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

Statistical release: National Statistics

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National Statistics
This is a National Statistics publication.


Designation can be broadly interpreted to mean that the statistics:
• meet identified user needs
• are well explained and readily accessible
• are produced according to sound methods, and
• are managed impartially and objectively in the public interest

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

Other National Statistics within this series and User Consultation
The most up to date information on the GD (including GDHIF) and ECO can be found in the headline statistical releases – available here. Details of methods, quality assurance and use of this data can be found in the Methodology note.

DECC launched a user consultation on 20 August, for 6 weeks, to assess impacts on user needs of making changes to this, the detailed (quarterly) release, and the headline (monthly) National Statistic series on Green Deal and ECO.
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Green Deal and ECO: January 2013 to June 2015

A provisional 1,566,000 measures\(^1\) were installed in around 1,273,000 properties\(^2\) through ECO\(^3\), Cashback, Green Deal Plans and the GDHIF to the end of June 2015.

Of the 575,936 Green Deal Assessments in Great Britain:

- The majority (89 per cent) of properties getting a GD Assessment had an energy efficiency band rating of D or lower. This compares to 77 per cent of the overall domestic building stock in England.

- There were 1,745,433 improvements recommended in GD Assessments (around three improvements per assessment). The most common single measure recommended was to install loft insulation. This accounted for 15 per cent of all recommended measures and was recommended in 45 per cent of all GD Assessments.

- Just over three quarters of GD Assessments were in owner-occupied properties (446,841), 12 per cent in the private rented sector and 10 per cent are in the social rented sector.

Of the 9,999 ‘live’ Green Deal Plans with measures installed in Great Britain, 40 per cent were for properties in Scotland (4,019 Plans). This is much lower than the 72 per cent of ‘live’ Plans in Scotland as at the end of June 2014, due to more GD Providers providing GD finance Plans in England and Wales over the last year.

There were 25,487 GDHIF voucher payments made (10.7 per 10,000 households in England and Wales). The region with the highest number of GDHIF payments per number of households was West Midlands with 15.9.

Around five per cent of properties that had installed energy efficiency measures using GD Finance were in the private rented sector, compared with just two per cent of households that received Cashback, and 25 per cent that used GDHIF. A reason for this is that GDHIF allowed landlords and tenants to directly apply for funding to undertake energy efficiency improvements.

A provisional 1,504,898 measures in 1,232,068 properties had been installed under ECO:

- Around one fifth (19 per cent) of ECO measures were in the North West (280,775), the highest in any region. 12 per cent of ECO measures were installed in Scotland (173,320) and five per cent were in Wales (76,258).

- In Great Britain, on average, there were around 47 households with ECO measures per 1,000 households, i.e. nearly five per cent of all households in Great Britain had a

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\(^1\) The number of measures is made up of 1,505,000 ECO measures, 16,000 Cashback measures, 16,000 Green Deal Plan measures and 29,000 Green Deal Home Improvement Fund measures.


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

\(^3\) This includes measures eligible under the ECO amendment order.
measure installed under ECO funding. The North West and North East had the highest amount with 74 and 70 households with ECO measures per 1,000 households respectively. In Scotland there were around 62 households with ECO measures per 1,000 households and 45 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, GDHIF and GD was between 21.1 – 22.2 MtCO₂ with provisional estimated lifetime energy savings between 86,389 – 91,212 GWh.

Home insulation levels: June 2015

It is estimated that at the end of June 2015:

- There were 27.5 million homes in Great Britain. Of these 19.5 million had cavity walls with the remaining 8.0 million having solid walls. 24.0 million properties had a loft.

- Compared with June 2014, 380,000 more properties had cavity wall insulation, 300,000 more had loft insulation of at least 125mm, and 54,000 more had solid wall insulation.

- 16.8 million homes had loft insulation of at least 125mm (70 per cent of homes with lofts). Of the 7.0 million homes with lofts without at least 125mm of insulation, only a small number are estimated to have no insulation – around 1 per cent of all properties with a loft.

- 14.3 million homes had cavity wall insulation (73 per cent of homes with cavity walls). Of the 4.7 million homes without cavity wall insulation, most are hard to treat, with only 0.4 million of them being uninsulated easy to treat standard cavities.

- 338,000 homes had solid wall insulation (4 per cent of homes with solid walls).

Household Energy schemes

Between January 2013 and June 2015, measures were installed through ECO in 1,232,100 properties, 25,400 households had funded measures through Green Deal Home Improvement Fund, in 14,700 properties following the redemption of Cashback vouchers, and 10,000 households had funded measures through Green Deal finance Plans. There is a small amount of double counting between these mechanisms (around 9,300 households). 262,800 properties benefitted from Feed-in Tariffs installations, 9,000 properties benefitted from a Renewable Heat Premium Payment, and 12,300 properties benefitted from domestic Renewable Heat Incentive. In addition to this, 1,327,354 electricity and gas Smart Meters have been installed in homes across Great Britain.

In aggregate this is around 1,566,400 household properties receiving energy efficiency or renewable measures through these schemes, but not unique properties. Currently we are not able to fully assess the overlap where households were benefitting from ECO & GD with FiTs and RHPP/RHI which will allow an estimate to be produced for unique properties receiving energy efficiency or renewable measures.

Understanding the overlap with Smart meters will be more complex, as currently these data are not available at property level and so are excluded from the combined figure given above.
Section 1 - Green Deal and ECO statistics

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

Green Deal Assessments, lodged up to 30th June 2015

The first step in the GD process involves a GD 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 (GDAR) being produced for the householder and lodged on a national register. The customer is then able to view the energy efficiency measures which have been recommended and understand the potential costs and savings.

For more information on the GD Assessment process see here.

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

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

Chart 1.1 - Percentage of Green Deal Assessments lodged, up to 30th June 2015, by Energy Efficiency (EE) Band compared with EE Band ratings of all England properties in 2013

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

Property Type (Table 1.2, Chart 1.2)

Chart 1.2 shows that 77 per cent of GD Assessments were in houses (442,128), 11 per cent were in bungalows (64,664), ten per cent were in flats (59,007), two per cent were in maisonettes (9,310) and the remaining 827 were park homes. The housing stock in England\(^5\) (as reported in the English Housing Survey 2013-14\(^6\)) shows that 70 per cent of property types were houses, 21 per cent were flats and/or maisonettes (purpose built flat or converted flat), and nine per cent were bungalows.

Chart 1.2 - Percentage of Green Deal Assessments lodged, up to 30th June 2015, and England properties in 2013 by property type

Tenure (Table 1.3, Chart 1.3)

Just over three quarters of GD Assessments were in owner-occupied properties (446,841), 12 per cent were in the private rented sector (70,037) and 10 per cent were in the social rented sector (56,284). In comparison, according to dwelling stock by tenure figures released by Department for Communities and Local Government\(^7\) for Great Britain in 2013, 63 per cent were owner-occupied, 19 per cent were private rented sector and 18 per cent were social rented sector. 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.

