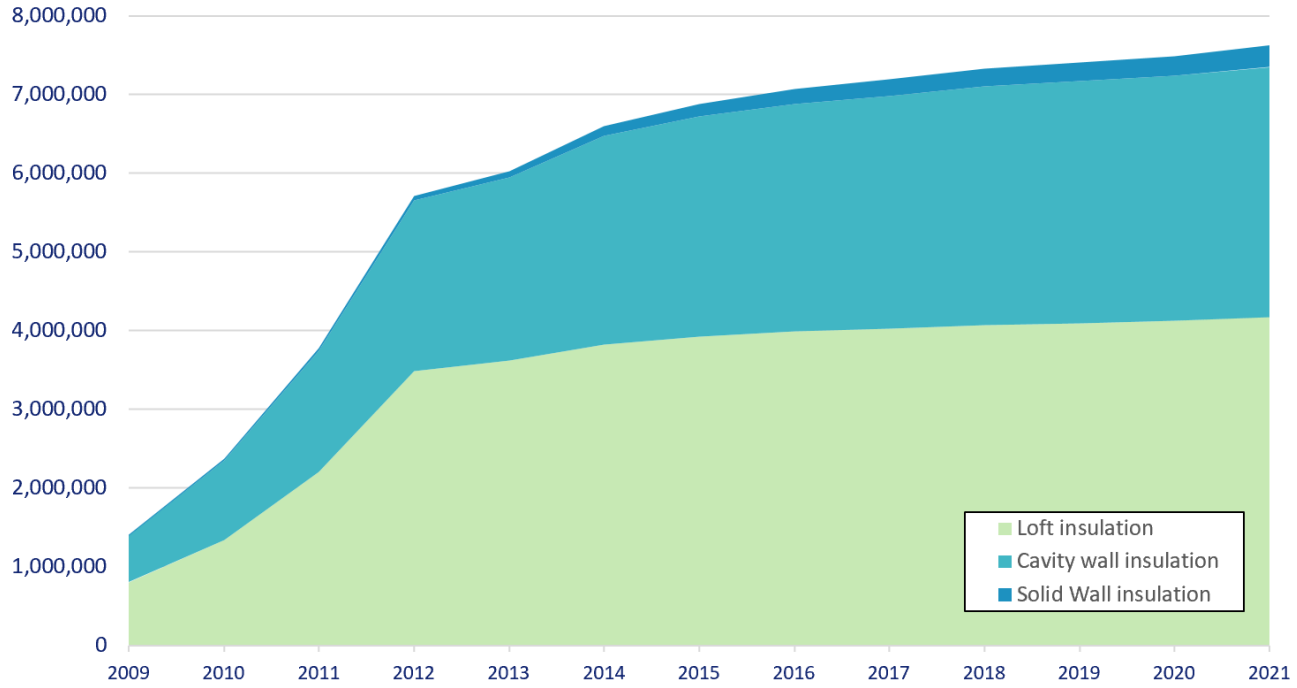
- 7.6 million measures installed through ECO and other government supported domestic energy efficiency schemes since 2009.
- In Great Britain, there are an estimated 29.3 million properties, with 71 per cent having cavity walls.
- Around 87 per cent of properties in Great Britain are estimated to have a loft.

## Professional Insulation measure installations

A total of 7.6 million major professional insulation measures (cavity wall, solid wall and loft) have been installed through ECO and other government supported domestic energy efficiency schemes since 2009 (Chart 13). While the number of measures delivered per year has fallen as the size of the obligation has been reduced, the focus of the obligation has changed to include more expensive measures, such as solid wall insulation, and to target the scheme towards more vulnerable households.

Though not covered in detail here, there have also been around 150,000 'Other Insulation' installations under ECO during the same time. The majority of these, 85 per cent, were installed under ECO3. Similarly, 85 per cent of these installations have been for under floor insulation.

***Chart 13: Cumulative professional insulation measures installed through Energy Obligations 2009-2021***



## Housing Stock

The housing stock in Great Britain is made up of properties with different characteristics, such as cavity walls or solid walls. It is important to understand the profile of the housing stock because different insulation measures are suitable for different property types.

### *Infographic 1: Housing Stock estimates to the end of 2021*


## Levels of Insulation

Estimating levels of insulation types in the housing stock makes it possible to see both how much progress has been made to date and how much work there is left to do.

At the end of December 2021:

- 14.5 million properties had cavity wall insulation (70 per cent of properties with a cavity wall);
- 16.8 million had loft insulation (66 per cent of properties with a loft); and
- 794,000 had solid wall insulation (nine per cent of properties with solid walls).

Through 2021, both retrofit insulation (delivered through Government schemes[6],[7]) and new properties[8] built with insulation resulted in the following progress:

- Around 266,000 more homes with cavity wall insulation (a 1.9 per cent increase between the end of December 2020 and December 2021), of which 58,100 were through retrofit and 208,000 through new build;
- Approximately 233,000 more homes with at least 125mm of loft insulation (a 1.4 per cent increase between the end of December 2020 and December 2021), of which 48,000 were through retrofit and 184,000 through new build;
- Around 22,000 more homes with solid wall insulation (a 2.8 per cent increase between the end of December 2020 and December 2021), all of which are assumed to be through retrofit.

