



Domestic Green Deal, Energy Company Obligation and Insulation Levels in Great Britain, Quarterly report

Statistical release: National Statistics

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This document is also available from our website at https://www.gov.uk/government/collections/green-deal-and-energy-company-obligation-ecostatistics



National Statistics

This is a National Statistics publication.

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the UK Statistics Authority: Code of Practice for Official Statistics. The Statistics Authority published its report on 12 June 2014:

http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs
- are well explained and readily accessible
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

Other National Statistics within this series

The most up to date information on the GD (including GDHIF) and ECO can be found in the monthly statistical releases – available <u>here</u>. Details of methods, quality assurance and use of this data can be found in the <u>Methodology note</u>.

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Key points

Green Deal and ECO: January 2013 to December 2014

A provisional 1,337,000 measures¹ were installed in around 1,086,000 properties² through ECO³, Cashback, Green Deal Plans and the GDHIF to the end of December 2014.

Of the 447,310 Green Deal Assessments in Great Britain:

- The majority (89 per cent) of properties getting a GD Assessment had an energy efficiency band rating of D or lower. This compares to 77 per cent of the overall domestic building stock in England.
- There were 1,412,227 improvements recommended in Green Deal Assessments (around three improvements per assessment). The most common single measure recommended was to install loft insulation. This accounted for 15 per cent of all recommended measures and was recommended in 47 per cent of all GD Assessments.
- Around three quarters of GD Assessments were in owner-occupied properties (345,738), 12 per cent in the private rented sector and 10 per cent are in the social rented sector.

Of the 4,721 'live' Green Deal Plans with measures installed in Great Britain, around half (50 per cent) of these were for properties in Scotland (2,347 Plans).

There were 12,942 GDHIF voucher payments made (5.4 per 10,000 households in England and Wales). The area with the highest number of GDHIF payments per number of households was Wales with 16.3.

A provisional 1,296,441 measures in 1,059,832 properties had been installed under ECO:

- Around one fifth (19 per cent) of ECO measures were in the North West (246,521), the highest in any region. 12 per cent of ECO measures were installed in Scotland (150,633) and five per cent were in Wales (66,156).
- In Great Britain, on average, there were around 40 households with ECO measures per 1,000 households, i.e. around four per cent of all households in Great Britain had a measure installed under ECO funding. The North West and North East had the highest amount with 66 and 64 households with ECO measures per 1,000 households respectively. In Scotland there were around 54 households with ECO measures per 1,000 households and 40 per 1,000 households in Wales.

¹ The number of measures is made up of 1,296,000 ECO measures, 16,000 Cashback measures, 9,000 Green Deal Plan measures and 16,000 Green Deal Home Improvement Fund measures.

Source: Table 1 - Green Deal and Energy Company Obligation (ECO): monthly statistics (February 2015): https://www.gov.uk/government/statistics/green-deal-and-energy-company-obligation-eco-monthly-statistics-february-2015

² Annex C, Table C1: Provisional number of individual households that have had measures installed.

³ This includes measures eligible under the ECO amendment order.

Carbon and energy saving

The provisional estimated lifetime carbon savings of measures installed under ECO (excluding Affordable Warmth), Cashback, GDHIF and Green Deal was between 17.6 – 18.2 MtCO₂ with provisional estimated lifetime energy savings between 72,500 – 75,100 GWh.

Home insulation levels: December 2014

It is estimated that at the end of December 2014:

- There were 27.4 million homes in Great Britain. Of these 19.4 million had cavity walls with the remaining 8.0 million having solid walls. 23.9 million properties had a loft.
- Compared with December 2013, 460,000 more properties had cavity wall insulation, 320,000 more had loft insulation of at least 125mm, and 61,000 more had solid wall insulation.
- 16.7 million homes had loft insulation of at least 125mm (70 per cent of homes with lofts). Of the 7.1 million homes with lofts without at least 125mm of insulation, only a small number are estimated to have no insulation – around 1 per cent of all properties with a loft.
- 14.1 million homes had cavity wall insulation (73 per cent of homes with cavity walls). Of the 4.8 million homes without cavity wall insulation, most are hard to treat, with only 0.5 million of them being uninsulated easy to treat standard cavities.
- 294,000 homes had solid wall insulation (4 per cent of homes with solid walls).

Household Energy schemes

Between January 2013 and December 2014, measures were installed through ECO in 1,059,800 properties, following the redemption of Cashback vouchers in 14,700 properties, around 4,700 households had funded measures through Green Deal finance Plans, and 12,900 households had funded measures through Green Deal Home Improvement Fund. There is a small amount of double counting between these mechanisms (around 6,000 households). 197,300 properties benefitted from Feed-in Tariffs installations, 9,000 properties benefitted from a Renewable Heat Premium Payment, and 5,000 properties benefitted from domestic Renewable Heat Incentive. In addition to this, 764,806 electricity and gas Smart Meters have been installed in homes across Great Britain.

In aggregate this is around 1,300,000 household properties receiving energy efficiency or renewable measures through these schemes, but not unique properties. Currently we are not able to properly assess the overlap where households were benefitting from ECO & GD with FiTs and RHPP/RHI which will allow an estimate to be produced for unique properties receiving energy efficiency or renewable measures.

Understanding the overlap with Smart meters will be more complex, as currently these data are not available at property level and as such are excluded from the combined figure given above.

Section 1 - Green Deal and ECO statistics

This section provides detailed information on different elements of the Green Deal, including a geographic breakdown of where GD Assessments took place and the characteristics of these properties. This section provides geographic breakdowns on the Cashback scheme, GDHIF ECO and (for the first time) further geographical breakdowns of 'live' GD Plans. It also reports estimates of the carbon savings achieved through measures installed under these delivery mechanisms. Where the report refers to table numbers in brackets, these are included in GD/ECO tables and separately in the accompanying Excel tables here.

Green Deal Assessments, lodged up to 31st December 2014

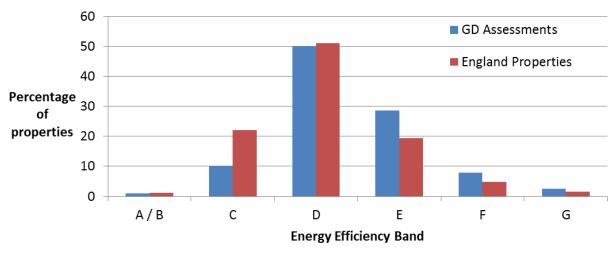
The first step in the Green Deal process involves a Green Deal Assessor coming to the home, talking to the owner/occupier about their energy use and seeing if they can benefit from making energy efficiency improvements to their property. This leads to a Green Deal Advice Report being produced for the householder and lodged on a national register. The customer is then able to view the energy efficiency measures which have been recommended and understand the potential costs and savings.

For more information on the GD Assessment process see here.

Energy Efficiency Rating (EER) Bands (Table 1.1, Chart 1.1)

The energy efficiency rating is presented in an A-G banding system for an Energy Performance Certificate, where Band A rating represents low energy costs (i.e. the most efficient band) and Band G rating represents high energy costs (i.e. the least efficient band). The majority (89 per cent) of properties getting a GD Assessment had an energy efficiency band rating of D or lower, suggesting that GD Assessments are generally happening in properties which could benefit most from energy efficiency measures. This compares to 77 per cent of the overall domestic building stock in England reported in the English Housing Survey⁴.

Chart 1.1 - Percentage of Green Deal Assessments lodged, up to 31st December 2014, by Energy Efficiency (EE) Band compared with EE Band ratings of all England properties in 2013



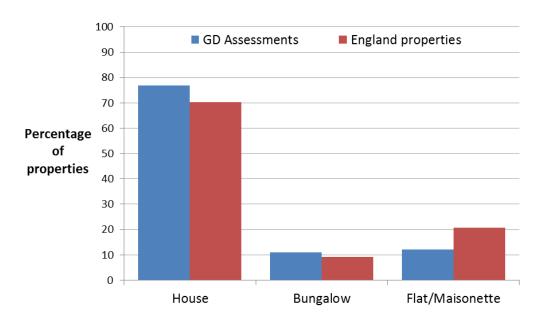
⁴ The equivalent split is not available for Welsh and Scottish properties, which make up around 14 per cent of the housing stock in Great Britain.

DCLG, English Housing Survey, Annex Table 2.10: Energy efficiency rating bands, 1996 to 2013, https://www.gov.uk/government/statistics/english-housing-survey-2013-to-2014-headline-report

Property Type (Table 1.2, Chart 1.2)

Chart 1.2 shows that 77 per cent of GD Assessments were in houses (343,697), 11 per cent were in bungalows (49,267), 10 per cent were in flats (46,937), and two per cent were in maisonettes (7,364). The housing stock in England⁵ (as reported in the English Housing Survey 2013-14⁶) shows that 70 per cent of property types were houses, 21 per cent were flats and/or maisonettes (purpose built flat or converted flat), and nine per cent were bungalows.

Chart 1.2 - Percentage of Green Deal Assessments, and England properties by property type, up to 31st December 2014



Tenure (Table 1.3, Chart 1.3)

Around three quarters of GD Assessments were in owner-occupied properties (345,738), 12 per cent were in the private rented sector (54,801) and 10 per cent were in the social rented sector (44,419). In comparison, according to dwelling stock figures released by Department for Communities and Local Government⁷ for Great Britain there were 64 per cent owner-occupied and 18 per cent were for social rented sector and the private rented sector respectively. This suggests that a higher proportion of GD Assessments were in owner-occupied properties than would be expected from the distribution of the housing stock.

⁵ The equivalent split is not available for Welsh and Scottish properties on a comparable basis. These make up around 14 per cent of the housing stock in Great Britain.

⁶ DCLG, English Housing Survey (EHS), Annex Table 2.1: Stock profile, 2013, https://www.gov.uk/government/statistics/english-housing-survey-2013-to-2014-headline-report

⁷ DCLG, Live tables on dwelling stock, by tenure, Great Britain Table 102 https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants

Chart 1.3 – Percentage of Green Deal Assessments and Great Britain properties by tenure, up to 31st December 2014



On or off the Mains Gas Grid (Table 1.4)

In 2013, it was estimated 2.7 million households do not have mains-gas supply in Great Britain⁸. This is around 10 per cent of all properties in Great Britain, which is similar (albeit lower) to the 15 per cent of properties which had a GD Assessment and were off the mainsgas grid.

Recommended measures (Tables 1.5, 1.5a, 1.5b)

There were 1,412,227 improvements recommended in Green Deal Advice Reports, so on average there were around three recommended measures per GD Assessment. In 36 per cent of Assessments (161,100) only one measure was recommended (Table 1.5b).

The most common single measure recommended was to install loft insulation. This accounted for 15 per cent of all recorded measures and was recommended in around 47 per cent of all GD Assessments (Table 1.5a).

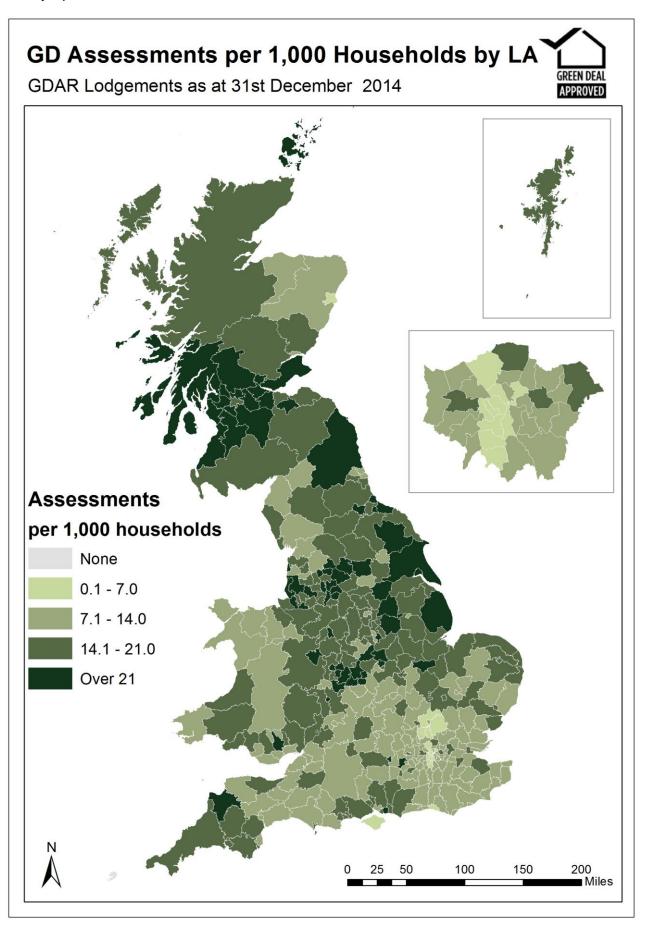
Geographic location (Tables 1.6, 1.6a, 1.6b, Map 1.1)

GD Assessments have been taking place in properties throughout Great Britain with 447,310 GD Assessments lodged in total up to 31st December 2014 (see Table 1.6 for the regional breakdown). Tables 1.6a and 1.6b present the number of GD Assessments that took place in each Local Authority (LA) (Table 1.6a) and Parliamentary Constituency (Table 1.6b).

