



Department  
of Energy &  
Climate Change

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

Statistical release: Experimental statistics

23 September 2014

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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-eco-statistics>

# Executive summary

This is the sixth detailed Green Deal (GD) and Energy Company Obligation (ECO) statistical release. [Section 1](#) provides a range of further analysis and geographical breakdowns showing the latest picture of GD Assessments, GD Plans, Cashback, ECO and Supply Chain activity for the period January 2013 to June 2014 and estimates of the carbon and energy savings achieved through measures installed.

The most up to date information on the GD (including Green Deal Home Improvement Fund) and ECO can be found in the monthly statistical releases – available [here](#). Details of methods, quality assurance and use of this data can be found in the [Methodology note](#).

[Section 2](#) provides estimates of home insulation levels in Great Britain. These estimates will continue to be produced on the same basis as previous releases on a quarterly basis. DECC set out in its Departmental Business Plan 2011-15<sup>1</sup> that these data for cavity wall and loft insulations would be used as one of the department's key impact indicators.

All of these estimates are released as Experimental Statistics; these have undergone an assessment by the UK Statistics Authority (UKSA) resulting in some requirements which have been addressed in the methodology note, in order for these statistics to be awarded National Statistics accreditation.

This release also includes a section that starts to bring together activity from GD and ECO and other household energy schemes (Feed-In Tariffs, Renewable Heat Premium Payment and Domestic Renewable Heat Incentive) between January 2013 and June 2014 (see [Annex C](#)). This is a first step in developing this quarterly report to provide a fuller analysis of the reach and impact of household sector programmes to complement the headline reporting of these programmes. The headline reporting of programmes will continue and will cover both domestic and non-domestic as appropriate.

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<sup>1</sup> <https://www.gov.uk/government/publications/decc-business-plan-quarterly-data-summary-indicators-and-other-data-sets>

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# Key points

## Green Deal, ECO and Cashback: January 2013 to June 2014

A provisional 910,000 measures were installed in around 754,000 properties through ECO, Cashback, Green Deal and the Green Deal Home Improvement Fund to the end of June 2014<sup>2</sup>.

Of the 263,068 Green Deal Assessments in Great Britain:

- The majority (87 per cent) of properties getting a GD Assessment had an energy efficiency band rating of D or lower. This compares to 82 per cent of the overall domestic building stock in England.
- There were 777,142 improvements recommended in Green Deal Assessments (around three improvements per assessment). The most common measure recommended was to install loft insulation. This accounted for 14 per cent of all measures and was recommended in 43 per cent of all GD assessments.
- Around three quarters of GD Assessments were in owner-occupied properties (196,079), 13 per cent in the private rented sector and 12 per cent are in the social rented sector.

Of the 1,587 'live' Green Deal Plans with measures installed in Great Britain, the majority (72 per cent) of these were for properties in Scotland (1,140 Plans).

A provisional 891,669 measures had been installed under ECO:

- Around one fifth (19 per cent) of ECO measures were in the North West (173,326), the highest in any region. 11 per cent of ECO measures were installed in Scotland (102,094) and six per cent were in Wales (52,252).
- In Great Britain, on average, there were around 35 ECO measures installed per 1,000 households, i.e. over three 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 58 and 57 ECO measures per 1,000 households respectively. In Scotland there were around 43 ECO measures per 1,000 households and 40 per 1,000 households in Wales.

Carbon and energy saving

- The provisional estimated lifetime carbon savings of measures installed under ECO (excluding Affordable Warmth), Cashback and Green Deal was between 9.96 – 10.17 MtCO<sub>2</sub> with provisional estimated lifetime energy savings between 44,683 – 45,651 GWh.

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<sup>2</sup> Source: Green Deal and Energy Company Obligation (ECO): monthly statistics (August 2014): <https://www.gov.uk/government/statistics/green-deal-and-energy-company-obligation-eco-monthly-statistics-august-2014>

## [Home insulation levels: June 2014](#)

It is estimated that at the end of June 2014:

- There were 27.3 million homes in Great Britain. Of these 19.3 million had cavity walls with the remaining 8.0 million having solid walls. 23.8 million properties had a loft.
- Compared with June 2013, 230,000 more properties had loft insulation of at least 125mm, 410,000 more had cavity wall insulation and 56,000 more had solid wall insulation.
- 16.4 million homes had loft insulation of at least 125mm (69 per cent of homes with lofts). Of the 7.3 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.
- 13.8 million homes had cavity wall insulation (72 per cent of homes with cavity walls). Of the 5.0 million homes without cavity wall insulation, most are hard to treat, with only 0.7 million of them being uninsulated easy to treat standard cavities.
- 265,000 homes had solid wall insulation (3 per cent of homes with solid walls).

## [Household Energy schemes](#)

Between January 2013 and June 2014, measures were installed through ECO in 739,000 properties, following the redemption of Cashback vouchers in 13,600 properties and through Green Deal finance in 1,600 properties. Broadening this to other household energy efficiency schemes, 138,000 properties benefitted from Feed-in Tariffs installations, 9,000 properties benefitted from a Renewable Heat Premium Payment, and 340 properties benefitted from domestic Renewable Heat Incentive. In addition to this, 491,852 electricity and gas Smart Meters have been installed in domestic properties during the foundation stage of the roll-out programme.

In aggregate this is around 900,000 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 are part of more than one scheme. We will continue to work to understand the overlap. Our first step in understanding the overlap will be to look at ECO, FiTs, GD 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 of the report 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 report also provides geographic breakdowns on measures installed through Cashback and ECO as well as estimates of the carbon savings achieved through these measures.

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 30<sup>th</sup> June 2014

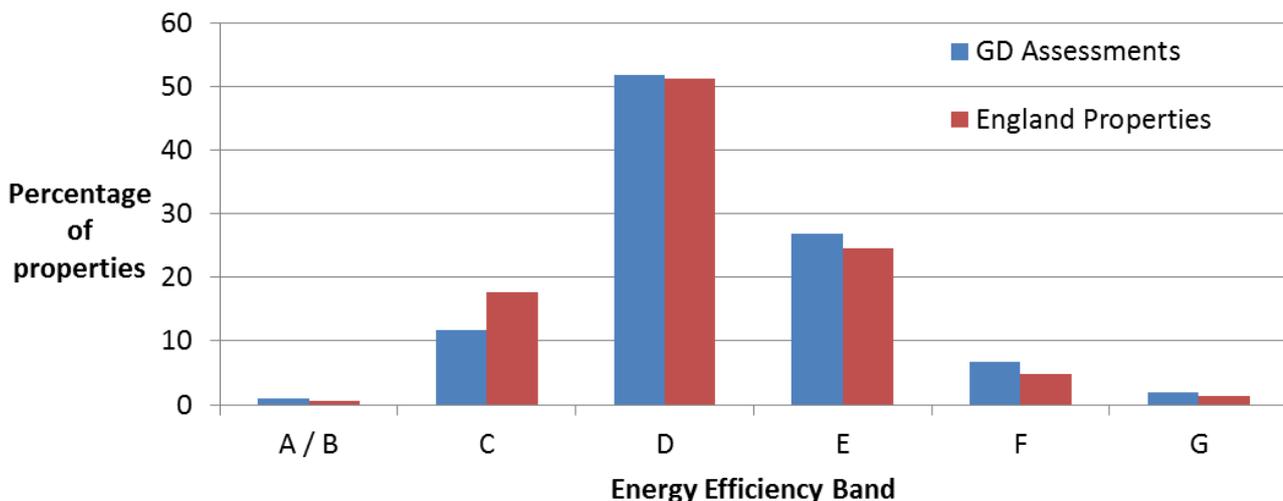
The first step in the Green Deal process involves a Green Deal Assessor coming to the home, talking to the owner/occupier about their energy use and seeing if they can benefit from making energy efficiency improvements to their property. This leads to a Green Deal Advice Report being produced for the 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 (87 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 from energy efficiency measures. This compares to 82 per cent of the overall domestic building stock in England reported in the English Housing Survey<sup>3</sup>. (Chart 1.1)

Chart 1.1 - Percentage of Green Deal Assessments lodged, up to 30<sup>th</sup> June 2014, by Energy Efficiency Band compared with Energy Efficiency Band ratings of all England properties in 2012