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[6] Insulation measures delivered in Scotland exclusively under the Green Homes Cashback scheme are excluded from the figures.
[7] The estimates of progress for 2021 include the delivery of insulation through the Green Homes Grant Vouchers (GHGV) and Green Homes Grant Local Authority Delivery (LAD) schemes, as well as the Energy Company Obligation (ECO).
[8] Information is not available on the wall construction of new homes. Building regulations would typically be met by insulated cavity walls but other construction types could be used with an equivalent insulating performance. In this publication, it is assumed that all new builds since April 2013 have cavity wall insulation. BEIS estimates that around 208,000 new builds were completed in 2021, based on new builds data from England, Wales and Scotland.

## Sources of increase in insulation levels by Devolved Administration

Tables 8.7b-8.7d of the accompanying Excel tables show the share of homes insulated for each Devolved Administration in 2013 as well as the additional insulation measures delivered through newly built homes and retrofits.

Chart 14 and Chart 15 below show the estimated number of homes with insulation prior to the start of ECO and GD in 2013, as well as the increase resulting from Government schemes[9] and newly built properties.

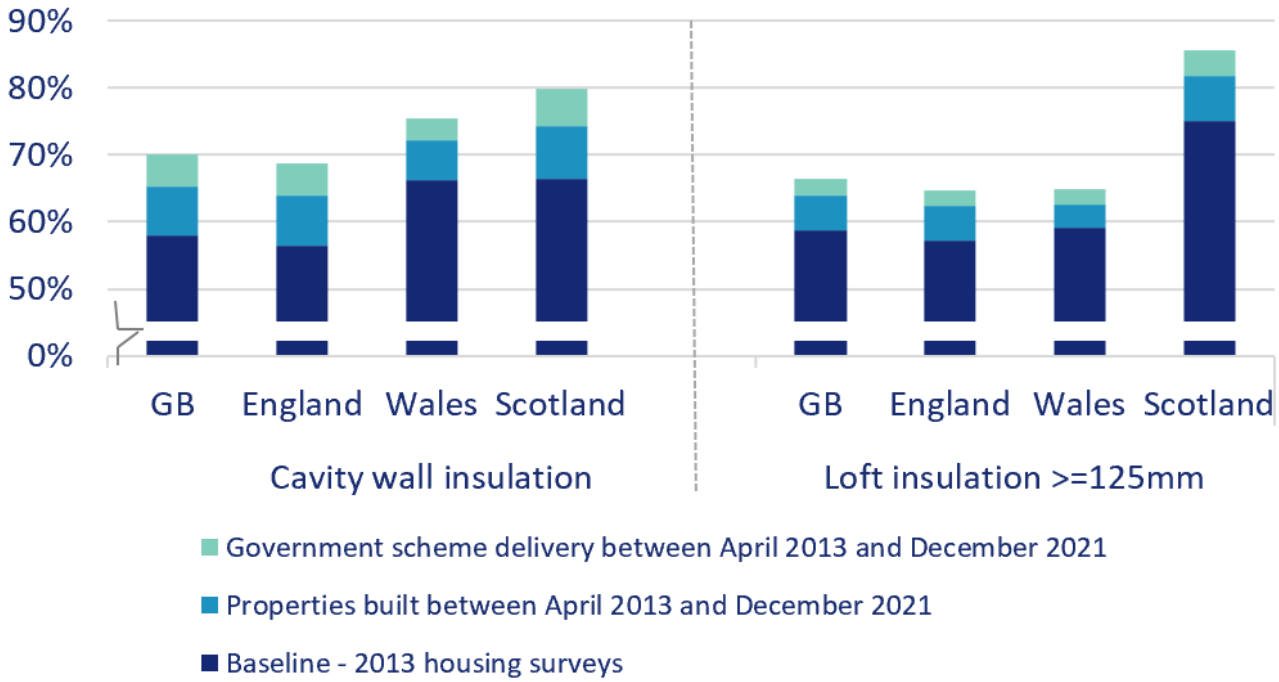
For all three of these measures, Scotland had the highest share of insulated homes in 2013 and also the highest rates of delivery since then. At the end of December 2021, it is estimated that Scotland had:

- 80 per cent of cavity wall homes insulated, compared to 70 per cent for Great Britain;
- 86 per cent of homes with a loft insulated with at least 125mm of loft insulation, compared to 66 per cent for Great Britain; and
- 22 per cent of solid wall homes insulated, compared to nine per cent for Great Britain.

At the end of December 2021, Wales (75 per cent) had a higher share of insulated cavity wall homes than England (69 per cent); the same levels of loft insulation (65 per cent); but slightly lower levels of solid wall insulation (seven per cent, compared to eight per cent in England).