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5 The equivalent split is not available for Welsh and Scottish properties on a comparable basis. These make up around 14 per cent of the housing stock in Great Britain.
7 DCLG, Live tables on dwelling stock, by tenure, Great Britain Table 102 https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants
On or off the Mains Gas Grid (Table 1.4)

In 2013, it was estimated 2.7 million households do not have mains-gas supply in Great Britain\(^8\). This is around 10 per cent of all properties in Great Britain, which is similar (albeit lower) to the 16 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 1,745,433 improvements recommended in Green Deal Advice Reports, so on average there were around three recommended measures per GD Assessment. In 39 per cent of Assessments (226,357) only one measure was recommended (Table 1.5b).

The most common single measure recommended was to install loft insulation. This accounted for 15 per cent of all recorded measures and was recommended in around 45 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 575,936 GD Assessments lodged in total up to 30th June 2015 (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 22 Green Deal Assessments per 1,000 households in Great Britain. Scotland had the highest number of Green Deal Assessments per 1,000 households with 32. Wales had 19 Green Deal Assessments per 1,000 households (Map 1.1).

\(^8\) DECC, Sub-national estimates of households not connected to the gas network, 2013
Map 1.1 – Number of Green Deal Assessments per 1,000 households lodged by Local Authority up to 30th June 2015.
Within England, Oldham Local Authority had the most GD Assessments per 1,000 households (47). In Scotland, six Local Authorities had more GD Assessments per 1,000 households; North Ayrshire (47), North Lanarkshire (47), South Lanarkshire (52), Midlothian (53), East Ayrshire (53), and Clackmannanshire (74).

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

**Green Deal Plans, up to 30th June 2015**

On 23 July 2015 DECC announced that there will be no further public funding to the Green Deal Finance Company (GDFC). This decision has no impact on existing Green Deal Finance Plans in the system. Therefore Plans currently in the system will continue to progress. The announcement was concerned with the financing of GDFC only – the wider market framework remains in place, and should a new finance provider come forward to enter the market, then consumers will be able to choose GD finance Plans as a route.

At the end of June 2015 there were 9,999 ‘live’ Green Deal Plans in unique properties in Great Britain (i.e. measures were installed and billing had commenced). 27 properties had two ‘live’ Green Deal Plans, so there are 10,026 ‘live’ Green Deal Plans at the end of June 2015. We estimate that the total initial loan amounts (i.e. excluding APR interest payments) associated with these ‘live’ Plans was around £36.6m. Therefore the average initial loan amount per GD Plan was around £3,650.

**Geographic location of properties where measures were installed using Green Deal Finance, up to 30th June 2015 (Tables 1.7, 1.7a and 1.7b)**

Of the 9,999 unique properties Green Deal Plans which were ‘live’ up to 30th June 2015, just over half of all Green Deal Plans with measures installed were for properties in England, 40 per cent were for properties in Scotland and five per cent were for properties in Wales (see Table 1.7). Tables 1.7a and 1.7b present the number of ‘live’ Green Deal Plans in each Local Authority (LA) (Table 1.7a) and Parliamentary Constituency (Table 1.7b).

**The tenure of properties where measures were installed using Green Deal Finance (Table 1.7c)**

Around 95 per cent of properties that had installed measures using Green Deal Finance were owner-occupied. Five per cent were in the private rented sector and a very small number were in the social rented sector (see Table 1.7c).

**Pioneer Places (end of scheme)**

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

Estimates based on data returns submitted to DECC by 11th February 2014 estimate that 9,543 Domestic Green Deal Assessments were lodged having been funded through the Green Deal Pioneer Places (see Table 1.8). These assessments are included in the data on overall
number of 529,365 Green Deal Assessments as reported above. If measures were installed following these assessments these will be captured under other delivery mechanisms reported within the National Statistics in this release.

Core Cities (end of scheme)

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

Estimates based on data returns submitted to DECC by 11th February 2014 estimate that around 2,817 properties had installed energy efficiency measures which had been funded through the Core Cities projects (see Table 1.9). The provisional number of measures installed in these properties was 3,919. 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 headline 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 and have not been updated since.

Green Deal Communities (Provisional Interim findings)

23 Lead Local Authorities (covering 95 individual Local Authority areas) in England have received £83.5 million to help deliver the Government’s Green Deal home energy efficiency improvement programme through a programme called Green Deal Communities scheme.

The scheme will continue to deliver energy efficiency measures in properties until the end of 2015. As at the end of January 2015, interim provisional data shows that 1,178 properties had installed 1,348 energy efficiency measures funded by Green Deal Communities (see Table 1.9b). Of the 1,348 energy efficiency measures installed around three quarters (987) were external solid wall insulation, around eight per cent were gas boilers (114) and eight per cent were loft insulation (105) (see Table 1.9c). The Green Deal Communities scheme has also funded 106 show homes up to end January 2015.

Another provisional summary of energy efficiency installations funded through the Green Deal Communities Scheme will be published in 2016, with final estimates expected to be published in 2017.

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

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

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9 This includes a number of measures which were also reported as ECO measures.
10 This may include some installations which were completed after the 31st January 2015.
14,743 properties\textsuperscript{11} where measures had been installed following payment from the Cashback scheme up to 30\textsuperscript{th} September 2014 (the end of the scheme).

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

Table 1.10 presents the regional breakdown of properties where measures were installed following Cashback payment up to 30\textsuperscript{th} September 2014. Tables 1.10a and 1.10b present these breakdowns of Cashback properties by LA and Parliamentary Constituency in England and Wales\textsuperscript{12} up to 30\textsuperscript{th} September 2014 (the end of the scheme).

There were 6.2 Cashback payments per 10,000 households in England and Wales. The region with the highest number of Cashbacks paid per number of households was the North West with 11.1 (accounting for 23 per cent of all Cashback vouchers paid, see Table 1.10). There were 4.3 Cashback payments per 10,000 households in Wales.

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

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

**Green Deal Home Improvement Fund measures installed, up to 30th June 2015**

The Green Deal Home Improvement Fund (GDHIF) is an incentive scheme open to all householders in England and Wales wanting to improve the energy efficiency of their homes. The scheme allows householders to choose one or both of two offers available and they are eligible to claim money back. GDHIF release 1 opened in June 2014 and closed to new applicants on 24 July 2014\textsuperscript{13}. GDHIF release 2 commenced on 10 December 2014 (and closed to new Solid Wall Insulation applicants on 11 December 2014) with payments under GDHIF release 2 starting from January 2015. GDHIF release 3 commenced on 16 March 2015 (and closed to new Solid Wall Insulation applicants on 26 March 2015). The announcement on 23 July 2015 stated that applications for the “two-measure” offer under GDHIF release 3 will close on 30th September 2015 or when remaining funds are fully allocated.

Under GDHIF there were 25,487 GDHIF vouchers paid (to 25,419 individual households) following installation of measures up to 30th June 2015\textsuperscript{14}.

\textsuperscript{11} This includes a small number of properties where the Cashback payment was made in October 2014 but the measures were installed before the end of September 2014.