The number of GD Assessments per 1,000 households gives a better indication of the areas which have had the most assessments in relation to the number of properties in that area. There were on average 17 Green Deal Assessments per 1,000 households in Great Britain. Scotland had the highest number of Green Deal Assessments per 1,000 households with 26. Wales had 14 Green Deal Assessments per 1,000 households (Map 1.1).

⁸ DECC, Sub-national estimates of households not connected to the gas network, 2013 https://www.gov.uk/government/statistics/sub-national-estimates-of-households-not-connected-to-the-gas-network

Map 1.1 – Number of Green Deal Assessments per 1,000 households lodged by Local Authority up to 31st December 2014



Within England, Oldham Local Authority had the most GD Assessments per 1,000 households (40). In Scotland, five Local Authorities had more GD Assessments per 1,000 households; North Lanarkshire (40.3), South Lanarkshire (42), East Ayrshire (42), Midlothian (43) and Clackmannanshire (68).

Map 1.1 shows a difference in the level of Green Deal Assessments per 1,000 households at Local Authority level. Local Authorities in Southern England (the South East, London, the South West, and the East) and North Wales have fewer assessments per 1,000 householders compared to Local Authorities in other regions of Great Britain.

Green Deal Plans, up to 31st December 2014

Geographic location of properties where measures were installed using Green Deal Finance, up to 30th December 2014 (Tables 1.7, 1.7a and 1.7b)

Of the 4,721 Green Deal Plans which were 'live' up to 31st December 2014 (i.e. measures were installed and billing had commenced), around half of all Green Deal Plans with measures installed were for properties in Scotland, 45 per cent were for properties in England and five per cent were for properties in Wales (see Table 1.7). Tables 1.7a and 1.7b present the number of 'live' Green Deal Plans in each Local Authority (LA) (Table 1.7a) and Parliamentary Constituency (Table 1.7b).

Pioneer Places (end of scheme)

The Green Deal Pioneer Places Fund of £10m was allocated to Local Authorities and/or consortia of Local Authorities in England to demonstrate ambitious approaches to kick starting local Green Deal activity in both the domestic and non-domestic sectors. Among a range of outcomes from these projects was funding for GD Assessments.

Estimates based on data returns submitted to DECC by 11th February 2014 estimate that 9,543 Domestic Green Deal Assessments were lodged having been funded through the Green Deal Pioneer Places (see Table 1.8). These assessments are included in the data on overall number of 447,310 Green Deal Assessments as reported above. If measures were installed following these assessments these will be captured under other delivery mechanisms reported within the National Statistics in this release.

Core Cities (end of scheme)

Eight cities across England received funding of £10.8m in total to trial early aspects of the Green Deal process and support them to help kick-start the Green Deal. The projects included conducting energy efficiency assessments as well as retrofitting properties across whole communities.

Estimates based on data returns submitted to DECC by 11th February 2014 estimate that around 2,817 properties had installed energy efficiency measures which had been funded through the Core Cities projects (see Table 1.9). The provisional number of measures installed in these properties was 3,919⁹. Over 1,500 of these measures were external solid wall insulation (see Table 1.9a). Numbers of core city funded measures and household's benefiting from installing energy efficiency measures through core cities funding are not included in Table 1 and Table 1a of the monthly statistical release as there is a large overlap with other delivery

⁹ This includes a number of measures which were also reported as ECO measures.

mechanisms (particularly with ECO). As with Pioneer Places, these figures were first published in March 2014 and have not been updated since.

Cashback measures installed, up to 30th September 2014 (end of the scheme)

The Cashback scheme was available from January 2013 to June 2014 in England and Wales. It was a financial incentive specifically aimed to encourage domestic customers to get measures installed through the Green Deal process, although it is the customers' choice whether they decide to take out Green Deal finance or other sources of finance to fund the installation of the measures. The Cashback scheme closed for applications at the end of June 2014 and all redemptions required measures to be installed before the end of September 2014. Therefore this breakdown is the final summary of the Cashback scheme. There were 14,743 properties¹⁰ where measures had been installed following payment from the Cashback scheme up to 30th September 2014 (the end of the scheme).

Geographic location of properties where measures were installed following Cashback payment, up to 30th September 2014 (Tables 1.10, 1.10a and 1.10b)

Table 1.10 presents the regional breakdown of properties where measures were installed following Cashback payment up to 30th September 2014. Tables 1.10a and 1.10b present these breakdowns of Cashback properties by LA and Parliamentary Constituency in England and Wales¹¹ up to 30th September 2014 (the end of the scheme).

There were 6.2 Cashback payments per 10,000 households in England and Wales. The region with the highest number of Cashbacks paid per number of households was the North West with 11.1 (accounting for 23 per cent of all Cashback vouchers paid, see Table 1.10). There were 4.7 Cashback payments per 10,000 households in Wales.

The tenure of properties where measures were installed using Cashback (Table 1.10c)

Around 91 per cent of properties that had installed measures using Cashback were owner-occupied. Eight per cent were in the social rented sector and two per cent were in the private rented sector (see Table 1.10c).

Green Deal Home Improvement Fund measures installed, up to 31st December 2014

The Green Deal Home Improvement Fund (GDHIF) is an incentive scheme open to all householders in England and Wales wanting to improve the energy efficiency of their homes. The scheme allows householders to choose one or both of two offers available and they are eligible to claim up to £7,600. The Green Deal Home Improvement Fund (GDHIF) opened in June 2014 and closed to new applicants at 6:30pm on 24 July 2014. GDHIF release 2 commenced on 10 December 2014. Under GDHIF release 1 (as well as a very small number of release 2 vouchers) there were 12,942 GDHIF vouchers paid (to 12,910 individual households) following installation of measures up to 31st December 2014.

¹⁰ This includes a small number of properties where the Cashback payment was made in October 2014 but the measures were installed before the end of September 2014.

¹¹ These figures only present breakdowns for England and Wales. A separate Cashback scheme operates in Scotland (see <u>website</u> and latest <u>Scotland Green Homes Cashback scheme statistics</u>).

¹² This includes properties where the GDHIF payment was made in January 2015 but the measures were installed before the end of December 2014. More than one voucher can be issued and payment made per household.

Geographic location of properties where measures were installed using GDHIF payment, up to 31st December 2014 (Tables 1.10d, 1.10e, 1.10f, Map 1.2)

Table 1.10d presents the regional breakdown of properties where measures were installed with GDHIF payment up to 31st December 2014. Tables 1.10e and 1.10f present these breakdowns of GDHIF properties by LA and Parliamentary Constituency in England and Wales up to 31st December 2014¹³.

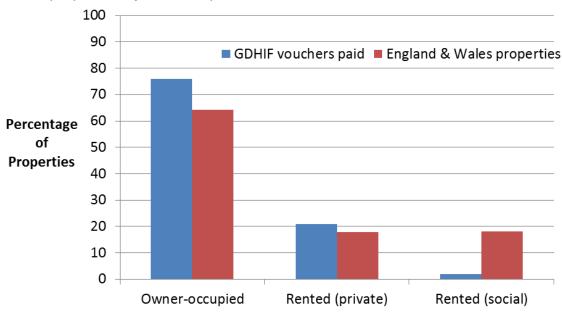
There were 5.4 GDHIF payments per 10,000 households in England and Wales. The area with the highest number of GDHIF voucher payments per number of households was Wales with 16.3 (accounting for 17 per cent of all GDHIF vouchers paid, see Table 1.10d).

Within England, Wolverhampton Local Authority had the most GDHIF voucher payments per 10,000 households (40). In Wales, three Local Authorities had more GDHIF voucher payments per 1,000 households; Rhondda Cynon Taf (46), Blaenau Gwent (73) and Merthyr Tydfil (79) (Map 1.2).

The tenure of properties where measures were installed using GDHIF (Table 1.10g)

Around 76 per cent of properties that had installed measures using GDHIF were owner-occupied. 21 per cent were in the private rented sector and two per cent were in the social rented sector (see Table 1.10g). In comparison, according to dwelling stock figures released by Department for Communities and Local Government for Great Britain there were 64 per cent owner-occupied and 18 per cent were for social rented sector and the private rented sector respectively. This suggests that there were a much lower proportion of measures installed using GDHIF in the social rented sector than would be expected from the distribution of the housing stock (or compared to the Cashback scheme, eight per cent, see Table 1.10c).

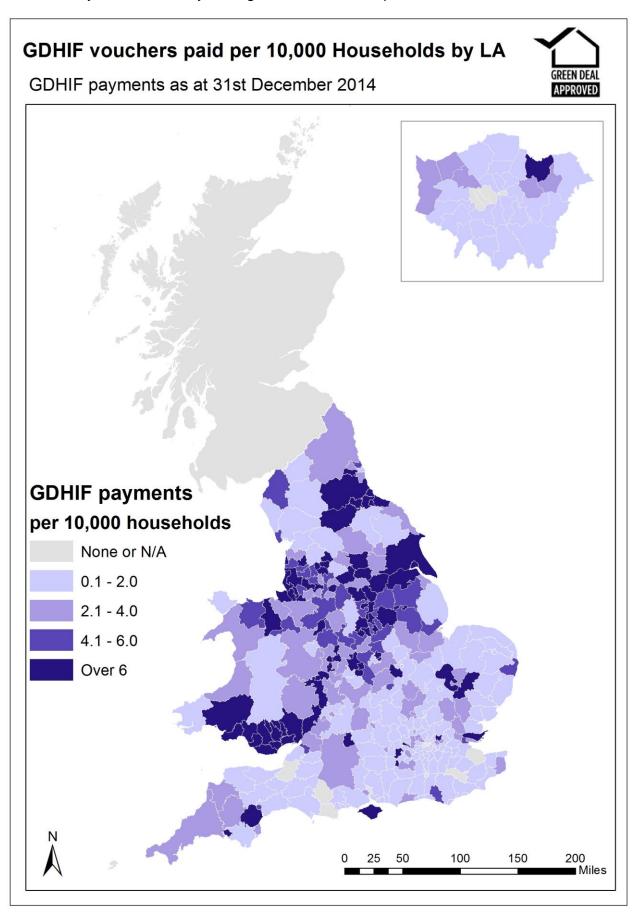
Chart 1.4 – Percentage of households where GDHIF vouchers have been paid and England & Wales¹⁴ properties by tenure, up to 31st December 2014



¹³ These figures only present breakdowns for England and Wales. A separate Cashback scheme operates in Scotland (see website and latest Scotland Green Homes Cashback scheme statistics).

¹⁴ DCLG, Live tables on dwelling stock, by tenure, England, Table 104, Wales Table 106 https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants.

Map 1.2 – Number of Green Deal Home Improvement Fund vouchers paid per 10,000 households by Local Authority in England and Wales, up to 31st December 2014



Measures installed under ECO, up to 31st December 2014

The <u>Energy Company Obligation</u> (ECO) was introduced in January 2013 to reduce energy consumption and support people living in fuel poverty. All measures installed under ECO are provisional until the end of the obligation period as checks are undertaken by Ofgem.