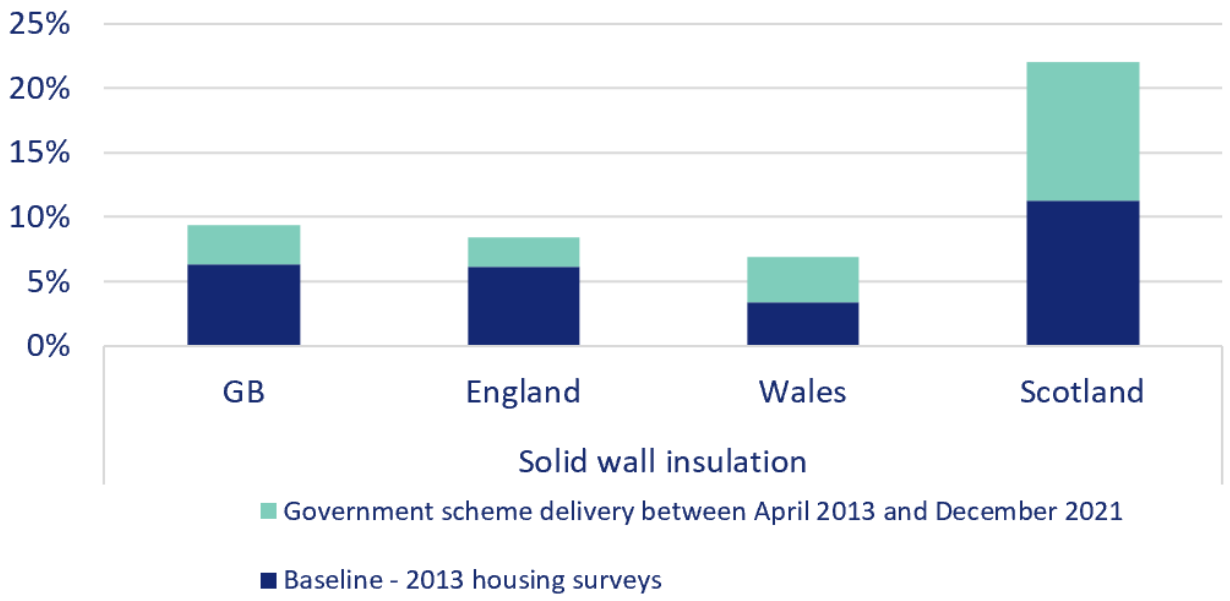
Of retrofit insulation measures since 2013, over 99 per cent of cavity wall and 97 per cent of loft insulation measures have been delivered through ECO. Around 77 per cent of solid wall insulation over this period has been through ECO; with 17 per cent of solid wall measures delivered through the Green Deal framework and five per cent through GHG Vouchers and LAD.

***Chart 14: Share of homes with cavity wall insulation and loft insulation by source, Great Britain and Devolved Administration, December 2021***




[9] The estimates of progress for 2021 include the delivery of insulation through the Green Homes Grant Vouchers (GHGV) and Green Homes Grant Local Authority Delivery (LAD) schemes, as well as the Energy Company Obligation (ECO).

### *Chart 15: Share of homes in GB with solid wall insulation by source, Great Britain and Devolved Administration, December 2021*