\textsuperscript{12} 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).

\textsuperscript{13} Information on the number of Green Deal Home Improvement Fund (GDHIF) release 1 applications, vouchers issued and maximum value of vouchers issued was published on a weekly basis from 17 June 2014 until the scheme closed on 24 July 2014. Also included on a weekly basis from 17 December 2014 until 7 January 2015 were GDHIF application statistics on GDHIF release 2 and from 24 March 2015 until 26 March 2015 on GDHIF release 3, available here: https://www.gov.uk/government/statistics/energy-savings-advice-service-esas-calls-and-green-deal-webpage-views

\textsuperscript{14} This includes properties where the GDHIF payment was made in July 2015 but the measures were installed before the end of June 2015. More than one voucher can be issued and payment made per household.
Geographic location of properties where measures were installed using GDHIF payment, up to 30th June 2015 (Tables 1.10d, 1.10e, 1.10f, Map 1.2)

Table 1.10d presents the regional breakdown of properties where measures were installed with GDHIF payment up to 30th June 2015. Tables 1.10e and 1.10f present these breakdowns of GDHIF properties by LA and Parliamentary Constituency in England and Wales up to 30th June 2015\textsuperscript{15}.

There were 10.7 GDHIF payments per 10,000 households in England and Wales. The area with the highest number of GDHIF voucher payments per number of households was Wales with 33.5 (accounting for 17 per cent of all GDHIF vouchers paid, see Table 1.10d).

Within England, Wolverhampton Local Authority had the most GDHIF voucher payments per 10,000 households (104). In Wales, three Local Authorities had more GDHIF voucher payments per 10,000 households; Rhondda Cynon Taf (104), Blaenau Gwent (145) and Merthyr Tydfil (199) (Map 1.2).

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

Around 71 per cent of properties that had installed measures using GDHIF were owner-occupied. 25 per cent were in the private rented sector and four per cent were in the social rented sector (see Table 1.10g). In comparison, according to dwelling stock figures released by Department for Communities and Local Government for England and Wales in 2013 there were 64 per cent owner-occupied, 19 per cent were private rented sector and 17 per cent were for social rented sector. This suggests that there were a much lower proportion of measures installed using GDHIF in the social rented sector than would be expected from the distribution of the housing stock (or compared to the Cashback scheme, eight per cent, see Table 1.10c).

\textsuperscript{15} 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 – Number of Green Deal Home Improvement Fund vouchers paid per 10,000 households by Local Authority in England and Wales, up to 30th June 2015.
Measures installed under ECO, up to 30th June 2015

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.

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

Geographic location of provisional measures installed under ECO, up to 30th June 2015 (Tables 1.11, 1.11a and 1.11b)

Tables 1.11, 1.11a and 1.11b present the number of provisional measures installed under ECO, broken down by obligation, in each region (Table 1.11), LA (Table 1.11a) and Parliamentary Constituency (Table 1.11b) up to 30th June 2015.

Around one fifth (19 per cent) of ECO measures were in the North West (280,775), the highest in any region. 12 per cent of ECO measures were installed in Scotland (173,320) and five per cent were in Wales (76,258).

Geographic location of provisional number of households in receipt of ECO measures, up to 30th June 2015 (Tables 1.11c, 1.11d, 1.11e and Map 1.3)

Up to 30th June 2015, 1,232,068 unique properties17 had benefitted from having at least one ECO measure installed (Table 1.11). By ECO obligation, 559,483 unique properties had Carbon Savings Target measures installed, 350,000 properties had Affordable Warmth (HHCRO) measures installed, and 356,387 properties had Carbon Saving Community measures installed, of which 51,908 properties had measures installed under the rural sub-obligation18.

When comparing areas, it is more representative to use the number of households in receipt of ECO measures per 1,000 households. In Great Britain, on average, there were around 47 households in receipt of ECO measures per 1,000 households or, in other words, around five 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 74 and 70 households with ECO measures per 1,000 households respectively. In Scotland there were around 62 ECO measures per 1,000 households and 45 per 1,000 households in Wales. Blackpool had the highest proportion of households with ECO measures in any Local Authority in Great Britain, with around 146 households with ECO measures per 1,000 households.

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

17 The number of unique properties by ECO obligation does not tally to the total number of unique properties (1,232,068) as a property can have a number of different measures installed under different ECO obligations.

Map 1.3 – Provisional number of households in receipt of ECO measures by Local Authority per 1,000 households, up to 30th June 2015
Further breakdowns of provisional measures installed under ECO, up to 30th June 2015 (Tables 1.12, 1.12a, 1.12b, and 1.12c)

Tables 1.12 to 1.12d present further analysis of provisional measures installed under ECO up to 30th June 2015, 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 99 per cent of Affordable Warmth Target measures were installed in gas-fuelled properties, compared to 90 per cent of all ECO measures and 85 per cent of all households in England. This suggests that a slightly higher proportion of measures installed under ECO were in gas-fuelled properties that would be expected from the housing stock.

The large majority of properties with ECO measures (75 per cent) were houses, 17 per cent were flats and the remainder were bungalows and maisonettes (and park homes). However, this varies by obligation, with a greater proportion of properties with measures installed under Carbon Saving Target being flats (24 per cent), compared with properties with measures installed under Carbon Saving Communities (18 per cent) and Affordable Warmth (five per cent). There were 73,683 properties with ECO measures installed between April and June 2015 (see Table C1).

Estimated lifetime bill savings for Affordable Warmth measures installed, up to 30th June 2015 (Table 1.12d)

Having installed 456,850 affordable warmth ECO measures, we estimate it will result in around £5.4bn worth of notional lifetime bill savings.

ECO costs

DECC receives monthly summary information covering the costs associated with delivering ECO for all nine obligated energy suppliers, at the end of each quarter. It is important to note that these figures relate to all costs as reported by suppliers as at the end of June 2015. 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 2015, covering the whole of ECO 1 period and first quarter of ECO 2 period) are included in Table 1.13. These are historic costs and future costs may go up or down depending on a range of factors.

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

Due to these changes to ECO measures and costs, the projected annual costs have not been included in this release. The new ECO amendment order reduced delivery costs, particularly under the CERO. There are further factors, such as carry-forward to ECO from previous

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obligation schemes, the estimated impact of the levelisation mechanism (which would provide uplift to CERO carbon scoring) and the fact that, subject to final determination by Ofgem, some suppliers have exceeded some of their obligations, so these measures (and their costs) would count towards ECO 2 targets (April 2015 to March 2017). All of these factors do not make it possible to scale costs accurately.

The total ECO cost estimates in Table 1.13, are based on the companies’ reported costs. They include the costs of delivering the additional, likely cheaper, measures companies have delivered since April 2014 under CERO in anticipation of the legislative amendments to ECO in March 2015 (where measures have been installed up to the end of June 2015, and have been notified to Ofgem). The total delivery costs for ECO 1 (January 2013 –June 2015) were around £2.53bn, with an additional £212m in administrative costs.