The Government announced proposals for a <u>set of changes to ECO</u> in December 2013. This included allowing additional measures (loft and standard cavity wall insulation, and district heating) to be eligible under CERO. The revised regulations were passed by Parliament on 5 December 2014. Measures that were installed since 1 April 2014 in anticipation of these changes which were notified to Ofgem have now been included in this release.

Geographic location of provisional measures installed under ECO, up to 31st December 2014 (Tables 1.11, 1.11a and 1.11b)

Tables 1.11, 1.11a and 1.11b present the number of provisional measures installed under ECO, broken down by obligation, in each region (Table 1.11), LA (Table 1.11a) and Parliamentary Constituency (Table 1.11b) up to 31st December 2014.

Around one fifth (19 per cent) of ECO measures were in the North West (246,521), the highest in any region. 12 per cent of ECO measures were installed in Scotland (150,633) and five per cent were in Wales (66,156).

Geographic location of provisional number of households in receipt of ECO measures, up to 31st December 2014 (Tables 1.11c, 1.11d, 1.11e and Map 1.3)

Up to 31st December 2014, 1,059,832 unique properties¹⁵ had benefitted from having at least one ECO measure installed (Table 1.11). By ECO obligation, 463,142 unique properties had Carbon Savings Target measures installed, 318,582 properties had Affordable Warmth (HHCRO) measures installed, and 305,537 properties had Carbon Saving Community measures installed, of which 41,005 properties had measures installed under the rural sub-obligation¹⁶.

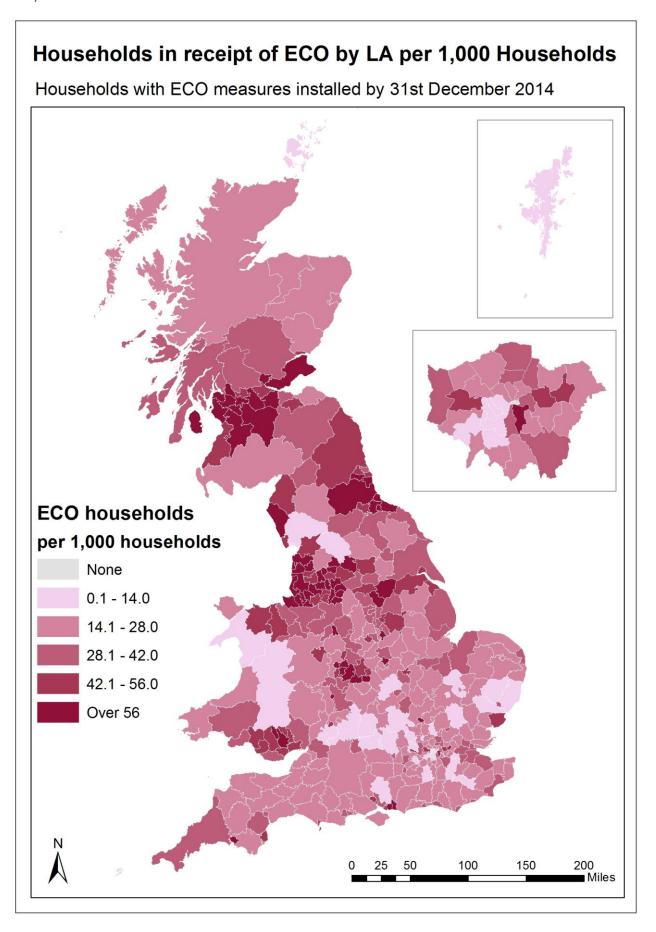
When comparing areas, it is more representative to use the number of households in receipt of ECO measures per 1,000 households. In Great Britain, on average, there were around 40 households in receipt of ECO measures per 1,000 households or, in other words, around four per cent of all households in Great Britain had a measure installed under ECO funding. The North West and North East had the highest amount with 66 and 64 households with ECO measures per 1,000 households respectively. In Scotland there were around 54 ECO measures per 1,000 households and 40 per 1,000 households in Wales. Blackpool had the highest proportion of households with ECO measures in any Local Authority in Great Britain, with around 138 households with ECO measures per 1,000 households.

Table 1.11d and Map 1.3 shows the provisional number of households in receipt of ECO measures by Local Authority per 1,000 households. This shows the concentration of households in receipt of ECO measures in the North West, North East and West Midlands in England as well as South Wales and parts of Scotland.

¹⁵ The number of unique properties by ECO obligation does not tally to the total number of unique properties (1,059,832) as a property can have a number of different measures installed under different ECO obligations.

¹⁶ Source: Table 6a - Green Deal and Energy Company Obligation (ECO): monthly statistics (February 2015): https://www.gov.uk/government/statistics/green-deal-and-energy-company-obligation-eco-monthly-statistics-february-2015

Map 1.3 – Provisional number of households in receipt of ECO measures by Local Authority per 1,000 households



<u>Further breakdowns of provisional measures installed under ECO, up to 31st December 2014</u> (Tables 1.12, 1.12a, 1.12b, and 1.12c)

Tables 1.12 to 1.12d present further analysis of provisional measures installed under ECO up to 31st December 2014, including breakdowns by fuel type, property type and tenure, the percentage of measures traded through brokerage and estimated bill savings for Affordable Warmth measures. Findings of note include that 86 per cent of Carbon Saving Target measures were installed in gas-fuelled properties, compared to 91 per cent of all ECO measures and 84 per cent of all households in England¹⁷. This suggests that a slightly higher proportion of measures installed under ECO were in gas-fuelled properties that would be expected from the housing stock.

The large majority of properties with ECO measures (76 per cent) were houses, 18 per cent were flats and the remainder were bungalows and maisonettes. However, this varies by obligation, with a greater proportion of properties with measures installed under Carbon Saving Target being flats (27 per cent), compared with properties with measures installed under Carbon Saving Communities (16 per cent) and Affordable Warmth (five per cent). There were 141,866 properties with ECO measures installed between October and December 2014 (see Table C1).

Estimated lifetime bill savings for Affordable Warmth measures installed, up to 31st December 2014 (Table 1.12d)

Having installed 407,315 affordable warmth ECO measures, we estimate it will result in around £4.8bn worth of notional lifetime bill savings.

ECO costs

DECC receives monthly summary information covering the costs associated with delivering ECO for all nine obligated energy suppliers. It is important to note that these figures relate to all costs as reported by suppliers as at the end of December 2014. For more information on ECO costs please see Annex A and full definitions are included in the Methodology note. The latest aggregate delivery costs (up to the end of December 2014) are included in Table 1.13. These are historic costs and future costs may go up or down depending on a range of factors.

The Government announced proposals for a set of changes to ECO in December 2013, which were consulted on in spring 2014. These include: introducing ECO targets for the two-year period to the end of March 2017; reducing the March 2015 CERO by 33%; and allowing additional measures (loft and standard cavity wall insulation, and district heating) to be eligible under the CERO target. The Government confirmed its intention to introduce these changes into legislation in its 22 July 2014 response here. The revised regulations were passed by Parliament on 5 December 2014. Measures that were installed since 1 April 2014 in anticipation of these changes, which were notified to Ofgem, have been included in this release, and the costs associated with these measures have also now been included for the first time.

Due to these changes to ECO measures and costs, the projected annual costs have not been included in this release. The new ECO amendment order reduced delivery costs, particularly under the CERO, so scaling forward the costs incurred from before the legislative change

¹⁷ Table 23, Fuel poverty statistics 2012, https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2012

would not be appropriate. There are further factors, such as carry-forward to ECO from previous obligation schemes, the estimated impact of the levelisation mechanism (which would provide uplift to CERO carbon scoring) and the fact that, subject to final determination by Ofgem, some suppliers have already exceeded some of their obligations, so these measures (and their costs) would count towards future ECO targets (April 2015 to March 2017). All of these factors do not make it possible to scale costs accurately.

The total ECO cost estimates in Table 1.13, are based on the companies' reported costs. They now include the costs of delivering the additional, likely cheaper, measures companies have delivered since April 2014 under CERO in anticipation of the legislative amendments to ECO in December 2014 (where measures have been installed up to the end of December 2014, and have been notified to Ofgem). The total delivery costs for the first two years of ECO were £2.2bn, with an additional £169m in administrative costs.

Table 1.13a shows the average cost by obligation and the highest average cost and lowest average cost reported by suppliers for each obligation as at the end of December 2014. The suppliers have not been identified to protect commercial confidentiality. This shows that some energy suppliers are discharging their obligation more cost effectively than others. This includes cost revisions submitted from some energy companies as previously reported.

ECO Brokerage

The <u>ECO Brokerage</u> system operates as a fortnightly anonymous auction where providers can sell 'lots' of future measures of ECO Carbon Saving Obligation, ECO Carbon Saving Communities and ECO Affordable Warmth, to energy companies in return for ECO subsidy.

ECO Brokerage clearing prices by ECO obligation by auction, up to end of December 2014 (Table 1.14)

Table 1.14 presents the clearing prices of all lots sold through ECO brokerage from all 50 auctions taking place up to the end of December 2014, with a total value of contracts let worth £430 million. Auctions 25, 32, 33, 34, 36, 40, 46, 47, and 50 saw no contracts let. The low levels of brokerage activity since March 2014 are likely to have been affected by a number of factors, including uncertainty around the period following the announced reduction in the obligation and other changes to ECO before new legislation came into force in December. Trading may have also been affected as a result of the approaching end to the first ECO obligation period, because contracts under brokerage are for future delivery. The average price paid for lots has been decreasing for the Carbon Saving Obligation, Carbon Saving Communities (CSCO) and ECO Affordable Warmth. For more detail on the results of each auction, please see ECO Brokerage.

Estimated carbon and energy savings for measures installed through ECO, Green Deal Plans, GDHIF and Cashback, up to 31st December 2014

The <u>Final Stage Impact Assessment</u> for the Green Deal and Energy Company Obligation reported that both policies would lead to significant carbon and energy savings. This section estimates the carbon and energy savings derived from measures installed through these policy areas.

Estimated carbon and energy savings relating to measures installed through ECO, Green Deal Plans, GDHIF and Cashback up to 31st December 2014 (Table 1.15)

Table 1.15 presents the estimated impact of measures installed through Cashback, Green Deal Plans, Green Deal Home Improvement Fund (GDHIF) or under ECO (through the Carbon Saving Obligation and Carbon Saving Communities Obligation) up to the end of December 2014. Affordable Warmth is excluded because carbon reductions are not the stated aim of this policy and difficulties in accurately estimating their carbon impact. This obligation of ECO is anticipated to lead to a net reduction in carbon. However, this depends on reductions in the traded sector emissions out-weighing any increase in non-traded sector emissions.

The provisional total estimated carbon savings of these measures (based on savings as set out in the Impact Assessment) is in the range $17.6 - 18.2 \text{ MtCO}_2$ with estimated lifetime energy savings in the range 72,476 - 75,067 GWh.

For Green Deal Plans, GDHIF and Cashback measures, the net estimated carbon savings has been calculated from the difference between that in the original EPC (pre-installation of measures) and the updated EPC (post installation of measures). For ECO measures, the estimated lifetime carbon savings has been revised to account for estimated levels of comfort taking, which better represent our understanding of the assumed net impact of the installed measures.

Estimated carbon and energy savings relating to measures installed through ECO (as well as Cashback, GDHIF and Green Deal Plans) are reduced by 15% to account for behavioural change following the installation of measures. This is consistent with the 2012 Green Deal/ECO final Impact Assessment analysis, and in no way impacts on the progress reported in supplier obligations. Therefore, the carbon estimates for ECO may differ from those published through Ofgem. Also all carbon and energy savings relating to measures installed through Cashback, GDHIF and Green Deal Plans are adjusted by the relevant in-use factors for each measure type ¹⁸. In-use factors ¹⁹ for carbon and energy savings relating to ECO measures have been accounted for in this and previous quarterly releases.

More information on the methodology used is included here.

Measures not captured by administrative data sources

This report provides detail on measures installed in properties through ECO, with support from Cashback and Green Deal and Local Authority programmes, which make up the majority of measures installed. As first reported in March 2014's quarterly release, we have successfully matched these datasets and determined that, of the 75,884 households who had a GD Assessment between April and September 2013, around 46,000 measures had been installed in around 40,000 households with support from any of these schemes.