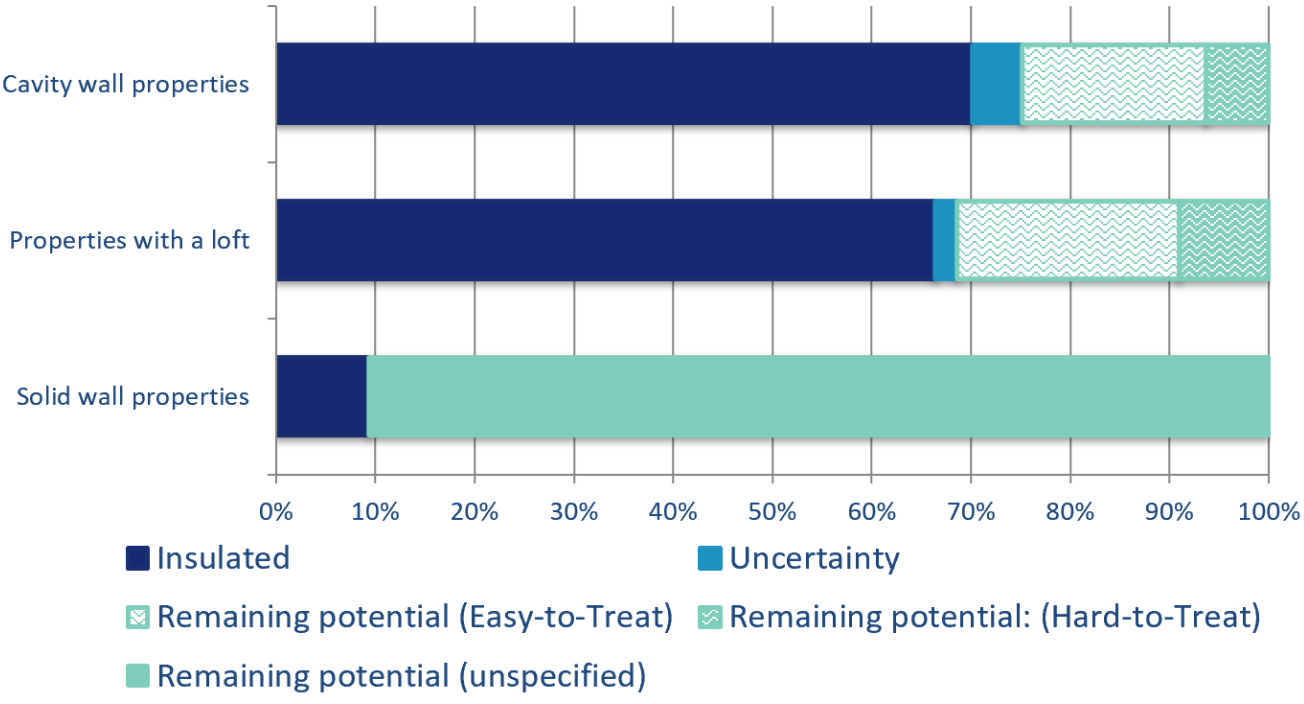

## Remaining Potential

A key use of these estimates for BEIS is to identify how many homes have the potential to receive cavity wall, loft or solid wall insulation in the future, which can then aid the design of future policies.

Both historical figures and a more detailed breakdown of Great Britain's remaining insulation potential are available in Tables 8.4 - 8.6 of the accompanying Excel tables.

Chart 16 gives a summary of the remaining potential for insulating properties in Great Britain. It shows that around two-thirds of properties with cavity walls (70 per cent) and properties with a loft (66 per cent) are insulated. In comparison, only nine per cent of properties with solid walls are insulated.

### *Chart 16: Remaining potential to insulate the housing stock in Great Britain, end December 2021*



## Remaining Potential – Cavity Wall Insulation

At the end of December 2021, it is estimated that there were 14.5 million homes with cavity wall insulation in Great Britain (70 per cent of homes with cavity walls). Of the approximate 5.2 million homes without cavity wall insulation, 3.8 million are easy to treat standard cavities and 1.3 million are hard to treat.[10] It is also worth noting that there are around 1.0 million properties which may or may not have cavity wall insulation (Chart 16, Table 8.4), due to the level of uncertainty from the survey of what is insulated.

## Remaining Potential – Solid Wall Insulation

Solid wall insulation has been defined throughout this report as internal or external wall insulation installed through Government programmes.

It is estimated that there were around 7.7 million uninsulated solid wall properties at the end of December 2021 (91 per cent of homes with solid walls), with around 794,000 insulated solid wall properties in Great Britain. Prior to 2013, Government schemes focused on insulating homes with cavity walls due to the costs involved with insulating solid wall properties. However, the focus has switched in recent years to harder or more expensive to treat properties due to policies like ECO, including solid wall properties. Of the remaining insulation potential, it may not be possible to insulate all solid wall properties. Some of these properties are likely to be too costly to treat or to be located within conservation areas, which means that they will never be insulated.

## Remaining Potential – Loft Insulation

Lofts are defined as insulated in this publication if they have 125mm or more of insulation. Lofts with less than 125mm of insulation are defined as uninsulated as they would benefit most from top-up insulation.

At the end of December 2021, it is estimated that there were 7.9 million uninsulated lofts in Great Britain (31 per cent of homes with lofts). Of these, around 5.7 million homes require easy to treat loft insulation and 2.3 million are considered to be hard to treat or unfillable, which means that the loft would be hard or costly to insulate or could not be insulated at all. This can occur in properties with a flat roof, properties with a room in their roof, or properties where the roof has a very shallow pitch, which makes the loft space inaccessible. It is also worth noting that there are around 0.6 million properties which may or may not have loft insulation (Chart 16, Table 8.5), due to the level of uncertainty from the survey of what is insulated and whether new build homes have lofts.

[10] Hard to treat cavities are ones that are more difficult or more expensive to fill than standard cavities. This includes properties with a narrow cavity and properties of either concrete or metal frame construction. The definition of hard to treat used in this publication is based on the definition used in the 2013 Housing Surveys. The ECO definition of hard to treat differs from this definition slightly as it also includes partial fill cavities and cavity wall properties over three storeys (compared to over four). It also excludes some cavities which assessors would not be able to identify as hard to treat, such as properties with high exposure to wind and rain.

