Department for Energy Security & Net Zero

Household Energy Efficiency

Great Britain, Data to December 2024

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

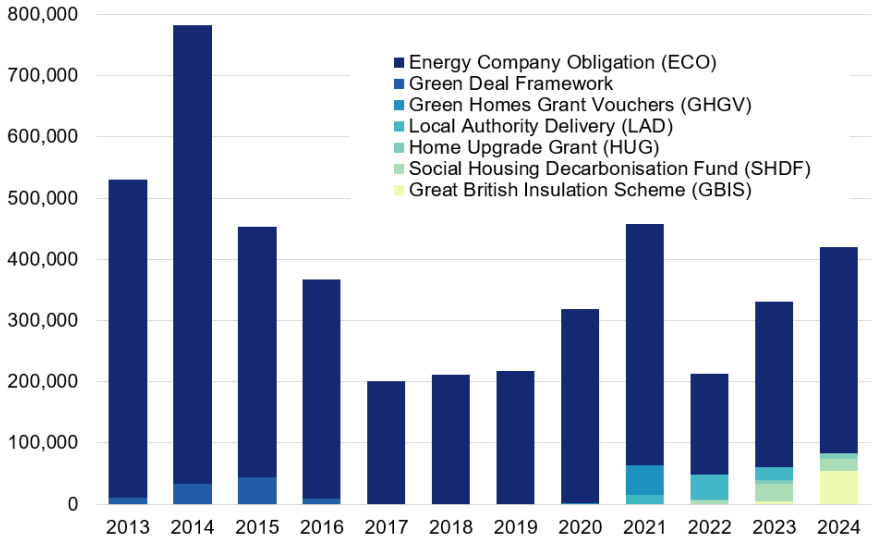
For information on the schemes please see the Technical Information.

Data tables

The underlying tables are available in Excel format at HEE Statistics.

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

Annual Energy Efficiency measures installations to 2024



Key headlines

- From 2013 to the end of 2024, around 4.5 million energy efficiency measures were installed in 2.8 million properties in Great Britain through various government support schemes.
- During 2024, around 420,600 energy efficiency measures were installed through these schemes, an increase of 27 per cent compared with 2023.
- Around 120,900 households were upgraded across all schemes, an increase of 38 per cent compared with 2023.
- ECO remains the largest energy efficiency scheme. Measures delivered through ECO accounted for 80 per cent of all measures installed in 2024. During 2024, ECO delivered 337,800 measures in 62,500 first-time households – an increase of 24 per cent compared to 2023.
- In 2024, 43,600 households were upgraded through GBIS, 9,900 through SHDF and 4,900 through HUG.
- Of the households treated through LAD, HUG and SHDF initially rated EPC band D or lower, 68% were upgraded to EPC band C or above.
- At the end of 2024, it is estimated that 15.2 million properties in Great Britain had cavity wall insulation (71 per cent of properties with a cavity wall), 17.5 million had loft insulation (67 per cent of properties with a loft) and 876,000 had solid wall insulation (10 per cent of properties with solid wall).

1. Energy Efficiency Trends

Tables 1.1 to 1.2

The number of measures installed and the number of households receiving measures under ECO and other energy efficiency schemes.

Key Headlines

- From 2013 to 2024, 4.5 million energy efficiency measures were installed in 2.8 million properties through various government support schemes.
- In 2024, 420,600 measures were installed in 120,900 households through ECO, HUG, SHDF and GBIS.
- In 2024, 337,800 ECO measures were installed in 62,500 first-time households.

From January 2013 to the end of December 2024, around 4.5 million energy efficiency measures (see chapter 2 for the types of measures) were installed in 2.8 million properties through various government support schemes:

- Energy Company Obligation (ECO)
- Great British Insulation Scheme (GBIS)
- Social Housing Decarbonisation Fund (SHDF)
- Home Upgrade Grant (HUG)
- Local Authority Delivery (LAD)
- Green Homes Grant Vouchers (GHGV)
- Green Deal (GD) Framework.

More information on these schemes can be found in Chapter 9.

In addition to these schemes, there is government support for low carbon heating systems such as heat pumps and biomass boilers under the Boiler Upgrade Scheme and the Domestic Renewable Heat Incentive. Delivery on these schemes can be found in Table 8.1 and Chapter 10.

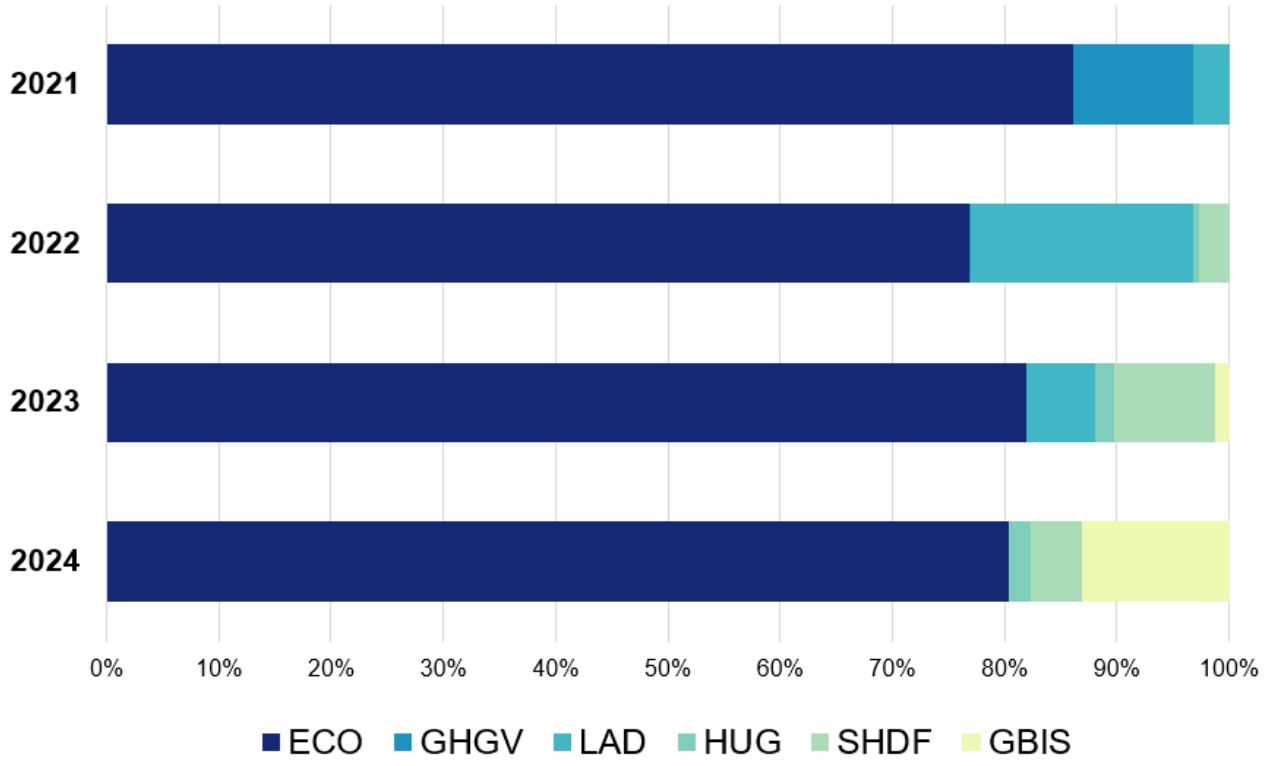
In 2024, 420,600 measures were installed through ECO, HUG, SHDF and GBIS. This is an increase of 27 per cent compared with 2023. This increase was largely due to sustained higher levels of ECO delivery in the first half of 2024 following the rise in 2023 and increased delivery under GBIS. GBIS began delivery in May 2023, but uptake was slow in the initial months, with around 4,000 measures being installed in 2023. However, delivery continued to rise through 2023 into 2024, with 55,000 GBIS measures being installed in 2024, 14 times more than the previous year. GBIS delivery made up 13 per cent of all measures installed in 2024 (Chart 1).

HUG and SHDF schemes both began delivering in 2022. HUG Phase 1 delivery was completed at the end of 2023 with all 2024 delivery being under HUG Phase 2. Under HUG, 8,600 measures were delivered in 2024, up from 5,600 in 2023. SHDF Wave 1 delivery completed mid-way through 2024, with SHDF Wave 2.1 making up the majority of SHDF measures installed in 2024. Under SHDF, 19,200 measures were installed in 2024, down from 29,800 measures in 2023.

In 2024, 337,800 ECO measures were installed which was 24 per cent higher than in 2023. This was more similar to delivery in 2020 and 2021 but lower than the earlier periods of ECO. Through 2024, 62,500 households received ECO measures for the first time, which was 21 per cent higher than in 2023. As ECO has been running since 2013, a number of households have been treated previously under the scheme. The current iteration of ECO (ECO4) also adopts a whole-house approach to energy efficiency improvement whereby multiple measures are installed in a property following a full assessment of the home's needs, therefore leading to a higher number of measures per household.

Even after the introduction of other government schemes, ECO remains the largest energy efficiency scheme, with measures delivered through ECO accounting for between 70 and 90 per cent of measures installed in each of the last four years (Chart 1). In 2021, GHGV delivered the second highest number of measures. After the closure of GHGV in 2021, LAD became the second biggest scheme in 2022, accounting for 20 per cent of measures, followed by SHDF at 3 per cent. After the closure of LAD in 2023, ECO made up 80 per cent of measures installed in 2024, followed by GBIS at 13 per cent (Table 1.1 and Chart 1).

Chart 1: Share of measures installed from 2021 to 2024 by scheme (Table 1.1)



2. Measures by Type

Tables 1.3 and 3.1
The number of measures installed by type of measure.

Key Headlines

- Across all schemes, 55 per cent of measures were for insulation and 45 per cent for heating.
- In 2024, the most popular group of measures under ECO was 'Heating Controls', with 175,600 measures installed.

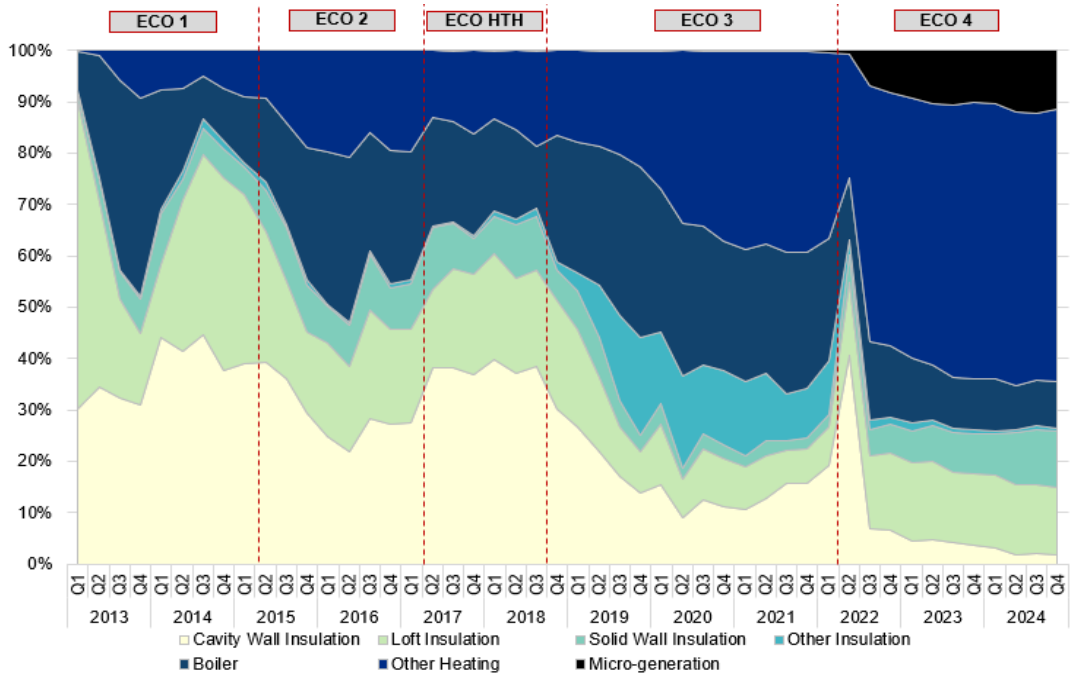
Measures by Type

Energy efficiency measures installed under government schemes include insulation measures, boiler measures, low carbon heat measures such as heat pumps and solar thermal, solar PV, window and door measures, and heating controls.