Table 1.13a shows the average cost by obligation and the highest average cost and lowest average cost reported by suppliers for each obligation as at the end of March 2015. The suppliers have not been identified to protect commercial confidentiality. This shows that some energy suppliers are discharging their obligation more cost effectively than others. This includes cost revisions submitted from some energy companies as previously reported where Energy companies have been informed of rejected ECO measures (by Ofgem), or other changes they need to reflect in their ECO costs and carbon and bill savings.

**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 2015 (Table 1.14)**

Table 1.14 presents the clearing prices of all lots sold through ECO brokerage from all 62 auctions taking place up to the end of June 2015, with a total value of contracts let worth £434 million. Over a quarter of all auctions (18 of the 62) saw no contracts let. The low levels of brokerage activity since March 2014 are likely to have been affected by a number of factors, including uncertainty around the period following the announced reduction in the obligation before new legislation came into force in December 2014. Trading may have also been affected as a result of reaching the end to the first ECO obligation period, because contracts under brokerage are for future delivery (and there will not be certainty of ECO 2 targets until Ofgem complete their compliance checks of ECO 1 measures). The average price paid for lots has been decreasing for the Carbon Saving Obligation, Carbon Saving Communities (CSCO) and ECO Affordable Warmth. For more detail on the results of each auction, please see ECO Brokerage.

**Estimated carbon and energy savings for measures installed through ECO, Green Deal Plans, GDHIF and Cashback, up to 30th June 2015**

The Final Stage Impact Assessment for the GD and ECO reported that both policies would lead to significant carbon and energy savings. This section estimates the carbon and energy savings derived from measures installed through these policy areas.
Estimated carbon and energy savings relating to measures installed through ECO, Green Deal Plans, GDHIF and Cashback up to 30th June 2015 (Table 1.15)

Table 1.15 presents the estimated impact of measures installed through Cashback, Green Deal Plans, Green Deal Home Improvement Fund (GDHIF) or under ECO (through the Carbon Saving Obligation and Carbon Saving Communities Obligation) up to the end of June 2015. Affordable Warmth is excluded because carbon reductions are not the stated aim of this policy and difficulties in accurately estimating their carbon impact (however this will be considered again in future releases). This obligation of ECO is anticipated to lead to a net reduction in carbon. However, this depends on reductions in the traded sector emissions out-weighing any increase in non-traded sector emissions.

The provisional total estimated carbon savings of these measures (based on savings as set out in the Impact Assessment) is in the range 21.1 – 22.2 MtCO2 with provisional estimated lifetime energy savings between 86,389 – 91,212 GWh.

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

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

More information on the methodology used is included here.

Measures not captured by administrative data sources

This report provides detail on measures installed in properties through ECO, with support from Cashback and Green Deal and Local Authority programmes, which make up the majority of measures installed. As first reported in March 2014’s detailed 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

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20 Domestic measures in-use factors, page 9

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\textsuperscript{22}. 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 28th July 2015 (Table 1.16)

The supply chain to support the Green Deal has been developing since October 2012. This includes individual Advisors (who carry out and produce Green Deal Advice Reports) and Assessor organisations (who employ authorised Green Deal Advisors), Green Deal Providers (who quote for and arrange Green Deal Plans with customers), and Installer organisations\textsuperscript{23} (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\textsuperscript{24}. These figures are based on information submitted\textsuperscript{25} to the ORB consumer search tool by a number of these participating organisations and indicate a good coverage across Great Britain.

\textsuperscript{22} 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.

\textsuperscript{23} Individual Installers within an installer organisation do not need to register.

\textsuperscript{24} Businesses are flexible and may travel further to other areas as the market develops.

\textsuperscript{25} GD accredited organisations are able to provide their operational coverage information onto the ORB consumer search tool on a voluntary basis. Some organisations have waited until they are ready to delivery GD services before providing their details. Separate entries have been submitted for each individual sub-division of an organisation which has its own certification ID.
GD and ECO Tables

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

Table 1.1: Number of Green Deal Assessments by Energy Efficiency Band, up to 30th June 2015, Great Britain

<table>
<thead>
<tr>
<th>Energy Efficiency Band</th>
<th>Green Deal Assessments</th>
<th>Percentage of Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>467</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>4,429</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>56,745</td>
<td>10</td>
</tr>
<tr>
<td>D</td>
<td>282,008</td>
<td>49</td>
</tr>
<tr>
<td>E</td>
<td>165,816</td>
<td>29</td>
</tr>
<tr>
<td>F</td>
<td>49,756</td>
<td>9</td>
</tr>
<tr>
<td>G</td>
<td>16,715</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575,936</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 1.2: Number of Green Deal Assessments by Property Type up to 30th June 2015, Great Britain

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Green Deal Assessments</th>
<th>Percentage of Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>House</td>
<td>442,128</td>
<td>77</td>
</tr>
<tr>
<td>Bungalow</td>
<td>64,664</td>
<td>11</td>
</tr>
<tr>
<td>Flat</td>
<td>59,007</td>
<td>10</td>
</tr>
<tr>
<td>Maisonette</td>
<td>9,310</td>
<td>2</td>
</tr>
<tr>
<td>Park homes</td>
<td>827</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575,936</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 1.3: Number of Green Deal Assessments by tenure, up to 30th June 2015, Great Britain

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Green Deal Assessments</th>
<th>Valid Percentage of Assessments(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied</td>
<td>446,841</td>
<td>78</td>
</tr>
<tr>
<td>Rented (private)</td>
<td>70,037</td>
<td>12</td>
</tr>
<tr>
<td>Rented (social)</td>
<td>56,284</td>
<td>10</td>
</tr>
<tr>
<td>Unknown</td>
<td>2,774</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575,936</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

\(^1\) 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 2015, Great Britain

<table>
<thead>
<tr>
<th>Properties by whether on or off Mains Gas Grid</th>
<th>Green Deal Assessments</th>
<th>Valid Percentage of Assessments¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Gas</td>
<td>91,001</td>
<td>16</td>
</tr>
<tr>
<td>On Gas</td>
<td>484,072</td>
<td>84</td>
</tr>
<tr>
<td>Unknown</td>
<td>863</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575,936</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

¹ Percentage of Assessments is calculated only for those Assessments where Mains Gas connection is known.

Table 1.5: Number of improvements recommended in Green Deal Assessments¹ by measure type (grouped), up to 30th June 2015, Great Britain

<table>
<thead>
<tr>
<th>Measure Types</th>
<th>Number of improvements recommended ²</th>
<th>Percentage of improvements recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler</td>
<td>174,347</td>
<td>10.0</td>
</tr>
<tr>
<td>Cavity wall insulation</td>
<td>186,286</td>
<td>10.7</td>
</tr>
<tr>
<td>Lighting</td>
<td>715</td>
<td>0.0</td>
</tr>
<tr>
<td>Loft Insulation</td>
<td>277,860</td>
<td>15.9</td>
</tr>
<tr>
<td>Micro-generation</td>
<td>403,385</td>
<td>23.1</td>
</tr>
<tr>
<td>Other Heating</td>
<td>162,804</td>
<td>9.3</td>
</tr>
<tr>
<td>Other Insulation</td>
<td>342,660</td>
<td>19.6</td>
</tr>
<tr>
<td>Solid Wall Insulation</td>
<td>155,993</td>
<td>8.9</td>
</tr>
<tr>
<td>Window Glazing</td>
<td>41,383</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,745,433</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

¹ Does not include recommended improvements from the Green Deal Improvement Package tool.
² More than one improvement can be recommended per Assessment. On average, there are around three improvements recommended per Assessment.