# 9. Technical Information

## Data in this release

Data are collected by BEIS from a range of administrative sources. For these statistics, the main sources of data on the schemes are:

- Ofgem for ECO data – scheme administrator collects data from energy companies on ECO delivery
- Green Deal Central Charge Database – administer and manage Green Deal Plans
- NEC Software Solutions UK – manage national lodgement of Green Deal measures
- Energy Savings Trust Scotland (EST) – manage lodgement of Green Deal measures in Scotland
- Green Deal Oversight and Regulation Body (ORB) – administer Green Deal organisations certification
- ICF for Green Homes Grant Vouchers (GHGV) data – scheme administrator collecting data from applicants (householders and landlords) and installers on GHGV delivery.
- Local authorities and Local energy hubs for Green Homes Grant Local Authority Delivery (LAD) data – administer scheme funding so collect data from householders and installers on delivery.

Further administrative datasets are used to provide the geographic breakdowns included in this release. Reference geography datasets and map boundary files are obtained from the Office for National Statistics (ONS), through the Open Geography Portal.

## Methodology and revisions

The statistics presented in this release cover measures installed up to December 2021.

Further information regarding the methodology and quality assurance process used to produce estimates for this statistical series can be found here: Household Energy Efficiency Statistics Methodology Note

## Revision's policy

Figures for the latest periods are provisional and are liable to subsequent revision. The BEIS statistical revisions policy sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority Code of Practice for Statistics.

## Scheme Information

The Energy Company Obligation (ECO) was introduced in January 2013 to reduce energy consumption and support people at greater risk of living in fuel poverty. The larger energy companies are set obligations to install insulation and heating measures in order to achieve reductions in energy usage and heating costs. ECO is now in its fourth phase. Broadly, ECO takes over from two previous Energy Obligation schemes: Carbon Emissions Reduction Target (CERT) and Community Energy Saving Programme (CESP). The current ECO3 scheme focuses on providing energy efficiency measures to low income and vulnerable consumers, as well as those living in 'hard-to-treat' properties.

- ECO1 started on 1 January 2013 (although energy companies were able to count measures delivered since 1 October 2012 against their targets) and ran until 31 March 2015.
- ECO2 commenced in April 2015 and ran until 31 March 2017.
- ECO Help-to-Heat commenced in April 2017 and ran until September 2018.
- ECO3 went live on 3 December 2018 (although suppliers can count measures delivered since October 2018 against their targets), with the scheme due to run until March 2022.

The Green Deal (GD)[11] is a government initiative that is designed to help homeowners install energy efficiency measures into their properties, and the costs of these measures are paid back through their energy bill over a period of time; this is in the form of a Green Deal Finance Plan (GD Plan).

The Green Homes Grant Vouchers (GHGV) scheme launched for applications on 30th September 2020 and closed to new applicants on 31st March 2021. It was available in England only. Householders and landlords could apply for a grant of up to £10,000 to cover the cost of installing energy efficiency measures. The scheme was split into a main scheme and a low-income scheme, which was determined by the receipt of certain benefits. Applicants on the main scheme would receive up to two-thirds of the cost of the retrofit up to a value of £5,000, while low-income applicants would be fully funded up to £10,000. Further information on the scheme is available in the official statistics[12] and GHGV guidance[13].

The Green Homes Grant Local Authority Delivery (GHG LAD) scheme launched in 2020 with £500 million of funding to support the energy efficiency upgrades of low-income households across England. LAD is delivered over different phases, with Phase 1 allocating £200m in grants to over 136 Local Authorities for delivery by March 2022. Phase 2 allocated £300m in grants to the five Local Net Zero Hubs, who will work with their regional Local Authorities. Under the scheme, LAs identify households that meet the eligibility criteria for the scheme - these are targeted as those most at risk of fuel poverty or in the least energy efficient housing. Further information on the scheme is available in the official statistics[14].

| | |
|---|---|
| *Carbon Emission Reduction Obligation (CERO)* | This covered the installation of measures like solid wall and hard-to-treat cavity wall insulation, which ordinarily cannot be financed solely through Green Deal Plans. The obligation was measured in terms of lifetime carbon savings. From April 2017 this included a rural sub-obligation where at least 15 per cent of a supplier's CERO for Help-to-Heat must be achieved in rural areas. (Closed end September 2018). |
| *Carbon Saving Communities (CSCO)* | This provides insulation measures to households in specified areas of low income. The obligation was measured in terms of lifetime carbon savings. It required 15 per cent of each supplier's obligation to be used to upgrade more hard-to-reach low-income households in rural areas. (Closed end March 2017) |
| *Affordable Warmth or The Home Heating Cost Reduction Obligation (HHCRO)* | This provides heating and insulation measures to consumers who receive particular means-tested benefits. Since April 2017 it enables those in social housing living in E, F and G rated properties to receive insulation measures, and some heating measures. This obligation supports low-income consumers who are vulnerable to the impact of living in cold homes, including the elderly, disabled and families. Under ECO3, 100% of the obligation is based on HHCRO. The obligation was measured in terms of lifetime bill savings. From October 2018 this included a rural sub-obligation where at least 15 per cent of a supplier's ECO3 must be achieved in rural areas. |
| *Flexible Eligibility* | Local Authorities can determine eligible homes under the new 'Flexible Eligibility' mechanism, introduced in 2017. Up to 25% of the Obligation can be delivered through Flexible Eligibility under ECO3, up from 10% under ECO Help-To-Heat. Households can be assessed by local authorities to be 'living in fuel poverty'; or assessed to be 'living on a low income and vulnerable to cold'. |
| *Innovation Measures* | Under ECO3, suppliers are able to meet up to 10% of their obligation to deliver innovation measures to eligible households. A further 10% can be used to monitor the actual energy performance of measures in homes. |