Of all measures installed under ECO, GD, LAD, HUG, GHGV, SHDF and GBIS to the end of 2024, around 55 per cent were insulation measures and 45 per cent were heating measures. The most commonly installed measure type was cavity wall insulation at 24 per cent. This was followed by 'Other heating' at 22 per cent of measures installed.[1] Less than one per cent of measures were 'Other' measures such as Energy Efficiency lighting and Waste water heat recovery systems (Table 1.3). The breakdown is different for 2024 where ECO, GBIS, HUG and SHDF were the only schemes operating. In 2024, 'Heating Controls' were the most commonly installed at 45 per cent, largely driven by ECO, as 93 per cent of these heating controls were installed under this scheme. The second most commonly installed measure in 2024 was loft insulation at 16 per cent, followed by solid wall insulation at 10 per cent. (Table 3.1).

Looking at ECO specifically in 2024, the most popular group of measures was 'Heating Controls', with 175,600 measures installed (52 per cent). The second most popular measure group was loft insulation, with 45,800 measures installed (14 per cent). In 2024, the micro-generation measure group (heat pumps, biomass boilers and solar PV) has continued to grow, making up 11 per cent of all measures installed. This is up from 10 per cent in 2023. (Table 3.1).

Chart 2: Share of quarterly ECO measures by measure type, to end 2024 (Table 3.1 from quarterly statistical release)



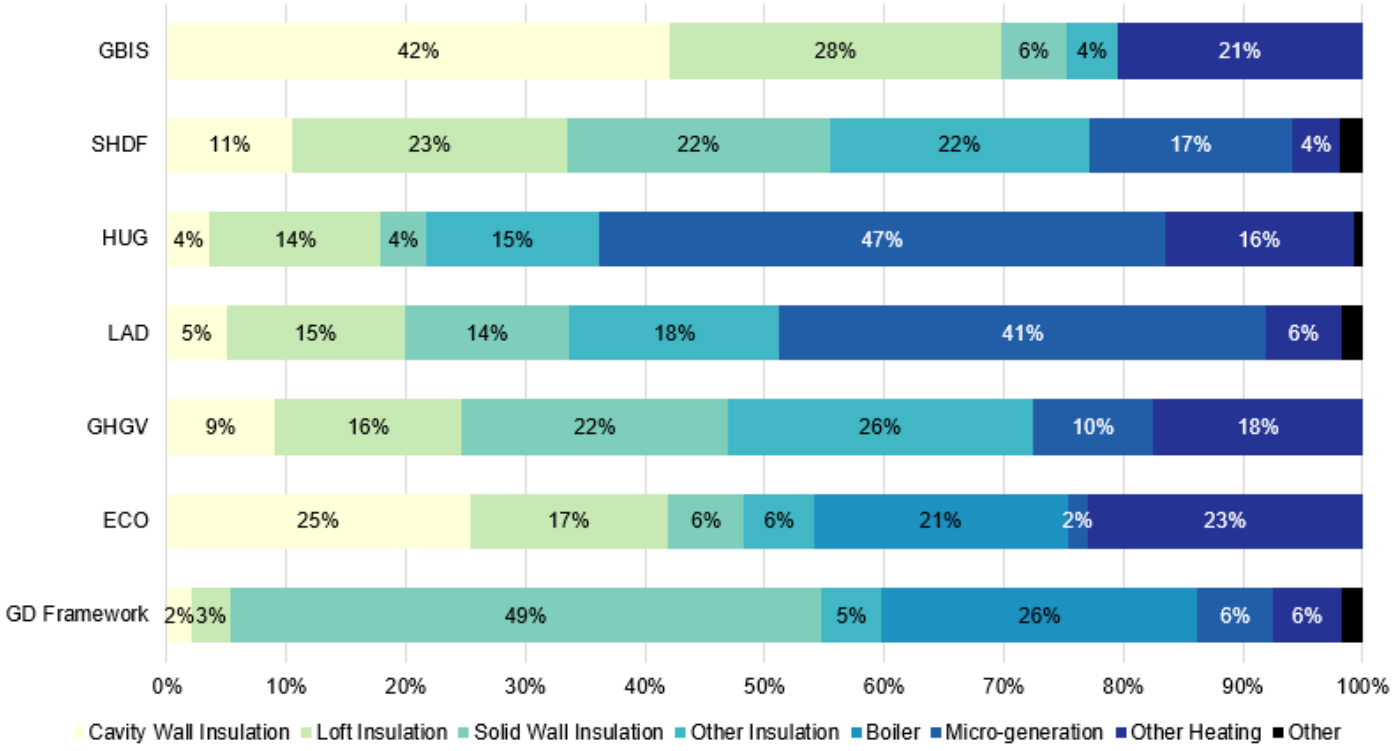
[1] Other heating includes heating controls, electric storage heating, district heating and solar thermal.

The breakdown of measures installed by measure type for other household energy efficiency schemes since 2013 varies, mainly due to the differences in the types of measures that are eligible. Under the Green Deal Framework, solid wall insulation accounted for almost half (49 per cent) of all measures installed. This was followed by boiler measures, accounting for 26 per cent. (Table 1.3).

For other schemes, boilers are not an eligible measure due to the focus on supporting the UK to reach its Net Zero target by 2050. Under LAD and HUG, the most popular measure installed has been solar PV, accounting for 37 per cent and 31 per cent of measures installed, respectively (Table 1.3). Under SHDF, there is more variation in measure type with loft insulation being the most popular measure installed accounting for 23 per cent, followed by solid wall insulation at 22 per cent. (Table 1.3, Chart 3).

GBIS focuses on installing the most cost-effective mainly single insulation measures to the least efficient homes (with heating controls eligible as a secondary measure for low-income households once an insulation measure has been installed). Under GBIS, most common measure installed has been cavity wall insulation at 42 per cent. This is followed by loft insulation at 28 per cent. (Table 1.3, Chart 3).

Chart 3: Share of all measures installed by measure type, by scheme, up to end 2024 (Table 1.3)[2]



[2] In Chart 3, Micro-generation is made up of heat pumps and solar PV. Other Heating is made up of heating controls, electric storage heating, district heating and solar thermal. Other insulation is made up room-in-roof, flat roof, floor, and park home insulation, as well as window and door measures. The 'Other' category is made up of Energy Efficiency lighting and Waste water heat recovery systems.

Multiple Measures

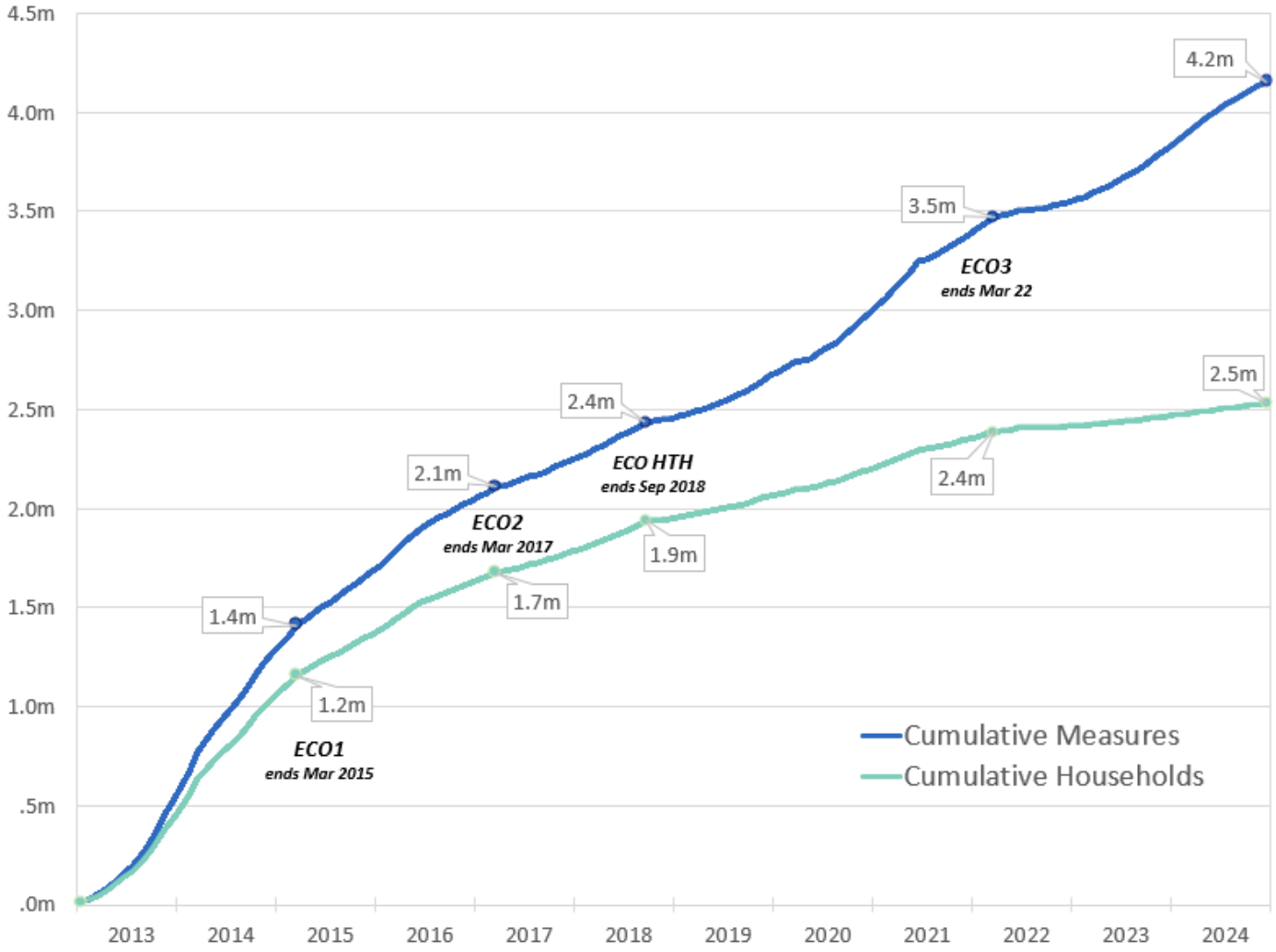
Since 2013, an average of 1.61 measures have been installed per household receiving measures across all schemes.

Under ECO, an average of 1.64 measures were installed per household receiving measures since 2013. ECO4, the latest iteration of ECO, has seen a large increase in the number of measures installed per household due to the whole-house retrofit focus of the scheme. The growing difference between the number of measures installed and the number of unique households receiving measures through the iterations of ECO can be seen in Chart 4.

Under ECO4 (April 2022 onwards), around 4.15 measures have been installed per unique household (Table 1.6 from Household Energy Efficiency Statistics, headline release February 2025).

In 2024, across the other schemes, the average varied between 1 and 2 measures installed per household. The average was highest under SHDF at 1.93 measures per household and was lowest for GBIS at an average of 1.26 measures per household (Tables 1.1 and 1.2).

Chart 4: Cumulative number of ECO measures installed and unique households receiving measures by year, to end of 2024



3. Household Characteristics

Tables 3.2 and 4.2 to 4.3

The number of measures installed and households receiving measures by household characteristics, including heating source, property type and tenure, where available for the difference schemes.

