



Department for
Communities and
Local Government

Energy Performance of Buildings Certificates: Statistics Release Q1 2008 to Q4 2015 England and Wales

- This statistical release presents experimental official statistics drawn from the data which has been lodged on the Energy Performance of Buildings Registers (Registers) for England and Wales. The statistics have been produced from Energy Performance Certificates (EPCs) issued for domestic and non-domestic buildings and Display Energy Certificates (DECs) issued for buildings occupied by public authorities.
- Data lodged on the Registers records information about the certificates issued for buildings which have been newly constructed, sold or let since 2008. Data lodged in relation to buildings occupied by public authorities over 1,000 square metres also dates back to 2008. The floor area size threshold was changed to include buildings over 500 square metres in January 2013. In July 2015 the floor area size threshold was lowered to include buildings over 250 square metres. These statistics do not, therefore, represent the entire building stock in England and Wales.
- Data lodged on the Registers will also include buildings for which multiple EPCs or DECs have been issued since 2008 as well as buildings for which only a single energy certificate has been issued.
- The data are presented as experimental official statistics because they are still subject to evaluation and testing. The statistics are still work in progress and consequently they may not meet rigorous quality standards. They have been released because they have been judged to be of immediate value to interested parties and to encourage user feedback.

Energy Efficiency *Experimental Official Statistics Release*

29 January 2016

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Summary

Energy Performance Certificates

An Energy Performance Certificate indicates how energy efficient a building is. The certificate provides an asset energy rating of the building (it reflects the potential energy efficiency of a building), where A is the most efficient (or A+ in the case of a building that is a non-domestic property). The higher the rating, the more energy efficient the building is and the lower the fuel bills are likely to be. An Energy Performance Certificate is required whenever a building is newly constructed, sold or is let to a new tenant. The purpose of an Energy Performance Certificate is to show prospective tenants or buyers the energy efficiency of the building.

Display Energy Certificates

Larger buildings occupied by a public authority and where the building is frequently visited by the public must display a Display Energy Certificate (DEC) in a prominent place. Display Energy Certificates show the actual energy consumption of a building in a manner that allows comparison and are accompanied by reports which provide recommendations on potential energy saving measures.

Statistics for the latest complete quarter ending 31 December 2015 (Q4 2015)

All Properties

A total of 408,582 Energy Performance Certificates (EPCs) covering all buildings were lodged on the Registers during the quarter – a decrease of 21 per cent compared to the same quarter in 2014. They covered a total floor area of 51,063,541 square metres – a decrease of 14 per cent compared to the same quarter in 2014.

All Domestic Properties

A total of 390,620 EPCs covering domestic buildings were lodged on the Domestic Register during the quarter – a decrease of 22 per cent compared to the same quarter in 2014. They covered a total floor area of 36,072,631 square metres – a decrease of 23 per cent compared to the same quarter in 2014.

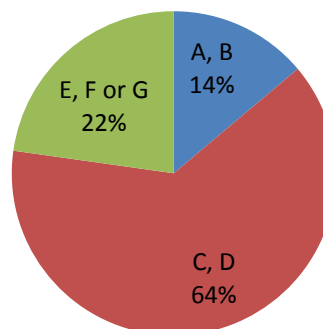
The following table compares average values over a range of indicators for those domestic properties for which EPCs were lodged during this quarter compared to the same quarter in 2014.

Table 1 - Average Energy Use, CO₂ Emissions and Fuel Costs for all Domestic Properties

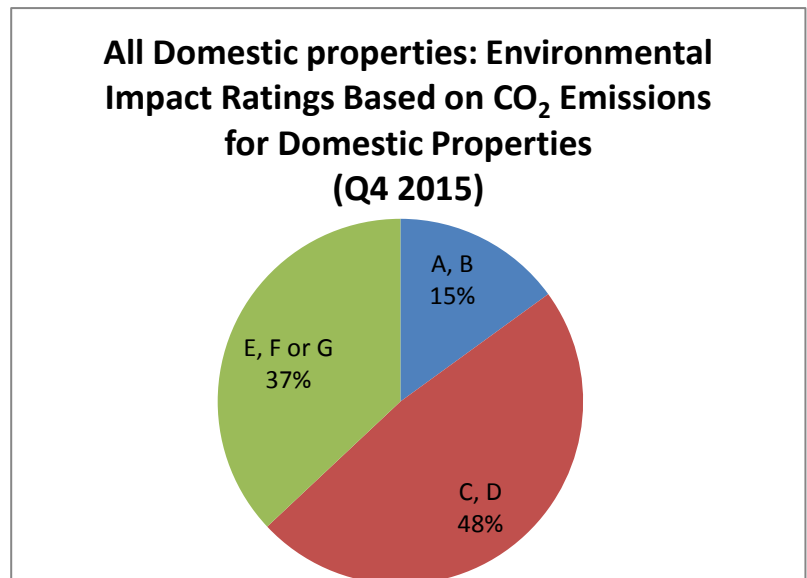
Year/Period Lodged	Floor area (m ²)	Energy use (kWh/m ² p/a)	CO ₂ emissions (tonnes p/a)	Lighting costs (£ p/a)	Heating costs (£ p/a)	Hot water costs (£ p/a)
Q4 2015	92	265	4.27	81	773	147
Q4 2014	93	255	4.42	81	825	151