## Definitions

[11] https://www.gov.uk/green-deal-energy-saving-measures (opens in a new window)

[12] https://www.gov.uk/government/collections/green-home-grant-statistics
[13] https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme
[14] https://www.gov.uk/government/collections/green-home-grant-statistics

Energy Company Obligation (ECO) requires the larger energy suppliers to achieve savings in homes. There have been three main ECO obligations, which are detailed in the table below. The table also identifies defines Flexible Eligibility and Innovation, which are sub-obligations operating under ECO3. CERO & CSCO were measured in terms of lifetime carbon savings, Affordable Warmth is measured in terms of lifetime bill savings.

Energy Suppliers are set targets for each phase of the scheme based on two criteria: the number of customers that they have and the amount of energy that they supply to domestic properties in Great Britain. This threshold remained the same for ECO1, 2 & Help-to-Heat but it is tightening through ECO3. Suppliers are obligated to participate in the scheme if they exceeded both the customer number threshold and the electricity or gas supply threshold as of 31 December of the previous year.

- ECO3 Phase 1: obligated 14 energy suppliers meeting the threshold on 31 December 2017.
- ECO3 Phase 2: obligated 18 suppliers based on the threshold on 31 December 2018.
- ECO3 Phase 3: obligated 26 suppliers based on the threshold on 31 December 2019.
- ECO3 Phase 4: obligated 21 suppliers based on the threshold on 31 December 2020.

**ECO3 Supplier Obligation Thresholds: 2013-2022**

| | **Phase 1** | | **Phase 2** | **Phase 3** | **Phase 4** |
|---|---|---|---|---|---|
| | Up to 3 Dec 2018 | 3 Dec 2018 – 31 Mar 2019 | 1 Apr 2019 – 31 Mar 2020 | 1 Apr 2020 – 31 Mar 2021 | 1 Apr 2021 – 31 Mar 2022 |
| Number of domestic customers | 250,000 | 250,000 | 200,000 | 150,000 | 150,000 |
| Electricity supply to domestic customers | 400 GWh | 500 GWh | 400 GWh | 300 GWh | 300 GWh |
| Gas supply to domestic customers | 2,000 GWh | 1,400 GWh | 1,100 GWh | 700 GWh | 700 GWh |

## ECO Brokerage

The ECO Brokerage system operated a fortnightly anonymous auction to enable 'lots' of ECO measures to be sold to energy companies in return for ECO subsidy. From February 2021, auctions were held monthly. Subsequently, Crown Commercial Services (CCS) sent out communication to all stakeholders in May 2021 that the ECO brokerage mechanism would be decommissioned as of June 2021, with no further auctions after auction number 205.

## ECO delivery costs

ECO delivery costs and administrative costs are reported by obligated energy suppliers by the end of the second month following each reporting quarter. Full definitions on ECO costs are included here.

**ECO delivery costs** are defined as the cost of installing an ECO measure in a property. This includes the costs of technical monitoring, measure assessment costs, costs involved with searching for ECO properties, installation costs and marketing costs by delivery partners involved with promoting the ECO obligations.

In addition, **administrative costs** are collected from suppliers and include reporting and compliance, own marketing, and direct administrative costs (such as development of IT/reporting systems to support delivery of the scheme).

## Legacy Green Deal Schemes

Measures installed from these legacy schemes are included in Tables 1.1 to 1.4, but detailed scheme figures are not reported in this release but are available in the 2017 Detailed report.

*Green Deal Home Improvement Fund (GDHIF)*

The GDHIF was an incentive scheme open to all householders in England and Wales wanting to improve the energy efficiency of their homes. The scheme allowed householders to choose one or both of two offers and

they were eligible to claim up to £7,600. Householders could also claim a refund of up to £100 for a GDAR. In July 2015, it was announced that there would be no future funding of GDHIF, resulting in close down of the scheme in June 2016.

*Green Deal Communities*

The Green Deal Communities scheme was in operation from April 2014 until September 2016.[15] Twenty-three areas in England (covering 98 individual Local Authorities) received £85 million to help deliver the Government's Green Deal home energy efficiency programme.

[15] Some installations were until the end of November 2016.

# 10. Household Energy Efficiency Schemes

This section of the report presents activity levels on the Energy Company Obligation (ECO) and Green Deal (GD) between January 2013 and December 2021 alongside figures on Feed-In Tariffs installations, Renewable Heat Premium Payment voucher redemptions, and Smart Electricity and Gas Meter installations that have been previously published in their own statistical releases. These figures are shown in Table 9.1 of the Detailed tables.