Key Headlines

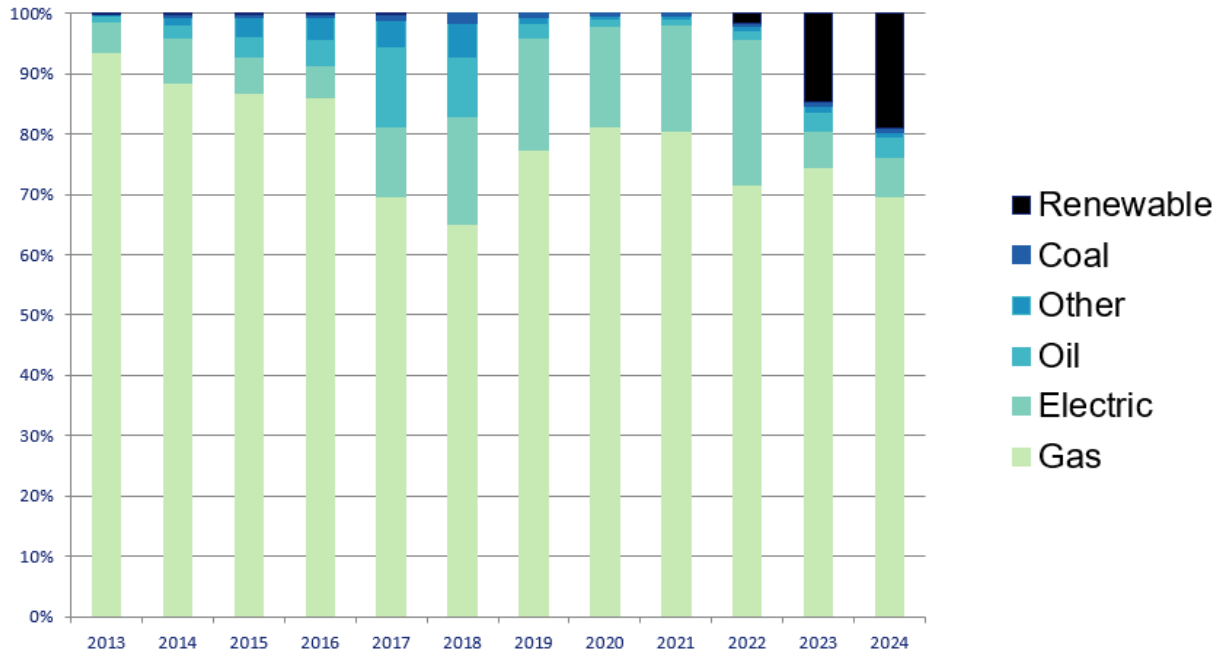
- Under ECO, 78 per cent of measures were installed in properties using gas as their main fuel type.
- Under ECO, GBIS, LAD, HUG and SHDF, the majority of households where measures were installed were houses.
- The most common tenure under ECO, GBIS and HUG in 2024 was owner-occupied, whilst almost all properties were socially rented under SHDF.

ECO measures by property main fuel type[3]

In total, to the end of 2024, 3.26 million measures (78 per cent) under ECO were installed in properties that used gas as their main fuel type (Table 3.2). *The 78 per cent calculation allows for including properties where the main fuel type is unknown in the overall total*. Around four per cent of measures were installed in a property where the main fuel type was 'unknown'. Excluding these properties where the fuel type was unknown, gas was the main property fuel type for 82 per cent of measures installed.

The proportion of ECO installation properties where renewables[4] were the main fuel type has increased in both 2023 and 2024. From two per cent in 2022, the renewables percentage rose to 15 per cent in 2023 and to 19 per cent in 2024[5] (Table 3.2, Chart 5).

Chart 5: ECO Measures by main fuel type of property, by year, to end of 2024 (Table 3.2)

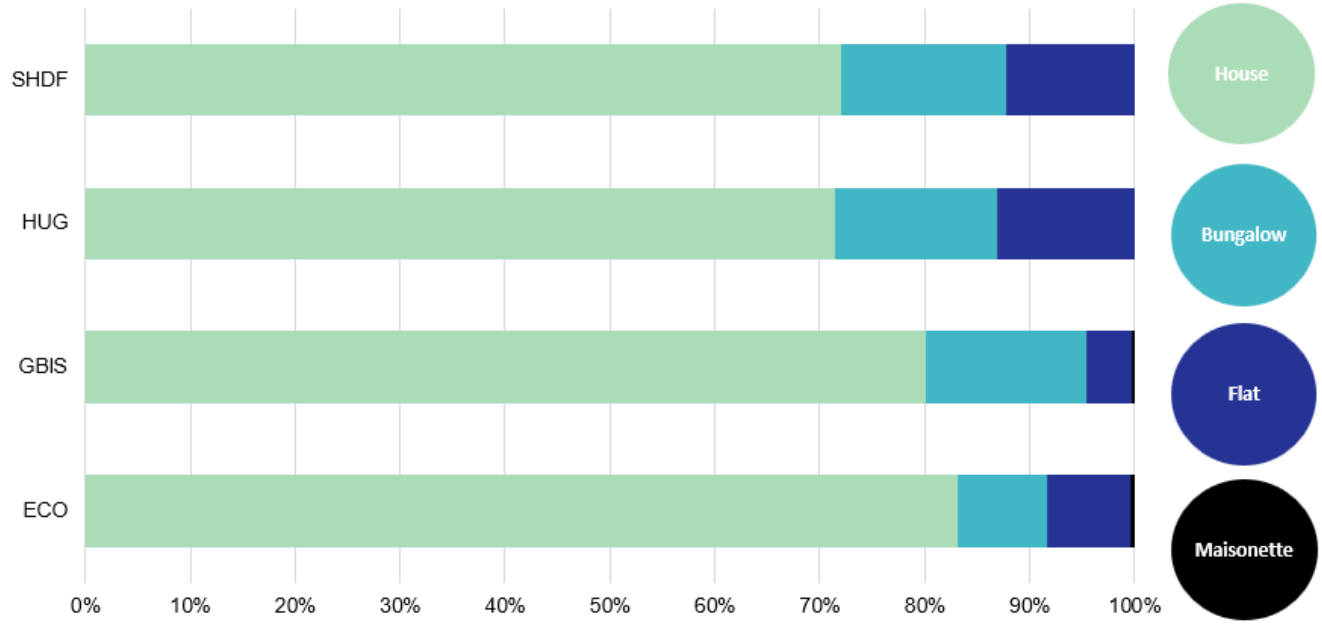


Households receiving measures – property type and tenure

[3] This section covers ECO only as data on pre-installation main property fuel type is not collected for other schemes.
[4] Renewable main fuel type includes air source heat pump, ground source heat pumps and biomass boilers.
[5]These percentages and Chart 5 exclude properties with an unknown main fuel type. This is because of an increase in the number of properties where the main fuel type is unknown during ECO4 due to changes in data collection requirements.

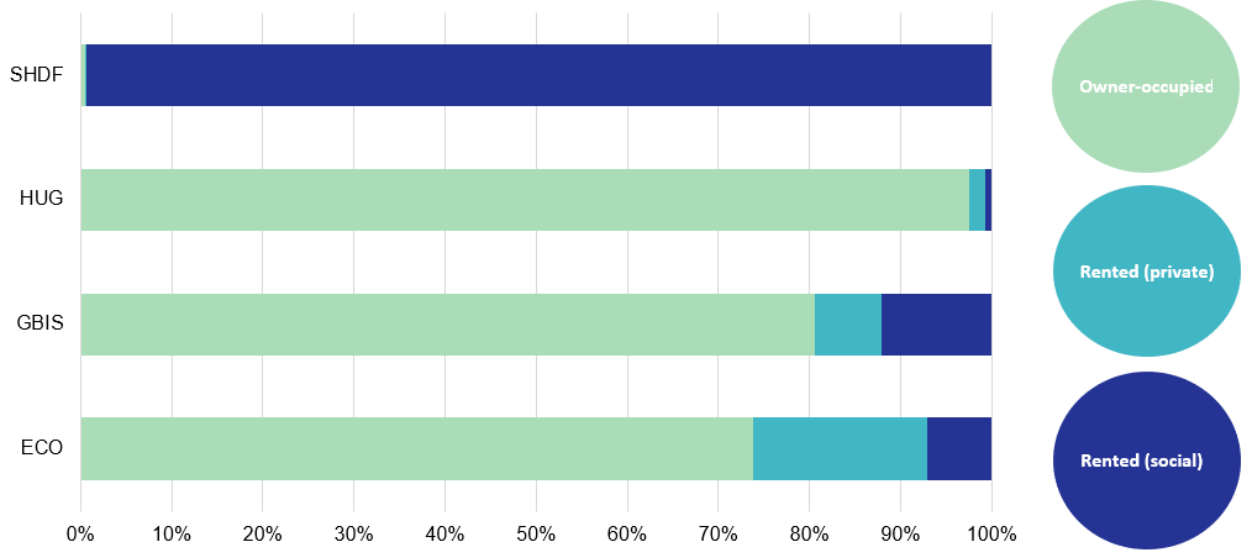
Under ECO, GBIS, LAD, HUG and SHDF, the majority of the households where measures have been installed have been houses. Since 2013, around 1.8 million properties (72 per cent) that have received measures under ECO have been houses, with a further 18 per cent of properties being flats. In 2024, this house percentage was higher at 83 per cent of properties. This was followed by GBIS where 79 per cent of households receiving measures were houses. HUG and SHDF saw a higher percentage of households being flats in 2024, at 13 per cent and 12 per cent respectively (Table 4.2 and Chart 6).

Chart 6: Households in receipt of measures by property type, by scheme in 2024 (where known) (Table 4.2)



For the whole of ECO, the most common tenure, where known, is owner-occupied with around 1.7 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. In 2024, owner-occupied households accounted for 74 per cent of all ECO households in the year. Under HUG, almost all households were owner-occupied in 2024. Conversely, almost all households under SHDF were socially rented as only social housing properties are eligible for the scheme. (Table 4.3 and Chart 7).

Chart 7: Households in receipt of measures by tenure, by scheme in 2024 (where known) (Table 4.3)



4. Regional Trends

Tables 3.3 to 3.6. 3.9, 4.1 and 4.4

The number of measures installed and households receiving measures by region, local authority and parliamentary constituency and also geographic breakdowns for ECO Flexible Eligibility.

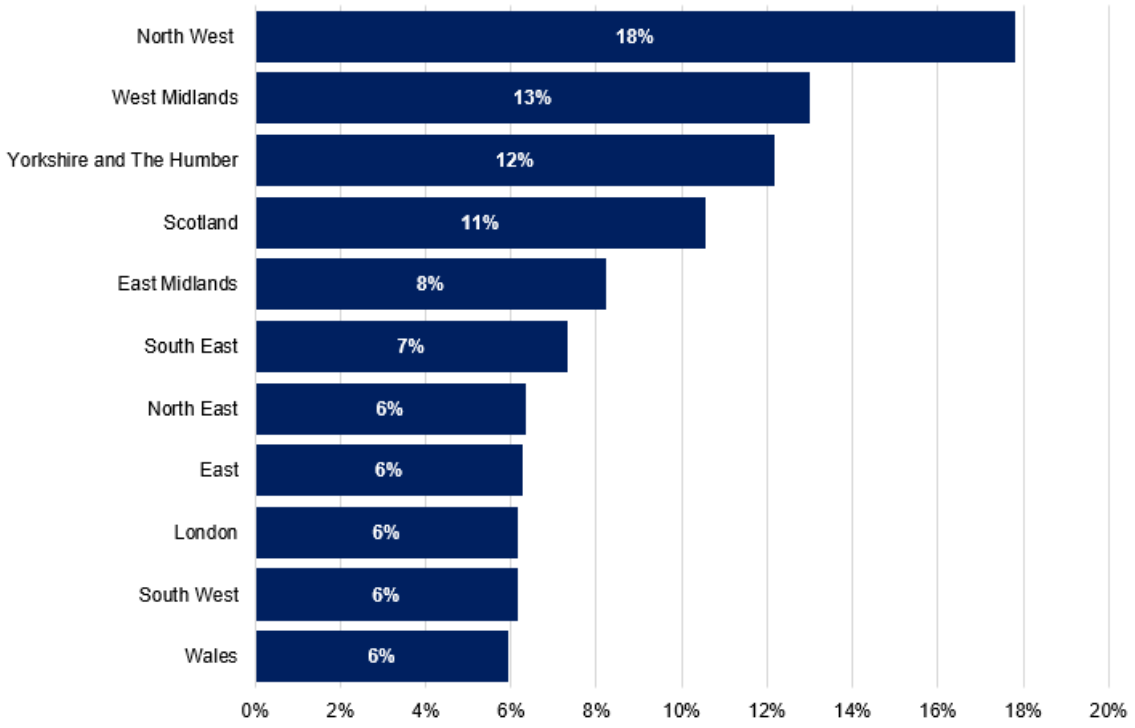
Key Headlines

- Across ECO, nearly one fifth (18 per cent) of ECO measures were installed in the North West of England.
- The North West region also had the most measures installed under LAD and GBIS

Regional Trends

The chart below shows the share of measures installed under government schemes (ECO, GBIS, LAD, HUG, GHGV and SHDF) by region to the end of 2024 (note that LAD, HUG, GHGV and SHDF operate in England only). Due to the size of ECO, the regional share under all of these scheme combined matches that of ECO only (Table 3.3 and Chart 8).