Based on their fuel costs, 14 per cent of domestic properties for which EPCs were lodged on the Domestic Register during this quarter were awarded an Energy Efficiency Rating of either A (the highest) or B. A further 64 per cent were awarded a Rating of C or D and the remaining 22 per cent were awarded a Rating of E, F or G (the lowest).

All Domestic Properties: Energy Efficiency Ratings Based on Fuel Cost for Domestic Properties (Q4 2015)



Based on their CO₂ emissions, 15 per cent of domestic properties for which EPCs were lodged on the Domestic Register during this quarter were awarded an Environmental Impact Rating of either A (the highest) or B. A further 48 per cent were awarded a Rating of C or D and the remaining 37 per cent were awarded a Rating of E, F or G (the lowest).



New Domestic Properties

A total of 52,251 EPCs covering new domestic properties were lodged on the Domestic Register during the quarter – an increase of 16 per cent compared to the same quarter in 2014. The buildings for which these certificates were issued covered a total floor area of 4,918,760 square metres – an increase of 15 per cent compared to the same quarter in 2014.

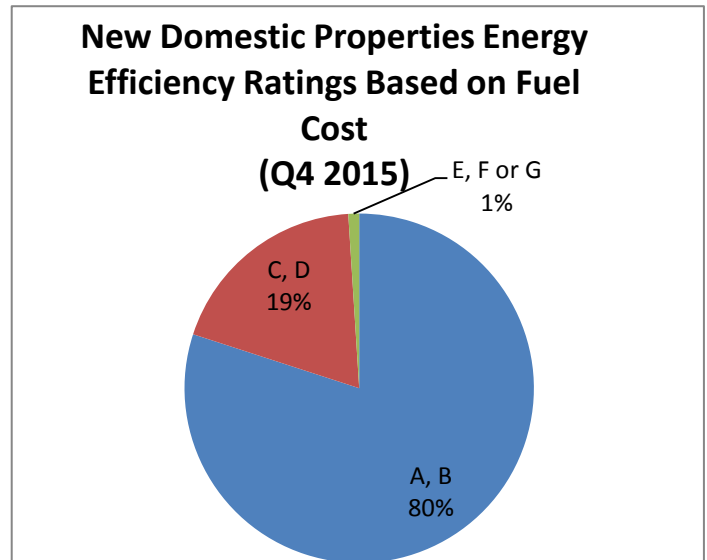
New domestic properties accounted for 13 per cent of all domestic EPCs lodged on the Domestic Register during the quarter.

The following table compares average values over a range of indicators for new domestic properties for which EPCs were lodged during this quarter compared to the same quarter in 2014.

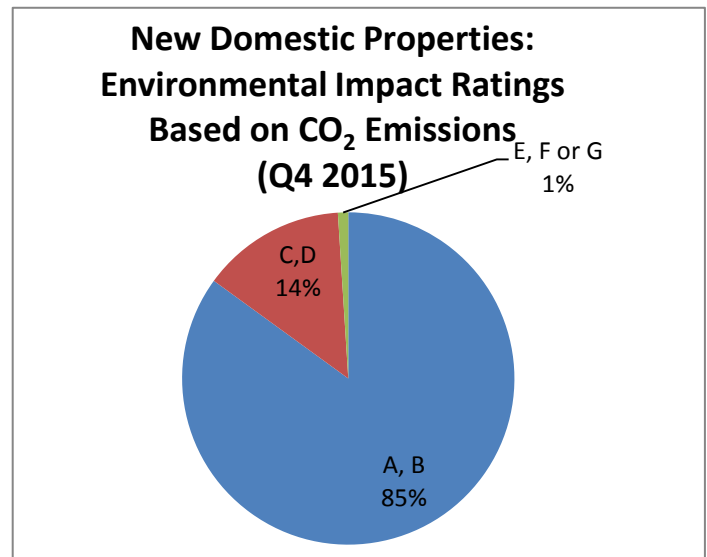
Table 2 - Average Values for New Domestic Properties

Lodged	Floor area (m²)	Energy use (kWh/m² p/a)	CO₂ emissions (tonnes p/a)	Lighting costs (£ p/a)	Heating costs (£ p/a)	Hot water costs (£ p/a)
Q4 2015	94	101	1.53	59	296	108
Q4 2014	95	101	1.57	59	302	104

Based on their fuel costs, 80 per cent of new domestic properties for which EPCs were lodged on the Domestic Register during this quarter were awarded an Energy Efficiency Rating of either A (the highest) or B. A further 19 per cent were awarded a Rating of C or D and the remaining 1 per cent were awarded a Rating of E, F or G (the lowest).