## ECO and Green Deal

It is estimated that around 2.4 million households benefitted from ECO and 13,800 households had funded measures through GD Finance Plans up to December 2021.

In addition, around 14,700 households installed from the Cashback scheme, 35,300 households had funded measures through GDHIF, and 15,600 households had measures funded under the Green Deal Communities.

There is a small amount of double counting between these mechanisms. For the latest statistics, please see the latest monthly Headline release.

## Feed-in-Tariffs

The Feed-in Tariff (FITs) scheme was launched in April 2010 and is a financial support scheme for eligible low-carbon electricity technologies, aimed at small-scale installations with a capacity of less than 5 megawatts (MW). FITs support new anaerobic digestion (AD), solar photovoltaic (PV), small hydro and wind, by requiring electricity suppliers to make payments (generation tariffs) to these generators based on the number of kilowatt hours (kWh) they generate. An additional guaranteed export tariff is paid for electricity generated that is not used on site and exported to the grid. The scheme also supports micro combined heat and power installations with an electrical capacity of 2 kW or less.

The majority of the installations installed under FITs are in the domestic sector (96 per cent) but, as these tend to be smaller in size, the capacity of domestic schemes makes up 47 per cent of the total capacity installed under FITs. The majority of the domestic schemes are solar PV (99 per cent). These solar PV schemes cover 98 per cent of the total installed domestic capacity, whilst domestic wind installations account for 1.5 per cent of capacity.

Between January 2013 and the end of December 2021, 483,600 domestic installations were confirmed onto the Central FIT Register. Since the FIT scheme began in April 2010, 828,900 domestic installations were confirmed onto the Central FIT Register to the end of December 2021.

Since the closure of the Feed in Tariff scheme in March 2019, 21,258 domestic installations have been confirmed onto the Central FIT Register. These installations had been commissioned before the closure date, however there can be a lag of 18 months before a site is confirmed onto the scheme.

## Domestic Renewable Heat Incentive

The domestic Renewable Heat Incentive (RHI) is a financial incentive scheme introduced to encourage a switch to renewable heating systems in the domestic sector in Great Britain. Participants of the scheme receive tariff payments for the heat generated from an eligible renewable heating system which is heating a single property. The scheme covers single domestic properties and is open to owner-occupiers, private landlords, social landlords and self-builders. There are four renewable heating technologies covered by the scheme: air-source heat pumps; ground and water-source heat pumps; biomass-only boilers and biomass pellet stoves with integrated boilers; and solar thermal panels.

Up until the end of December 2021, 98,400 systems have been accredited to the scheme. These data refer to systems installed after the launch of the domestic RHI scheme on 9 April 2014 which gained accreditation to the scheme.

## Renewable Heat Premium Payment (Legacy scheme)

The Renewable Heat Premium Payment (RHPP) scheme was introduced as an interim measure in the absence of the domestic Renewable Heat Incentive (RHI). It was designed to support the uptake of domestic renewable heat and maintain the supply chain, to learn about renewable heat technologies and the way consumers use them to better shape the domestic RHI policy and contribute to the renewable energy target. The scheme encompassed three components: the householder's scheme, social landlord competition and community's scheme. These components were designed to give greater coverage across the different parts of the housing market.

Solar Thermal and Air Source Heat Pumps were the most popular technologies in all phases, accounting for over two thirds of redeemed or claimed vouchers in total.

## Smart Meters

Smart meters[16] are the next generation of gas and electricity meters and offer a range of intelligent functions. They can tell customers how much energy they are using in pounds and pence through an In-Home Display (IHD). This information helps customers manage their energy use, save money and reduce emissions. Smart meters communicate automatically with energy suppliers, which avoids manual meter reads and provides customers with accurate bills.

By the end of December 2021, there were 26.1 million smart meters operating across homes in Great Britain, of which 22.0 million were operating in smart mode. Of these smart meters in operation to the end of December 2021, there were 14.9 million electricity smart meters operating across homes in Great Britain, of which 12.8 million were operating in smart mode.

## Green Homes Grant

In July 2020, the Chancellor announced a £2 billion Green Homes Grant scheme to upgrade homes across England. The scheme consists of two elements: vouchers and local authority delivery.

For the Green Homes Grant Vouchers (GHGV) scheme, householders or landlords can apply directly for funding to install energy efficiency measures in their property. Vouchers will cover two-thirds of the cost of eligible improvements, up to a maximum government contribution of £5,000. If a householder or a member of the household is in receipt of certain benefits, the households may be eligible for a voucher covering 100% of the cost of the improvements, up to a maximum value of the voucher is £10,000. Measures are split into two categories, with a primary measure (either insulation or low carbon heating) required, while secondary measures (such as heating controls or energy efficient windows and doors) are optional. More information on GHGV is available at GHGV Information.