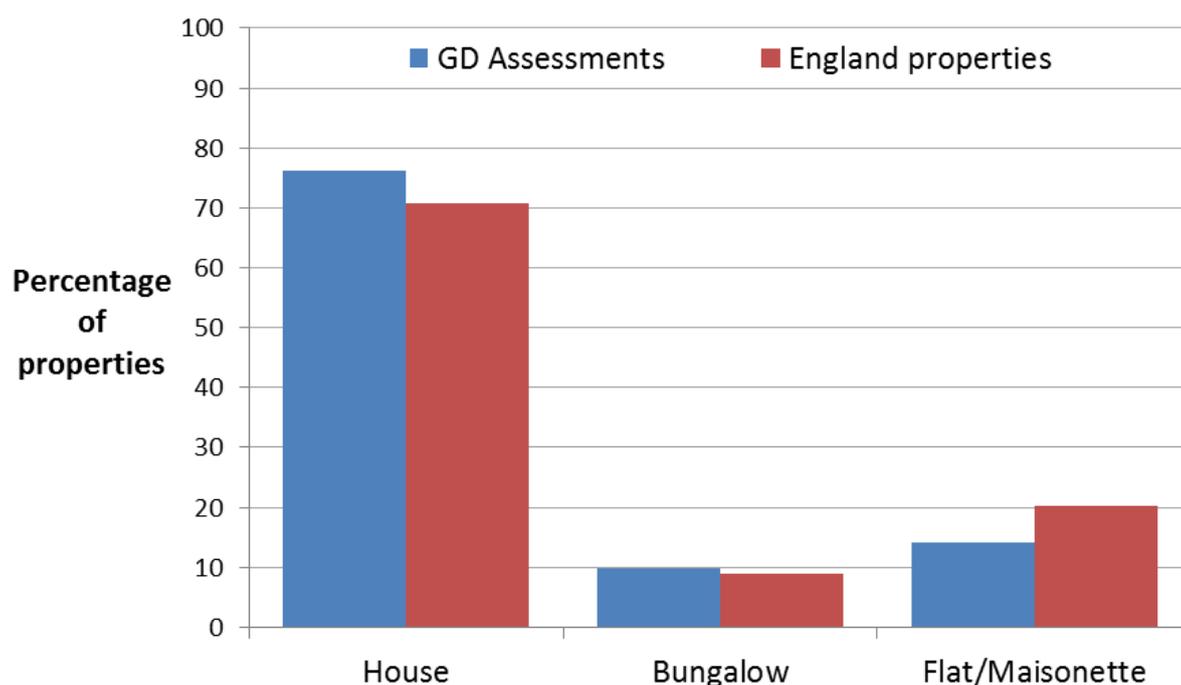


<sup>3</sup> DCLG, English Housing Survey, Headline Report 2012-13, Annex Table 20, Energy Efficiency rating bands, 2012, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/284648/English\\_Housing\\_Survey\\_Headline\\_Report\\_2012-13.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284648/English_Housing_Survey_Headline_Report_2012-13.pdf)

### Property Type (Table 1.2, Chart 1.2)

Chart 1.2 shows that 76 per cent of GD Assessments were in houses (200,194), 12 per cent were in flats (32,143), 10 per cent were in bungalows (25,797) and two per cent were in maisonettes (4,934). The housing stock in England<sup>4</sup> (as reported in the English Housing Survey 2012-13<sup>5</sup>) shows that 71 per cent of property types were houses, 20 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 and Wales properties by property type, up to 30<sup>th</sup> June 2014



### Tenure (Table 1.3, Chart 1.3)

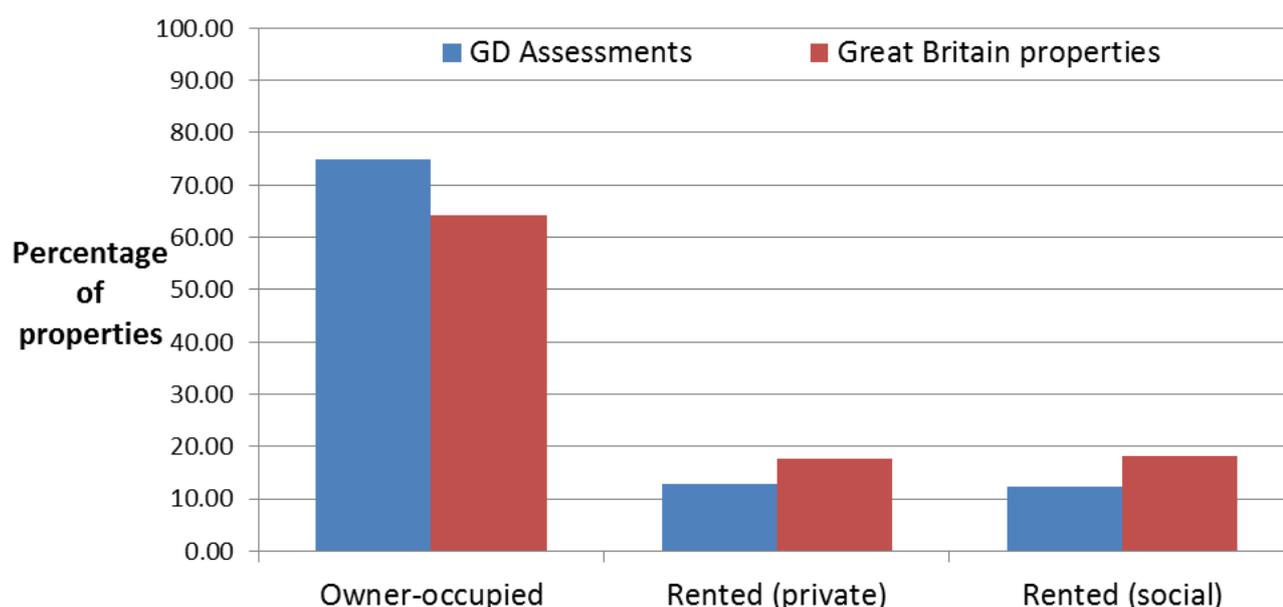
Around three quarters of GD Assessments were in owner-occupied properties (196,079), 13 per cent were in the private rented sector (33,662) and 12 per cent were in the social rented sector (32,014). In comparison, according to dwelling stock figures released by Department for Communities and Local Government<sup>6</sup> 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.

<sup>4</sup> The equivalent split is not available for Welsh properties, which make up around 6 per cent of the housing stock in England and Wales.

<sup>5</sup> DCLG, English Housing Survey (EHS), Headline Report 2012-13, Table 11, Stock Profile, 2012, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/284648/English\\_Housing\\_Survey\\_Headline\\_Report\\_2012-13.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284648/English_Housing_Survey_Headline_Report_2012-13.pdf)

<sup>6</sup> 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 30<sup>th</sup> June 2014



#### On or off the Mains Gas Grid (Table 1.4)

In 2012, it was estimated 2.8 million households do not have mains-gas supply in Great Britain<sup>7</sup>. This is around 11 per cent of all properties in Great Britain, which is similar (albeit lower) to the 14 per cent of properties which had a GD assessment and were off the mains-gas grid.

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

There were 777,142 improvements recommended in Green Deal Advice Reports, so on average there were around three recommended measures per GD Assessment. In 37 per cent of Assessments (96,230) only one measure was recommended (Table 1.5b).

The most common measure recommended was to install loft insulation. This accounted for 14 per cent of all recorded measures and was recommended in around 43 per cent of all GD assessments (Table 1.5a).

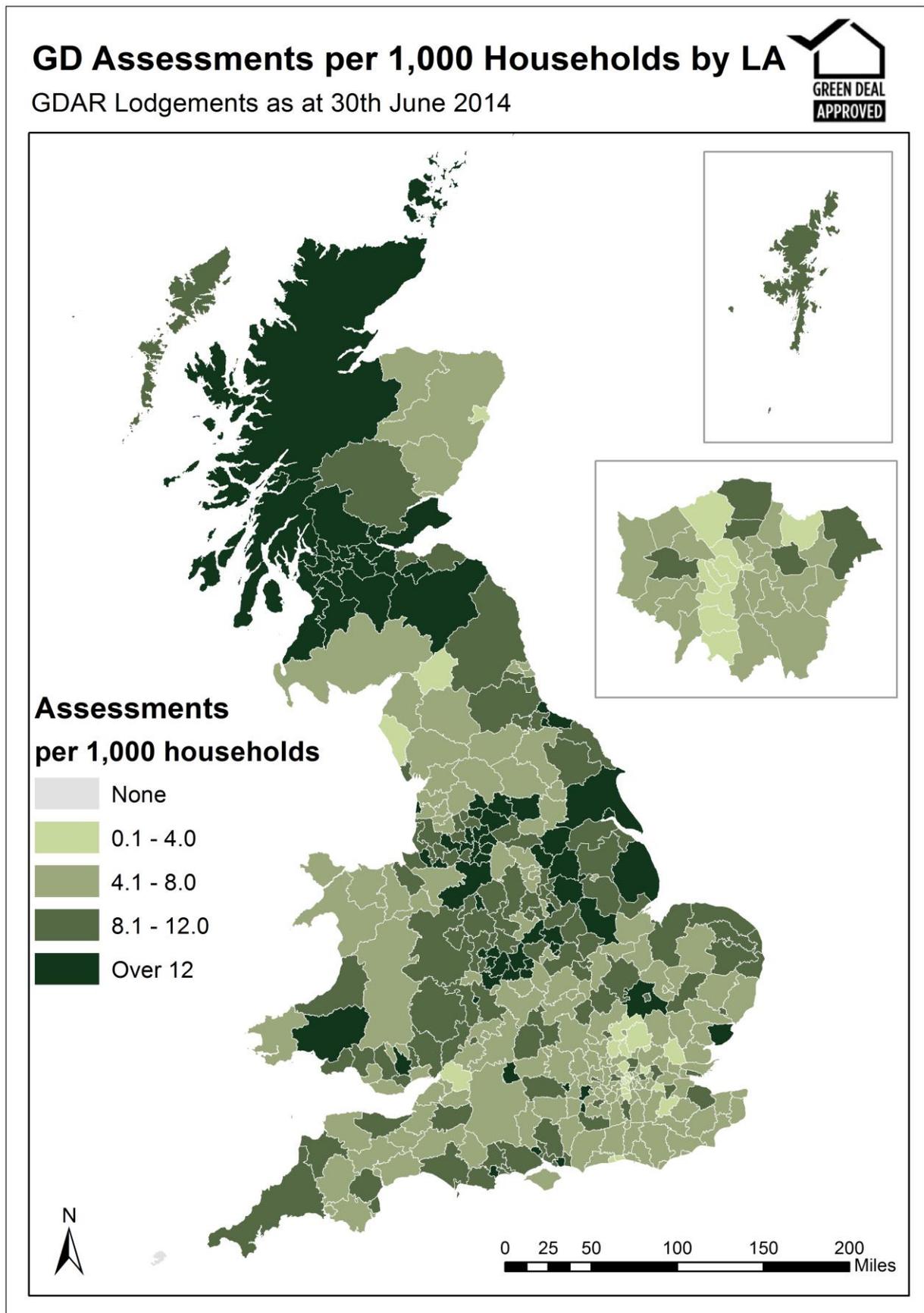
#### Geographic location (Tables 1.6, 1.6a, 1.6b, Map 1.1)

GD Assessments have been taking place in properties throughout Great Britain with 263,068 GD Assessments lodged in total up to 30<sup>th</sup> June 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 10.2 Green Deal Assessments per 1,000 households in Great Britain. Scotland had the highest number of Green Deal Assessments per 1,000 households with 17. Wales had nine Green Deal Assessments per 1,000 households (Map 1.1).