Table 1.5a: Number of improvements by measures recommended in Green Deal Assessments, up to 30th June 2015, Great Britain (Table available in Excel here).

Table 1.5b: Number of improvements recommended per Green Deal Assessment, up to 30th June 2015, Great Britain (Table available in Excel here).

Table 1.6: Number of Green Deal Assessments lodged by region, up to 30th June 2015 (Table available in Excel here).

Table 1.6a: Number of Green Deal Assessments lodged by administrative area, up to 30th June 2015 (Table available in Excel here).

Table 1.6b: Number of Green Deal Assessments lodged by Parliamentary Constituency, up to 30th June 2015 (Table available in Excel here).

Table 1.7: Number of 'live' Green Deal Plans by Region, up to 30th June 2015 (Table available in Excel here).
Table 1.7a: Number of ‘live’ Green Deal Plans by administrative area, up to the 30th June 2015 (Table available in Excel here).

Table 1.7b: Number of ‘live’ Green Deal Plans by Parliamentary Constituency, up to the 30th June 2015 (Table available in Excel here).

Table 1.7c: Number of ‘live’ Green Deal Plans by tenure, up to the 30th June 2015

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Total number of ‘Live’ Green Deal Plans</th>
<th>Valid percentage of ‘Live’ Green Deal Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied</td>
<td>9,420</td>
<td>95</td>
</tr>
<tr>
<td>Rented (private)</td>
<td>542</td>
<td>5</td>
</tr>
<tr>
<td>Rented (social)</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,999</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1 The table shows the number of ‘Live’ Green Deal Plans in unique properties.
2 Percentage of ‘Live’ Green Deal Plans is calculated only for those vouchers where tenure is known.

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

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

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

Table 1.9b: Provisional number of properties with energy efficiency work installed under Green Deal Communities Programme, by project area (Table available in Excel here).

Table 1.9c: Provisional number of energy efficiency measures installed under Green Deal Communities Programme, by measure type (Table available in Excel here).

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

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

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

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

Table 1.10d: Number of Green Deal Home Improvement Fund vouchers paid by region, up to 30th June 2015, England and Wales (Table available in Excel here).

Table 1.10e: Green Deal Home Improvement Fund vouchers paid by administrative area, up to 30th June 2015, England and Wales (Table available in Excel here).
Table 1.10f: Green Deal Home Improvement Fund vouchers paid by Parliamentary Constituency, up to 30th June 2015, England and Wales (Table available in Excel here).

Table 1.10g: Number of Green Deal Home Improvement Fund vouchers paid by tenure, up to 30th June 2015, England and Wales

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Total number of GDHIF vouchers paid</th>
<th>Valid percentage of GDHIF vouchers paid¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied</td>
<td>17,660</td>
<td>71</td>
</tr>
<tr>
<td>Rented (private)</td>
<td>6,311</td>
<td>25</td>
</tr>
<tr>
<td>Rented (social)</td>
<td>884</td>
<td>4</td>
</tr>
<tr>
<td>Unknown</td>
<td>632</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong>²</td>
<td><strong>25,487</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

¹ Percentage of GDHIF vouchers paid is calculated only for those vouchers where the tenure of the householder is known.
² Includes any GDHIF vouchers paid to end of July 2015, where the installation month of the measures GDHIF is being claimed on was no later than end of June 2015.

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 2015 (Table available in Excel here).

Table 1.11a: Provisional number of ECO measures by ECO obligation by administrative area, up to 30th June 2015 (Table available in Excel here).

Table 1.11b: Provisional number of ECO measures by ECO obligation by Parliamentary Constituency, up to 30th June 2015 (Table available in Excel here).

Table 1.11c: Provisional number of households in receipt of ECO measures by region, up to 30th June 2015 (Table available in Excel here).

Table 1.11d: Provisional number of households in receipt of ECO measures by administrative area, up to 30th June 2015 (Table available in Excel here).

Table 1.11e: Provisional number of households in receipt of ECO measures by Parliamentary Constituency, up to 30th June 2015 (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 2015 (Table available in Excel here).

Table 1.12a: Provisional number of households in receipt of ECO measures by property type and ECO obligation, up to 30th June 2015 (Table available in Excel here).

Table 1.12b: Provisional number of households in receipt of ECO measures by tenure and ECO obligation, up to 30th June 2015 (Table available in Excel here).

Table 1.12c: Provisional number and percentage of ECO measures traded through brokerage by month and ECO obligation, up to 30th June 2015 (Table available in Excel here)

Table 1.12d: Estimated lifetime bill savings for Affordable Warmth measures installed by month, up to 30th June 2015 (Table available in Excel here)
### Table 1.13: Estimated ECO delivery costs as reported by energy suppliers, up to 30th June 2015

<table>
<thead>
<tr>
<th>Obligation</th>
<th>Average cost per £ saved on energy bills</th>
<th>Average cost per lifetime tonne of CO$_2$ saved</th>
<th>Total delivery costs</th>
<th>Total administrative costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable Warmth</td>
<td>£0.16</td>
<td>N/A</td>
<td>£853.9m</td>
<td></td>
</tr>
<tr>
<td>Carbon Saving Communities 4</td>
<td>N/A</td>
<td>£52.17</td>
<td>£488.2m</td>
<td></td>
</tr>
<tr>
<td>Carbon Saving Obligation</td>
<td>N/A</td>
<td>£74.67</td>
<td>£1,184.3m</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>£2,526.4m</strong></td>
<td><strong>£212.0m</strong></td>
</tr>
</tbody>
</table>

1. Average cost per £ saved on energy bills for Affordable Warmth ECO measures.
2. Average cost per lifetime tonne of CO$_2$ saved for Carbon Saving Communities and Carbon Saving Obligation. CO$_2$ savings are not adjusted by 15% comfort taking factor.
3. Administrative costs are not available by obligation.
4. Carbon Saving Communities includes delivery costs incurred through the rural sub-obligation.
5. Total estimated ECO delivery costs include cost revisions submitted from some energy companies.

### Table 1.13a: Estimated average ECO delivery costs as reported by energy suppliers, up to 30th June 2015 (Table available in Excel [here](#)).

### Table 1.14: ECO Brokerage Auction clearing prices by ECO obligation by auction, up to 30th June 2015 (Table available in Excel [here](#)).