Additionally, there are a small number of measures installed, but not captured by our administrative data sources (i.e. measures which followed a Green Deal Assessment but were not financed or part financed through a delivery route already reported). Using findings from Waves 2 and 3 of the GD Assessments research, we have been able to match the large

¹⁸ Domestic measures in-use factors, page 9 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48407/5505-how-the-green-deal-will-reflect-the-insitu-perfor.pdf

¹⁹ Ofgem ECO measures https://www.ofgem.gov.uk/ofgem-publications/83100/energycompaniesobligation-measures.pdf

majority of measures reported by those interviewed to our mainstream data collections. Through this, we estimate that for every seven to nine measures installed through one of our reported routes with an accompanying Green Deal Assessment (ECO, Cashback, Green Deal finance, Core Cities, other DECC policies), that one additional measure is installed entirely using alternative finance²⁰. These measures may have been paid for through a number of alternative finance packages including savings, payment from a landlord, housing association or Local Authority or other type of loan or credit, but would not have received funding from any of our reported routes.

Applying these estimates to the total number of measures installed with an accompanying Green Deal Assessment equates to an additional 3,000 to 4,000 households installing between 5,000 and 7,000 measures over six months. This results in an estimated 1,000 measures being installed per month. In the context of all measures installed – as many ECO measures will not have an accompanying Green Deal Assessment – this equates to an additional two per cent of all measures being installed over the six month period, but not being captured by our administrative data sources.

For more detail on the analysis behind these estimates please see the <u>Methodology note</u>. We will continue to review these calculations.

The Supply Chain

To understand more about the organisations and infrastructure underpinning the Green Deal, this report also includes a section on geographical coverage of the number of Assessor organisations and Green Deal Installer organisations.

Supply chain operational coverage, as at 2nd February 2015 (Table 1.16)

The supply chain to support the Green Deal has been developing since October 2012. This includes individual Advisors (who carry out and produce Green Deal Advice Reports) and Assessor organisations (who employ authorised Green Deal Advisors), Green Deal Providers (who quote for and arrange Green Deal Plans with customers), and Installer organisations²¹ (who install energy efficiency improvements under the GD finance mechanism).

The Green Deal Oversight and Regulation Body (ORB) produces publically available information on the supply chain, and the latest figures are available by using the search tool on the <u>ORB website</u>. There is also information available on <u>contacts in local areas.</u>

These organisations operate in different geographical locations and provide a wide variety of offers to consumers. Table 1.16 shows the self-reported operational coverage of Green Deal Providers, Assessor organisations and Installers by Local Authority that they are expecting to operate within²². These figures are based on information submitted²³ to the ORB consumer search tool by a number of these participating organisations and indicate a good coverage across Great Britain.

²⁰ This is based on findings from <u>Waves 2 and 3 of the Assessments research</u> and therefore only representative of GD assessments and measures installed up to the end of September 2013.

²¹ Individual Installers within an installer organisation do not need to register.

²² Businesses are flexible and may travel further to other areas as the market develops.

²³ GD accredited organisations are able to provide their operational coverage information onto the ORB consumer search tool on a voluntary basis. Some organisations have waited until they are ready to delivery GD services before providing their details. Separate entries have been submitted for each individual sub-division of an organisation which has its own certification ID.

GD and **ECO** Tables

Please note, percentages may not add up to totals due to rounding.

Table 1.1: Number of Green Deal Assessments by Energy Efficiency Band, up to 31st December 2014, Great Britain

Energy Efficiency Band	Green Deal Assessments	Percentage of Assessments
A	379	0
В	3,613	1
С	45,860	10
D	223,737	50
E	127,523	29
F	35,294	8
G	10,904	2
Total	447,310	100

Table 1.2: Number of Green Deal Assessments by Property Type up to 31st December 2014, Great Britain

Property Type	Green Deal Assessments	Valid Percentage of Assessments ¹
House	343,697	77
Bungalow	49,267	11
Flat	46,937	10
Maisonette	7,364	2
Unknown ²	45	-
Total	447,310	100

¹ Percentage of Assessments is calculated only for those Assessments where property type is known.

Table 1.3: Number of Green Deal Assessments by tenure, up to 31st December 2014, Great Britain

Tenure	Green Deal	Valid Percentage
- Chare	Assessments	of Assessments ¹
Owner-occupied	345,738	78
Rented (private)	54,801	12
Rented (social)	44,419	10
Unknown	2,352	-
_ Total	447,310	100

¹ Percentage of Assessments is calculated only for those Assessments where tenure is known.

²The unknown number includes park homes.

Table 1.4: Number of Green Deal Assessments by whether property is on or off the Mains Gas Grid, up to 31st December 2014, Great Britain

Properties by whether on or off Mains Gas Grid	Green Deal Assessments	Valid Percentage ¹ of Assessments
Off Gas	68,342	15
On Gas	378,091	85
Unknown	877	-
Total	447,310	100

¹ Percentage of Assessments is calculated only for those Assessments where mains gas connection is known.

Table 1.5: Number of improvements recommended in Green Deal Assessments¹ by measure type (grouped), up to 31st December 2014, Great Britain

Measure Types	Number of improvements recommended ²	Percentage of improvements recommended
Boiler	144,719	10.2
Cavity Wall Insulation	148,778	10.5
Lighting	64	0.0
Loft Insulation	221,376	15.7
Micro-generation	327,742	23.2
Other Heating	137,950	9.8
Other Insulation	282,456	20.0
Solid Wall Insulation	120,515	8.5
Window Glazing	28,627	2.0
Total	1,412,227	100

¹ Does not include recommended improvements from the Green Deal Improvement Package tool.

Table 1.5a: Number of improvements by measures recommended in Green Deal Assessments¹, up to 31st December 2014, Great Britain

	Number of	Percentage of
	provements	improvements
rec	ommended ²	recommended
Boiler	144,719	10.2
Change heating to gas condensing boiler (fuel switch)	5,993	0.4
Change heating to gas condensing boiler (fuel switch), and flue gas heat recover	ery 1,313	0.1
Change heating to gas condensing boiler (no fuel switch)	2,130	0.2
Change heating to gas condensing boiler (no fuel switch), flue gas heat recove	y 204	0.0
Condensing oil boiler	1,461	0.1
Upgrade boiler, same fuel	120,125	8.5
Upgrade boiler, same fuel, and flue gas heat recovery	13,493	1.0
Cavity wall insulation	148,778	10.5
Cavity wall insulation	148,731	10.5
Party wall insulation	47	0.0
Lighting	64	0.0
Energy efficient luminaires	64	0.0

² More than one improvement can be recommended per Assessment. On average, there are around three improvements recommended per Assessment.

Loft Insulation	221,376	15.7
Loft insulation	209,623	14.8
Room-in-roof insulation	11,753	0.8
	,	0.0
Micro-generation	327,742	23.2
Air source heat pump with radiators	3,330	0.2
Air source heat pump with underfloor heating	263	0.0
Biomass wood logs boiler	5,323	0.4
Biomass wood pellets room heater with boiler	2,840	0.2
Ground source heat pump with radiators	599	0.0
Ground source heat pump with underfloor heating	153	0.0
Micro-CHP	250	0.0
Photovoltaics	169,575	12.0
Solar water heating	127,274	9.0
Wind turbine (on mast)	1,973	0.1
Wind turbine (roof mounted)	16,162	1.1
Other Heating	137,950	9.8
Circulation pump	24	0.0
Cylinder thermostat	19,896	1.4
Heating controls for warm air system	820	0.1
Heating controls for wet central heating system	102,398	7.3
New or replacement storage heaters	7,541	0.5
Replacement warm-air unit	450	0.0
Storage waste water heat recovery	62	0.0
Waste water heat recovery	6,759	0.5
•	,	
Other Insulation	282,456	20.0
Draughtproofing	37,264	2.6
Flat roof insulation	8,326	0.6
Floor insulation	168,362	11.9
Hot water cylinder insulation	35,490	2.5
Insulated doors	33,014	2.3
Solid Wall Insulation	120,515	8.5
External insulation with cavity wall insulation	5,515	0.4
Solid wall insulation (pre 1967 E&W, pre 1965 Scotland)	70,867	5.0
Solid wall insulation (from 1967 E&W, from 1965 Scotland)	44,133	3.1
	ŕ	
Window Glazing	28,627	2.0
Double glazing	25,792	1.8
Glazing replacement	659	0.0
Secondary glazing	1,583	0.1
Triple glazing	593	0.0
Total	1,412,227	100

¹ Does not include recommended improvements from the Green Deal Improvement Package tool.

² More than one improvement can be recommended per Assessment. On average, there are around three improvements recommended per Assessment.

Table 1.5b: Number of improvements recommended per Green Deal Assessment, up to 31st December 2014, Great Britain

Number of improvements recommended	Number of Green Deal Assessments	Percentage of Green Deal Assessments
1	161,100	36
2	74,929	17
3	41,747	9
4	45,455	10
5	43,303	10
6 or more	80,776	18
Total	447,310	100

Table 1.6: Number of Green Deal Assessments lodged by region, up to 31st December 2014

Area names	Green Deal Assessments	Percentage of Assessments	Households with at least one usual resident ¹	Green Deal Assessments per 1,000 households
Great Britain	447,310	100	26,263,269	17.0
England	366,582	82	22,542,903	16.3
North East	20,727	5	1,145,559	18.1
North West	65,160	15	3,046,753	21.4
Yorkshire and The Humber	48,499	11	2,262,423	21.4
East Midlands	37,735	8	1,935,710	19.5
West Midlands	52,927	12	2,332,802	22.7
East	32,972	7	2,484,620	13.3
London	28,925	6	3,383,918	8.5
South East	47,274	11	3,638,436	13.0
South West	32,363	7	2,312,682	14.0
Wales	19,026	4	1,318,569	14.4
Scotland	61,702	14	2,401,797	25.7

¹ Source: England: Department for Communities and Local Government, Household Projections. Wales: Welsh Government, Household estimates.

Scotland: General Register Office for Scotland, Estimates of Households in Scotland.

Table 1.6a: Number of Green Deal Assessments lodged by administrative area, up to 31st December 2014 (Table available in Excel here).

Table 1.6b: Number of Green Deal Assessments lodged by Parliamentary Constituency, up to 31st December 2014 (Table available in Excel here).

Table 1.7: Number of 'live' Green Deal Plans by Region, up to 31st December 2014

Area names	'Live' Green Deal Plans	Percentage of Plans	Households with at least one usual resident ¹	Green Deal Plans per 100,000 households
Great Britain	4,721	100	26,263,269	18.0
England	2,124	45	22,542,903	9.4
North East	431	9	1,145,559	37.6
North West	419	9	3,046,753	13.8
Yorkshire and The Humber	381	8	2,262,423	16.8
East Midlands	256	5	1,935,710	13.2
West Midlands	151	3	2,332,802	6.5
East	115	2	2,484,620	4.6
London	57	1	3,383,918	1.7
South East	96	2	3,638,436	2.6
South West	218	5	2,312,682	9.4
Wales	250	5	1,318,569	19.0
Scotland	2,347	50	2,401,797	97.7

¹ Source: England: Department for Communities and Local Government, Household Projections.

Wales: Welsh Government, Household estimates.

Scotland: General Register Office for Scotland, Estimates of Households in Scotland.

Table 1.7a: Number of 'live' Green Deal Plans by administrative area, up to the 31st December 2014 (Table available in Excel here).

Table 1.7b: Number of 'live' Green Deal Plans by Local Authority, up to the 31st December 2014 (Table available in Excel here).

Table 1.8: Number of Green Deal Assessments delivered under the Pioneer Places Project, by Pioneer Place Area (Table available in Excel here).

Table 1.9: Provisional number of properties with energy efficiency work delivered under Core Cities Project, by Core City Area (Table available in Excel here).

Table 1.9a: Provisional number of energy efficiency measures installed under Core Cities Project, by measure type (Table available in Excel here).