<sup>7</sup> DECC, Sub-national estimates of households not connected to the gas network, 2012  
<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 30<sup>th</sup> June 2014



Within England, the Local Authorities that had more than 25 assessments per 1,000 households were Newark and Sherwood, and Portsmouth Unitary Authority and in Scotland, East Ayrshire, Fife, Midlothian, South Lanarkshire, Renfrewshire and North Lanarkshire. Only one Local Authority that had more than 50 assessments per 1,000 households and that was Clackmannanshire in Scotland.

### **Green Deal Plans, up to 30<sup>th</sup> June 2014**

Of the 1,587 Green Deal Plans which were 'live' up to 30<sup>th</sup> June 2014 (i.e. measures were installed and billing had commenced), 72 per cent of Green Deal Plans with measures installed were for properties in Scotland, 26 per cent were for properties in England and two per cent were for properties in Wales (see Table 1.7).

### **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. Among a range of outcomes from these projects was funding for GD Assessments.

Estimates based on data returns submitted to DECC by 11<sup>th</sup> 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 263,068 Green Deal Assessments as reported above.

### **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 conducting energy efficiency assessments as well as retrofitting properties across whole communities.

Estimates based on data returns submitted to DECC by 11<sup>th</sup> 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 3,919<sup>8</sup>. 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 mechanisms (particularly with ECO). As with Pioneer Places, these figures were first published in March 2014.

### **Cashback measures installed, up to 30<sup>th</sup> June 2014**

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. For more information please see the Cashback website. The Cashback scheme closed at the end of June 2014. There will be no further applications for the Cashback scheme

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<sup>8</sup> This includes a number of measures which were also reported as ECO measures.

but vouchers will continued to be redeemed and paid until 30 September 2014. There were 13,598 properties<sup>9</sup> where measures had been installed following payment from the Cashback scheme up to 30<sup>th</sup> June 2014.

#### Geographic location of properties where measures were installed following Cashback payment, up to 30<sup>th</sup> June 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 30<sup>th</sup> June 2014. Tables 1.10a and 1.10b present these breakdowns of Cashback properties by LA and Parliamentary Constituency in England and Wales up to 30<sup>th</sup> June 2014<sup>10</sup>.

There were 5.8 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 9.8 (accounting for 22 per cent of all cashback vouchers paid, see Table 1.10). There were 4.4 Cashback payments per 10,000 households in Wales.

#### **Measures installed under ECO, up to 30<sup>th</sup> June 2014**

The [Energy Company Obligation](#) (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.

#### Geographic location of provisional measures installed under ECO, up to 30<sup>th</sup> June 2014 (Tables 1.11, 1.11a and 1.11b, Map 1.2)

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 30<sup>th</sup> June 2014.

Around a fifth (19 per cent) of ECO measures were in the North West (173,326), the highest in any region. 11 per cent of ECO measures were installed in Scotland (102,094) and six per cent were in Wales (52,252).

When comparing areas, it is more representative to use the number of ECO measures per 1,000 households. In Great Britain, on average, there were around 35 ECO measures installed per 1,000 households or, in other words, over three 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 58 and 57 ECO measures per 1,000 households respectively. In Scotland there were around 43 ECO measures per 1,000 households and 40 per 1,000 households in Wales. Blackpool had the highest proportion of ECO measures in any Local Authority area in Great Britain, with nearly 140 ECO measures per 1,000 households.

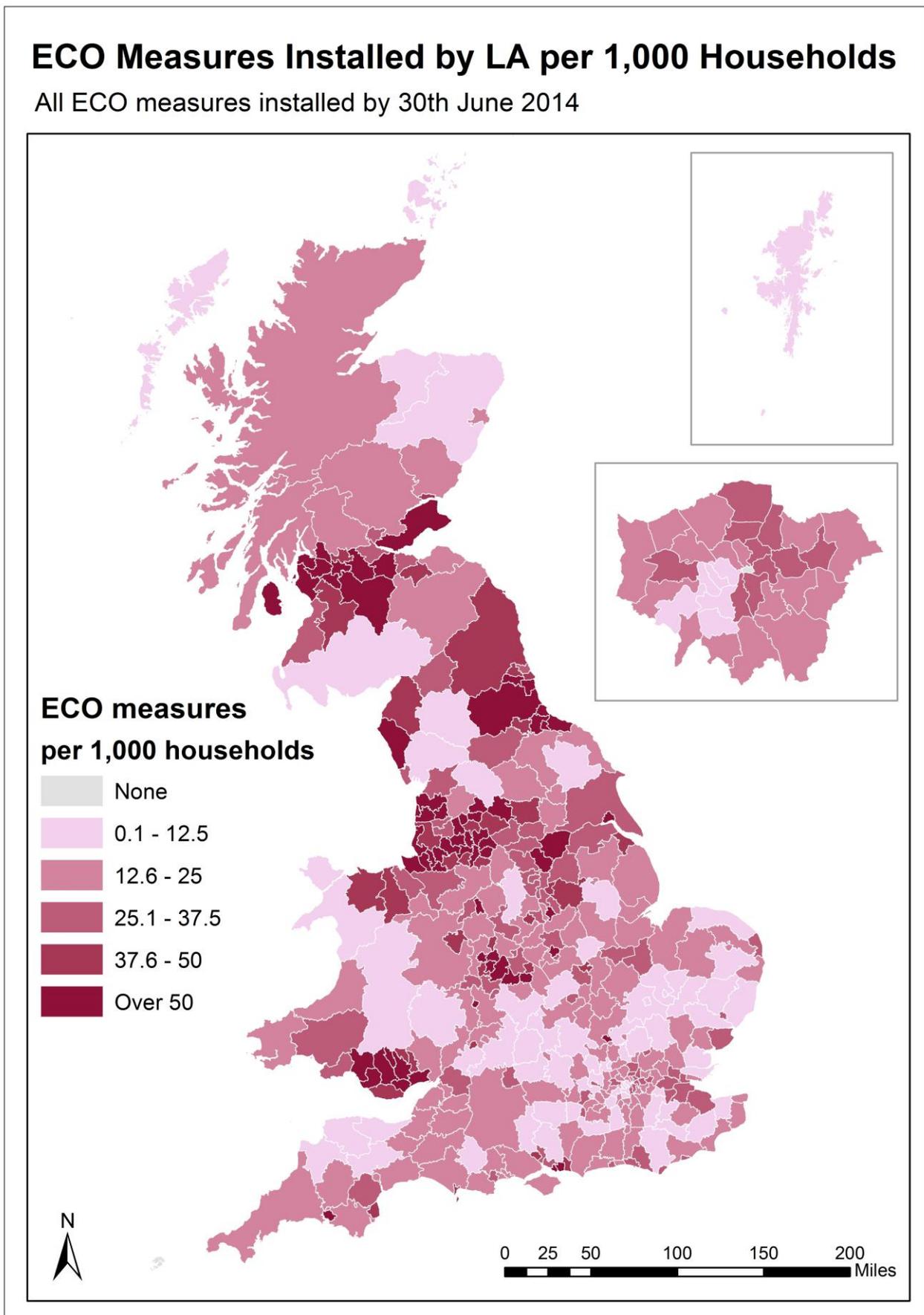
Map 1.2 shows the provisional number of ECO measures installed by Local Authority per 1,000 households. This shows the concentration of ECO measures in the North West and North East of England as well as South Wales and parts of Scotland.

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<sup>9</sup> This includes a small number of properties where the Cashback payment was made in July 2014 but the measures were installed before the end of June 2014.

<sup>10</sup> 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](#)).

Map 1.2 – Provisional number of ECO measures installed by Local Authority per 1,000 households



Up to 30<sup>th</sup> June 2014, 738,729 unique properties<sup>11</sup> had benefitted from having at least one ECO measure installed (Table 1.11). By ECO obligation, 311,246 unique properties had Carbon Savings Target measures installed, 290,089 properties had Affordable Warmth (HHCRO) measures installed, and 147,647 properties had Carbon Saving Community measures installed.

Further breakdowns of provisional measures installed under ECO, up to 30<sup>th</sup> June 2014 (Tables 1.12, 1.12a, 1.12b, 1.12c and 1.12d)

Tables 1.12 to 1.12d present further analysis of provisional measures installed under ECO up to 30<sup>th</sup> June 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 84 per cent of Carbon Saving Target measures were installed in gas-fuelled properties, compared to 92 per cent of all ECO measures and 84 per cent of all households in England<sup>12</sup>. This suggests that a higher proportion of measures installed under ECO were in gas-fuelled properties that would be expected from the housing stock.

The large majority of ECO measures (76 per cent) were installed in houses, with 19 per cent installed in flats and the remainder in bungalows and maisonettes. However, this varies by obligation, with a greater proportion of Carbon Saving Target measures installed in flats (33 per cent), compared with Carbon Saving Communities measures (14 per cent of all measures) and Affordable Warmth measures (five per cent of all measures). There were 87,055 ECO measures installed between April and June 2014 (see [Table C1](#)).

