



Department  
of Energy &  
Climate Change

# Background quality report

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

September 2015

© Crown copyright 2015

URN [15D/069]

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence/](http://www.nationalarchives.gov.uk/doc/open-government-licence/) or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Any enquiries regarding this publication should be sent to us at:  
[EnergyEfficiency.Stats@decc.gsi.gov.uk](mailto:EnergyEfficiency.Stats@decc.gsi.gov.uk).

# Contents

Green Deal, Energy Company Obligation and Insulation Levels background quality report .....	4
1. Introduction.....	4
1.1 Background.....	4
1.2 Publications, methodology and documentation .....	4
1.3 Production and dissemination .....	5
2. Relevance .....	6
2.1 Content .....	6
2.2 Completeness .....	6
2.3 Geographical coverage .....	7
2.4 User needs.....	7
3. Relevance .....	7
3.1 Methodology.....	7
3.2 Uncertainty and bias .....	7
4. Timeliness and punctuality .....	8
4.1 Timeliness.....	8
4.2 Punctuality.....	8
5. Accessibility and clarity.....	8
5.1 Accessibility.....	8
5.2 Clarity .....	8
6. Coherence and comparability .....	9
6.1 Consistency across time .....	9
6.2 Consistency with related data sets.....	9
7. Trade offs .....	10
8. Assessment of user needs and perceptions.....	10
9. Performance, cost and respondent burden .....	10
10. Confidentiality, transparency and security .....	10
11. References .....	11

# Green Deal, Energy Company Obligation and Insulation Levels background quality report

## 1. Introduction

### 1.1 Background

This report provides a summary of the quality assurance relating to statistics on the Green Deal (GD), Energy Company Obligation (ECO) and insulation levels in Great Britain. DECC's National Statistics on the Green Deal and ECO use administrative data generated as part of the Green Deal and ECO application process. In addition, the estimates of home insulation levels use data contained within the national housing surveys and dwelling stock data published by the Department for Communities and Local Government (DCLG) to build up an overall picture of the housing stock in Great Britain.

### 1.2 Publications, methodology and documentation

#### **Green Deal and Energy Company Obligation: headline statistics**

The headline statistical release is a National Statistics publication reporting on the latest available statistics on the GD and ECO. Data relating to the GD is published approximately three weeks later than the time period it is referring to. Data relating to ECO is published approximately seven weeks later than the time period it is referring to.

The publication comprises a statistical release and detailed data tables<sup>1</sup>. A detailed summary of the methodology used to compile the statistics contained within this release is available in the accompanying methodology note<sup>2</sup>.

Headline estimates of GD and ECO delivery were published as “experimental statistics” from March 2013. They were rebadged as National Statistics from January 2015 following assessment by the UK Statistics Authority, which demonstrates that they meet the requirements contained in the Code of Practice for Official Statistics.

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

The detailed statistical release is a National Statistics publication reporting a range of further analysis and geographical breakdowns relating to GD assessments, GD Plans, Cashback, Green Deal Home Improvement Fund (GDHIF) and ECO. It also publishes GD supply chain activity by local authority and estimates of the carbon and energy savings achieved through the measures installed. The final section of this release estimates levels of home insulation in Great Britain. The release is currently published on a quarterly basis; approximately three months after the period to which it refers.

The publication comprises a statistical release and detailed data tables<sup>3</sup>. A detailed summary of the methodology used to compile the statistics contained within this release is available in the accompanying methodology note<sup>4</sup>.

Detailed estimates of GD and ECO delivery were published as “experimental statistics” from March 2013. They were rebadged as National Statistics from January 2015 following assessment by the UK Statistics Authority, which demonstrates that they meet the requirements contained in the Code of Practice for Official Statistics.

### 1.3 Production and dissemination

The headline and detailed statistical releases use administrative data generated as part of the GD and ECO processes. In addition, estimates of levels of home insulation also combine information collected in the national housing surveys with dwelling stock data published by DCLG.