Table 1.10: Number of Cashback vouchers paid by region, at the end of the Cashback Scheme, England and Wales

Area names	Total number of Cashback vouchers paid	Valid percentage of Cashback vouchers paid ^{1,2}	Households with at least one usual resident ³	Cashback vouchers paid per 10,000 households
England and Wales	14,743	100	23,861,472	6.2
England	13,914	95.7	22,542,903	6.2
North East	450	3.1	1,145,559	3.9
North West	3,388	23.3	3,046,753	11.1
Yorkshire and The Humber	1,676	11.5	2,262,423	7.4
East Midlands	1,892	13.0	1,935,710	9.8
West Midlands	1,291	8.9	2,332,802	5.5
East	939	6.5	2,484,620	3.8
London	999	6.9	3,383,918	3.0
South East	1,884	13.0	3,638,436	5.2
South West	1,395	9.6	2,312,682	6.0
Wales	626	4.3	1,318,569	4.7
Unknown	203	-		

¹ Percentage of Cashback vouchers paid is calculated only for those vouchers where the location is known.

Table 1.10a: Number of Cashback vouchers paid by administrative area, at the end of the Cashback Scheme, England and Wales (Table available in Excel here).

Table 1.10b: Number of Cashback vouchers paid by Parliamentary Constituency, at the end of the Cashback Scheme, England and Wales (Table available in Excel here).

Table 1.10c: Number of Cashback vouchers paid by tenure, at the end of the Cashback Scheme, England and Wales

	Cross Dool	Valid Danasatana
Tenure	Green Deal	Valid Percentage
	Assessments	of Assessments ¹
Owner-occupied	13,192	91
Rented (private)	242	2
Rented (social)	1,103	8
Unknown	206	-
Total	14,743	100

¹ Percentage of Cashback vouchers paid is calculated only for those where tenure is known.

² Includes any Cashback vouchers paid to date, where the installation month of the measures Cashback is being claimed on was no later than end of September 2014.

³ Source: England: Department for Communities and Local Government, Household Projections. Wales: Welsh Government, Household estimates.

Table 1.10d: Number of Green Deal Home Improvement Fund vouchers paid by region, up to 31st December 2014, England and Wales

Area names	Total number of GDHIF vouchers paid ¹	Valid percentage of GDHIF vouchers paid ^{2,3}	Households with at least one usual resident ⁴	GDHIF vouchers paid per 10,000 households
England and Wales	12,942	100	23,861,472	5.4
England	10,793	83.4	22,542,903	4.8
North East	918	7.1	1,145,559	8.0
North West	2,305	17.8	3,046,753	7.6
Yorkshire and The Humbe	er 2,100	16.2	2,262,423	9.3
East Midlands	1,415	10.9	1,935,710	7.3
West Midlands	1,752	13.5	2,332,802	7.5
East	496	3.8	2,484,620	2.0
London	483	3.7	3,383,918	1.4
South East	616	4.8	3,638,436	1.7
South West	708	5.5	2,312,682	3.1
Wales	2,149	16.6	1,318,569	16.3

¹ In a small number of cases more than one voucher was paid per household.

Table 1.10e: Green Deal Home Improvement Fund vouchers paid by administrative area, up to 31st December 2014, England and Wales (Table available in Excel here).

Table 1.10f: Green Deal Home Improvement Fund vouchers paid by Parliamentary Constituency, up to 31st December 2014, England and Wales (Table available in Excel here).

Table 1.10g: Number of Green Deal Home Improvement Fund vouchers paid by tenure, up to 31st December 2014, England and Wales

Tenure	Green Deal Assessments	Valid Percentage of Assessments ¹
Owner-occupied	9,626	76
Rented (private)	2,719	21
Rented (social)	308	2
Unknown	289	-
Total	12,942	100

¹ Percentage of GDHIF vouchers paid is calculated only for those where tenure is known.

Table 1.11: Provisional number of ECO measures by ECO obligation by region and total number of unique properties benefitting from ECO, up to 31st December 2014 (Table available in Excel here).

² Percentage of GDHIF vouchers paid is calculated only for those vouchers where the location is known.

³ Includes any GDHIF vouchers paid to date, where the installation month of the measures GDHIF is being claimed on was no later than end of December 2014.

⁴ Sources: England: Department for Communities and Local Government, Household Projections. Wales: Welsh Government, Household estimates.

Table 1.11a: Provisional number of ECO measures by ECO obligation by administrative area, up to 31st December 2014 (Table available in Excel here).

Table 1.11b: Provisional number of ECO measures by ECO obligation by Parliamentary Constituency, up to 31st December 2014 (Table available in Excel here).

Table 1.11c: Provisional number of households in receipt of ECO measures by region, up to 31st December 2014

	Total number	Valid		
	of household	percentage of	Households	Households in
	in receipt of	households in	with at least	receipt of ECO
	ECO	receipt of ECO	one usual	measures per
Area names	measures ¹	measures ²	resident ³	1,000 households
Croot Britain	4 050 022	400	26 262 260	40.4
Great Britain	1,059,832	100	26,263,269	40.4
England	878,897	82.9	22,542,903	39.0
North East	72,836	6.9	1,145,559	63.6
North West	200,226	18.9	3,046,753	65.7
Yorkshire and The Humber	108,848	10.3	2,262,423	48.1
East Midlands	68,477	6.5	1,935,710	35.4
West Midlands	125,293	11.8	2,332,802	53.7
East	59,777	5.6	2,484,620	24.1
London	85,819	8.1	3,383,918	25.4
South East	92,871	8.8	3,638,436	25.5
South West	64,750	6.1	2,312,682	28.0
Wales	52,146	4.9	1,318,569	39.5
Scotland	128,635	12.1	2,401,797	53.6
Unknown	154	-		

¹ Great Britain totals also include unknowns, but percentages are only based on known location totals.

Table 1.11d: Provisional number of households in receipt of ECO measures by administrative area, up to 31st December 2014 (Table available in Excel here).

Table 1.11e: Provisional number of households in receipt of ECO measures by Parliamentary Constituency, up to 31st December 2014 (Table available in Excel here).

² Percentage of ECO measures delivered are calculated only for those ECO measures where the location is known.

³ Sources: England: Department for Communities and Local Government, Household Projections. Wales: Welsh Government, Household estimates. Scotland: General Register Office for Scotland, Estimates of Households in Scotland.

Table 1.12: Provisional number of ECO measures by main fuel type of property and ECO obligation, up to 31st December 2014

Obligation								
		on Saving		n Savings		ble Warmth		ber of ECO
Fuel Type	Targ	et (CSO)	Commu	nity (CSCO)	(Hl	HCRO)	measures	delivered 1
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Gas	463,607	85.7	308,876	88.8	402,580	98.9	1,175,063	90.7
Electric	59,318	11.0	22,475	6.5	1,990	0.5	83,783	6.5
Oil	8,242	1.5	7,159	2.1	1,627	0.4	17,028	1.3
Other ²	6,405	1.2	6,056	1.7	653	0.2	13,114	1.0
Coal	2,684	0.5	1,930	0.6	185	0.0	4,799	0.4
Renewable	967	0.2	1,298	0.4	0	0.0	2,265	0.2
Unknown	103	-	6	-	280	-	389	-
Total	541,326	100	347,800	100	407,315	100	1,296,441	100

¹ Percentage of ECO measures delivered is calculated only for those ECO measures where the fuel type is known.

Table 1.12a: Provisional number of households in receipt of ECO measures by property type and ECO obligation, up to 31st December $2014^{1,2}$

	Obligation						Total n	umber of
Property Type		on Saving et (CSO)		n Savings nity (CSCO)		ble Warmth HCRO)	household	ds in receipt measures
. , , , ,	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
House	298,798	65.6	227,101	77.5	274,864	88.4	800,763	75.6
Bungalow	29,003	6.4	13,816	4.7	19,428	6.2	62,247	5.9
Flat	122,126	26.8	48,173	16.4	15,377	5.0	185,676	17.5
Maisonette	5,660	1.2	3,985	1.4	1,073	0.4	10,718	1.0
Unknown ³	293	-	26	-	109	-	428	-
Total	455,880	100	293,101	100	310,851	100	1,059,832	100

¹ Percentage of ECO measures is calculated only for those ECO measures where the property type is known

² "Other" fuel type includes District Heating Systems and Liquefied Petroleum Gas.

² As multiple ECO measures may have been installed in a property, the property type recorded against the first measure installed is used in the above table. The total number of households in receipt of ECO measures is therefore different from totals reported in other tables.

³Unknown property type includes 136 mobile homes.

Table 1.12b: Provisional number of households in receipt of ECO measures by tenure and ECO obligation, up to 31st December 2014 ¹

	Obligation							
Tenure	Carbon Saving Target (CSO)		Carbon Savings Community (CSCO)		Affordable Warmth (HHCRO) ²		Total number of households in receipt of ECO measures 1	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Owner-								
occupied	327,393	74.9	199,723	70.6	233,894	76.7	761,010	74.3
Rented								
(private)	43,604	10.0	32,523	11.5	71,060	23.3	147,187	14.4
Rented								
(social)	65,998	15.1	50,511	17.9	N/A	-	116,509	11.4
Unknown	18,885	-	10,344	-	5,897	-	35,126	-
Total ³	455,880	100	293,101	100	310,851	100	1,059,832	100

¹ Percentage of ECO measures is calculated only for those ECO measures where the tenure is known.

Table 1.12c: Provisional number and percentage of ECO measures traded through brokerage by month and ECO obligation, up to 31st December 2014 (Table available in Excel here).

² It is not possible for socially-rented properties to benefit from measures delivered under Affordable Warmth.

³ As multiple ECO measures may have been installed in a property, the tenure recorded against the first measure installed is used in the above table. The total number of households in receipt of ECO measures is therefore different from totals reported in other tables.

Table 1.12d: Estimated lifetime bill savings for Affordable Warmth measures installed by month, up to 31st December 2014¹

Installation Month ²	Total number of Affordable	Estimated lifetime bill saving
	Warmth measures	(£ million)
January 2013 ³	2,704	20.4
February 2013	6,095	32.3
March 2013	7,496	44.4
April 2013	10,247	74.6
May 2013	12,098	126.1
June 2013	16,044	170.1
July 2013	19,648	236.1
August 2013	25,998	307.8
September 2013	28,772	354.8
October 2013	37,952	474.5
November 2013	40,458	499.1
December 2013	33,292	412.1
January 2014	33,641	429.7
February 2014	24,970	302.6
March 2014	21,548	252.8
April 2014	15,617	178.2
May 2014	12,880	157.7
June 2014	10,165	130.0
July 2014	7,974	104.9
August 2014	6,907	84.0
September 2014	5,822	71.7
October 2014	8,649	109.6
November 2014	9,408	116.5
December 2014	8,930	106.3
Total to date	407,315	4,796.2

¹ Estimated bill savings as reported by energy suppliers to Ofgem and following initial validation.

Table 1.13: Estimated ECO delivery costs as reported by energy suppliers, up to end December 2014

	Average cost per	Average cost per		Total
	£ saved on energy	lifetime tonne of CO ₂	Total delivery	administrative
Obligation	bills 1	saved ²	costs	costs 3
Affordable Warmth	£0.16	N/A	£781,142,265	
Carbon Saving Communities	s ⁴ N/A	£50.93	£378,101,440	
Carbon Saving Obligation	N/A	£79.57	£1,042,068,414	
Total ⁵			£2,201,312,120	£169,452,323

¹ Average cost per £ saved on energy bills for Affordable Warmth ECO measures.

² ECO measures installed in earlier installation months can be notified at a later date under some circumstances. Some notified measures can be reallocated to different ECO sub-obligations and so are subject to change.

³ Includes some measures installed between October and December 2012.

²Average cost per lifetime tonne of CO₂ saved for Carbon Saving Communities and Carbon Saving Obligation.

³ Administrative costs are not available by obligation.

⁴ Carbon Saving Communities includes delivery costs incurred through the rural sub-obligation.

⁵ Total estimated ECO delivery costs include cost revisions submitted from some energy companies.

Table 1.13a: Estimated average ECO delivery costs as reported by energy suppliers, up to end December 2014 (Table available in Excel here).

Table 1.14: ECO Brokerage Auction clearing prices by ECO obligation by auction, up to end of December 2014 (Table available in Excel here).

Table 1.15: Estimated carbon and energy savings relating to measures installed through ECO, Cashback, Green Deal Home Improvement Fund and Green Deal Plans, up to 31st December 2014 (Table available in Excel here).