Chart 8: Share of measures by region, up to the end of 2024 (Table 3.3)

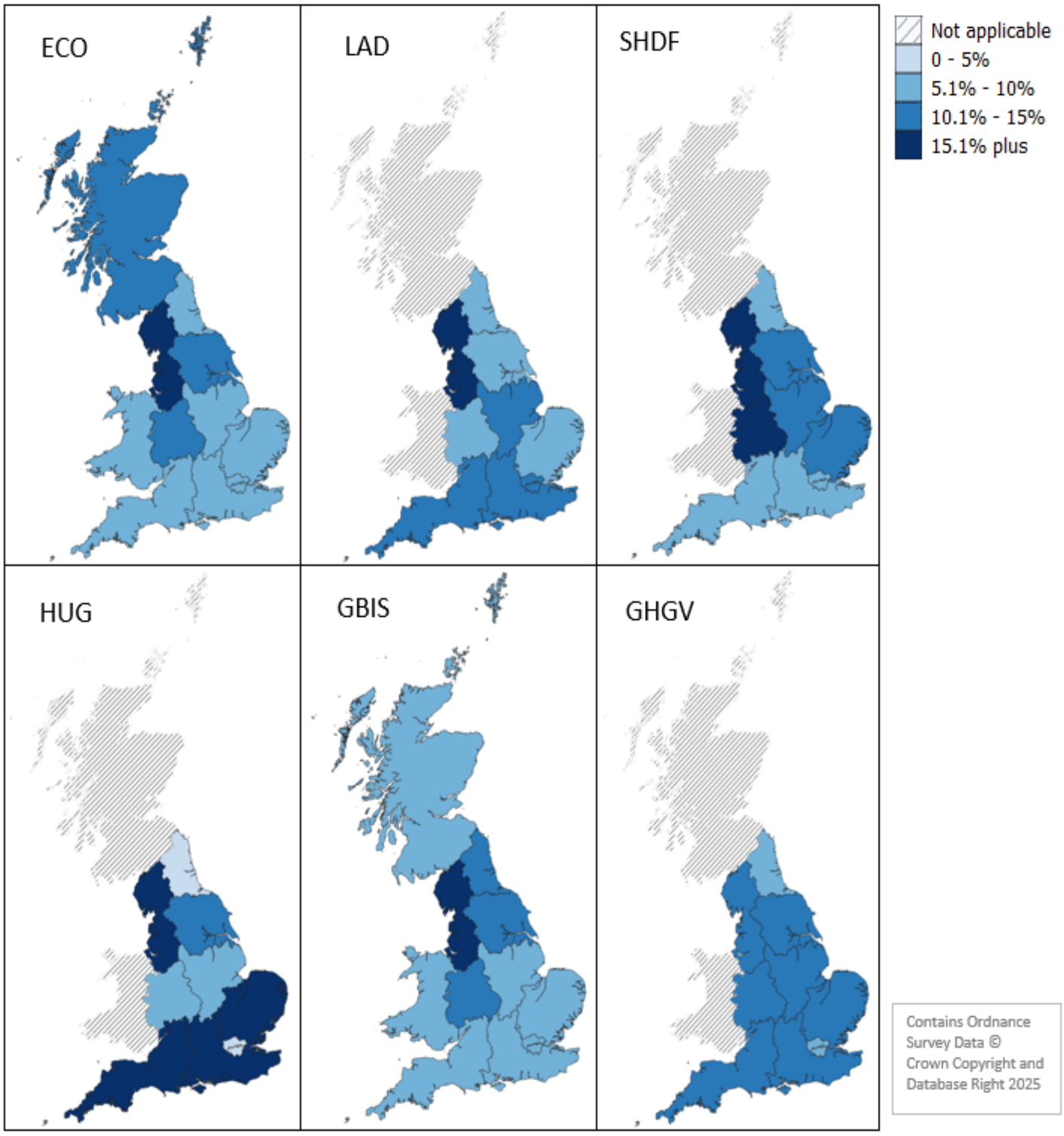


Up to the end of December 2024, around one fifth (18 per cent) of ECO measures were in the North West (742,200) - the highest in any region. Eleven per cent of ECO measures were installed in Scotland (463,000) and six per cent were in Wales (258,800). Under GBIS, the North West (9,500 measures) had 16 per cent of all measures, higher than any other region. Five per cent of GBIS measures were installed in Scotland (3,100) and six per cent were in Wales (3,600), (Table 3.3 and Map 1).

The LAD, HUG, GHGV and SHDF schemes operate within England only. Under LAD, the North West region had the most measures installed of any region, around 20 per cent (15,200 measures) of all LAD measures. The West Midlands region had the most measures installed under SHDF to the end of 2024, with 19 per cent of measures (10,300 measures). The South East and North West regions had the most measures installed under HUG up to the end of 2024, with 22 per cent and 19 per cent of all HUG measures (3,400 and 2,900

respectively). Under GHGV, the North West, West Midlands and South East regions each had 14 per cent of all measures, all having around 7,000 each (Table 3.3 and Map 1).

Map 1: Percentage of each government scheme's measures installed in each region, up to end of 2024 (Table 3.3)



In Wales and Scotland only the ECO and GBIS schemes are applicable.

Flexible Eligibility (Flex')

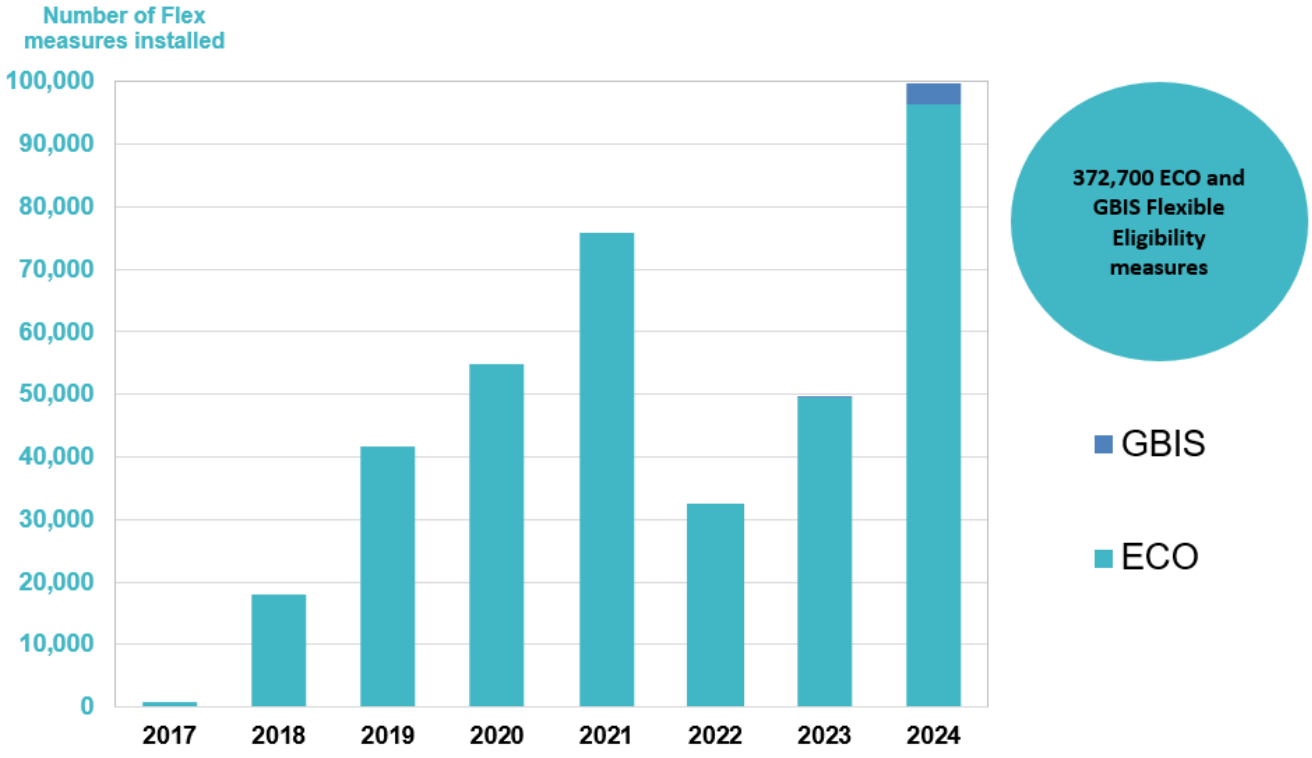
The 'Flexible Eligibility' rules for ECO4 mean suppliers can now deliver up to 50 per cent of their obligation through this mechanism, up from 25 per cent under ECO3, and 10 per cent under ECO Help-to-Heat (HTH). Ofgem defines ECO4 Flex as, "ECO4 Flex is a household referral mechanism within the wider ECO4 Scheme which enables councils to widen the eligibility criteria for ECO, allowing them to tailor energy efficiency schemes to their respective sector. Under ECO4 Flex, a participating local authority can refer private tenure households that it considers to be living in fuel poverty or on a low income and vulnerable to the effects of living in a cold home".

Since the introduction of Flexible Eligibility ('Flex') under ECO at the start of ECO HTH (April 2017), 369,300 measures were installed by this mechanism until the end of 2024. Of these, 210,100 were installed under either ECO HTH or ECO3, while around 159,300 were installed under ECO3 interim or ECO4 (Table 3.4 and Chart 9).

The number of ECO Flex measures installed increased at a steady rate each year from its introduction in 2017, up until a previous peak of 75,800 in 2021. ECO Flex installation numbers dropped in 2022, to around 32,400 installations, reflecting the end of the ECO3 phase and slow uptake start at the beginning of ECO4. Flex installation numbers rose again in 2023, to 49,500 in the year, as ECO4 measure installation numbers increased, before reaching a new peak of 96,300 measures in 2024 (Table 1.8).

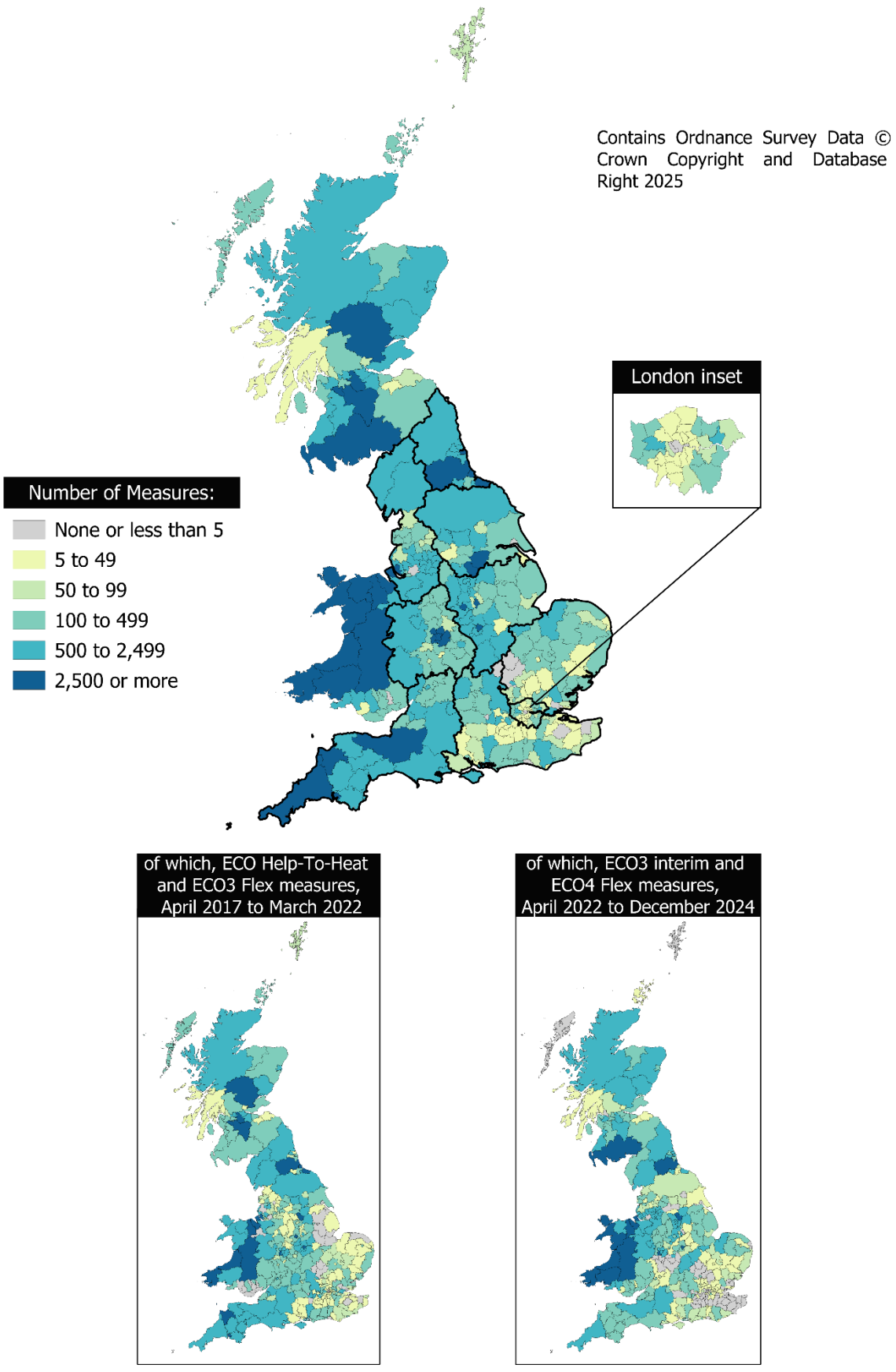
Households receiving measures under GBIS can also be referred through the Flexible Eligibility mechanism. Under GBIS suppliers can deliver up to 80 per cent of their GBIS low-income obligation through Flex. To the end of 2024, 3,400 Flex measures have been installed under GBIS (Table 1.8).