## ECO costs

DECC receives monthly summary information from the seven obligated energy suppliers on their costs associated with delivering ECO. It is important to note that these figures relate to all costs as reported by suppliers as at the end of June 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 June 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. Projected annual costs are based on scaling information (associated with the ECO targets currently in legislation) from the first 18 months of the scheme and then scaled for the remaining nine months up to the end of March 2015. These costs are only indicative of the amount energy suppliers could pass through to customers on their bills to fund their compliance with their share of the obligation. These figures suggest that, if suppliers pass through the reported costs incurred in the year they are reported, then customers currently pay an average of around £55 per annum to fund ECO (this is an illustrative amount which is calculated by dividing the total costs by the 26 million account holders). Projected costs are slightly higher than the central scenario in the 2012 [DECC Impact Assessment](#) for ECO but within DECC's estimates of the costs of delivering previous obligations.

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

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<sup>11</sup> The number of unique properties by ECO obligation does not tally to the total number of unique properties (738,729) as a property can have a number of different measures installed under different ECO obligations.

<sup>12</sup> Table 23, Fuel poverty statistics 2012, <https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2012>

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 are due to be legislated later this year, but with the change of allowing additional measures under CERO having retrospective effect from 1 April 2014.

The Government published its latest assessment of the potential costs to suppliers of delivering the revised ECO targets in the 22 July 2014 [DECC Impact Assessment](#). This assessment reflected the whole package of changes, including the retrospective change of allowing companies to deliver cheaper measures from 1 April 2014. It also reflected updated assumptions on the likely carry-forward to ECO from previous obligation schemes, the estimated impact of the new levelisation mechanism (which would provide uplift to CERO carbon scoring) and an assumption that the obligated companies would bring forward some of their 2017 target delivery to the period to 31 March 2015. The total ECO cost estimates in table 1.13, however, are based on the companies' reported costs and will not reflect all the forthcoming changes to ECO. In particular, they do not include the costs of delivering the additional, likely cheaper, measures companies can deliver retrospectively under CERO (these "interim measures" cannot be verified by Ofgem until the legislation is in force). Further, the scaled up costs reflect the 31 March 2015 target ambition currently in legislation and not, like the 22 July IA, the Department's estimates of the actual ambition the companies might deliver to March 2015. Therefore, assuming that the average/highest/lowest prices to date continue to be paid throughout the obligation period, shown in table 1.13, is unlikely to be an accurate projection of future costs. The projected costs based on reported costs will be revised once the new ECO legislation is in place and these measures can be notified to Ofgem.

Table 1.13a shows the average price by obligation and the highest and lowest prices reported by suppliers for each obligation as at the end of June 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. If the highest prices for each ECO obligation are scaled, and suppliers were to deliver their currently legislated ECO targets to 31 March 2015, the overall scheme would cost around £1.6bn per year. Scaling up the lowest prices would bring the overall scheme in at around £1.3bn per year, and the average prices resulting in around £1.5bn per year. This includes cost revisions submitted from some energy companies as previously reported.

## ECO Brokerage

The [ECO Brokerage](#) 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 June 2014 (Table 1.14)

Table 1.14 presents the clearing prices of all lots sold through ECO brokerage from all 37 auctions taking place up to the end of June 2014, with a total value of contracts let worth £402 million. Auctions 25, 32, 33, 34, and 36 saw no contracts let. The levels of brokerage activity in recent months are likely to have been affected by uncertainty around the period, following the announced proposals for a [set of changes to ECO](#). 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 Cashback and ECO, up to 30<sup>th</sup> June 2014

The [Final Stage Impact Assessment](#) 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 Cashback and ECO, up to 30<sup>th</sup> June 2014 (Table 1.15)

Table 1.15 presents the estimated impact of measures installed through Cashback, Green Deal Plans or under ECO (through the Carbon Saving Obligation and Carbon Saving Communities Obligation) up to the end of June 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-weighting 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 9.96 – 10.17 MtCO<sub>2</sub> with provisional estimated lifetime energy savings in the range 44,683 – 45,651 GWh.

For Green Deal Plan 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 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.

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 the Energy Company Obligation, 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

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 finance<sup>13</sup>. 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 [Methodology note](#). 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 28<sup>th</sup> July 2014 (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 organisations<sup>14</sup> (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 [ORB website](#). There is also information available on [contacts in local areas](#).

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 within<sup>15</sup>. These figures are based on information submitted<sup>16</sup> to the ORB consumer search tool by a number of these participating organisations and indicate a good coverage across Great Britain.

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<sup>13</sup> This is based on findings from [Waves 2 and 3 of the Assessments research](#) and therefore only representative of GD assessments and measures installed up to the end of September 2013.

<sup>14</sup> Individual Installers within an installer organisation do not need to register.

<sup>15</sup> Businesses are flexible and may travel further to other areas as the market develops.

<sup>16</sup> 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

**Table 1.1: Number of Green Deal Assessments by Energy Efficiency Band, up to 30th June 2014, Great Britain**

Energy Efficiency Band	Green Deal Assessments	Percentage of Assessments
A	232	0
B	2,230	1
C	30,824	12
D	136,297	52
E	70,572	27
F	17,764	7
G	5,149	2
<b>Total</b>	<b>263,068</b>	<b>100</b>

**Table 1.2: Number of Green Deal Assessments by Property Type up to 30th June 2014, Great Britain**

Property Type	Green Deal Assessments	Percentage of Assessments
House	200,194	76
Bungalow	25,797	10
Flat	32,143	12
Maisonette	4,934	2
<b>Total</b>	<b>263,068</b>	<b>100</b>

**Table 1.3: Number of Green Deal Assessments by tenure, up to 30th June 2014, Great Britain**

Tenure	Green Deal Assessments	Valid Percentage of Assessments <sup>1</sup>
Owner-occupied	196,079	75
Rented (private)	33,662	13
Rented (social)	32,014	12
Unknown	1,313	-
<b>Total</b>	<b>263,068</b>	<b>100</b>

<sup>1</sup> Percentage of Assessments is calculated only for those Assessments where tenure is known.

**Table 1.4: Number of Green Deal Assessments by whether property is on or off the Mains Gas Grid, up to 30th June 2014, Great Britain**

Properties by whether on or off Mains Gas Grid	Green Deal Assessments	Valid Percentage <sup>1</sup> of Assessments
Off Gas	37,069	14
On Gas	225,958	86
Unknown	41	
<b>Total</b>	<b>263,068</b>	<b>100</b>

<sup>1</sup> 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 Assessments by measure type (grouped), up to 30th June 2014, Great Britain**

Measure Types	Number of improvements recommended <sup>1</sup>	Percentage of improvements recommended
Boiler	87,678	11.3
Cavity Wall Insulation	89,951	11.6
Loft Insulation	117,803	15.2
Micro-generation	162,088	20.9
Other Heating	76,123	9.8
Other Insulation	153,895	19.8
Solid Wall Insulation	72,505	9.3
Window Glazing	17,099	2.2
<b>Total</b>	<b>777,142</b>	<b>100</b>

<sup>1</sup> More than one improvement can be recommended per Assessment. On average, there are around two to three improvements recommended per Assessment.

**Table 1.5a: Number of improvements by measures recommended in Green Deal Assessments, up to 30th June 2014, Great Britain**

Measure Type by Measures	Number of improvements recommended <sup>1</sup>	Percentage of improvements recommended
<b>Boiler</b>	<b>87,678</b>	<b>11.3</b>
Change heating to gas condensing boiler (fuel switch)	3,273	0.4
Change heating to gas condensing boiler (fuel switch), and flue gas heat recovery	240	0.0
Change heating to gas condensing boiler (no fuel switch)	1,246	0.2
Change heating to gas condensing boiler (no fuel switch), and flue gas heat recovery	54	0.0
Condensing oil boiler	828	0.1
Upgrade boiler, same fuel	77,738	10.0
Upgrade boiler, same fuel, and flue gas heat recovery	4,299	0.6

<b>Cavity wall insulation</b>	<b>89,951</b>	<b>11.6</b>
<b>Loft Insulation</b>	<b>117,803</b>	<b>15.2</b>
Loft Insulation	112,207	14.4
Room-in-roof insulation	5,596	0.7
<b>Micro-generation</b>	<b>162,088</b>	<b>20.9</b>
Air source heat pump with radiators	1,878	0.2
Air source heat pump with underfloor heating	202	0.0
Biomass wood logs boiler	2,356	0.3
Biomass wood pellets room heater with boiler	1,247	0.2
Ground source heat pump with radiators	409	0.1
Ground source heat pump with underfloor heating	115	0.0
Micro-CHP	142	0.0
Photovoltaics	85,844	11.0
Solar water heating	62,874	8.1
Wind turbine (on mast)	758	0.1
Wind turbine (roof mounted)	6,263	0.8
<b>Other Heating</b>	<b>76,123</b>	<b>9.8</b>
Cylinder thermostat	10,503	1.4
Heating controls for warm air system	586	0.1
Heating controls for wet central heating system	57,660	7.4
New or replacement storage heaters	4,566	0.6
Replacement warm-air unit	298	0.0
Waste water heat recovery	2,510	0.3
<b>Other Insulation</b>	<b>153,895</b>	<b>19.8</b>
Draughtproofing	23,365	3.0
Flat roof insulation	5,448	0.7
Floor insulation	87,204	11.2
Hot water cylinder insulation	19,974	2.6
Insulated doors	17,904	2.3
<b>Solid Wall Insulation</b>	<b>72,505</b>	<b>9.3</b>
External insulation with cavity wall insulation	3,100	0.4
Solid wall insulation (pre 1967 E&W, pre 1965 Scotland)	41,409	5.3
Solid wall insulation (from 1967 E&W, from 1965 Scotland)	27,996	3.6
<b>Window Glazing</b>	<b>17,099</b>	<b>2.2</b>
Double glazing	15,581	2.0
Secondary glazing	1,113	0.1
Triple glazing	405	0.1
<b>Total</b>	<b>777,142</b>	<b>100</b>

<sup>1</sup> More than one measure can be recommended per Assessment. On average, there are around three recommendations per Assessment.