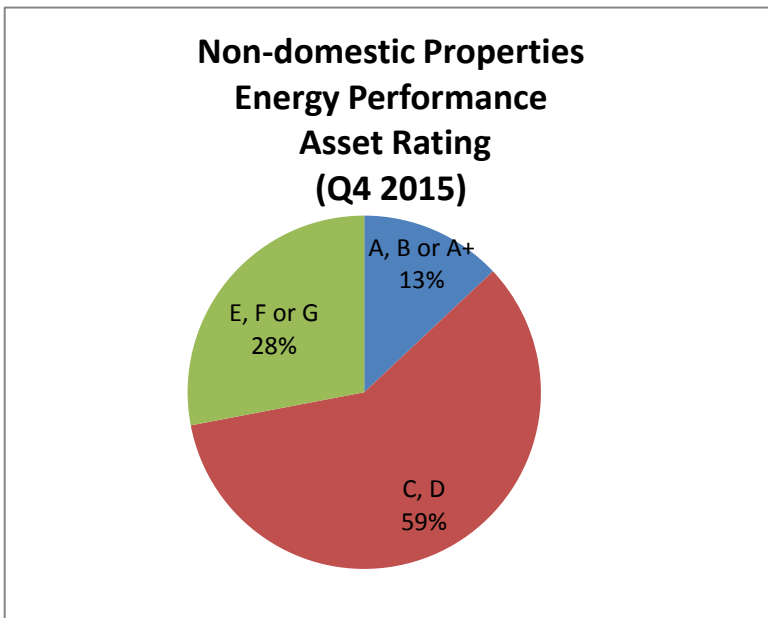
Based on their CO₂ emissions, 85 per cent of new domestic properties for which EPCs were lodged on the Domestic Register during this quarter were awarded an Environmental Impact Rating of either A (the highest) or B. A further 14 per cent were awarded a Rating of C or D and 1 per cent were awarded a Rating of E, F or G (the lowest).



Non-domestic Properties

A total of 17,962 EPCs covering non-domestic properties were lodged on the Non-domestic Register during the quarter - an increase of 6 per cent compared to the same quarter in 2014. They covered a total floor area of 14,990,910 square metres - an increase of 17 per cent compared to the same quarter in 2014.

Of the total number of non-domestic buildings 13 per cent achieved an Energy Performance Asset Rating of either A+ (the highest), A or B. A further 59 per cent were given a Rating of C or D and the remaining 28 per cent were awarded a Rating of E, F or G (the lowest).

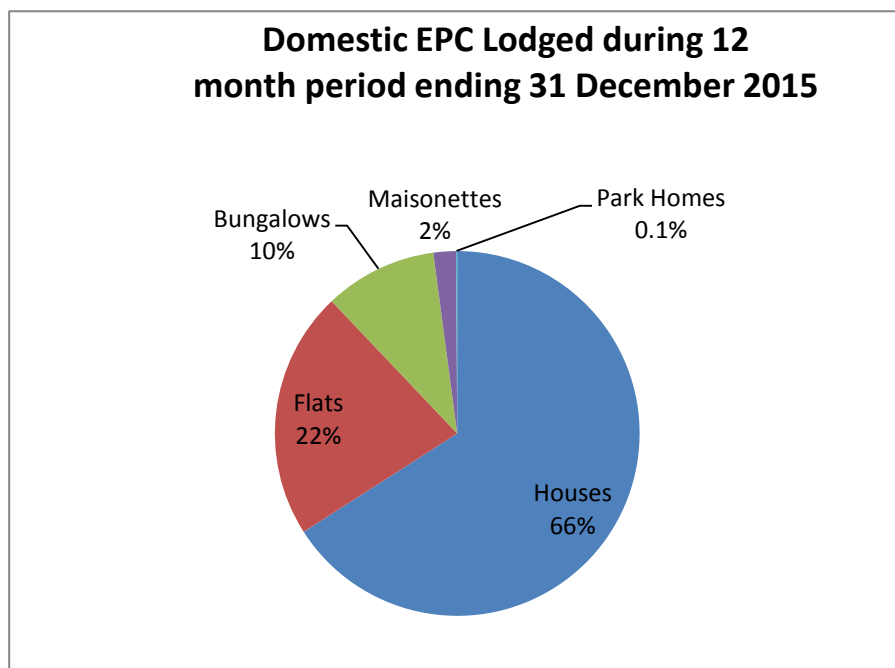


Statistics for the 12 month period ending 31 December 2015

All Properties

A total of 1,865,165 EPCs were lodged on the Registers during the 12 month period ending December 2015 - a decrease of 19 per cent compared to the previous 12 month period ending December 2014. They covered a total floor area of 221,990.182 square metres – a decrease of 15 per cent compared to the previous 12 month period ending 31December 2014. .