Table 1.16: Number of accredited Assessor organisations, Green Deal Providers, and Installer organisations reporting where they would operate, by Lower Tier Local Authority, as of 2nd February 2015 (Table available in Excel here).

Section 2 - Estimates of Home Insulation Levels in Great Britain: December 2014

This section presents estimates of the number of homes in Great Britain with loft, cavity wall and solid wall insulation. It gives headline estimates for the number of insulated homes and a summary of the different data sources these are derived from. It also sets out the remaining potential for insulation in dwellings in Great Britain.

Sources and methodology

The estimates in this Statistical Release use 2008 housing survey data, which coincides with the start of the Carbon Emissions Reduction Target (CERT), and adds known measures delivered through Government schemes (these include CERT²⁴, the Community Energy Saving Programme (CESP)²⁵, Warm Front²⁶, Green Deal (including Green Deal finance, Cashback and the Green Deal Home Improvement Fund)²⁷ and the Energy Company Obligation²⁸ (ECO)). This is supplemented with data on house building published by The Department for Communities and Local Government to provide an estimate for the latest quarter. See the Methodology note for full details.

Headline results

There were 27.4 million homes²⁹ in Great Britain, of these 19.4 million had cavity walls with the remaining 8.0 million having solid walls. 23.9 million properties had a loft.

Table 2.1 shows the number of properties in Great Britain with cavity wall, loft or solid wall insulation (see <u>Annex B</u> for an explanation of measures).

At the end of December 2014, 14.1 million had cavity wall insulation (73 per cent of properties with a cavity wall), 16.7 million had loft insulation (70 per cent of properties with a loft) and 294,000 had solid wall insulation (four per cent of properties with solid walls) (Chart 2.1). It should be noted that measures installed as a mitigation action³⁰ after the end of CERT and CESP are not currently included in these figures, and therefore actual delivery during 2013 is likely to be higher than reported in this document.

²⁴https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes

²⁵https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes

https://www.gov.uk/government/policies/helping-households-to-cut-their-energy-bills/supporting-pages/warm-front-scheme

²⁷https://<u>www.gov.uk/green-deal-energy-saving-measures</u>

²⁸https://www.gov.uk/government/policies/helping-households-to-cut-their-energy-bills/supporting-pages/energy-companies-obligation-eco

²⁹ This includes both occupied and unoccupied dwellings and therefore differs from household numbers included in Section 1 of this publication which refers to households that are occupied (one or more resident).

³⁰ Following the end of the CERT and CESP schemes, energy suppliers and generators who had not achieved their targets by 31st December 2012 were able to deliver energy efficiency measures as "mitigation action".

Chart 2.1: Percentage of properties with insulation in Great Britain, March 2008 to December 2014

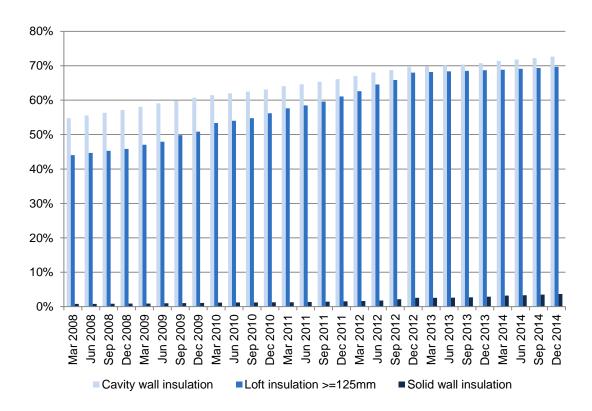


Table 2.1: Insulated homes in Great Britain, March 2008 to December 2014 (Thousands)

		Cavity wall	Loft insulation	Solid wall
		insulation	>=125mm	insulation
Mar 2008		10,030	10,150	65
Mar 2009		10,760	10,930	74
Mar 2010		11,490	12,450	94
Mar 2011		12,090	13,540	102
Mar 2012		12,750	14,770	132
Mar 2013		13,360	16,160	205
Mar 2014	р	13,760	16,400	258
Dec 2013	р	13,620	16,340	233
Mar 2014	р	13,760	16,400	258
Jun 2014	р	13,870	16,480	266
Sep 2014	р	13,980	16,560	281
Dec 2014	р	14,080	16,660	294

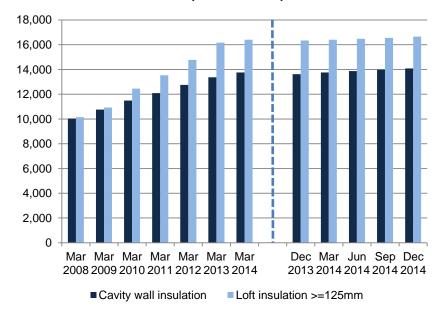
p, provisional figure.

Taking into account retro-fit insulation delivered through Government schemes and new properties³¹ built with insulation during the last year, in December 2014 there were 460,000 more homes with cavity wall insulation, 320,000 more homes with at least 125mm of loft insulation and 61,000 more homes with solid wall insulation compared with December 2013.

³¹ Information is not available on the wall construction of new homes. Typically building regulations would be met by insulated cavity walls but other construction types could be used. In this publication it is assumed that all new builds since April 2008 have cavity wall insulation.

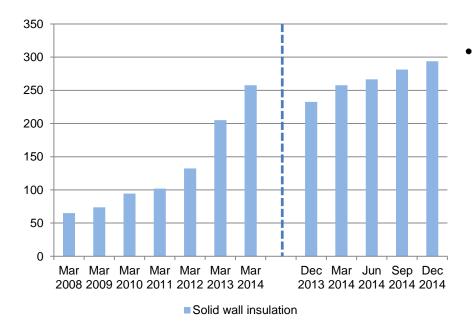
The number of retro-fit wall and loft insulations in the first half of 2013 was low compared to delivery in previous quarters. This reflects a transition phase between the end of the CERT and CESP schemes in December 2012 and the commencement of ECO. Following the end of the CERT and CESP schemes, energy suppliers and generators who had not achieved their targets by 31st December 2012 were able to deliver energy efficiency measures as "mitigation action". In addition, insulation measures delivered in Scotland exclusively under the Green Homes Cashback scheme are also excluded from the figures. Both will be included when data become available.

Chart 2.2: Homes in Great Britain with cavity wall insulation and loft insulation: March 2008 to December 2014 (Thousands)



- The number of properties with cavity wall insulation increased by three per cent (460,000) between the end of December 2013 and December 2014.
- The number of properties with loft insulation with a depth of at least 125mm increased by two per cent (320,000) between the end of December 2013 and December 2014.

Chart 2.3: Homes in Great Britain with solid wall insulation³²: March 2008 to December 2014 (Thousands)



The number of properties with solid wall insulation increased by 26 per cent (61,000) between the end of December 2013 and December 2014.

³² Solid wall insulation has been defined throughout this report as internal or external wall insulation installed through Government schemes.

Sources of increase in insulation levels

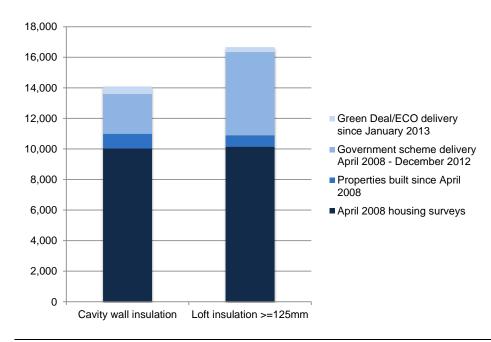
Increases in in the number of properties with insulation result from new properties being built³³ and from retro-fit insulation, predominately through Government schemes. Table 2.2 and Charts 2.4 and 2.5 show where the insulation estimates have come from. Delivery of measures through CERT has made the largest contribution since April 2008, for lofts and cavities. CESP has accounted for the largest contribution of solid wall insulation, with ECO delivering the second highest contribution. See Table 2.2a in the Excel tables for Government scheme delivery since April 2008 by quarter and measure type.

Table 2.2: Insulated homes in Great Britain by source, December 2014 (Thousands)

	Cavity wall	Loft insulation	Solid wall
	insulation	>=125mm	insulation
April 2008 housing surveys	10,030	10,150	65
Properties built since April 2008	950	740	
Government scheme delivery April 2008 -			
December 2012	2,600	5,450	139
Green Deal/ECO delivery since January 2013	500	320	90
Total	14,080	16,660	294
Homes in Great Britain [†]	19,390	23,910	7,990
Percentage of homes insulated [‡]	73%	70%	4%

^{^ 2008} estimates for solid wall insulation are taken from the Government's Energy Efficiency Commitment (EEC) 1 and 2 reported activity rather than housing surveys.

Chart 2.4: Number of homes in Great Britain with cavity wall insulation and loft insulation by source, December 2014 (Thousands)



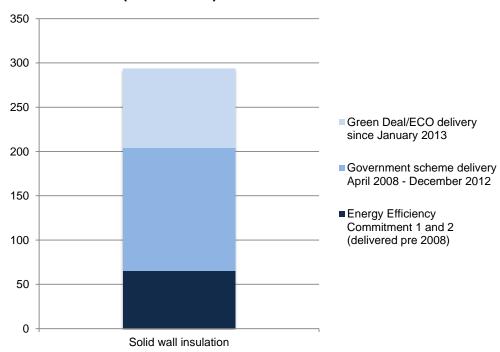
³³ Information is not available on the wall construction of new homes. Typically building regulations would be met by insulated cavity walls but other construction types could be used. In this publication it is assumed that all new builds since April 2008 have cavity wall insulation.

[†] The number of homes in Great Britain with cavity walls, lofts and solid walls respectively.

[‡] The solid wall insulation (SWI) percentage is calculated based on the number of homes with SWI delivered through Government schemes divided by the number of homes with non-cavity walls, this is likely to be an overestimate of the total number of properties with solid wall insulation as it may include a small number of hard to treat cavity wall properties.

^{..} not applicable.

Chart 2.5: Number of homes in Great Britain with solid wall insulation by source, December 2014 (Thousands)³⁴



Remaining potential

A key use of these estimates for DECC is to identify homes that have the potential to receive cavity wall, loft and solid wall insulation in the future. The section below outlines remaining potential figures as at the end of December 2014, for historical figures and a more detailed breakdown see Tables 2.3 to 2.7 in the <u>Excel tables</u> accompanying this publication.

Table 2.3 and Chart 2.6 give a summary of the remaining potential for insulating the housing stock in Great Britain.

Table 2.3: Remaining potential to insulate the housing stock in Great Britain, December 2014 (Thousands)

Insulation type	Insulated	Uncertainty*	Remaining potential**	Total properties
Cavity wall	14,080	480	4,820	19,390
insulation	73%	2%	25%	100%
Loft	16,660	110	7,140	23,910
insulation	70%	0.5%	30%	100%
Solid wall	294	126	7,570	7,990
insulation	4%	2%	95%	100%

^{*} Properties which may or may not be insulated.

** Not all remaining potential properties could be insulated and some which could be insulated would not be cost effective to insulate. This could be due to properties being hard to treat, having limited potential to save energy or being unfillable.

³⁴ Estimates of solid wall insulation are based only on delivery of solid wall insulation through Government schemes (including the Energy Efficiency Commitment).

Chart 2.6: Remaining potential to insulate the housing stock in Great Britain, December 2014

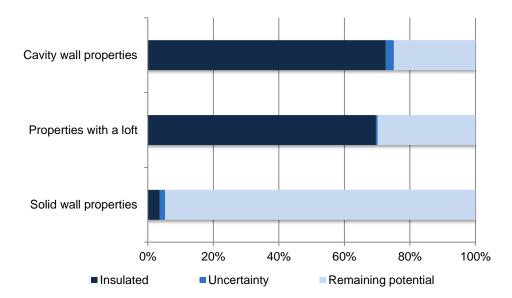


Table 2.3 and Chart 2.6 show that just over two thirds of properties with cavity walls (73 per cent) and properties with a loft (70 per cent) are insulated. In comparison only four per cent of properties with solid walls are insulated. The following section gives further information on the remaining potential to insulate the housing stock in Great Britain, by insulation type.