**Table 1.5b: Number of improvements recommended per Green Deal Assessment, up to 30th June 2014, Great Britain**

Number of improvements recommended	Number of Green Deal Assessments	Percentage of Green Deal Assessments
1	96,230	37
2	51,298	19
3	26,916	10
4	26,791	10
5 or more	61,833	24
<b>Total</b>	<b>263,068</b>	<b>100</b>

**Table 1.6: Number of Green Deal Assessments lodged by region, up to 30th June 2014**

Area names	Green Deal Assessments	Percentage of Assessments	Households with at least one usual resident <sup>1</sup>	Green Deal Assessments per 1,000 households
<b>Great Britain</b>	<b>263,068</b>	<b>100</b>	<b>25,738,820</b>	<b>10.2</b>
<b>England</b>	<b>211,115</b>	<b>80</b>	<b>22,063,368</b>	<b>9.6</b>
North East	10,473	4	1,129,935	9.3
North West	36,467	14	3,009,549	12.1
Yorkshire and The Humber	26,621	10	2,224,059	12.0
East Midlands	22,671	9	1,895,604	12.0
West Midlands	33,369	13	2,294,909	14.5
East	17,494	7	2,423,035	7.2
London	18,226	7	3,266,173	5.6
South East	28,024	11	3,555,463	7.9
South West	17,770	7	2,264,641	7.8
<b>Wales</b>	<b>11,693</b>	<b>4</b>	<b>1,302,676</b>	<b>9.0</b>
<b>Scotland<sup>2</sup></b>	<b>40,260</b>	<b>15</b>	<b>2,372,780</b>	<b>17.0</b>

<sup>1</sup> Source: ONS 2011 Census Table H01UK: Households with at least one usual resident, household size and average household size, local authorities in the United Kingdom

<sup>2</sup> Scotland household figures are rounded and so do not tally to the Great Britain total.

**Table 1.6a: Number of Green Deal Assessments lodged by administrative area, up to 30th June 2014** (Table available in Excel [here](#)).

**Table 1.6b: Number of Green Deal Assessments lodged by Parliamentary Constituency, up to 30th June 2014** (Table available in Excel [here](#)).

**Table 1.7: Number of 'live' Green Deal Plans by Region, up to 30th June 2014**

Area names	'Live' Green Deal Plans	Percentage of Plans	Households with at least one usual resident <sup>1</sup>	Green Deal Plans per 1,000,000 households
<b>Great Britain</b>	<b>1,587</b>	<b>100</b>	<b>25,738,820</b>	<b>61.7</b>
<b>England</b>	<b>420</b>	<b>26</b>	<b>22,063,368</b>	<b>19.0</b>
North East	24	2	1,129,935	21.2
North West	48	3	3,009,549	15.9
Yorkshire and The Humber	59	4	2,224,059	26.5
East Midlands	44	3	1,895,604	23.2
West Midlands	42	3	2,294,909	18.3
East	20	1	2,423,035	8.3
London	38	2	3,266,173	11.6
South East	74	5	3,555,463	20.8
South West	71	4	2,264,641	31.4
<b>Wales</b>	<b>27</b>	<b>2</b>	<b>1,302,676</b>	<b>20.7</b>
<b>Scotland<sup>2</sup></b>	<b>1,140</b>	<b>72</b>	<b>2,372,780</b>	<b>480.4</b>

<sup>1</sup> Source: ONS 2011 Census Table H01UK: Households with at least one usual resident, household size and average household size, local authorities in the United Kingdom.

<sup>2</sup> Scotland household figures are rounded and so do not tally to the Great Britain total.

**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<sup>1</sup>, by Core City Area**

Core City Area	Number of properties with energy efficiency measures funded by Core Cities <sup>2</sup>	Number of measures installed <sup>3</sup>
Birmingham <sup>4</sup>	506	528
Bristol	155	155
Leeds	1,169	1,432
Liverpool	93	120
Manchester	587	1,114
Newcastle	137	312
Nottingham	97	131
Sheffield	73	127
<b>Total</b>	<b>2,817</b>	<b>3,919</b>

<sup>1</sup> Based on returns received up to 11th February 2014.

<sup>2</sup> This excludes any properties that had an assessment but where no reported measures were installed.

<sup>3</sup> This includes a number of measures which were also reported as ECO measures.

<sup>4</sup> Includes number of individual address in tower blocks that have benefitted from a communal Eco Pod installation.

**Table 1.9a: Provisional number of energy efficiency measures installed under Core Cities Project<sup>1</sup>, by measure type**

Measure type	Number of measures installed <sup>2</sup>	Percentage of measures
Air Source Heat Pump	16	0.4
Boiler <sup>3</sup>	670	17.1
Cavity Wall Insulation	103	2.6
Cellar Insulation	24	0.6
Draughtproofing	48	1.2
Eco Pod <sup>4</sup>	426	10.9
External Wall Insulation	1,519	38.8
Floor Insulation	6	0.2
Heating controls	14	0.4
High Performance External Doors	215	5.5
Internal Wall Insulation	99	2.5
Loft Insulation	364	9.3
Mechanical Ventilation Heat Recovery	9	0.2
Other	2	0.1
VPhase voltage optimisation	16	0.4
Window Glazing	375	9.6
Unknown	13	0.3
<b>Total</b>	<b>3,919</b>	<b>100</b>

<sup>1</sup> Based on returns received up to 11th February 2014.

<sup>2</sup> This includes a number of measures which were also reported as ECO measures.

<sup>3</sup> Some boilers also include the installation of central wet heating systems.

<sup>4</sup> This number of Eco Pod installations is measured by the number of individual addresses that are connected to the Eco Pod installation.

**Table 1.10: Number of Cashback vouchers paid by region, up to 30th June 2014, England and Wales**

Area names	Total number of Cashback vouchers paid	Valid percentage of Cashback vouchers paid <sup>1,2</sup>	Households with at least one usual resident <sup>3</sup>	Cashback vouchers paid per 10,000 households
<b>England and Wales</b>	<b>13,598</b>	<b>100</b>	<b>23,366,044</b>	<b>5.8</b>
<b>England</b>	<b>12,506</b>	<b>95.6</b>	<b>22,063,368</b>	<b>5.7</b>
North East	410	3.1	1,129,935	3.6
North West	2,935	22.4	3,009,549	9.8
Yorkshire and The Humber	1,541	11.8	2,224,059	6.9
East Midlands	1,717	13.1	1,895,604	9.1
West Midlands	1,189	9.1	2,294,909	5.2
East	744	5.7	2,423,035	3.1
London	883	6.7	3,266,173	2.7
South East	1,768	13.5	3,555,463	5.0
South West	1,319	10.1	2,264,641	5.8
<b>Wales</b>	<b>579</b>	<b>4.4</b>	<b>1,302,676</b>	<b>4.4</b>
Unknown	513	-		

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

<sup>2</sup> 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 June 2014.

<sup>3</sup> Source: ONS 2011 Census Table H01UK: Households with at least one usual resident, household size and average household size, local authorities in the United Kingdom

**Table 1.10a: Number of Cashback vouchers paid by administrative area, up to 30th June 2014, England and Wales** (Table available in Excel [here](#)).

**Table 1.10b: Number of Cashback vouchers paid by Parliamentary Constituency, up to 30th June 2014, England and Wales** (Table available in Excel [here](#)).

**Table 1.11: Provisional number of ECO measures by ECO obligation by region and total number of unique properties benefitting from ECO, up to 30th June 2014** (Table available in Excel [here](#)).

**Table 1.11a: Provisional number of ECO measures by ECO obligation by administrative area, up to 30th June 2014** (Table available in Excel [here](#)).

**Table 1.11b: Provisional number of ECO measures by ECO obligation by Parliamentary Constituency, up to 30th June 2014** (Table available in Excel [here](#)).

**Table 1.12: Provisional number of ECO measures by main fuel type of property and ECO obligation, up to 30th June 2014**

Fuel Type	Obligation						Total number of ECO measures delivered <sup>1</sup>	
	Carbon Saving Target (CSO)		Carbon Savings Community (CSCO)		Affordable Warmth (HHCRO)			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Gas	310,825	84.2	153,804	93.9	354,374	98.9	819,003	91.9
Electric	48,271	13.1	6,729	4.1	1,788	0.5	56,788	6.4
Other <sup>2</sup>	3,680	1.0	405	0.2	1,527	0.4	5,612	0.6
Oil	3,382	0.9	2,009	1.2	636	0.2	6,027	0.7
Coal	1,941	0.5	304	0.2	145	0.0	2,390	0.3
Renewable	877	0.2	593	0.4	0	0.0	1,470	0.2
Unknown	93	-	5	-	281	-	379	-
<b>Total</b>	<b>369,069</b>	<b>100</b>	<b>163,849</b>	<b>100</b>	<b>358,751</b>	<b>100</b>	<b>891,669</b>	<b>100</b>

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

<sup>2</sup> "Other" fuel type includes District Heating Systems and Liquefied Petroleum Gas.