Chart 9: ECO and GBIS Flexibility Eligibility Measures by installation year, to end of 2024 (Table 1.8)



To the end of December 2024, 281 local authorities had 50 or more measures installed through ECO Flexible Eligibility, of which 135 local authorities had over 500 measures installed. The East Midlands (60,300 ECO Flex measures) had the highest proportion of ECO Flex measures installed of any region, with just over 16 per cent of all the flex measures in Great Britain. Wales (58,500 ECO Flex measures) had just under 16 per cent of all ECO Flex measures installed, while Scotland (56,100 ECO Flex measures) had just over 15 per cent (Map 2 and Table 3.4).

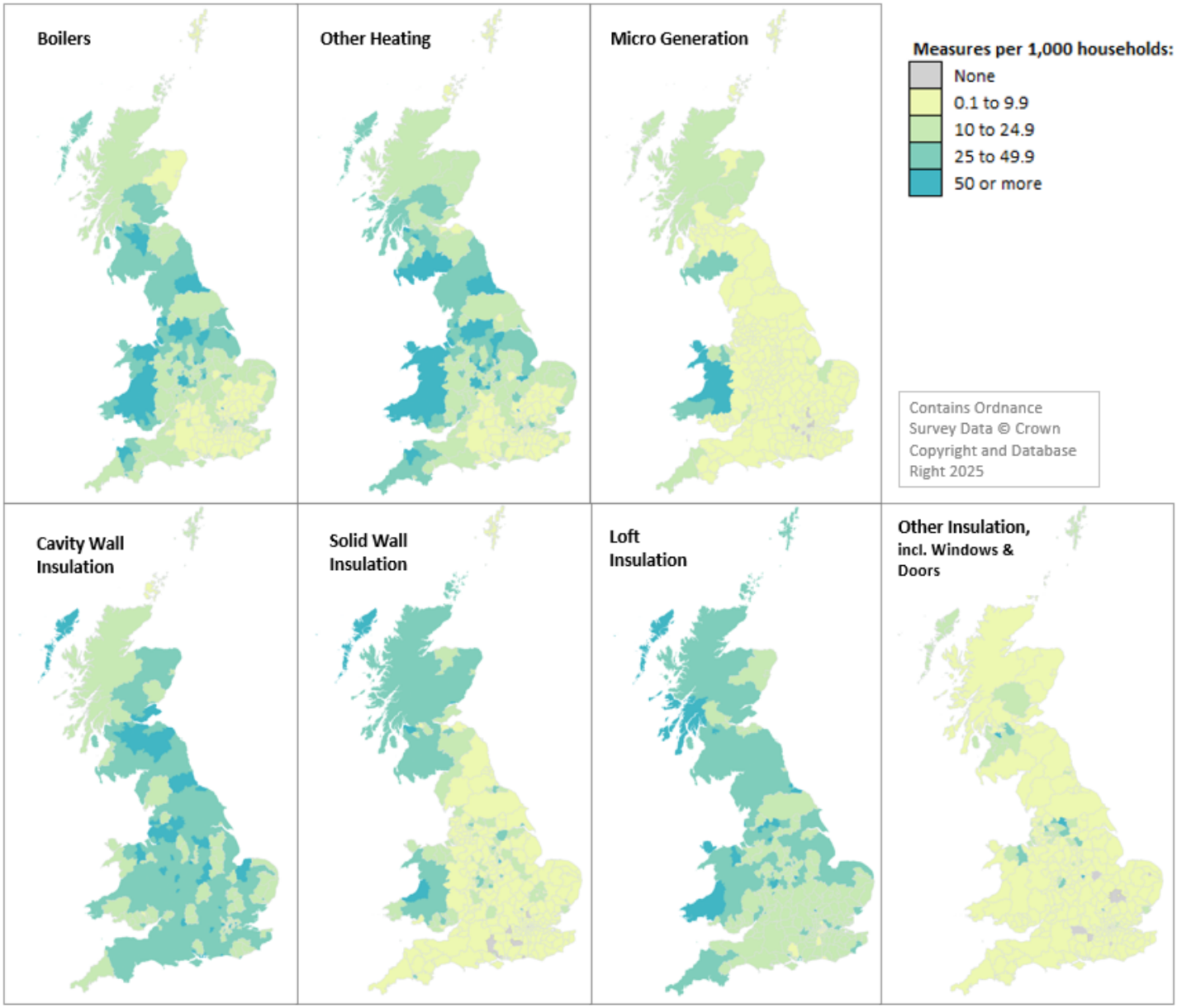
Map 2: ECO Measures installed through Flexible Eligibility, by Local Authority from quarter 2 2017 to quarter 4 2024 (Table 3.4)



Regional ECO Measures by Measure Type

In addition to variation in regional delivery overall and under ECO 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. There is an individual map for boilers, other heating, micro generation, loft insulation, cavity wall insulation, solid wall insulation and other insulation. The maps show the differences in the regional spread of measures, with a higher rate of boiler installations in Wales, the North West and North East regions. There are high rates of delivery for loft insulation across Great Britain, but particularly in Scotland, Wales and parts of England's northern regions. There are high rates of delivery for cavity wall insulation across local authorities in Great Britain. Scotland and Wales have the highest rates of solid wall insulation delivery. For Other Insulation measures, the rates are low across Great Britain, except for specific local authorities in North Wales, and the North West and Yorkshire & Humberside regions in England. Micro Generation rates are generally low nationally, with the exception of mid and North Wales and a few authorities in Scotland.

Map 3: ECO Measures per 1,000 households, by measure type and Local Authority, up to end December 2024



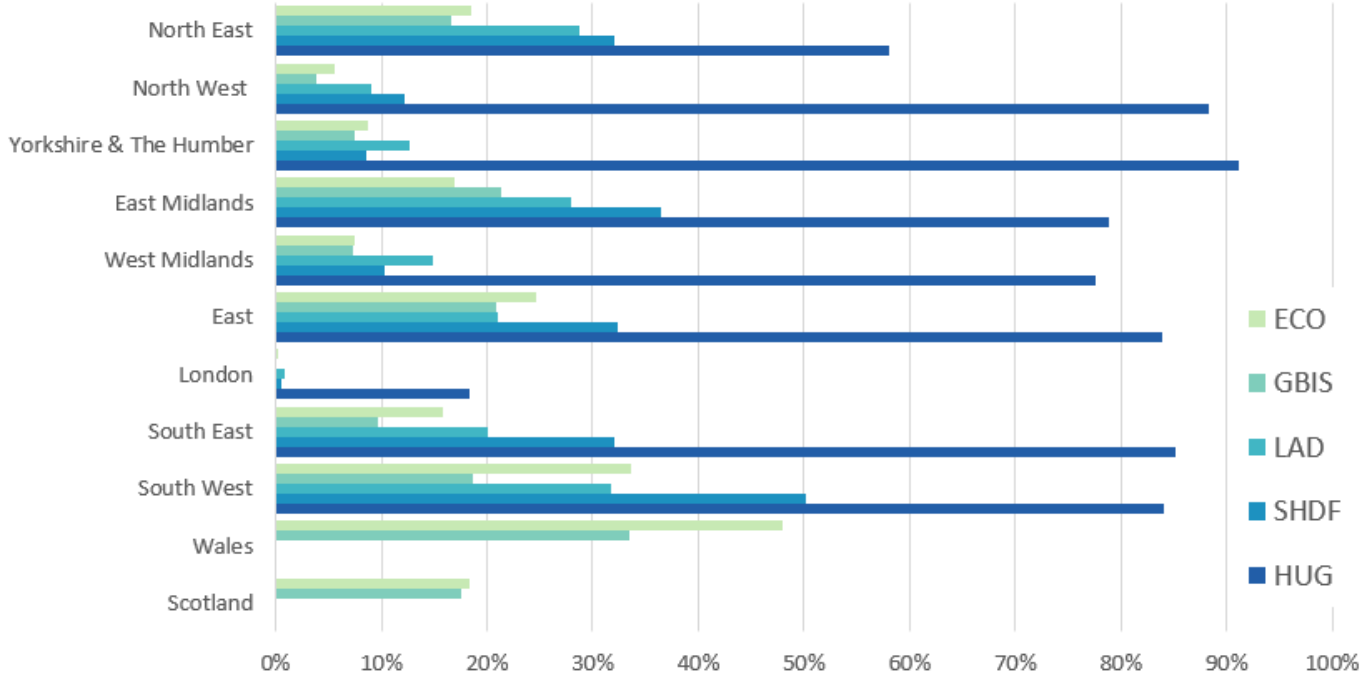
Rurality of measures installed under ECO compared to other government schemes

Under ECO up to the end of December 2024, across the whole of Great Britain around 15 per cent of measures were installed in rural areas.[6] This urban/rural installation split varies across the country, with around 44 per cent of measures in Wales installed in rural areas, compared to 18 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 34 per cent and 25 per cent of their measures installed in rural areas respectively compared to six per cent and seven per cent in the North West and West Midlands 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 3.6a and Chart 10).

So far, under GBIS up to end December 2024, the urban/rural split has followed a generally similar pattern as ECO in the three nations' figures: within England, 11 per cent of measures were in rural areas, with 18 per cent in rural areas of Scotland and 34 per cent of measures installed in Wales were in rural areas, a lower percentage than the equivalent under ECO. Within the English regions, it is the East Midlands and East regions that have the largest percentage of their measures in rural areas, compared to urban areas, both with 21 per cent of installations in rural areas (Table 3.6e and Chart 10).

The LAD, HUG and SHDF schemes are only applicable within England. Under LAD, within the English regions, it is the South West, North East and East Midlands regions that have the largest percentage of their measures in rural areas, compared to urban areas, with 32, 29 and 28 per cent of installations in rural areas respectively. Overall, 18 per cent of measures in England under LAD were in rural areas (Table 3.6b and Chart 10). Similarly, 21 per cent of all SHDF measures were in rural areas in England, with the South West region having the highest percentage in rural areas at 50 per cent (Table 3.6d and Chart 10). Under HUG, compared to other schemes there is a far higher proportion of installations in rural areas (due to HUG only being applicable to properties off the gas grid), compared to urban measure installations, in every English region except London. Under HUG, of the other English regions, the percentage of rural measures in each area ranges from 58 per cent (North East region) to 91 per cent in Yorkshire and The Humber (Table 3.6c and Chart 10).

Chart 10: Percentage of measures installed in rural areas in each region under ECO and other government schemes, to the end of 2024 (Table 3.6)



In Wales and Scotland only the ECO and GBIS schemes are applicable.

[6] 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.