Cavity wall insulation

It is estimated that at the end of December 2014 there were 4.8 million cavity wall properties which could benefit from some cavity wall insulation (25 per cent of homes with cavity walls).

Of these, 1.4 million are considered to have limited potential³⁵ (0.5 million of this 1.4 million are also considered hard to treat³⁶) and 3.4 million are totally uninsulated (2.9 million of the 3.4 million uninsulated properties are considered hard to treat). There are therefore 0.5 million easy to treat, standard cavities remaining. Historical figures and a more detailed breakdown is available in Table 2.6 of the accompanying <u>Excel tables</u>.

Loft insulation

In this publication 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.

³⁵ Although these properties are not fully insulated it is likely that they already have a relatively good thermal performance which means savings from having cavity wall insulation installed would be lower than for older properties. Limited potential properties are those built between 1983 and 1995 for England and Wales, and between 1984 and 1991 for Scotland.

³⁶ Hard to treat cavities are ones that are more difficult or more expensive to fill than standard cavities. This can include 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 a report commissioned by DECC using the 2008 Housing Surveys (<a href="https://www.gov.uk/government/uploads/system/up

At the end of December 2014 it is estimated that there were 7.1 million uninsulated lofts (30 per cent of homes with lofts). Of these, 1.7 million are considered to be hard to treat or unfillable which means the loft would be hard/costly to insulate or could not be insulated – this can occur in properties with a flat roof or in properties where the roof has a very shallow pitch which makes the loft space inaccessible. Historical figures and a more detailed breakdown is available in Table 2.7 of the accompanying Excel tables.

Solid wall insulation

It is estimated that at the end of December 2014 there were 7.6 million uninsulated solid walls (95 per cent of homes with solid walls) in Great Britain. Previously, Government schemes have focused on insulating homes with cavity walls due to the costs involved with insulating solid wall properties; however the launch of the Green Deal and ECO in January 2013 has switched the focus to harder or more expensive to treat properties, including solid wall properties. Of the remaining potential it may not be possible to insulate all uninsulated solid wall properties, it is likely that some of these will be too costly to treat or be within conservation areas and will therefore never be insulated, work is planned to assess the extent of this issue. Historical figures and a more detailed breakdown is available in Table 2.5 of the accompanying Exceltables. Solid wall insulation has been defined throughout this report as internal or external wall insulation installed through Government programmes. In addition, in April 2008 about 133,000 properties are known to have had other forms of non-cavity wall insulation that fall outside this definition.

Annex A – Background

Green Deal

The <u>Green Deal</u> (GD) was launched on 28 January 2013 in England and Wales (and on 25 February in Scotland) with the aim of tackling a number of the key barriers to the take-up of energy efficiency measures.

Customers having Green Deal Assessments undertaken have the choice of how they proceed. They might take the view that their home is sufficiently energy efficient, or that they want to finance work through a Green Deal Plan or that they want to use alternative funding arrangements (e.g. use of savings).

The Green Deal process for households is briefly described below:

- **Step 1** Assessment A Green Deal assessor will come to the home, talk to the owner/occupier about their energy use and see if they can benefit from making energy efficiency improvements to their property.
- **Step 2** Recommendations The assessor will recommend improvements that are appropriate for the property and indicate whether they are expected to pay for themselves through reduced energy bills.
- **Step 3** Quotes Green Deal Providers will discuss with the owner/occupier whether a Green Deal Plan is right for them and quote for the recommended improvements, including the savings estimates, savings period, first year instalments and payment period for each improvement. A number of quotes can be obtained.
- **Step 4** Signing a Plan The customer chooses to proceed with a given provider and package of measures. The owner/occupier needs to obtain the necessary consent to make improvements to the property before they can agree terms with the GD Provider of a Green Deal Plan³⁷, at which stage they enter a cooling-off period³⁸.
- **Step 5** Installation Once a Green Deal Plan has been agreed, the Provider will arrange for the improvements to be made by a Green Deal Installer. Once the installation has been completed a letter is sent to the Bill Payer and, at this stage, the Green Deal Plan goes 'live'.

Repayments will be no more than what a typical household should save in energy costs.

³⁷ The Plan is a contract between the owner/occupier and the Provider – it sets out the work that will be done and the repayments.

³⁸ For example, in the case of a Green Deal Plan that is regulated by the Consumer Credit Act 1974, the consumer will have 14 days to withdraw from the part of the Green Deal Plan which provides credit.

Energy Company Obligation

The <u>Energy Company Obligation</u> (ECO) started on 1 January 2013 (although energy companies have been able to count against their targets measures delivered since 1 October 2012) and runs to 31 March 2015. It broadly takes over from two previous schemes (Carbon Emissions Reduction Target - CERT - and Community Energy Saving Programme - CESP) and focuses on providing energy efficiency measures to low income and vulnerable consumers and those living in 'hard-to-treat' properties.

There are three main ECO obligations – The Carbon Saving Obligation (CSO); Carbon Saving Communities (CSCO) and Affordable Warmth (HHCRO).

<u>Carbon Saving Obligation</u> - This covers the installation of measures like solid wall and hard-to-treat cavity wall insulation, which ordinarily can't be financed solely through the Green Deal.

<u>Carbon Saving Communities Obligation</u> - This provides insulation measures to households in specified areas of low income. It also makes sure that 15 per cent of each supplier's obligation is used to upgrade more hard-to-reach low-income households in rural areas.

<u>Affordable Warmth Obligation</u> - This provides heating and insulation measures to consumers living in private tenure properties who receive particular means-tested benefits. This obligation supports low-income consumers who are vulnerable to the impact of living in cold homes, including the elderly, disabled and families.

The Government announced proposals for a <u>set of changes to ECO</u> in March 2014. These include: extending through to 2017, with new targets; reducing the ambition of the Carbon Saving Target element; and allowing new measures (loft and standard cavity wall insulation, and district heating) to be eligible under that element. The Government published a consultation on <u>these proposals</u> in March 2014, and intends subject to consultation that revised regulations will come into force later this year, but with many changes taking effect as from 1 April 2014.

How do the Green Deal and ECO interact?

Following a GD Assessment there will be a range of measures which could improve the energy efficiency of the property. Some of these could be paid for through GD finance, up to the point where the expected annual cost will not exceed what a typical household should save in energy costs. However, depending on the measure or the property, other sources of finance may also be required. ECO funding could be one of these sources, for example for measures such as Solid Wall Insulation and hard-to-treat Cavity Wall insulation.

Using record level data matching we have estimated the number of households that have benefitted from energy efficiency installations through more than one delivery mechanism. Full details of this are available in the accompanying Methodology note.

Green Deal Cashback

The Cashback scheme closed at the end of June 2014. There will be no further applications for the Cashback scheme but vouchers will continued to be redeemed and paid until 30 September 2014. The Green Deal Cashback Scheme rewarded the first Green Deal customers. It was a first-come, first served offer where householders can claim cash back from Government on energy saving improvements like insulation, front doors, windows and boilers with packages worth over £1,000. It was available for households in England and Wales.

For more information on the separate scheme that operates in Scotland please see the relevant <u>website</u>.

Green Deal Home Improvement Fund

The Green Deal Home Improvement Fund (GDHIF) is an incentive scheme open to all householders in England and Wales wanting to improve the energy efficiency of their homes. The scheme allows householders to choose one or both of two offers available and they are eligible to claim up to £7,600. Householders could also claim a refund of up to £100 for a Green Deal Advice Report (GDAR). GDHIF release 1 closed to new applicants at 6:30pm on 24 July 2014. GDHIF release 2 commenced on 10 December 2014. For more information please see the GDHIF website. For more information on the separate scheme that operates in Scotland please see the relevant website. Statistics on this scheme can be found here.

DECC published GDHIF application data on the gov.uk <u>website</u> on a weekly basis until the scheme closed (for SWI applications), to assist businesses and households. This weekly series reported the number of applications, vouchers issued and maximum value of vouchers issued. This data was provided from the GDHIF administrator and was therefore provisional.

ECO delivery costs

ECO delivery costs are reported by obligated energy suppliers following each reporting month.

ECO delivery costs are defined as the cost of installing an ECO measure in a property. This includes the costs of technical monitoring, cost of assessment, costs involved with searching for ECO properties, installation costs and marketing costs by delivery partners involved with promoting the ECO obligations. Administrative costs are not included in delivery costs.

In addition, **administrative costs** are collected every quarter from suppliers and include: reporting and compliance, own marketing and direct administrative costs. Figures up to the end of December 2014 show aggregate expenditure of £169.45m. However, overall administrative costs reported are likely to be relatively small compared to delivery costs and, in addition, they may be front-loaded as suppliers will invest significantly in the development of IT / reporting systems to support delivery of the scheme. Suppliers make returns on administrative costs at the end of the month following each reporting quarter.

Full definitions on ECO costs are included here

ECO Brokerage

The <u>ECO Brokerage</u> system operates as a fortnightly anonymous auction where GD Providers can sell 'lots' of future measures of ECO Carbon Saving Obligation, ECO Carbon Saving Communities and ECO Affordable Warmth, to energy companies in return for ECO subsidy.

This market-based mechanism has been introduced to support an open and competitive market for the delivery of the ECO. Brokerage allows a range of Green Deal providers to fairly compete on price to attract ECO support and enables energy suppliers to deliver their obligations at the lowest possible cost, thereby reducing the impact on customer energy bills.

Sellers (GD Providers) can make a competitive offer on brokerage by leveraging additional sources of finance, such as part funding measures through Green Deal Finance, partnerships with local authorities, or driving down costs by economies of scale.

The Supply Chain

To understand more about the organisations and infrastructure underpinning the Green Deal, this report also includes a section summarising the trends in the number of Green Deal Advisors (and Assessor organisations), the number of Green Deal Providers and the number of Green Deal Installer organisations.

Pioneer Places

The Green Deal Pioneer Places Fund of £10m was allocated to Local Authorities and/or consortia of Local Authorities in England to demonstrate ambitious approaches to kick starting local Green Deal activity in both the domestic and non-domestic sectors. Activities that were supported by the DECC funding included:

- funding the Green Deal Assessment by Authorised Assessors;
- piloting local marketing approaches, including a street by street approach to roll out;
- establishing a network of local Green Deal show homes;
- · area wide events to publicise the Green Deal;
- working with local partners such as the local NHS to drive demand for the Green Deal;
- working with community and other civil society groups to deliver demand for the GD.

The accompanying <u>Methodology note</u> contains a table of the full list of lead Local Authorities and/or consortia of Local Authorities which form part of these projects

Core Cities

Eight cities across England received funding of £10.8m in total to trial early aspects of the Green Deal process and support them to help kick-start the Green Deal. The projects included retrofitting properties across whole communities.

The cities were:

- Birmingham
- Bristol
- Leeds
- Liverpool
- Manchester
- Newcastle
- Nottingham
- Sheffield

The projects provided feedback and data on the elements of the Green Deal framework such as assessment and installation.

The cities' projects also generated match funding. This work is supporting future Green Deal activity in these cities, including raised awareness of the Green Deal through community engagement and show homes, and a stimulus to local supply chains such as trained Green Deal advisors and registered installers.

Further information on Core Cities and Pioneer Place can be found at https://www.gov.uk/local-authorities-and-the-green-deal.

Annex B – Sources and Methodology

National Statistics

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the UK Statistics Authority: Code of Practice for Official Statistics. The Statistics Authority published its report on 12 June 2014:

http://www.statisticsauthority.gov.uk/assessment/assessment-reports/index.html

More information on the methodology is included <u>here</u>.

As with any new data collection, there are likely to be some data quality issues to resolve as the process beds in. Therefore data in the monthly Green Deal and Energy Company Obligation (ECO) releases should be treated as provisional and subject to revision.

Green Deal and ECO estimates

The estimates relating to the Green Deal and ECO in this and future Statistical Releases use administrative data generated as part of the Green Deal and ECO processes.