The Green Homes Grant Local Authority Delivery (GHG LAD) scheme received £500 million funding to be allocated to local authorities, to improve the energy efficiency of homes of low-income households, helping reduce fuel poverty, phasing out high carbon fossil fuel heating, and delivering progress towards the UK's commitment to net zero by 2050. The scheme is targeted at raising the energy efficiency of low income and low energy performance homes (those with energy performance certificate (EPC) ratings of E, F or G), including off-gas grid homes. The scheme was split into two phases, with Phase 1 requiring Local Authorities (LAs) to bid for funding, while Phase 2 will be administered by the local energy hubs. More information on GHG LAD is available at GHG LAD Information.

In February 2021, the first statistics on GHGV were published. Further analysis will be incorporated into subsequent releases. In due course, statistics will be published on the GHG LAD scheme. Both statistical publications will be available at GHG Statistics.

[16] Smart meters are compliant with the Smart Meter Equipment Technical Specification (SMETS).

# 11. Further Information

## Recent publications of interest

**Household Energy Efficiency Detailed statistics (annual)**
For detailed analysis of ECO and GD Plans, along with home insulation levels across Great Britain see the Annual Household Energy Efficiency Detailed Statistics publication.

**Green Homes Grant Vouchers statistics**
For statistics monitoring the Green Homes Grant Vouchers scheme across England., see the Green Homes Grant Vouchers statistics.

**Green Homes Grant Local Authority Delivery statistics**
For statistics monitoring the Green Homes Grant Local Authority Delivery scheme across England, see the Green Homes Grant Local Authority Delivery statistics.

**Smart Meters quarterly statistics**
For estimates on the roll-out of Smart Meters in Great Britain, covering meters operating and meters installed, see the Smart Meters statistics.

**Renewable Heat Incentive statistics**
For statistics on deployment data for the domestic and non-domestic Renewable Heat Incentive (RHI) to support the uptake of renewable heat, see the Renewable Heat Incentive statistics.

**Energy Trends**
For detailed data on supply and demand of coal, oil, gas, electricity and renewables in the United Kingdom, see the Energy Trends statistics.

**Energy Consumption in the United Kingdom (ECUK)**
For detailed data on end use estimates of energy in the UK, see the Energy Consumption in the United Kingdom (ECUK) statistics.

**Sub-national total final energy consumption**
For findings of the sub–national energy consumption analysis in the UK for all fuels, for the period covering 1 January to 31 December, with gas consumption covering the annual period from mid-May, see the sub-national total final energy consumption statistics.

**Sub-national electricity consumption**
For electricity consumption by consuming sector for Great Britain and devolved administration areas, see the sub-national electricity consumption statistics. Data are based on the aggregation of Meter Point Administration Number readings as part of BEIS's annual meter point electricity data exercise.

**Sub-national gas consumption**
For gas consumption by consuming sector for Great Britain, and devolved administration areas, see the sub-national gas consumption statistics. Data are based on the aggregation of Meter Point Reference Number readings throughout Great Britain as part of BEIS's annual meter point gas data exercise. Data are subject to a weather correction factor to enable comparison of gas use over time.

**Domestic Energy Interactive Map**
For an interactive map for indicators of domestic energy efficiency, including the percentage of households receiving ECO measures down to Lower Layer Super Output Area up to December 2021, see the Domestic Energy Map. The map also shows the number of loft and wall insulation measures installed.

## Future updates to these statistics

The next headline release on the gov.uk website is planned for publication at 9.30am on 21st April 2022 and will contain the latest available information on headline ECO measures up to the end of February.

The next quarterly release is planned for publication at 9.30am on 26th May 2022.

## National statistics

This is a National Statistics publication. National Statistics status means that our statistics meet the highest standards of trustworthiness, quality, and public value, and it is our responsibility to maintain compliance with these standards.

The statistics last underwent a full assessment against the Code of Practice for Statistics on 12 June 2014.

## Pre-release

Some ministers and officials receive access to these statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the ministers and officials that receive pre-release access to these statistics can be found in the BEIS statement of compliance with the Pre-Release Access to Official Statistics Order 2008.

## Uses of these statistics

These statistics are used by Government to monitor the delivery and effectiveness of the ECO and GD schemes. They are used to monitor the delivery of the ECO obligation and the share of the obligation delivered though key aspects of the scheme, including Flexibility Eligibility and innovation measures. The data are used within the National Energy Efficiency Data-framework to assess the impact of these measures in different types of homes.

## User engagement

Users are encouraged to provide comments and feedback on how these statistics are used and how well they meet user needs. Comments on any issues relating to this statistical release are welcomed and should be sent to the Energy Efficiency Statistics mailbox.

The BEIS statement on statistical public engagement and data standards sets out the department's commitments on public engagement and data standards as outlined by the Code of Practice for Statistics.



This publication is available on Gov.uk by following the link here.

If you need a version of this document in a more accessible format, please email the Energy Efficiency Statistics mailbox. Please tell us what format you need. It will help us if you say what assistive technology you use.