5. Costs

Tables 5.1 to 5.6

The costs of delivering and administering the ECO and GBIS schemes as reported by energy suppliers, and average measure costs under other government scheme.

ECO and GBIS 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 2024.

Key Headlines

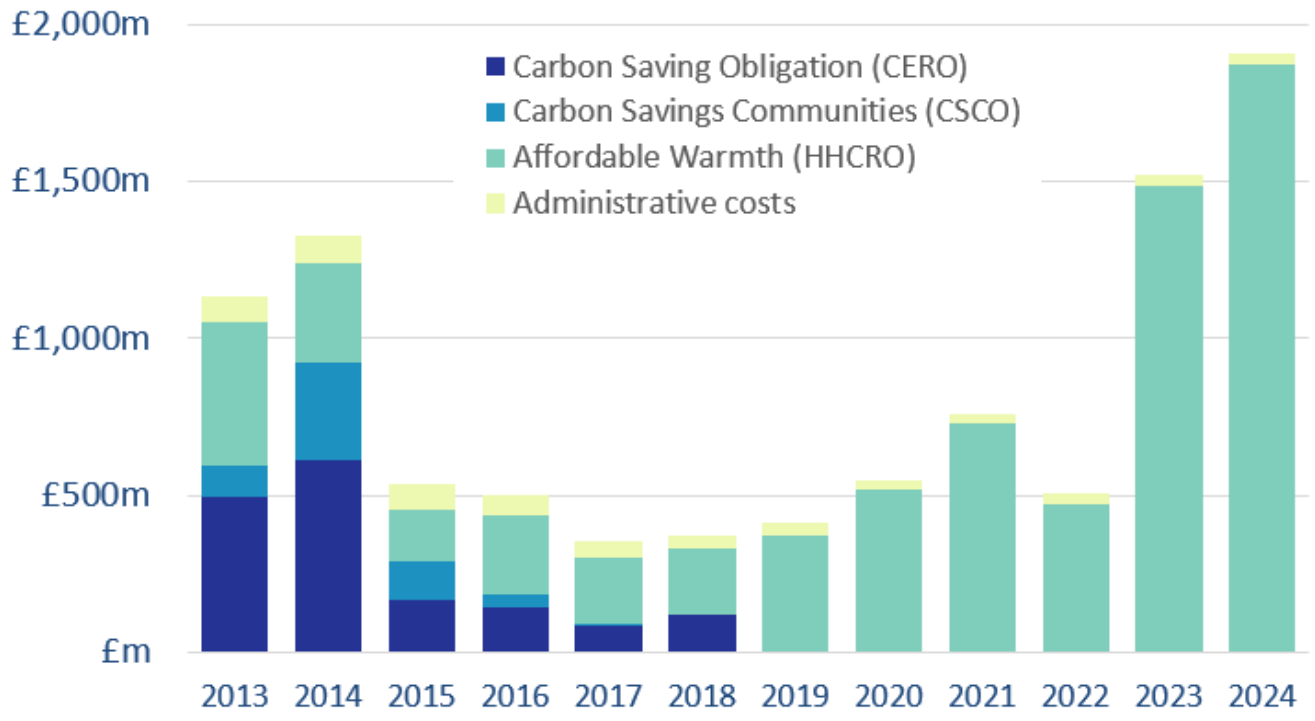
- The total ECO costs reported by suppliers (both delivery and administrative) to the end of 2024 were £9.86 billion.
- ECO delivery costs in 2024 were £1.87 billion.
- Up to the end of December 2024 the average cost of delivering the ECO4 obligation, not including ECO3 interim, was around £22.36 per £ annual bill savings.

ECO Costs

Total ECO delivery costs up to the end of 2024 were around £9.26 billion, with an additional £604 million in administrative costs. Therefore, the total cost of ECO was £9.86 billion. Delivery costs in 2024 were 26 per cent higher than in 2023: £1.87 billion in 2024, compared to £1.48 billion in 2023. As well as higher measure delivery volumes in 2024, compared to the prior year, this largely reflected the substantial rise in the costs of delivering ECO measures throughout ECO4. Note, historic figures are not adjusted for inflation (Table 5.1, Chart 11).

Up to the end of December 2024 the average cost of delivering the ECO4 obligation, not including ECO3 interim, was around £22.36 per £ annual bill savings (Table 5.2). Again, this average has been steadily rising throughout the ECO4 period.

Chart 11: ECO costs, by obligation, by year, up to end 2024 (Table 5.1)



GBIS Costs

Total GBIS delivery costs up to the end of 2024 were around £178.6 million, with an additional £13.0 million in administrative costs. Therefore, the total cost of GBIS was £191.6 million. (Table 5.4).

Up to the end of December 2024 the average cost of delivering the GBIS obligation was around £25.97 per £ annual bill savings (Table 5.5).

Average Measure Costs

Under LAD, HUG and SHDF, data is collected on the cost of delivering individual measures under the schemes. The variation in delivery costs across schemes will reflect many different factors such as the size and type of properties and the ease of installation. Of all phases under these schemes, SHDF Wave 2.1 has seen the highest overall average cost per measure at £7,800. The highest average measure cost under SHDF Wave 2.1 was for External Solid Wall Insulation at an average of £22,800 per measure, with the lowest average cost being Energy Efficient Lighting at £200 per measure. (Table 5.6).

External Solid Wall Insulation was also the highest average cost under LAD Phase 1, LAD Phase 3 and HUG Phase 1 at £13,200, £19,700 and £19,600 respectively. Under LAD Phase 2 and SHDF Wave 1, the highest average measure cost was for Ground Source Heat Pumps at £23,000 and £23,200 respectively. (Table 5.6).

6. Green Deal

Tables 6.1 to 6.2

The number of Green Deal Plans and measures installed. Table 6.1 contains data up to December 2024, with Chart 12 illustrating the delivery for complete years. The Green Deal (GD) 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).

Key Headlines

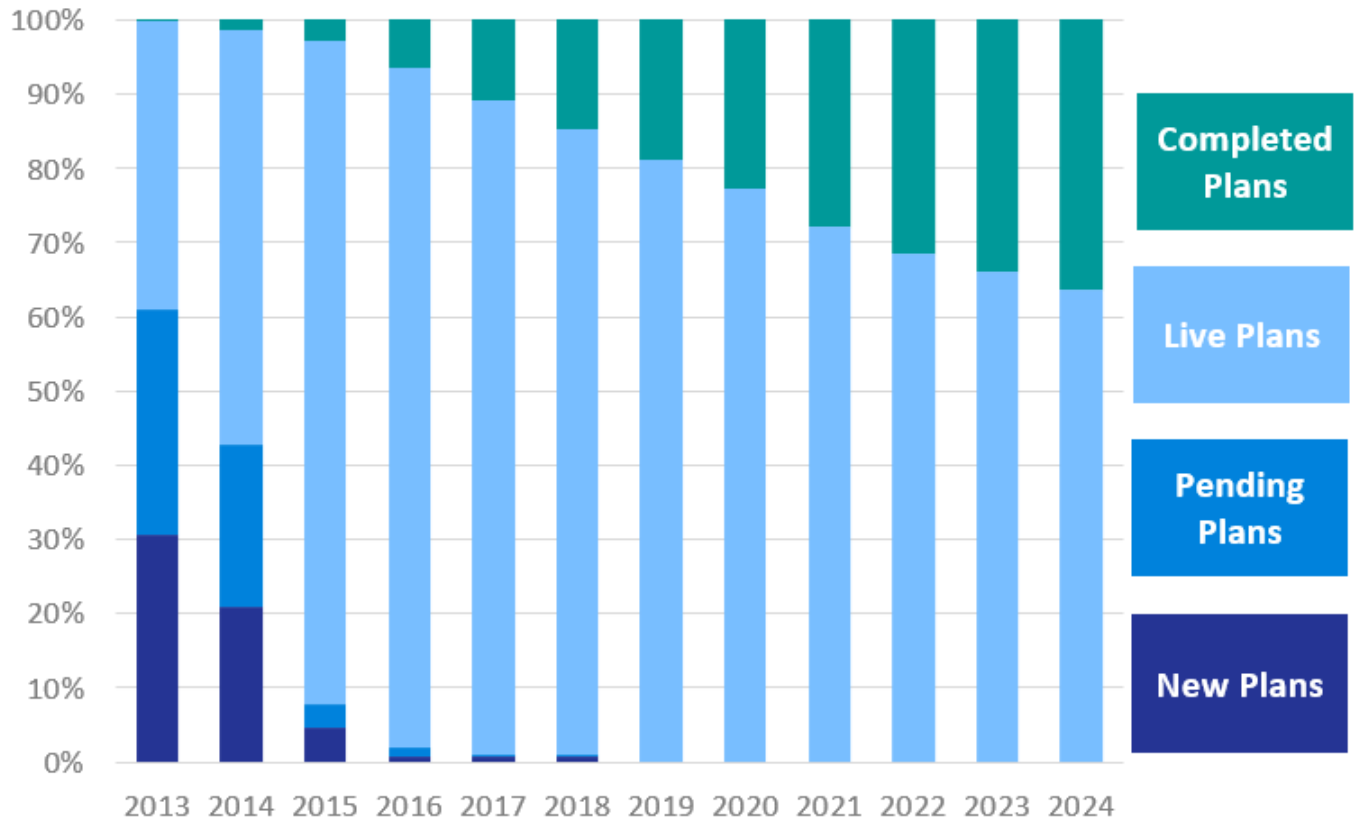
- A total of 13,867 Green Deal Plans since the Green Deal began in 2013.
- Over a third of plans (36 per cent) are classified as 'Completed' (all measures installed and paid off).
- In 2024, 317 plans were 'Completed'.

Under the Green Deal scheme, a total of 13,867 Plans were classified as either 'Live' or 'Completed' at the end of 2024. Of these, 8,828 were 'Live' (all measures installed) and 5,039 were 'Completed' (all measures installed and paid off). At the end of 2024 around 64 per cent of all plans were 'Live'. (Chart 12).

In 2024, 317 plans were 'Completed', compared to 359 plans 'Completed' in 2023 (Table 6.1).

We estimate that the total initial loan amounts (excluding APR interest payments) associated with all 'Live' plans was around £31.6m as of December 2024, with 'Completed' plans accounting for around a further £17.8m. 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 2024 (Table 6.1)



7. Estimates of Home Insulation Levels in Great Britain

Tables 7.1 to 7.7

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.

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 can be found in the Methodology note.

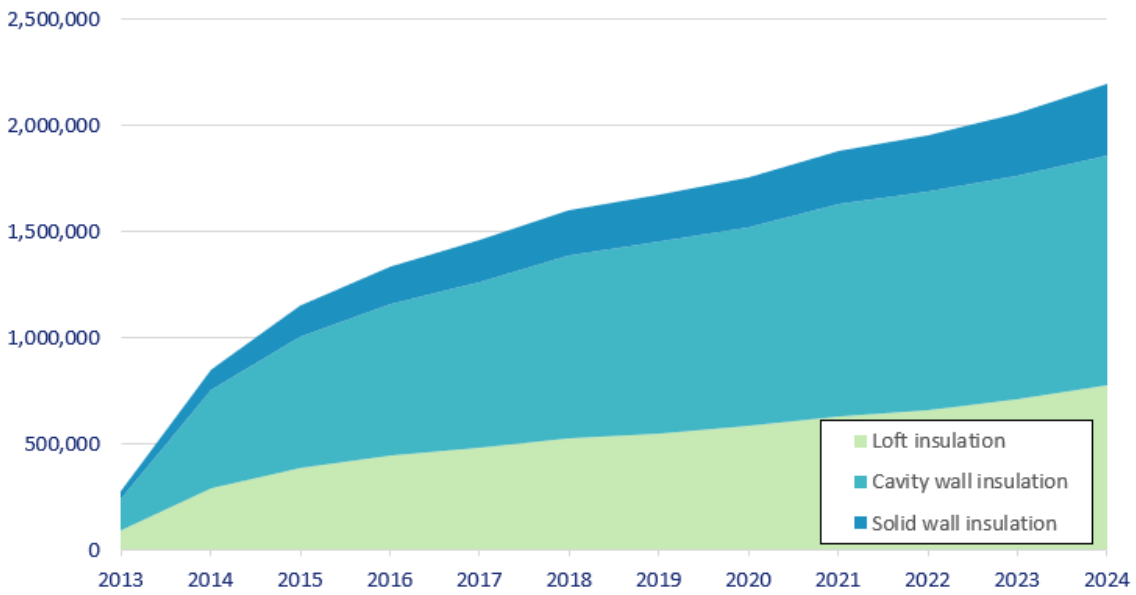
Key Headlines

- Of the estimated 21.6 million homes with cavity walls, 71 per cent have cavity wall insulation.
- Of the estimated 26.1 million homes with lofts, 67 per cent have loft insulation (at least 125mm).
- Of the estimated 8.5 million homes with solid walls, 10 per cent have solid wall insulation.
- 2.2 million major professional insulation measures (cavity wall, loft and solid wall) have been installed through ECO and other government supported domestic energy efficiency schemes since 2013.