Data sources used to produce headline and detailed publications:

- Landmark – who manage the national lodgement of GD Assessments in England and Wales
- Energy Savings Trust Scotland – who manage the national lodgement of GD Assessments in Scotland
- Green Deal Central Charge Database – which manages the recording and administration of GD Plans
- Ofgem – who administer ECO and collect information from energy companies on measures installed under ECO
- The Green Deal Oversight and Regulation Body – who administer the certification of GD organisations (including assessors, installers and providers)
- Data on ECO brokerage – publically available after each auction
- Capita – who administer the Green Deal Cashback Scheme and GDHIF
- Energy Savings Trust – who run the telephone Energy Saving Advice Service (ESAS) offering impartial energy-saving advice to homes in England and Wales
- National housing surveys – which collect data on the housing stock in England, Wales and Scotland
- DCLG – which produce information on the number of properties in the housing stock and new builds
- Inbuilt – a report produced by Inbuilt is used to inform estimates on the number of hard to treat cavity wall properties in the housing stock

After appropriate quality assurance described later in this report, DECC uses the data from these data sources to produce the headline and detailed estimates included in National Statistics releases.

Pre-release access to the statistical release, briefing and data tables is granted 24 hours ahead in accordance with DECC’s statement of compliance with pre-release access<sup>5</sup>. Following publication an email is circulated to relevant statistical and policy colleagues to make them aware of the release and who they should contact should they wish to discuss. The shared mailbox is also monitored as users are invited to send in any feedback or questions they have on the publications to this address.

## 2. Relevance

### 2.1 Content

#### **Green Deal and Energy Company Obligation: headline statistics**

The headline statistical release includes information on the number of GD Assessments and GD Plans, Cashback and Green Deal Home Improvement Fund (GDHIF) vouchers spent, measures installed through Cashback, GDHIF, GD Plans and ECO, a summary of ECO brokerage and an overview of the GD supply chain.

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

The detailed statistical release reports a range of further analysis and geographical breakdowns showing the latest picture of GD assessments, GD Plans, Cashback, GDHIF and ECO – for example by administrative area and Parliamentary Constituency.

It also publishes GD supply chain activity by local authority and estimates of the carbon and energy savings achieved through the measures installed by scheme (ECO, Cashback, GDHIF and GD Plans).

The final section of this release estimates levels of home insulation in Great Britain, this includes cavity wall insulation, loft insulation and solid wall insulation. These levels of insulation allow users to see how many homes have been insulated through the rollout of Government schemes and the remaining potential for insulation in dwellings in Great Britain.

### 2.2 Completeness

Data contained within both the headline and detailed release are based on the most recent data available. Data for previous months are revised as more data is received/updated.

In order to produce the most timely data possible, estimates in the headline report include a month of data that has yet to go through initial Ofgem validation checks (i.e. as reported by energy suppliers to Ofgem). Revisions to data are routinely included in releases and will be explained if they are large. ECO-obligated energy suppliers notify Ofgem of installed measures every month with a month lag between the installation period and notification date (e.g. measures installed up to the end of April were notified to Ofgem by the end of May). The data at this stage is unprocessed by Ofgem and is shared with DECC early the following month (i.e. using the example above, in early June). There is an additional month lag for ECO breakdowns presented in the detailed National Statistics, i.e. data relating to the end of December 2014 will be published in March 2015.

Ofgem undertake comprehensive validation checks on the measures reported by energy suppliers in the month following receipt of data and longer-term audits completed over the obligation period. DECC receive processed data from Ofgem early the following month (i.e. using the example above, in early July) which states which measures have been approved and which are requiring further clarification by energy suppliers. Energy suppliers have no time limit in which to resolve these queries and, as such, all figures are provisional until the end of the ECO period in March 2017. The number of households in receipt of ECO measures in the Statistical Release is based on the latest available information (i.e. unprocessed data for the latest month and processed data for all previous months). Any measures which have been rejected by Ofgem or withdrawn by obligated energy suppliers have been excluded from the ECO measures reported.

Currently data relating to the Green Homes Cashback scheme operating in Scotland is not included since record level data is not available.

## 2.3 Geographical coverage

The statistics cover various geographies depending on the delivery mechanism:

- Green Deal Plans: Great Britain
- ECO: Great Britain
- Cashback: England and Wales
- GDHIF: England and Wales

Where possible, in the detailed release, tables are published by region, administrative area and Parliamentary Constituency.

Levels of home insulation cover Great Britain, breakdowns below this level are not available.