**Table 1.12a: Provisional number of households in receipt of ECO measures by property type and ECO obligation, up to 30th June 2014 <sup>1,2</sup>**

Property Type	Obligation						Total number of households in receipt of ECO measures	
	Carbon Saving Target (CSO)		Carbon Savings Community (CSCO)		Affordable Warmth (HHCRO)			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
House	189,923	61.7	116,868	81.4	254,163	88.6	560,954	76.0
Bungalow	12,012	3.9	4,809	3.3	17,408	6.1	34,229	4.6
Flat	101,893	33.1	20,623	14.4	14,270	5.0	136,786	18.5
Maisonette	4,088	1.3	1,325	0.9	980	0.3	6,393	0.9
Unknown <sup>3</sup>	235	-	24	-	108	-	367	-
<b>Total</b>	<b>308,151</b>	<b>100</b>	<b>143,649</b>	<b>100</b>	<b>286,929</b>	<b>100</b>	<b>738,729</b>	<b>100</b>

<sup>1</sup> Percentage of ECO measures is calculated only for those ECO measures where the property type is known

<sup>2</sup> 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.

<sup>3</sup> Unknown property type includes 121 mobile homes

**Table 1.12b: Provisional number of households in receipt of ECO measures by tenure and ECO obligation, up to 30th June 2014 <sup>1</sup>**

Tenure	Obligation						Total number of households in receipt of ECO measures <sup>1</sup>	
	Carbon Saving Target (CSO)		Carbon Savings Community (CSCO)		Affordable Warmth (HHCRO) <sup>2</sup>			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Owner-occupied	203,722	70.0	93,891	69.1	216,061	76.9	513,674	72.5
Rented (private)	33,720	11.6	16,174	11.9	64,838	23.1	114,732	16.2
Rented (social)	53,788	18.5	25,906	19.1	N/A	-	79,694	11.3
Unknown	16,921	-	7,678	-	6,030	-	30,629	-
<b>Total <sup>3</sup></b>	<b>308,151</b>	<b>100</b>	<b>143,649</b>	<b>100</b>	<b>286,929</b>	<b>100</b>	<b>738,729</b>	<b>100</b>

<sup>1</sup> Percentage of ECO measures is calculated only for those ECO measures where the tenure is known

<sup>2</sup> It is not possible for socially-rented properties to benefit from measures delivered under Affordable Warmth

<sup>3</sup> 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 1.12c: Provisional number and percentage of ECO measures traded through brokerage by month and ECO obligation, up to 30th June 2014 (Table available in Excel [here](#)).**

**Table 1.12d: Estimated lifetime bill savings for Affordable Warmth measures installed by month, up to 30th June 2014<sup>1</sup>**

Installation Month <sup>2</sup>	Total number of Affordable Warmth measures	Estimated lifetime bill saving (£)
January 2013 <sup>3</sup>	2,705	20,354,859
February 2013	6,097	32,308,420
March 2013	7,511	44,636,019
April 2013	10,312	75,067,868
May 2013	12,225	126,678,487
June 2013	16,078	170,301,966
July 2013	19,594	235,173,911
August 2013	25,982	307,507,647
September 2013	28,761	353,280,033
October 2013	37,885	475,308,260
November 2013	40,466	499,593,485
December 2013	33,352	413,448,817
January 2014	33,503	429,601,571
February 2014	24,735	301,854,203
March 2014	21,104	249,570,240
April 2014	15,552	178,300,853
May 2014	12,805	157,375,055
June 2014	10,084	130,119,192
<b>Total to date</b>	<b>378,751</b>	<b>4,200,480,886</b>

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

<sup>2</sup> 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.

<sup>3</sup> Includes some measures installed between October and December 2012

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

Obligation	Average price <sup>1</sup>	Total delivery costs	Scaled annual cost <sup>2,3</sup>	Central Impact Assessment <sup>4</sup>
Affordable Warmth	£0.17	£713,951,809	£320,736,204	£350,000,000
Carbon Saving Communities <sup>5</sup>	£63.04	£172,341,449	£190,517,384	£190,000,000
Carbon Saving Obligation	£103.73	£916,448,105	£963,552,384	£760,000,000
<b>Total</b>		<b>£1,802,741,363</b>	<b>£1,474,805,973</b>	<b>£1,300,000,000</b>

<sup>1</sup> Average price refers to per £ saved on energy bills for Affordable Warmth and per lifetime tonne of CO2 saved for Carbon Saving Communities and Carbon Saving Obligation.

<sup>2</sup> Annual costs have been scaled on the basis that the total obligation (associated with the current legislation) is met and assumes that the average prices to date continue to be paid throughout the obligation period. This doesn't include any delivery costs associated with interim ECO measures.

<sup>3</sup> This does not include the £111 million of administrative costs reported by suppliers up to the end of June 2014.

<sup>4</sup> Central Impact Assessment associated with the current legislation, from the Final Stage Impact Assessment for the Green Deal and Energy Company Obligation, July 2012.

<sup>5</sup> Carbon Saving Communities includes delivery costs incurred through the rural sub-obligation.

<sup>6</sup> 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 June 2014**

Obligation	Average price (all suppliers) <sup>1</sup>	Highest price (individual supplier) <sup>2</sup>	Lowest price (individual supplier) <sup>2</sup>
Affordable Warmth	£0.17	£0.18	£0.15
Carbon Saving Communities <sup>3</sup>	£63.04	£83.99	£42.56
Carbon Saving Obligation	£103.73	£129.04	£81.55
Scaled annual cost <sup>4,5</sup>	£1.5bn	£1.6bn	£1.3bn
Potential ECO costs passed through (per customer per year)	£55	£65	£50

<sup>1</sup> Average price refers to per £ saved on energy bills for Affordable Warmth and per lifetime tonne of CO2 saved for Carbon Saving Communities and Carbon Saving Obligation.

<sup>2</sup> Suppliers have delivered different amounts against each obligation. 'Highest' and 'lowest' average prices for individual suppliers should therefore be treated with caution as they may relate to relatively low levels of delivery, different measures installed and different routes of meeting the obligation.

<sup>3</sup> Carbon Saving Communities includes delivery costs incurred through the rural sub-obligation.

<sup>4</sup> Annual costs have been scaled on the basis that the total obligation (associated with the current legislation) is met and assumes that the average/highest/lowest prices to date continue to be paid throughout the obligation period. This doesn't include any delivery costs associated with interim ECO measures.

<sup>5</sup> This does not include the £111 million of administrative costs reported by suppliers up to the end of June 2014.

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

**Table 1.15: Estimated carbon and energy savings relating to measures installed through Cashback and ECO, up to 30th June 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 28th July 2014** (Table available in Excel [here](#)).

# Section 2 - Estimates of Home Insulation Levels in Great Britain: June 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 CERT<sup>17</sup>, the Community Energy Saving Programme (CESP)<sup>18</sup>, Warm Front<sup>19</sup>, Green Deal (including Cashback)<sup>20</sup> and the Energy Company Obligation<sup>21</sup> (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 27.3 million homes in Great Britain, of these 19.3 million had cavity walls with the remaining 8.0 million having solid walls. 23.8 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 [Annex B](#) for an explanation of measures).

At the end of June 2014, 13.8 million had cavity wall insulation (72 per cent of properties with a cavity wall), 16.4 million had loft insulation (69 per cent of properties with a loft) and 265,000 had solid wall insulation (3 per cent of properties with solid walls) (Chart 2.1). It should be noted that measures installed as a mitigation action (see page 32) 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.

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<sup>17</sup> <https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes>

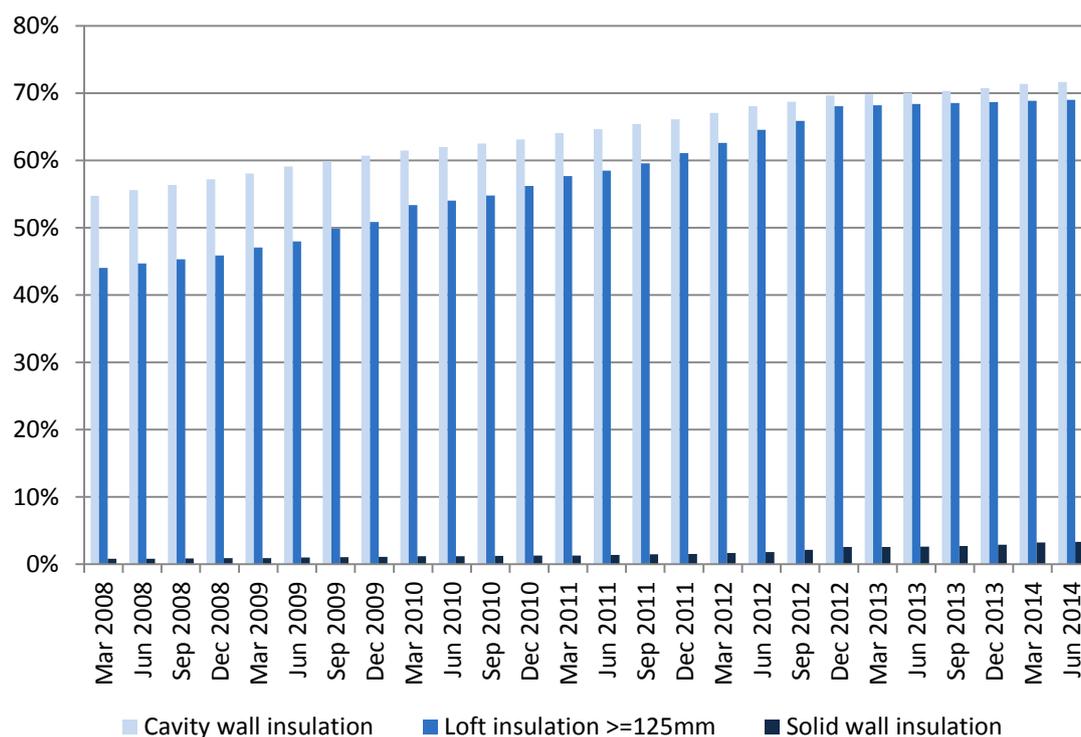
<sup>18</sup> <https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes>

<sup>19</sup> <https://www.gov.uk/government/policies/helping-households-to-cut-their-energy-bills/supporting-pages/warm-front-scheme>

<sup>20</sup> <https://www.gov.uk/green-deal-energy-saving-measures>

<sup>21</sup> <https://www.gov.uk/government/policies/helping-households-to-cut-their-energy-bills/supporting-pages/energy-companies-obligation-eco>

**Chart 2.1: Percentage of properties with insulation in Great Britain**



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

	Cavity wall insulation	Loft insulation >=125mm	Solid wall 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
Jun 2013	13,430	16,220	209
Sep 2013	13,510	16,280	217
Dec 2013 r	13,620	16,340	232
Mar 2014	13,760	16,400	257
Jun 2014 p	13,840	16,450	265

p, provisional figure.