Professional Insulation measure installations

A total of 2.2 million major professional insulation measures (cavity wall, loft and solid wall) have been installed through ECO and other government supported domestic energy efficiency schemes since 2013 (Chart 13). While the number of measures delivered per year has fallen as the size of the ECO obligation has been reduced, the focus of the obligation has changed to target measures with greater energy and carbon savings which are in turn more expensive measures, such as solid wall insulation, and to target the scheme towards more vulnerable households.

Chart 13: Cumulative professional insulation measures installed through Government energy efficiency schemes 2013-2024



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 2024

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 2024:

- 15.2 million homes had cavity wall insulation (71 per cent of homes with a cavity wall);
- 876,000 had solid wall insulation (10 per cent of homes with solid walls); and
- 17.5 million had loft insulation (67 per cent of homes with a loft)

Through 2024, both retrofit insulation (delivered through Government schemes[7],[8]) and new properties[9] built with insulation resulted in the following progress:

- Around 214,100 more homes with cavity wall insulation (a 1.4 per cent increase between the end of December 2023 and December 2024), of which 32,400 were through retrofit and 181,700 through new build;
- Approximately 232,000 more homes with at least 125mm of loft insulation (a 1.3 per cent increase between the end of December 2023 and December 2024), of which 68,800 were through retrofit and 163,200 through new build;
- Around 40,600 more homes with solid wall insulation (a 4.9 per cent increase between the end of December 2023 and December 2024), all of which are assumed to be through retrofit.

[7] Insulation measures delivered in Scotland exclusively under the Green Homes Cashback scheme are excluded from the figures.
[8] The estimates of progress for 2024 include the delivery of insulation through the Green Homes Grant Local Authority Delivery (LAD) schemes, Home Upgrade Grant (HUG) and the Social Housing Decarbonisation Fund (SHDF) scheme, as well as the Energy Company Obligation (ECO) and the Great British Insulation Scheme (GBIS).
[9] 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. DESNZ estimates that around 181,699 new builds were completed in 2024, based on new builds data from England, Wales and Scotland.

Sources of increase in insulation levels by nation

Tables 7.7b-7.7d of the accompanying Excel tables show the share of homes insulated for each nation in 2013 as well as the additional insulation measures delivered through newly built homes and retrofits.

Chart 14 and 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 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 2024, it is estimated that Scotland had:

- 81 per cent of cavity wall homes insulated, compared to 71 per cent for Great Britain;
- 86 per cent of homes with a loft insulated with at least 125mm of loft insulation, compared to 67 per cent for Great Britain; and
- 23 per cent of solid wall homes insulated, compared to 10 per cent for Great Britain.

At the end of December 2024, 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 (eight per cent, compared to nine per cent in England).

Of retrofit insulation measures funded through government schemes since 2013, 96 per cent of cavity wall and 92 per cent of loft insulation measures have been delivered through ECO. Around 76 per cent of solid wall insulation over this period has been through ECO; with 12 per cent of solid wall measures delivered through the Green Deal framework, a combined 11 per cent through GHGV, LAD, HUG, SHDF and GBIS and one per cent through the Community Energy Savings Programme (CESP).

Chart 14: Share of homes with cavity wall insulation and loft insulation by source, Great Britain, England, Wales and Scotland, December 2024 (Table 7.7)

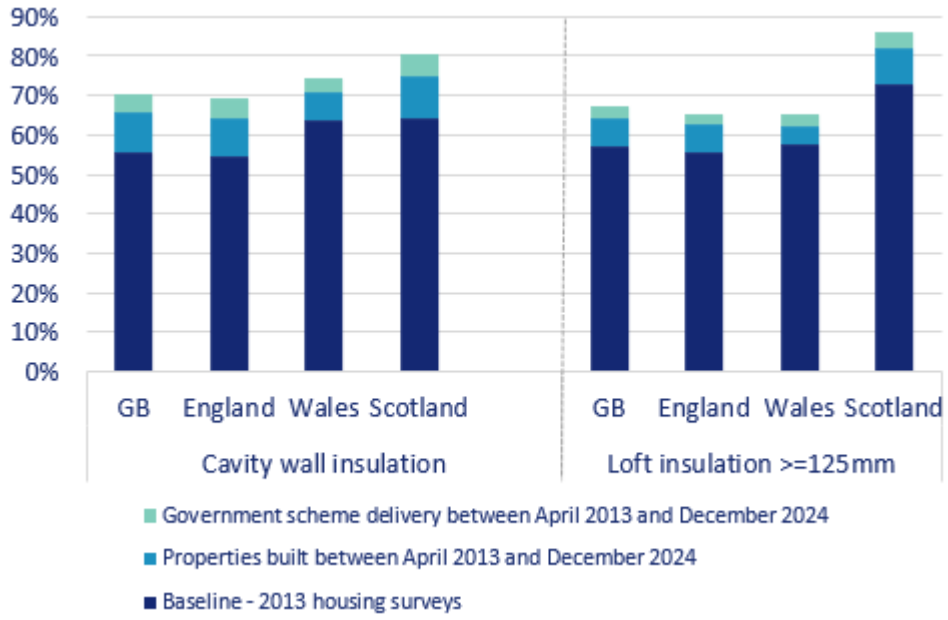
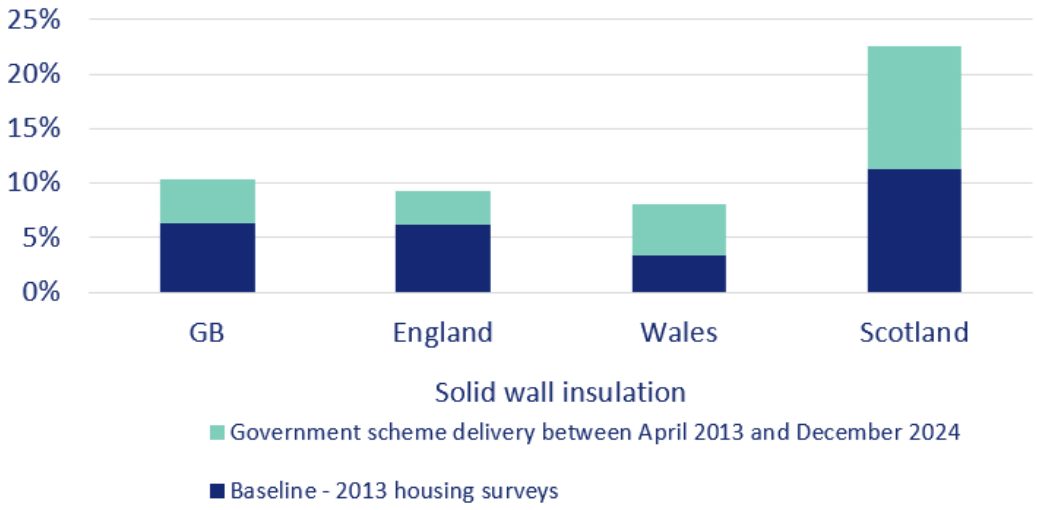


Chart 15: Share of homes in GB with solid wall insulation by source, Great Britain, England, Wales and Scotland, December 2024 (Table 7.7)



Remaining Potential

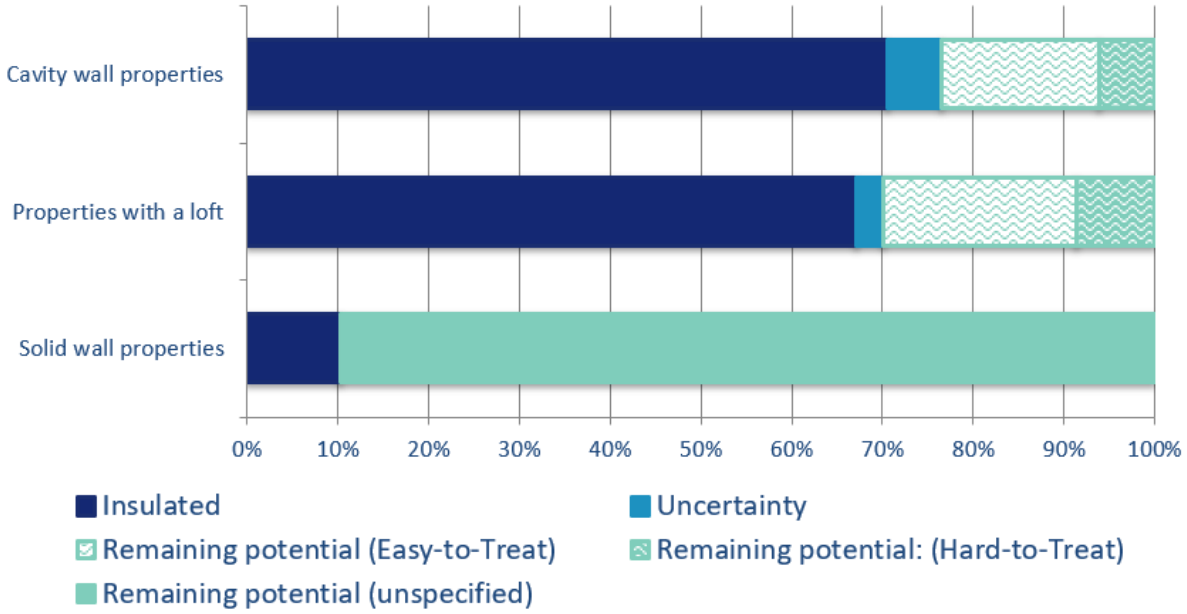
A key use of these estimates for DESNZ is to identify how many homes have the potential to receive cavity wall, loft or solid wall insulation in the future, which can then aid the design of future policies.

Both historical figures and a more detailed breakdown of Great Britain's remaining insulation potential are available in Tables 7.4 - 7.6 of the accompanying Excel tables.

Chart 16 gives a summary of the remaining potential for insulating properties in Great Britain. It shows that:

- Around 71 per cent of properties with cavity walls have cavity wall insulation
- Around 67 per cent of properties with a loft have loft insulation
- Only around 10 per cent of properties with solid walls have solid wall insulation.

Chart 16: Remaining potential to insulate the housing stock in Great Britain, end December 2024 (Tables 7.4, 7.5 and 7.6)[10]



Remaining Potential – Cavity Wall Insulation

At the end of December 2024, there were an estimated 21.6 million homes with cavity walls in Great Britain (Chart 16, Table 7.4). Of these, 15.2 million (71 per cent) were estimated to have cavity wall insulation. There were also around 1.3 million homes that may or may not have cavity wall insulation due to the level of uncertainty from the survey of what is insulated. Of the remaining approximate 5.1 million homes without cavity wall insulation, we estimate that 3.8 million have easy to treat standard cavities and 1.3 million are hard to treat.[11]

Remaining Potential – Loft Insulation

Lofts are defined as insulated 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 2024, there were an estimated 26.1 million homes with a loft in Great Britain (Chart 16, Table 7.5). Of these, 17.5 million (67 per cent) were estimated to have loft insulation. There were also around 0.8 million homes that may or may not have had loft insulation due to the level of uncertainty from the survey of what is insulated and uncertainty whether new build homes have lofts. Of the remaining approximate 7.8 million homes without loft insulation, 5.6 million were estimated to have easy to treat lofts and 2.2 million were considered to have hard to treat or unfillable lofts which means that the loft would be hard or costly to

[10] Includes where it is not certain if a property has cavity walls or a loft.

[11] 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.

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.

Remaining Potential – Solid Wall Insulation

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

At the end of December 2024, there were an estimated 8.5 million homes with solid walls in Great Britain (Chart 16, Table 7.6). Of these, it is estimated that 876,000 (10 per cent) had solid wall insulation and 7.6 million (90 per cent) were uninsulated.