## 2.4 User needs

A section on users and uses of the headline and detailed statistical releases is included in the methodology note under 'Users/uses of the report'. This methodology note can be accessed from: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>.

## 3. Relevance

### 3.1 Methodology

A statement of administrative sources used to compile national and official statistics is available on the gov.uk website<sup>6</sup>.

The methodology used to compile the headline and detailed statistical releases is detailed in the accompanying methodology note<sup>7</sup>.

### 3.2 Uncertainty and bias

The statistical releases are compiled to be as accurate as possible. The data sources listed in Section 1.3 of this document are all subject to a range of data quality checks employed by both data providers and DECC to ensure that data are as fit for purpose as possible. Details on the checks that are carried out are included in the 'Data quality of data sources' section of the methodology note which accompanies the statistical releases. This methodology note can be accessed from: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>.

Energy efficiency measures that are installed outside of Government schemes would not be captured in the estimates published. This can occur when measures are financed through another route such as savings, payment from a landlord, housing association or Local Authority. Further information on work which has been done to date to estimate the number of measures installed but not captured by our administrative data sources can be found in the 'Measures not captured by administrative data sources' section of the methodology note which accompanies the statistical releases. This methodology note can be accessed from: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>.

In terms of levels of home insulation, an estimate of uncertainty for each insulation measure (cavity wall, loft and solid wall insulation) is given i.e. where the property may or may not have insulation. The methodology for calculating uncertainty can be found in the methodology note

published alongside the statistical releases: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>.

## 4. Timeliness and punctuality

### 4.1 Timeliness

The table below details the publication timetable of each release, with examples.

Statistical release	Timeliness	Example
Headline release: data relating to Green Deal Finance delivery mechanism (GD Plans, Cashback, GDHIF)	Published ~3 weeks after the end of the period covered.	Measures delivered through the GD Framework to end November 2014 published on 18 December 2014
Headline release: data relating to ECO	Published ~7 weeks after the end of the period covered.	ECO measures to end November 2014 published on 22 January 2015
Detailed release: GD, ECO and Insulation Levels	Published ~3 months after the end of the quarter	Q3 2014 estimates published in late December 2014

### 4.2 Punctuality

All releases are published in accordance with a pre-announced release timetable. In accordance with the Code of Practice for Official Statistics, releases are published at 9.30am. Each publication states when the next update to figures will be published and any delay would be announced on the publications home page with the reason explained.

## 5. Accessibility and clarity

### 5.1 Accessibility

All statistical releases and accompanying documents and data tables are published on the relevant area of gov.uk. The release is provided in both Word and PDF format. Data tables are provided in Excel format (both XLSX and XLS), although users may request other formats if they wish.

Users of assistive technology can request a version of the publications or data tables in a more accessible format by contacting DECC correspondence.

### 5.2 Clarity

Each statistical release comprises a written statistical release containing a summary of the data, along with contextual information, and information about drivers of change in the data. More detailed breakdowns are included in the data tables provided alongside the release. Some



methodological information is summarised in the releases, but a full methodological document is published alongside the releases and updated as required.

## 6. Coherence and comparability

### 6.1 Consistency across time

Figures for each delivery mechanism, i.e. ECO and Green Deal are comparable across time – they are calculated using the same method and data source. Therefore any resultant trends should be a result of change in delivery rather than methodological differences.

### 6.2 Consistency with related data sets

The majority of figures which feed into the insulation levels in Great Britain section of the detailed release are released in other publications by the original data suppliers. For example insulation measures delivered through Green Deal and ECO are published in the headline report. It is important to note that estimates of levels of insulation will not always be comparable with the input data due to adjustments made in the production process. Full details on the adjustments made can be found in the 'Assumptions made in producing the estimates' section of the methodology note: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>. The key assumptions made are summarised below:

- The Building Research Establishment estimate that the English Housing Survey 2008 under-estimate the number of filled cavities by between five and ten per cent. The survey estimates which make up the 'insulated' category for cavity wall insulation in April 2008 have therefore been adjusted up by five per cent to take account of this.
- For the 2008 housing surveys a threshold of 125mm is used to describe a property as having loft insulation since the more insulation a property has the less cost effective it is to add further insulation.
- Data provided from Government schemes does not identify how much insulation was present before the loft insulation was installed. An assumption has been made that 10 per cent of professional loft insulations through Government schemes are top-ups of existing insulation above 125mm.
- The level of DIY insulation through CERT is reported by Ofgem based on sales by square metre rather than dwellings. Using English Housing Survey (EHS) data it is possible to estimate the average size of a loft by dividing useable floor space by the number of floors.
- For a variety of reasons, households may have solid wall insulation applied to specific rooms or certain walls only. The headline figures reported in this statistical release include all homes with at least one wall or room with solid wall insulation.