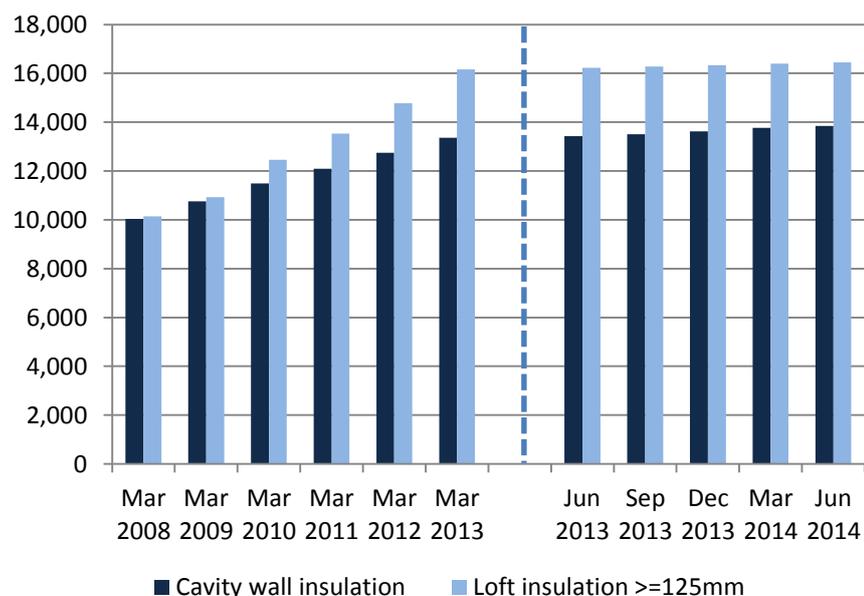
r, revised figure.

Taking into account retro-fit insulation delivered through Government schemes and new properties<sup>22</sup> built with insulation during the last year, in June 2014 there were 230,000 more homes with at least 125mm of loft insulation, 410,000 more homes with cavity wall insulation and 56,000 more homes with solid wall insulation compared with June 2013.

<sup>22</sup> 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.

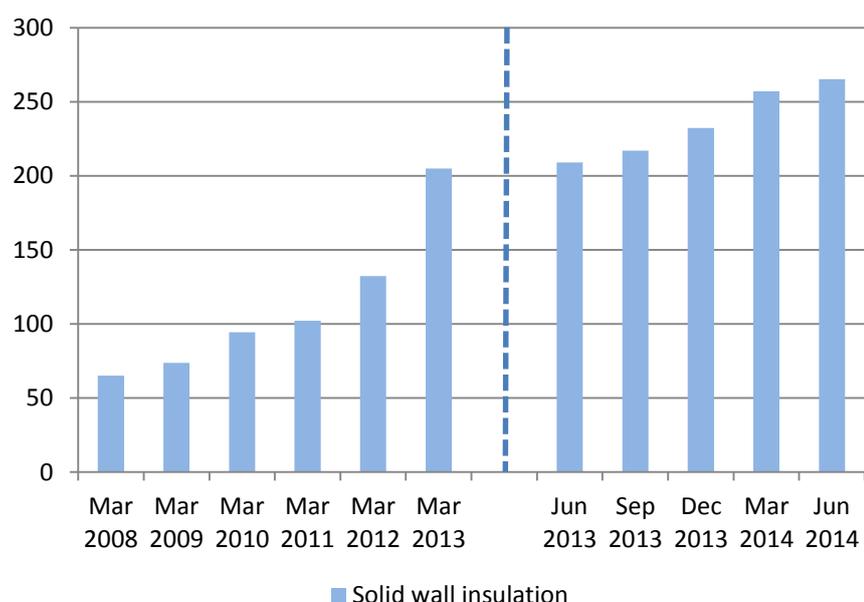
The number of retro-fit wall and loft insulations in the first half of 2013 was low compared to delivery in previous quarters. This reflects a transition phase between the end of the CERT and CESP schemes in December 2012 and the commencement of ECO. Following the end of the CERT and CESP schemes, energy 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 June 2014 (Thousands)**



- The number of properties with cavity wall insulation increased by 3 per cent (410,000) between the end of June 2013 and June 2014.
- The number of properties with loft insulation with a depth of at least 125mm increased by 1 per cent (230,000) between the end of June 2013 and June 2014.

**Chart 2.3: Homes in Great Britain with solid wall insulation<sup>23</sup>: March 2008 to June 2014 (Thousands)**



- The number of properties with solid wall insulation increased by 27 per cent (56,000) between the end of June 2013 and June 2014.

<sup>23</sup> 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 the number of properties with insulation result from new properties being built<sup>24</sup> 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.

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

	Cavity wall insulation	Loft insulation >=125mm	Solid wall insulation
April 2008 housing surveys <sup>^</sup>	10,030	10,150	65
Properties built since April 2008	880	680	..
Government scheme delivery April 2008 - December 2012	2,600	5,450	139
Green Deal/ECO delivery since January 2013	320	180	61
<b>Total</b>	<b>13,840</b>	<b>16,450</b>	<b>265</b>
Homes in Great Britain <sup>†</sup>	19,320	23,850	7,990
Percentage of homes insulated <sup>‡</sup>	72%	69%	3%

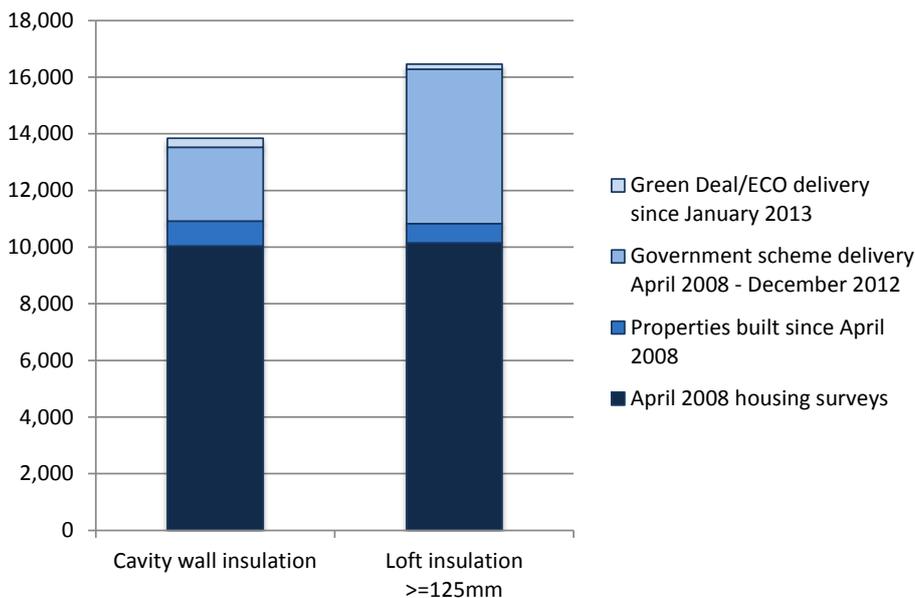
<sup>^</sup> 2008 estimates for solid wall insulation are taken from the Government's Energy Efficiency Commitment (EEC) 1 and 2 reported activity rather than housing surveys.

<sup>†</sup> The number of homes in Great Britain with cavity walls, lofts and solid walls respectively.

<sup>‡</sup> 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.

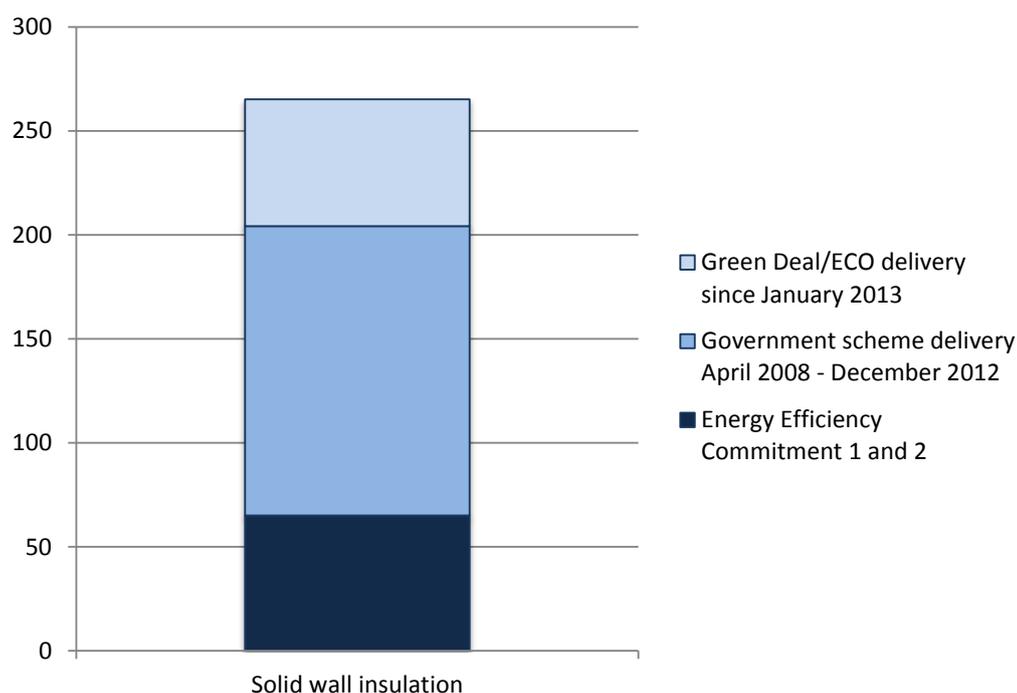
.. not applicable.