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.

8. Benefits Monitoring

Tables 2.1 to 2.3

This section sets out the combined number of measures installed across the schemes, plus the estimated carbon and energy savings from those measures.

Key Headlines

- To the end of December 2024, provisional estimated annual carbon savings of measures installed through LAD, HUG, GHGV and SHDF was up to 0.0726 MtCO2.
- To the end of December 2024, provisional estimated annual energy savings of measures installed through LAD, HUG, GHGV and SHDF was up to 362 GWh.
- To the end of December 2024, provisional estimated annual bill savings of measures installed through LAD, HUG, GHGV and SHDF was £17.7m.
- The total estimated annual bill savings to the end of December 2024 from measures installed under the ECO4 obligation was £127.3m.

Carbon, Energy and Bill Savings under LAD, HUG, GHGV and SHDF

The carbon, energy and bill savings associated with measures installed through the LAD, HUG, GHGV, and SHDF schemes are based on annual savings. The figures are estimated using modelled consumption values from the National Housing Model (NHM). More information on the methodology used can be found here: https://www.gov.uk/government/publications/green-homes-grant-vouchers-statistics-methodology-note

To the end of December 2024, the provisional estimated annual carbon savings, annual energy savings and annual bill savings under these schemes was 0.0726 MtCO2, 362 GWh and £17.7m respectively (Table 2.2). The breakdown by scheme was:

Table 1: Estimated Annual Energy, Carbon and Bill Savings for Installed Measures through LAD, HUG, GHGV and SHDF, to end of 2024 (Table 2.2)

Scheme	Estimated Annual Energy Saving (GWh)	Estimated Annual Carbon Saving (MtCO2)	Estimated Annual Bill Saving (£)
LAD1	40	0.0083	£2.2m
LAD2	37	0.0077	£2.3m
LAD3	32	0.0066	£1.9m
HUG1	11	0.0026	£0.8m
HUG2	18	0.0043	£1.4m
GHGV	130	0.0241	£3.9m
SHDF Wave 1	52	0.0107	£3.1m
SHDF Wave 2.1	41	0.0083	£2.3m
Total	**362**	**0.0726**	**£17.7m**

Under all of these schemes (except HUG), solid wall insulation accounted for most of these savings out of all measures installed. Under LAD, solid wall insulation makes up around 19 per cent of the measures with modelled estimated savings but around 53 per cent of the estimated annual energy savings (Table 2.2).

Under HUG1 and HUG2, the installation of heat pumps accounted for most of the energy, carbon and bill saving. Heat pumps make up around 17 per cent of measures with modelled estimated savings attached but around 51 per cent of the estimated annual energy savings. (Table 2.2).

Further information on LAD, HUG, GHGV and SHDF carbon and energy savings can be found in Table 2.2 or in their respective releases available here: https://www.gov.uk/government/collections/green-home-grant-statistics and https://www.gov.uk/government/collections/social-housing-decarbonisation-fund-statistics

Annual Bill Savings under ECO4

Under ECO4, each measure installed, or project completed receives a score which determines the contribution made towards a supplier's Home Heating Cost Reduction Obligation (HHCRO). The scores are based on the annual bill saving achieved by a measure or package of measures when installed in a domestic premises. Suppliers are required to achieve a total of £224.3 million in annual bill savings. Of the measures installed, 96 per cent have a score assigned so far, so actual progress towards the obligation is likely to be higher than this report indicates.

To the end of December 2024, the total estimated annual bill savings from measures installed under ECO4 HHCRO were £127.3m. This includes savings from measures installed under ECO3 Interim and measures installed prior to April 2022 that have been re-elected as ECO4 measures. (Table 2.3).

9. Technical Information

Data in this release

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

- Ofgem for ECO and GBIS data – scheme administrator collects data from energy companies on ECO and GBIS 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) and Home Upgrade Grant (HUG) data – administer scheme funding so collect data from householders and installers on delivery.
- Local authorities for the Social Housing Decarbonisation Fund (SHDF) – 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 2024.

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 DESNZ 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 iteration since it began. Broadly, ECO takes over from two previous Energy Obligation schemes: Carbon Emissions Reduction Target (CERT) and Community Energy Saving Programme (CESP). The current ECO4 scheme focuses on providing energy efficiency measures to low income and vulnerable consumers, and compared to previous ECO schemes requires a more complete upgrade of homes, shifting to a multi-measure whole-house retrofit approach.

- 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 commenced 3 December 2018 (although suppliers could count measures delivered since October 2018 against their targets) and ran until 31 March 2022.
- ECO4 commenced on 27 July 2022 (although installations between 1 April and 30 June 2022 could be counted as either 'ECO3 Interim Delivery' or 'ECO4 Early Delivery'). ECO4 will run until March 2026.

The Green Deal (GD)[12] 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[13] and GHGV guidance[14].

The Green Homes Grant Local Authority Delivery (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.

The Sustainable Warmth (SW) scheme launched in early 2022 to further support the energy efficiency upgrades of low-income households across England. SW consists of LAD Phase 3 and the Home Upgrade Grant (HUG) Phase 1. LAD Phase 3 has allocated £287 million funding to Local Authorities to support low-income homes on the gas grid, whilst HUG Phase 1 has allocated £220 million funding to Local Authorities to support low income homes off the gas grid. HUG Phase 2 has allocated up to £630 million of funding available for successful local authorities to deliver from September 2023 until March 2025. Further information on the LAD and HUG schemes is available in the official statistics[15].

The Social Housing Decarbonisation Fund (SHDF) scheme is a government scheme that will upgrade a significant amount of the social housing stock currently below Energy Performance Certificate (EPC) C up to that standard. It supports the installation of energy performance measures in social homes in England. The Government launched Wave 1 of the SHDF in August 2021. It has awarded around £179m of grant funding for delivery from 2022 into 2023 and will see energy performance improvements to up to 20,000 social housing properties. Successful projects within Wave 2.1 of the SHDF were announced on 22 March 2023. Wave 2.1 of the SHDF awarded around £778m of grant funding, delivering from 2023 to 2025. Wave 2.2 of the SHDF awarded around £80m of grant funding for delivery from 2024 to 2026. Further information on the scheme is available in the official statistics[16].

The Great British Insulation Scheme was announced by the Government at the end of March 2023. The £1 billion scheme will help around 300,000 households across the country with the cost of installing new home insulation. The scheme is scheduled to run until March 2026. GBIS will run alongside ECO4. Legislation relating to the scheme came into force on 25 July 2023, with delivery on or after 30 March until 24 July 2023 being known as early delivery measures. Further information on the scheme is available in the official statistics[17].

Definitions

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 ECO4. CERO & CSCO were

[12] https://www.gov.uk/green-deal-energy-saving-measures

[13] https://www.gov.uk/government/collections/green-home-grant-statistics
[14] https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme
[15] https://www.gov.uk/government/collections/green-home-grant-statistics
[16] https://www.gov.uk/government/collections/social-housing-decarbonisation-fund-statistics
[17] https://www.gov.uk/government/collections/great-british-insulation-scheme

measured in terms of lifetime carbon savings. Affordable Warmth was measured in terms of lifetime bill savings under ECO3 but is now measures in terms of annual bill savings for ECO3.

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 tightened through ECO3. Targets for ECO4 have remained the same as ECO3. The targets are as follows:

- Number of domestic customers must be 150,000 or more
- Electricity supply to domestic customers must be 300 GWh or more
- Gas supply to domestic customers must be 700 GWh or more

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.

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 ECO4, 100% of the obligation is based on HHCRO. The obligation was measured in terms of annual bill savings (previously measured in terms of lifetime savings for ECO3).
Flexible Eligibility	Local Authorities can determine eligible homes under the new 'Flexible Eligibility' mechanism, introduced in 2017. Up to 50% of the Obligation can be delivered through Flexible Eligibility under ECO4, up from 25% under ECO3. Households can be assessed by Local Authorities, the Devolved Administrations or suppliers to be 'living in fuel poverty'; or assessed to be 'living on a low income and vulnerable to cold'.
Innovation Measures	Under ECO4, 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.

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 1.3, 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.[18] 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.

[18] 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), Green Deal (GD), Green Homes Grant Vouchers (GHGV), Local Authority Delivery (LAD), Home Upgrade Grant (HUG), Social Housing Decarbonisation Fund (SHDF) and the Great British Insulation Scheme (GBIS) between January 2013 and December 2024 alongside figures on Feed-In Tariffs installations, Renewable Heat Premium Payment voucher redemptions, Domestic Renewable Heat Incentive, and Boiler Upgrade Scheme installations that have been previously published in their own statistical releases. These figures are shown in Table 8.1 of the Detailed tables.

ECO and Green Deal

It is estimated that around 2.5 million households benefitted from ECO up to December 2024. Through GD Finance Plans, 13,800 households had funded measures.

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.

Green Homes Grant Local Authority Delivery

The Local Authority Delivery scheme began delivery in October 2020. It is estimated that around 58,600 households have been upgraded under LAD Phase 1, 2 and 3 up to December 2024 (including around 1,200 households where completion date is missing for measures installed).

Home Upgrade Grant

The Home Upgrade Grant began delivery in January 2022. Under HUG1 and HUG2, around 9,200 households have been upgraded up to December 2024 (including 15 households where completion date is missing for measures installed).

Social Housing Decarbonisation Fund

The Social Housing Decarbonisation Fund began delivery in March 2022. To the end of December 2024, 28,000 households have been upgraded under Wave 1 and Wave 2.1 of the scheme.

Great British Insulation Scheme

The Great British Insulation Scheme began delivery in April 2023. To the end of December 2024, 46,900 households have been upgraded under the scheme.

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 2024, 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 2024.

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 was 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.

The domestic scheme closed to new applicants at the end of March 2022. At the end of March 2024, just under 113,400 systems have been accredited to the scheme. Total number of accreditations has fallen since the last update (March 23). This is because a number of previously accredited installations have since been cancelled, which has not been offset by new accreditations due to scheme closure.

Renewable Heat Premium Payment (Legacy scheme)

The Renewable Heat Premium Payment (RHPP) scheme was introduced as an interim measure in advance 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 scheme, social landlord competition and communities 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[19] 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 2024, there were 36.0 million smart meters operating across homes in Great Britain; 20.5 million were electricity smart meters operating, of which 19.1 million were operating in smart mode.

Boiler Upgrade Scheme

The Boiler Upgrade Scheme (BUS) aims to incentivise and increase the deployment of low carbon heating technologies by providing an upfront capital grant towards the cost of an installation of an air source heat pump (ASHP), a ground source heat pump (GSHP) and, in limited circumstances, a biomass boiler. Installations commissioned from 1 April 2022 are eligible to apply for the grant. At scheme launch, grants available were £5,000 for an ASHP or biomass boiler, and £6,000 for a GSHP. From 23 October 2023, grant levels for the installation of ASHPs and GSHPs increased to £7,500. Grants for biomass boilers remain at £5,000. To the end of December 2024, for all technology types, around 41,800 vouchers have been redeemed and the redemptions paid.

[19] 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 Local Authority Delivery and Home Upgrade Grant statistics
For statistics monitoring the Green Homes Grant Local Authority Delivery and Home Upgrade Grant schemes across England, see the Green Homes Grant Local Authority Delivery statistics.

Social Housing Decarbonisation Fund statistics
For statistics monitoring the Social Housing Decarbonisation Fund scheme across England, see the Social Housing Decarbonisation Fund statistics.

Great British Insulation Scheme statistics
For statistics monitoring the Great British Insulation Scheme across Great Britain, see the Great British Insulation Scheme 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.

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 DESNZ'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 DESNZ'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 2024, 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 17th April 2025 and will contain the latest available information on headline ECO measures up to the end of February 2025. The next quarterly release is planned for publication at 9.30am on 29th May 2025.

National statistics

This is an accredited official statistics publication. Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007.

These accredited official statistics were independently reviewed by the Office for Statistics Regulation (OSR) in June 2014. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics and should be labelled 'accredited official statistics'.

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the Code of Practice for Statistics that all producers of official statistics should adhere to.

You are welcome to contact us directly with any comments about how we meet these standards. Alternatively, you can contact OSR by emailing regulation@statistics.gov.uk or via the OSR website.

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 DESNZ 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 DESNZ 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.

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

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