The insulation estimates published by DECC can be used to estimate the number of homes that have the potential to receive insulation in the future. Users need to be aware that this cannot be achieved by simply taking the total insulated from the number of homes in Great Britain. For example when looking at properties with a loft that have not yet been insulated, some will be unfillable or hard to treat such as properties with a flat, chalet or mansard roof.

Whilst we use national housing surveys as the baseline data for this publication, at present we do not use the most recent annual results from these surveys to inform estimates since April

2008. This is because we consider the data on the number of insulation measures delivered through Government schemes to be more accurate and timely than the housing survey data. However, differences between DECC estimates and those from the housing surveys are considered annually as results from the surveys become available.

## 7. Trade offs

There is a trade off between timeliness and accuracy in publishing ECO data which forms part of both the headline and detailed releases. As stated in Section 2.2 of this note, ECO data contains one month of unprocessed data – this means it has not yet been through initial Ofgem validation checks. Revisions to data are therefore routinely included to ECO data once this unprocessed data has been validated. All ECO data should be treated as provisional.

## 8. Assessment of user needs and perceptions

A section on users and uses of the headline and detailed statistical releases is included in the methodology note under 'Users/uses of the report'. This methodology note can be accessed from: <https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>.

DECC recognise that these users will have different needs and welcome views from both internal and external customers through the Energy Efficiency Statistics Mailbox ([EnergyEfficiency.Stats@decc.gsi.gov.uk](mailto:EnergyEfficiency.Stats@decc.gsi.gov.uk)). Contact details for specific publications are also provided within each statistical release.

Further information about DECC's user engagement policies can be found in the Customer Service and Engagement statement published on gov.uk<sup>8</sup>.

## 9. Performance, cost and respondent burden

The data used to produce both the headline and detailed statistical releases makes use of existing data sources and therefore no extra resource is required to collect the data. The work of producing the statistics themselves is done by a team of 3 individuals within DECC, but with regular interaction with the data suppliers.

## 10. Confidentiality, transparency and security

All data released is published in aggregate tables, no record level data is released. Record level data relating to the aggregate tables is compliant with the Data Protection Act and held in line with a number of data sharing agreements between DECC and the data suppliers.

## 11. References

---

- 1 Green Deal and Energy Company Obligation (ECO): Headline statistics  
<https://www.gov.uk/government/collections/green-deal-and-energy-company-obligation-eco-statistics#headline-statistics>
- 2 Domestic Green Deal and Energy Company Obligation methodology note  
<https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>
- 3 Green Deal and Energy Company Obligation (ECO) and Insulation Levels in Great Britain, Detailed Report  
<https://www.gov.uk/government/collections/green-deal-and-energy-company-obligation-eco-statistics#detailed-statistics>
- 4 Domestic Green Deal and Energy Company Obligation methodology note  
<https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>
- 5 DECC statement of compliance with pre-release access:  
<https://www.gov.uk/government/statistics/official-statistics-order-2008-statement-of-compliance-with-the-pre-release-access>
- 6 DECC statement of administrative sources:  
<https://www.gov.uk/government/publications/administrative-sources-statement>
- 7 Domestic Green Deal and Energy Company Obligation methodology note  
<https://www.gov.uk/government/statistics/domestic-green-deal-and-eco-statistics-methodology-note>
8. DECC statistics customer service and engagement statement:  
<https://www.gov.uk/government/publications/customer-service-and-engagement-statement>

© Crown copyright 2015

Department of Energy & Climate Change

3 Whitehall Place

London SW1A 2AW

[www.gov.uk/decc](http://www.gov.uk/decc)

URN 15D/069