There are seven main sources of information:

- Landmark who manage the national lodgement of Green Deal Assessments in England and Wales
- Energy Savings Trust (EST) who manage the national lodgement of Green Deal Assessments in Scotland
- Green Deal Central Charge Database which manages the recording and administration of Green Deal Plans
- Ofgem who administer the Energy Company Obligation (ECO) and collect information from energy companies on measures installed under ECO.
- The Green Deal Oversight and Regulation Body (ORB) who administer the certification of GD organisations (including assessors, installers and providers)
- Data on ECO brokerage is publically available following each auction.
- Capita who administer the Green Deal Cashback Scheme and the <u>Green Deal Home</u> <u>Improvement Fund</u>

This report uses data from Landmark and the Energy Savings Trust for numbers of lodged Assessments and on measures installed using Green Deal finance, data from the Central Charge Database on Green Deal Plans, data from the Cashback Scheme Administrator on Cashback vouchers issued and measures installed, data from Ofgem on ECO measures, data from the ORB for the supply chain and the published data on ECO brokerage.

Property Characteristics

Information relating to the characteristics of properties getting GD Assessments is taken from the Energy Performance Certificate relating to the GD Assessment. Properties can be built in a large variety of configurations. A basic division is between free-standing or single-family houses and various types of attached or multi-user dwellings. Both sorts may vary greatly in scale and amount of accommodation provided. Many variations are purely matters of style rather than spatial arrangement or scale.

Energy Efficiency Rating

The Energy Efficiency Rating (EER) is presented in an A-G banding system for an Energy Performance Certificate, where Band A rating represents low energy costs (i.e. the most efficient band) and Band G rating represents high energy costs (the least efficient band).

The EER bands based on SAP³⁹ are:

- Band A (92 plus)
- Band B (81-91)
- Band C (69-90)
- Band D (55-68)
- Band E (39-54)
- Band F (21-38)
- Band G (1-20)

Insulation statistics

The following types of insulation which are included in the estimates of home insulation levels in Great Britain.

Cavity wall insulation

Many homes built in Great Britain have external walls made up of an inner and outer wall with a small cavity in between. These have been typical since the 1930s, but some older properties will also have them. Cavity walls were used initially because they were cheaper (as the inner leaf could use non-decorative brick) and had a greater resistance to moisture moving from outside to inside. The presence of a cavity also improves the thermal performance of the wall, especially if the cavity is insulated. Since the mid-1980s, homes have been increasingly built with pre-insulated cavity walls, though the type of blockwork used for the inner leaf has also contributed to the improved thermal performance required by Building Regulations.

Loft insulation

Some loft insulation has been installed in new homes since 1965. Current building regulations for new homes require a roof to have a thermal transmittance (U-value) of at least as low as 0.13 W/m².K, which would typically be achieved with 300mm of loft insulation. There is a strong 'diminishing returns' effect with savings from increasing the depth of loft insulation, so the first inch gives about half the savings from full insulation. Therefore, a threshold of 125mm is used in these statistics since homes with less than this would expect to see significant improvements in energy efficiency from a top-up.

Solid wall insulation

It is possible to improve the thermal performance of solid walls by adding insulation either internally or externally. There is a wide variety of technical solutions that can be used to

³⁹ Information on the Standard Assessment Procedure can be found here https://www.gov.uk/standard-assessment-procedure

insulate either the internal or external face of the wall. Current building regulations require a target U-value of 0.35 W/m².K to be reached if this modification to the wall is made. It is likely that installations of solid wall insulation before 2002 (i.e. before the first phase of the Energy Efficiency Commitment) may not achieve this level of thermal performance, so these are recorded separately in the statistics.

A methodology note setting out how estimates of home insulation levels in Great Britain are produced is available at: https://www.gov.uk/government/publications/domestic-green-deal-and-eco-statistics-methodology-note

Revisions

On occasions, previously published data will need to be revised due to changes to source data, methodology or correcting of errors. Provisional data will be marked with a "p" in the tables and revisions will be denoted with "r" in the data tables. Explanation will be provided for any significant revisions.

Further Information and Feedback

Any enquiries or comments in relation to this statistical release should be sent to DECC Statisticians at the following email address: EnergyEfficiency.Stats@decc.gsi.gov.uk

Contact telephone: 0300 068 5106

The statistician responsible for this publication is Peter Antoniades.

Further information on energy statistics is available at https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics

Next Release

The next quarterly publication is planned for publication at 9.30am on **18 June 2015** and will contain more detailed information on activity up to the end of March 2015. Subject to data quality checks the next quarterly publication will include interim information on the Green Deal Communities projects.

Annex C - Household Energy Efficiency schemes

It is intended to gradually widen the scope of this quarterly release to provide more detail on other domestic energy efficiency schemes. This section of the report presents activity levels on ECO, Cashback, Green Deal Plans and Green Deal Home Improvement Fund (GDHIF) between January 2013 and December 2014 (as reported in the monthly National Statistics release published on 19 February 2015) alongside figures on Feed-In Tariffs installations, Renewable Heat Premium Payment voucher redemptions, and on Smart Electricity and Gas Meter installations that have been previously published in their own statistical releases.

ECO, Cashback, Green Deal Plans and Green Deal Home Improvement Fund

Provisional figures show that around 1,059,800 households benefitted from ECO between January 2013 and December 2014. Around 14,700 households installed measures and received money from the Cashback scheme, around 4,700 households had funded measures through Green Deal finance Plans, and 12,900 households had funded measures through Green Deal Home Improvement Fund. There is a small amount of double counting between these mechanisms (around 6,000 households), See Table 1a of the February monthly statistics release

For more information on the policy background behind these schemes, please see Annex B.

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 63 per cent of the total capacity installed under FiTs. The majority of the domestic schemes are solar PV (99 per cent).

Between January 2013 and the end of December 2014 197,327 domestic installations were confirmed onto the Central FiT Register. The total number of domestic installations confirmed onto the FiT scheme by the end of December 2014 was 542,936.

Renewable Heat Premium Payment

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 encompasses 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.

Householders' scheme

The RHPP scheme distributed vouchers as a one off grant to eligible applicants installing renewable heating systems to offset some of the cost of installation. The technologies supported were: ground and water source heat pumps, air-to-water heat pumps, solid biomass boilers and solar thermal systems. There were three phases, run over three financial years; Phase 1 ran from the 1 August 2011 to the 31 March 2012, Phase 2 opened on the 1 May 2012 and closed on the 31 March 2013 and Phase 2 Extension opened on the 1 April 2013 and officially closed on the 31 March 2014. The RHPP scheme was succeeded by the domestic RHI scheme which launched on 9 April 2014. Information on homes benefiting from the domestic RHI are included below for the first time.

Between January 2013 and September 2014 (end of scheme), 8,991 vouchers were redeemed under phase 2 or phase 2 extension.

A total of 15,364 vouchers had been redeemed under all phases of the Renewable Heat Premium Payment voucher schemes – 5,230 under Phase 1, 5,315 under Phase 2, and a further 4,819 under Phase 2 Extension.

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

The social landlord competitions were designed to accelerate the deployment of renewable heating technologies in the social housing sector. Registered Providers of social housing were invited to bid for grants to support projects installing eligible renewable heating systems.

Since August 2011, seven social landlord competitions have been run, of which five have concluded with 3,763 renewable heating systems being installed in tenants' homes via £10 million in grants to social landlords across Great Britain.

Communities scheme

DECC launched the Renewable Heat Premium Payments Communities Scheme on 24 July 2012. The scheme was a funding mechanism to assist communities in England, Wales and Scotland to support domestic renewable heat installations in privately owned homes.

Twenty eight community groups, representing 31 projects, received £910,809 in grant funding towards the cost of installing the renewable technology. From this, 365 renewable heating technologies were installed.

Domestic RHI

The domestic Renewable Heat Incentive (RHI) is a financial incentive scheme introduced to encourage a switch to renewable heating systems in the domestic sector. Launched on the 9 April 2014 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 dwelling. The scheme covers single domestic dwellings 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 2014, 4,991 systems that had been installed after the launch of the domestic RHI scheme on 9 April 2014 had been accredited to the scheme.

Smart Meters

The rollout of smart meters⁴⁰ is one of the largest and most complex engineering infrastructure Programmes within the EU. The strategic aim of the programme within Great Britain is to rollout over 50 million smart electricity and gas meters to all domestic households by 2020. This will impact approximately 30 million properties.

Smart meters are the next generation of electricity and gas meters and offer a range of intelligent functions. Consumers will have near real time information on their energy consumption to help them control and manage their energy use, save money and reduce emissions. Smart meters will also provide consumers with more accurate information and bring an end to estimated billing.

The Smart Metering Programme is currently in Foundation Stage, which began in March 2011. The Government is working with the energy industry, consumer groups and other stakeholders to put commercial and regulatory frameworks in place to support smart metering, trial and test systems, learn lessons from early installations and enhance the consumer experience. Most householders will then have smart meters installed by their energy company in the period between 2016 and 2020 during the Main Installation Stage. Further information can be found on the gov.uk website.

As of 31 December 2014, 764,806 electricity and gas Smart Meters have been installed in homes across Great Britain.

⁴⁰ The definition of a 'Smart Meter' is an electricity or gas meter that is compliant with the Smart Meter Equipment Technical Specification (SMETS) and has functionality such as being able to transmit meter readings to suppliers and receive data remotely. Suppliers currently report both the number of SMETS compliant meters they have installed and those they expect to upgrade to become SMETS compliant. Some smart meters currently installed will need to receive updates, which are expected to be delivered remotely, before they are fully SMETS compliant.

Table C1: Provisional number of individual households that have had measures installed through ECO, Cashback, using Green Deal Finance, GDHIF, benefitting from Feed-in Tariffs, Renewable Heat Premium Payment, Domestic Renewable Heat Incentive, by quarter of installation, from January 2013 to December 2014

	Delivery mechanism						
Installation quarter ¹	ECO ²	Cashback Scheme ³	Green Deal Plans	Green Deal Home Improvement Fund ⁴	Feed in Tariffs ⁵	Renewable Heat Premium Payment ⁶	Domestic Renewable Heat Incentive ⁷
January - March 2013	48,953	228	0	0	20,403	958	N/A
April - June 2013	87,519	3,554	0	0	18,224	3,353	N/A
July - September 2013	130,595	3,225	57	0	24,874	338	N/A
October - December 2013	176,889	1,958	569	0	23,100	333	N/A
January - March 2014	201,575	2,042	369	0	21,928	1,178	N/A
April - June 2014	136,097	3,520	592	712	29,127	2,825	324
July – September 2014	136,338	216	994	8,228	28,297	6	1,369
October - December 2014	141,866	0	2,140	3,970	31,374	0	3,298
Total from January 2013 to December 2014 ⁸	1,059,832	14,743	4,721	12,910	197,327	8,991	4,991

¹ Measures installed in earlier installation months can be notified at a later date under some circumstances; some ECO installations prior to January 2013 are included in the January - March 2013 period.

https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics .

² Where a household has measures installed in two or more months, the earliest installation month is recorded. Following improved de-duplication processes the number of unique properties in receipt of ECO has been revised in all quarters compared to previous statistics published in earlier monthly statistical releases.

³ Cashback figures do not include any households that have had measures installed solely through the Cashback Exception Process.

⁴Where a household has measures installed in two or more months, the earliest installation month is recorded. This is lower than the number of vouchers issued as it is possible for there to be more than one GDHIF voucher paid per household.

⁵ Feed in Tariff installations classified as domestic on the Central FiT Register and based on their 'date of confirmation'. Further information can be found at:

⁶ Whilst the Renewable Heat Premium Payment consisted of 3 schemes, these quarterly installation figures relate to the redemption of vouchers for Phase 2 and Phase 2 extension only. Further information can be found at: https://www.gov.uk/government/collections/renewable-heat-incentive-renewable-heat-premium-payment-statistics.

⁷ These data refer to systems installed after the launch of the domestic RHI scheme on 9 April 2014 which gained accreditation to the scheme. The number of accredited applications in previous quarters has reduced slightly. This is due to participants leaving the scheme or submitting amended applications which make their previous application redundant. Slight reductions to accreditation numbers in previous quarters will occur each time the table is updated as a result of the above.

⁸ Some households may have had installations through more than one delivery mechanism and there is therefore likely to be some double counting. We aim to evaluate this through future analytical work. In addition to this, as of 31 December 2014, 764,806 electricity and gas Smart Meters have been installed in homes across Great Britain.