### Table 1.15: Estimated carbon and energy savings relating to measures installed through ECO, Cashback, Green Deal Home Improvement Fund and Green Deal Plans, up to 30th June 2015 (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 2015 (Table available in Excel [here](#)).
Section 2 - Estimates of Home Insulation Levels in Great Britain: June 2015

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\textsuperscript{26}, the Community Energy Saving Programme (CESP)\textsuperscript{27}, Warm Front\textsuperscript{28}, Green Deal (including Green Deal finance, Cashback and the Green Deal Home Improvement Fund)\textsuperscript{29} and the Energy Company Obligation\textsuperscript{30} (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 27.5 million homes\textsuperscript{31} in Great Britain, of these 19.5 million had cavity walls with the remaining 8.0 million having solid walls. 24.0 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 2015, 14.3 million had cavity wall insulation (73 per cent of properties with a cavity wall), 16.8 million had loft insulation (70 per cent of properties with a loft) and 338,000 had solid wall insulation (four per cent of properties with solid walls) (Chart 2.1).

\textsuperscript{26} https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes
\textsuperscript{27} https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes
\textsuperscript{28} https://www.gov.uk/government/policies/helping-households-to-cut-their-energy-bills/supporting-pages/warm-front-scheme
\textsuperscript{29} https://www.gov.uk/green-deal-energy-saving-measures
\textsuperscript{31} This includes both occupied and unoccupied dwellings and therefore differs from household numbers included in Section 1 of this publication which refers to households that are occupied (one or more resident).
Table 2.1: Insulated homes in Great Britain, March 2008 to June 2015 (Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Cavity wall insulation</th>
<th>Loft insulation &gt;=125mm</th>
<th>Solid wall insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 2008</td>
<td>10,030</td>
<td>10,150</td>
<td>65</td>
</tr>
<tr>
<td>Mar 2009</td>
<td>10,760</td>
<td>10,930</td>
<td>74</td>
</tr>
<tr>
<td>Mar 2010</td>
<td>11,490</td>
<td>12,450</td>
<td>94</td>
</tr>
<tr>
<td>Mar 2011</td>
<td>12,090</td>
<td>13,540</td>
<td>102</td>
</tr>
<tr>
<td>Mar 2012</td>
<td>12,750</td>
<td>14,770</td>
<td>132</td>
</tr>
<tr>
<td>Mar 2013</td>
<td>13,390</td>
<td>16,210</td>
<td>215</td>
</tr>
<tr>
<td>Mar 2014</td>
<td>13,780</td>
<td>16,450</td>
<td>275</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>14,190</td>
<td>16,770</td>
<td>325</td>
</tr>
<tr>
<td>Jun 2014</td>
<td>13,890</td>
<td>16,520</td>
<td>284</td>
</tr>
<tr>
<td>Sep 2014</td>
<td>13,990</td>
<td>16,600</td>
<td>299</td>
</tr>
<tr>
<td>Dec 2014</td>
<td>14,100</td>
<td>16,690</td>
<td>313</td>
</tr>
<tr>
<td>Mar 2015</td>
<td>14,190</td>
<td>16,770</td>
<td>325</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>14,270</td>
<td>16,820</td>
<td>338</td>
</tr>
</tbody>
</table>

p, provisional figure. All delivery under ECO remains provisional until full compliance checks have been completed by Ofgem.

r, revised figure.

Taking into account retro-fit insulation delivered through Government schemes and new properties built with insulation during the last year, in June 2015 there were 380,000 more homes with cavity wall insulation, 300,000 more homes with at least 125mm of loft insulation and 54,000 more homes with solid wall insulation compared with June 2014.

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.

---

Table 2.1: Insulated homes in Great Britain, March 2008 to June 2015 (Thousands)
Insulation measures delivered in Scotland exclusively under the Green Homes Cashback scheme are excluded from the figures. These 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 2015 (Thousands)

- The number of properties with cavity wall insulation increased by three per cent (380,000) between the end of June 2014 and June 2015.
- The number of properties with loft insulation with a depth of at least 125mm increased by two per cent (300,000) between the end of June 2014 and June 2015.

Chart 2.3: Homes in Great Britain with solid wall insulation33: March 2008 to June 2015 (Thousands)

- The number of properties with solid wall insulation increased by 19 per cent (54,000) between the end of June 2014 and June 2015.

Sources of increase in insulation levels

Increases in the number of properties with insulation result from new properties being built34 and from retro-fit insulation, predominately through Government schemes. Table 2.2 and

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33 Solid wall insulation has been defined throughout this report as internal or external wall insulation installed through Government schemes.
34 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.
Charts 2.4 and 2.5 show where the insulation estimates have come from. Delivery of measures through CERT has made the largest contribution since April 2008, for lofts and cavities. CESP has accounted for the largest contribution of solid wall insulation, with ECO delivering the second highest contribution. See Table 2.2a in the Excel tables for Government scheme delivery since April 2008 by quarter and measure type.

### Table 2.2: Insulated homes in Great Britain by source, June 2015 (Thousands)

<table>
<thead>
<tr>
<th>Source</th>
<th>Cavity wall insulation</th>
<th>Loft insulation &gt;=125mm</th>
<th>Solid wall insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2008 housing surveys †</td>
<td>10,030</td>
<td>10,150</td>
<td>65</td>
</tr>
<tr>
<td>Properties built since April 2008</td>
<td>1,030</td>
<td>800</td>
<td>..</td>
</tr>
<tr>
<td>Government scheme delivery (CERT, CESP, Warm Front)</td>
<td>2,630</td>
<td>5,500</td>
<td>157</td>
</tr>
<tr>
<td>Government scheme delivery Green Deal/ECO</td>
<td>580</td>
<td>380</td>
<td>116</td>
</tr>
<tr>
<td>Total</td>
<td>14,270</td>
<td>16,820</td>
<td>338</td>
</tr>
<tr>
<td>Homes in Great Britain ‡</td>
<td>19,490</td>
<td>23,980</td>
<td>7,990</td>
</tr>
<tr>
<td>Percentage of homes insulated ‡</td>
<td>73%</td>
<td>70%</td>
<td>4%</td>
</tr>
</tbody>
</table>

† 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.

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

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

.. not applicable.

### Chart 2.4: Number of homes in Great Britain with cavity wall insulation and loft insulation by source, June 2015 (Thousands)

![Chart 2.4: Number of homes in Great Britain with cavity wall insulation and loft insulation by source, June 2015 (Thousands)](chart.png)
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 2015, 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 2015 (Thousands)

<table>
<thead>
<tr>
<th>Insulation type</th>
<th>Insulated</th>
<th>Uncertainty*</th>
<th>Remaining potential**</th>
<th>Total properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavity wall insulation</td>
<td>14,270</td>
<td>500</td>
<td>4,720</td>
<td>19,490</td>
</tr>
<tr>
<td></td>
<td>73%</td>
<td>3%</td>
<td>24%</td>
<td>100%</td>
</tr>
<tr>
<td>Loft insulation</td>
<td>16,820</td>
<td>120</td>
<td>7,040</td>
<td>23,980</td>
</tr>
<tr>
<td></td>
<td>70%</td>
<td>0.5%</td>
<td>29%</td>
<td>100%</td>
</tr>
<tr>
<td>Solid wall insulation</td>
<td>338</td>
<td>126</td>
<td>7,520</td>
<td>7,990</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>2%</td>
<td>94%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* 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.