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



<sup>24</sup> 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.

**Chart 2.5: Number of homes in Great Britain with solid wall insulation by source, June 2014 (Thousands)<sup>25</sup>**



### 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 June 2014, for historical figures and a more detailed breakdown see Tables 2.3 to 2.7 in the [Excel tables](#) 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, June 2014 (Thousands)**

Insulation type	Insulated	Uncertainty*	Remaining potential**	Total properties
Cavity wall insulation	13,840 72%	480 2%	5,000 26%	19,320 100%
Loft insulation	16,450 69%	110 0.5%	7,290 31%	23,850 100%
Solid wall insulation	265 3%	126 2%	7,600 95%	7,990 100%

\* 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.

<sup>25</sup> 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, June 2014**

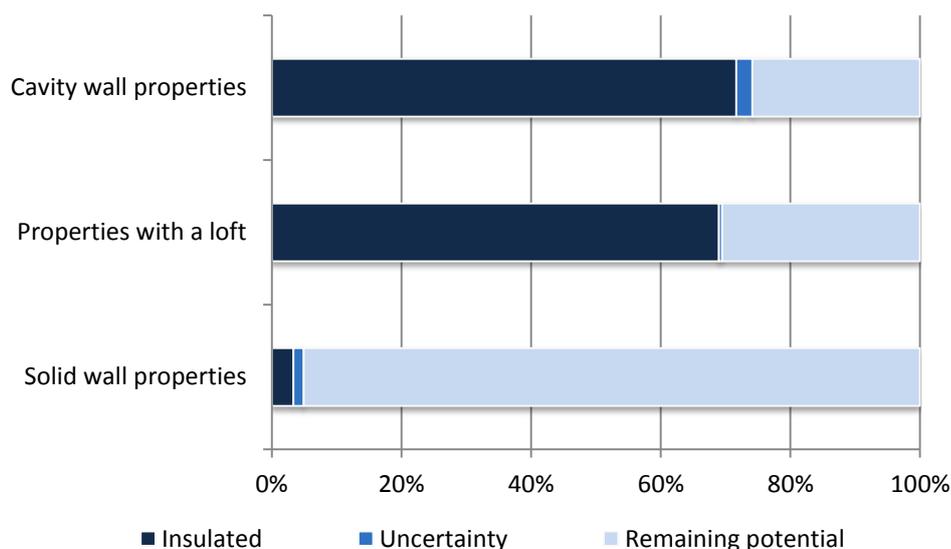


Table 2.3 and Chart 2.6 show that just over two thirds of properties with cavity walls and properties with a loft are insulated. In comparison only 3 per cent of properties with solid walls are insulated. The following section gives further information on the remaining potential to insulate the housing stock in Great Britain, by insulation type.

### Cavity wall insulation

It is estimated that at the end of June 2014 there were 5.0 million cavity wall properties which could benefit from some cavity wall insulation (26 per cent of homes with cavity walls).

Of these, 1.4 million are considered to have limited potential<sup>26</sup> (0.5 million of this 1.4 million are also considered hard to treat<sup>27</sup>) and 3.6 million are totally uninsulated (2.9 million of the 3.6 million uninsulated properties are considered hard to treat). There are therefore 0.7 million easy to treat, standard cavities remaining. Historical figures and a more detailed breakdown is available in Table 2.6 of the accompanying [Excel tables](#).

### 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.

<sup>26</sup> 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.

<sup>27</sup> 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 ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48433/5620-review-of-the-number-of-cavity-walls-in-great-brit.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48433/5620-review-of-the-number-of-cavity-walls-in-great-brit.pdf)), the ECO definition of hard treat differs from this definition slightly as it also includes partial fill cavities and cavity wall dwellings over three storeys (compared to over four in the Inbuilt definition) and excludes some cavities which assessors would not be able to identify as hard to treat, such as dwellings with high exposure to wind and rain.

At the end of June 2014 it is estimated that there were 7.3 million uninsulated lofts (31 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 June 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 [Excel tables](#). 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 [Green Deal](#) (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 Plan<sup>28</sup>, at which stage they enter a cooling-off period<sup>29</sup>.

**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.

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<sup>28</sup> The Plan is a contract between the owner/occupier and the Provider – it sets out the work that will be done and the repayments.

<sup>29</sup> 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 [Energy Company Obligation](#) (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).

Carbon Saving Obligation - 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.

Carbon Saving Communities Obligation - 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.

Affordable Warmth Obligation - 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 [set of changes to ECO](#) 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 [these proposals](#) 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.

## 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 [website](#).

## ECO delivery costs

ECO delivery costs are reported by obligated energy suppliers at the end of the month 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 June 2014 show aggregate expenditure of £111m. 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 [ECO Brokerage](#) 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 Green Deal.

The accompanying [Methodology note](#) 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

## Experimental Statistics

These estimates are released as Experimental Statistics which means they are official statistics undergoing an evaluation process prior to being assessed as National Statistics. They are published in order to involve users and stakeholders in their development, and as a means to build in quality assurance during development.

More information on the methodology is included [here](#).

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 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 [Green Deal Home Improvement Fund](#)

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 SAP<sup>30</sup> 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/m<sup>2</sup>.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 insulate

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<sup>30</sup> Information on the Standard Assessment Procedure can be found here  
<https://www.gov.uk/standard-assessment-procedure>

either the internal or external face of the wall. Current building regulations require a target U-value of 0.35 W/m<sup>2</sup>.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](mailto:EnergyEfficiency.Stats@decc.gsi.gov.uk)

Contact telephone: 0300 068 5106

The statistician responsible for this publication is Peter Antoniadis.

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 December 2014** and will contain more detailed information on activity up to the end of September 2014 including geographic breakdowns of Green Deal Assessments, Green Deal Plans, ECO measures and, for the first time, further breakdowns of statistics on the Green Deal Home Improvement Fund.

# 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 and Green Deal between January 2013 and June 2014 (as reported in the monthly Official Statistics release published on 21 August 2014) 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 and Green Deal

Provisional figures show that around 739,000 households benefitted from ECO between January 2013 and June 2014. In addition to this, around 13,600 households installed measures and received money from the Cashback scheme and around 1,600 households had funded measures through the Green Deal. There is a small amount of double counting between these mechanisms, but the levels between these three schemes and the following energy efficiency schemes is not yet known. More detailed work will be undertaken to better understand how many households are benefitting from a combination of schemes.

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 65 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 June 2014 137,656 domestic installations were confirmed onto the Central FiT Register. The total number of domestic installations confirmed onto the FiT scheme by the end of March 2014 was 483,265.

## 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 June 2014, 8,985 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 7 social landlord competitions have been run, 5 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 June 2014, 342 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 meters<sup>31</sup> 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 gas and electricity 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 between autumn 2015 and 2020 during the Rollout Phase. Further information can be found on the gov.uk website.

Since the Foundation Stage began, 491,852 Smart gas and electricity meters have been installed in homes.

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<sup>31</sup> 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 the number of smart meters they have installed and those they expect to upgrade to become SMETS compliant. Most of the 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, benefitting from Feed-in Tariffs, Renewable Heat Premium Payment, Domestic Renewable Heat Incentive, by quarter of installation, from January 2013 to June 2014**

Installation Month <sup>1</sup>	Delivery mechanism <sup>4</sup>					
	ECO <sup>2</sup>	Cashback <sup>3</sup>	Green Deal Plans	Feed in Tariffs <sup>5</sup>	Renewable Heat Premium Payment <sup>6</sup>	Domestic Renewable Heat Incentive <sup>7</sup>
January - March 2013	49,124	228	0	20,403	958	N/A
April - June 2013	89,289	3,554	0	18,224	3,353	N/A
July - September 2013	132,570	3,225	57	24,874	338	N/A
October - December 2013	179,489	1,950	569	23,100	333	N/A
January - March 2014	201,202	2,032	369	21,928	1,178	N/A
April - June 2014	87,055	2,609	592	29,127	2,825	342
<b>Total from January 2013 to June 2014<sup>8</sup></b>	<b>738,729</b>	<b>13,598</b>	<b>1,587</b>	<b>137,656</b>	<b>8,985</b>	<b>342</b>

<sup>1</sup> 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.

<sup>2</sup> Where a household has ECO measures installed in two or more months, the earliest installation month is recorded.

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

<sup>4</sup> 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.

<sup>5</sup> 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: <https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics>.

<sup>6</sup> 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>.

<sup>7</sup> These data refer to systems installed after the launch of the domestic RHI scheme on 9 April 2014 which gained accreditation to the scheme.

<sup>8</sup> In addition to this, 491,852 electricity and gas Smart Meters have been installed during the foundation stage of the roll-out programme.

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