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

Cavity wall insulation

It is estimated that at the end of June 2015 there were 4.7 million cavity wall properties which could benefit from some cavity wall insulation (24 per cent of homes with cavity walls).

Of these, 1.4 million are considered to have limited potential\(^{36}\) (0.5 million of this 1.4 million are also considered hard to treat\(^{37}\)) and 3.3 million are totally uninsulated (2.9 million of the 3.3 million uninsulated properties are considered hard to treat). There are therefore 0.4 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.

\(^{36}\)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.

\(^{37}\)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), 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 2015 it is estimated that there were 7.0 million uninsulated lofts (29 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 2015 there were 7.5 million uninsulated solid walls (94 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 2013 in Scotland) with the aim of tackling a number of the key barriers to the take-up of energy efficiency measures.

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

On 23 July 2015 DECC announced that there will be no further public funding to the Green Deal Finance Company. This decision has no impact on existing Green Deal Finance Plans in the system so these will continue to progress.

A brief description of how the GD process works is shown below:

Step 1 – Assessment – A GD 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 GD 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 – GD Providers will discuss with the owner/occupier whether a GD 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 GD Plan88, at which stage they enter a cooling-off period39.

Step 5 – Installation – Once a GD Plan has been agreed, the Provider will arrange for the improvements to be made by a GD Installer. Once the installation has been completed a letter is sent to the Bill Payer and, at this stage, the GD Plan goes ‘live’.

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

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88 The Plan is a contract between the owner/occupier and the Provider – it sets out the work that will be done and the repayments.
39 For example, in the case of a GD Plan that is regulated by the Consumer Credit Act 1974, the consumer will have 14 days to withdraw from the part of the GD 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 for the ECO 1 period. ECO 2 commenced from April 2015 and is set to run until 31 March 2017. 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 Target (CERO); Carbon Saving Communities (CSCO) and Affordable Warmth (HHCRO).

**Carbon Saving Target** – This covers the installation of measures like solid wall and hard-to-treat cavity wall insulation, which ordinarily can’t be financed solely through Green Deal Plans.

**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 and confirmed its intention to introduce these changes into legislation in its 22 July 2014 response. The revised regulations were passed by Parliament on 5 December 2014. Measures that were installed since 1 April 2014 in anticipation of these changes, which were notified to Ofgem, have been included in this release, and the costs associated with these measures are included in this release.

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

**Green Deal Cashback**

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

On 23 July 2015 DECC announced that there will be no future funding releases of the Green Deal Home Improvement Fund. This decision has no impact on existing Green Deal Home Improvement Fund applications and vouchers. The latest ‘two measures’ offer will close to applications on 30th September 2015 or when the remaining £2 million of funding (as at the end of August 2015) run out – whichever happens sooner.

The Green Deal Home Improvement Fund (GDHIF) is an incentive scheme open to all householders in England and Wales wanting to improve the energy efficiency of their homes. The scheme allowed householders to choose one or both of two offers and they were eligible to claim up to £7,600. Householders could also claim a refund of up to £100 for a Green Deal Advice Report (GDAR). GDHIF release 1 closed to new applicants at 6:30pm on 24 July 2014. GDHIF release 2 commenced on 10 December 2014 and GDHIF release 3 commenced on 16 March 2015. For more information please see the GDHIF website. For more information on the separate scheme that operated in Scotland please see the relevant website. Statistics on this scheme can be found here.

DECC published GDHIF application release 1 data on the gov.uk website on a weekly basis until the scheme closed, to assist businesses and households. This weekly series reported the number of applications, vouchers issued and maximum value of vouchers issued. Also included on a weekly basis from 17 December 2014 until 7 January 2015 (on the same website), were GDHIF application statistics on GDHIF release 2. A one-off publication was made on 12 December to show that funding allocated to Solid Wall Insulation applications reached its maximum allocation amount. Also included on a weekly basis from 24th March 2015 (on the same website), were GDHIF application statistics on GDHIF release 3. A one-off publication was made on 26 March 2015 to show that funding allocated to Solid Wall Insulation applications reached its maximum allocation amount.

This data was provided from the GDHIF administrator and was therefore provisional.

ECO delivery costs

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

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 from suppliers and include: reporting and compliance, own marketing and direct administrative costs. Figures up to the end of June 2015 show aggregate expenditure of £212m. 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 delivery and 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 GD.

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.

**Green Deal Communities**

23 Lead Local Authorities (covering 95 individual Local Authority areas) in England have received £83.5 million to help deliver the Government’s Green Deal home energy efficiency improvement programme through a programme called Green Deal Communities scheme.

LAs will have flexibility in which energy efficiency measures were installed, including solid wall insulation to private households; creative approaches e.g. local incentives, working with local community partners, or refunding Green Deal assessments where a household installs measures using Green Deal financing or self-finance. This also included show homes to launch activity in an area.

The Lead Local Authorities are:

- Ashfield
- Bath
- Bracknell Forest
- Bristol
- Broadland District Council
- Cambridgeshire
- Dartford
- East Hampshire
- Eastleigh
- Haringey
- Harrow
- Leeds
- Lewisham
- Manchester
- Nottingham
- Nuneaton
• Peterborough
• Plymouth
• South Bucks
• Suffolk
• Telford
• Woking and Surrey County Council
• Worcestershire

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
Annex B – Sources and Methodology

National Statistics


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 headline Green Deal and Energy Company Obligation (ECO) releases should be treated as provisional and subject to revision.

Green Deal and ECO estimates

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

There are seven main sources of information:

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

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

Insulation statistics

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

Cavity wall insulation

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

Loft insulation

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

Solid wall insulation

It is possible to improve the thermal performance of solid walls by adding insulation either internally or externally. There is a wide variety of technical solutions that can be used to insulate either the internal or external face of the wall. Current building regulations require a target U-value of 0.35 W/m².K to be reached if this modification to the wall is made. It is likely

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

DECC launched a user consultation on 20 August, for 6 weeks, to assess impacts on user needs of making changes to this, the headline (monthly), and the detailed (quarterly) National Statistic series on Green Deal, ECO and insulation statistics. Potential outcomes could include a reduction in the frequency for some tables of this release from monthly to quarterly, and the detailed release from quarterly to annual. A user consultation is required for National Statistics and is in compliance with the Code of Practice for Official Statistics.

Any enquiries or comments in relation to this statistical release should be sent to DECC’s Household Energy Efficiency Statistics Team at the following email address: EnergyEfficiency.Stats@decc.gsi.gov.uk

Contact telephone: 0300 068 5106

The statistician responsible for this publication is Peter Antoniades.

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

Next Release

Due to the user consultation (which is open until 30th September 2015), there are no pre-announced dates for the next release of this series. If proposals, set out in the user consultation, are approved then the next release of the detailed National Statistics of this series will be on 17th March 2016 covering activity up to the end of December 2015.

This will be announced in the user consultation response which will be published by DECC within 12 weeks of the close of the consultation.
Annex C - Household Energy Efficiency schemes

It is intended to gradually widen the scope of this detailed release to provide more detail on other domestic energy efficiency schemes. This section of the report presents activity levels on ECO, Cashback, Green Deal Plans and Green Deal Home Improvement Fund (GDHIF) between January 2013 and June 2015 (as reported in the headline National Statistics release published on 21 May 2015) alongside figures on Feed-In Tariffs installations, Renewable Heat Premium Payment voucher redemptions, and on Smart Electricity and Gas Meter installations that have been previously published in their own statistical releases.

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

Provisional figures show that around 1,232,100 households benefitted from ECO between January 2013 and June 2015. Around 14,700 households installed measures and received money from the Cashback scheme, around 10,000 households had funded measures through Green Deal finance Plans, and 25,400 households had funded measures through Green Deal Home Improvement Fund. There is a small amount of double counting between these mechanisms (around 9,300 households), See Table 1a of the August headline statistics release

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

Feed-In Tariffs

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

The majority of the installations installed under FITs are in the domestic sector (96 per cent) but as these tend to be smaller in size, the capacity of domestic schemes makes up 60 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 2015, 262,799 domestic installations were confirmed onto the Central FIT Register. The total number of domestic installations confirmed onto the FIT scheme by the end of June 2015 was 608,408.

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.

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

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

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

**Social landlord competitions**

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

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

**Communities scheme**

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

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

**Domestic RHI**

The domestic Renewable Heat Incentive (RHI) is a financial incentive scheme introduced to encourage a switch to renewable heating systems in the domestic sector. Launched on the 9 April 2014 in Great Britain, participants of the scheme receive tariff payments for the heat generated from an eligible renewable heating system which is heating a single dwelling. The scheme covers single domestic dwellings and is open to owner-occupiers, private landlords,
social landlords and self-builders. There are four renewable heating technologies covered by the scheme - Air-source heat pumps; Ground and water-source heat pumps; Biomass-only boilers and biomass pellet stoves with integrated boilers; and Solar thermal panels.

Up until the end of June 2015, 12,333 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\(^{41}\) is one of the largest and most complex engineering infrastructure Programmes within the EU. The strategic aim of the programme within Great Britain is to rollout over 50 million smart electricity and gas meters to all domestic households by 2020. This will impact approximately 30 million properties.

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

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

As of 30th June 2015, 1,327,354 electricity and gas Smart Meters have been installed in homes across Great Britain.

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\(^{41}\) 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. Each larger energy supplier reports the number of smart meters it has installed and is operating in smart mode to DECC. This includes both meters that are SMETS compliant and those they expect to upgrade to become SMETS compliant. Some smart meters currently installed will need to receive updates before they are fully SMETS compliant.
<table>
<thead>
<tr>
<th>Installation quarter</th>
<th>ECO</th>
<th>Cashback Scheme</th>
<th>Green Deal Plans</th>
<th>Green Deal Home Improvement Fund</th>
<th>Feed in Tariffs</th>
<th>Renewable Heat Premium Payment</th>
<th>Domestic Renewable Heat Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>January - March 2013</td>
<td>48,257</td>
<td>228</td>
<td>0</td>
<td>N/A</td>
<td>20,403</td>
<td>958</td>
<td>N/A</td>
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<tr>
<td>April - June 2013</td>
<td>84,348</td>
<td>3,554</td>
<td>0</td>
<td>N/A</td>
<td>18,224</td>
<td>3,353</td>
<td>N/A</td>
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<tr>
<td>July - September 2013</td>
<td>127,445</td>
<td>3,225</td>
<td>57</td>
<td>N/A</td>
<td>24,874</td>
<td>338</td>
<td>N/A</td>
</tr>
<tr>
<td>October - December 2013</td>
<td>176,168</td>
<td>1,958</td>
<td>569</td>
<td>N/A</td>
<td>23,100</td>
<td>333</td>
<td>N/A</td>
</tr>
<tr>
<td>January - March 2014</td>
<td>200,673</td>
<td>2,042</td>
<td>369</td>
<td>N/A</td>
<td>21,928</td>
<td>1,178</td>
<td>N/A</td>
</tr>
<tr>
<td>April - June 2014</td>
<td>135,364</td>
<td>3,520</td>
<td>592</td>
<td>735</td>
<td>29,127</td>
<td>2,825</td>
<td>320</td>
</tr>
<tr>
<td>July – September 2014</td>
<td>134,637</td>
<td>216</td>
<td>994</td>
<td>8,699</td>
<td>28,297</td>
<td>6</td>
<td>1,357</td>
</tr>
<tr>
<td>October - December 2014</td>
<td>139,425</td>
<td>N/A</td>
<td>2,140</td>
<td>5,862</td>
<td>31,374</td>
<td>N/A</td>
<td>3,275</td>
</tr>
<tr>
<td>January - March 2015</td>
<td>112,068</td>
<td>N/A</td>
<td>2,088</td>
<td>4,353</td>
<td>34,417</td>
<td>N/A</td>
<td>4,081</td>
</tr>
<tr>
<td>April - June 2015</td>
<td>73,683</td>
<td>N/A</td>
<td>3,190</td>
<td>5,770</td>
<td>31,055</td>
<td>N/A</td>
<td>3,300</td>
</tr>
<tr>
<td><strong>Total from January 2013 to June 2015</strong></td>
<td><strong>1,232,068</strong></td>
<td><strong>14,743</strong></td>
<td><strong>9,999</strong></td>
<td><strong>25,419</strong></td>
<td><strong>262,799</strong></td>
<td><strong>8,991</strong></td>
<td><strong>12,333</strong></td>
</tr>
</tbody>
</table>

1. Measures installed in earlier installation months can be notified at a later date under some circumstances; some ECO installations prior to January 2013 are included in the January - March 2013 period.
2. Where a household has measures installed in two or more months, the earliest installation month is recorded. Following improved de-duplication processes the number of unique properties in receipt of ECO has been revised in all quarters compared to previous statistics published in earlier monthly statistical releases.
3. Cashback figures do not include any households that have had measures installed solely through the Cashback Exception Process.
4. Where a household has measures installed in two or more months, the earliest installation month is recorded. This is lower than the number of vouchers issued as it is possible for there to be more than one GDHIF voucher paid per household.
7. These data refer to systems installed after the launch of the domestic RHI scheme on 9 April 2014 which gained accreditation to the scheme. The number of accredited applications in previous quarters has reduced slightly. This is due to participants leaving the scheme or submitting amended applications which make their previous application redundant. Slight reductions to accreditation numbers in previous quarters will occur each time the table is updated as a result of the above.
8. Some households may have had installations through more than one delivery mechanism and there is therefore likely to be some double counting. We aim to evaluate this through future analytical work. In addition to this, 1,327,354 domestic electricity and gas Smart Meters have been installed during the foundation stage of the roll-out programme.