Domestic properties accounted for 96 per cent of EPCs lodged during the 12 month period ending December 2015. This is a category which includes houses (66 per cent of domestic EPCs lodged), flats (22 per cent), bungalows (10 per cent) and maisonettes (2 per cent). Park Homes accounted for 0.1 per cent of the total.

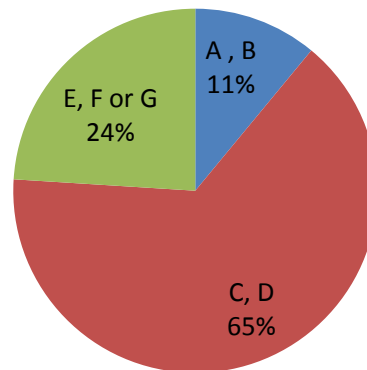


All Domestic Properties

A total of 1,797,276 EPCs covering domestic properties were lodged on the Domestic Register during the 12 month period. This amounts to a decrease of 19 per cent compared to the previous 12 month period ending December 2014. They covered a total floor area of 166,324,349 square metres – a decrease 19 per cent compared to the previous 12 month period ending December 2014.

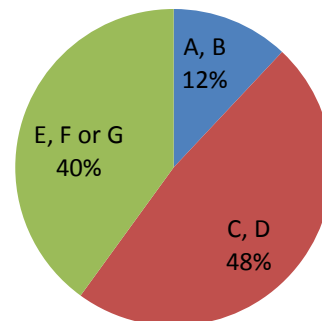
Based on their fuel costs, 11 per cent of domestic properties for which EPCs were lodged on the Domestic Register during the 12 month period ending December 2015 were awarded an Energy Efficiency Rating of either A (the highest) or B. A further 65 per cent were awarded a Rating of C or D and the remaining 24 per cent were awarded a Rating of E, F or G (the lowest).

Domestic Properties: Energy Efficiency Ratings based on fuel cost and lodged during 12 month period to December 2015



Based on their CO₂ emissions, 12 per cent of domestic properties for which EPCs were lodged on the Domestic Register during this 12 month period were awarded an Environmental Impact Rating of either A (the highest) or B. A further 48 per cent were awarded a Rating of C or D and the remaining 40 per cent were awarded a Rating of E, F or G (the lowest).

Environmental Impact Ratings based on CO₂ emissions and lodged during 12 month period to December 2015



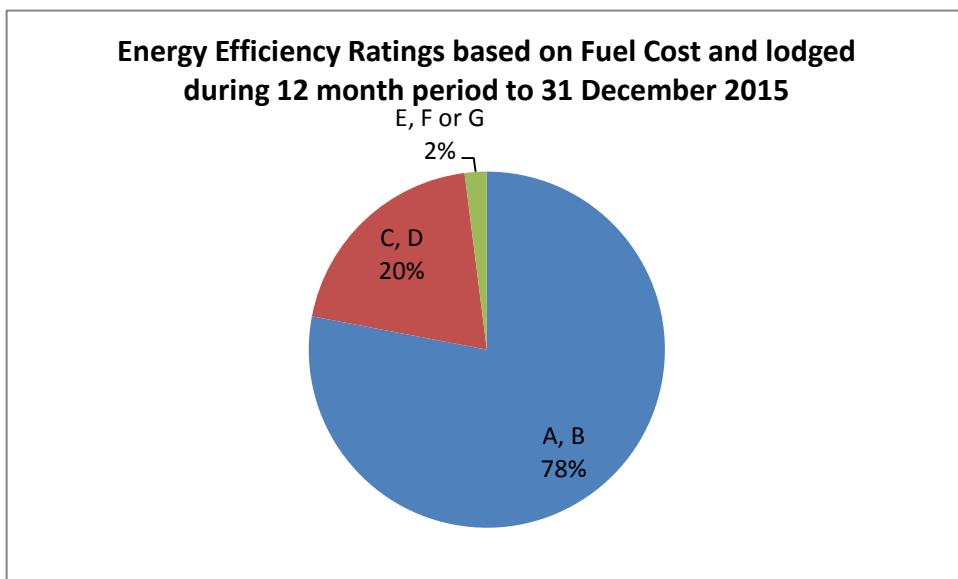
New Domestic Properties

A total of 203,005 EPCs issued for new domestic properties were lodged on the Domestic Register during the 12 month period – an increase of 27 per cent increase compared to the previous 12 month period ending December 2014. They covered a total floor area of 18,624,131 square metres – an increase of 24 per cent compared to the previous 12 month period ending December 2014.

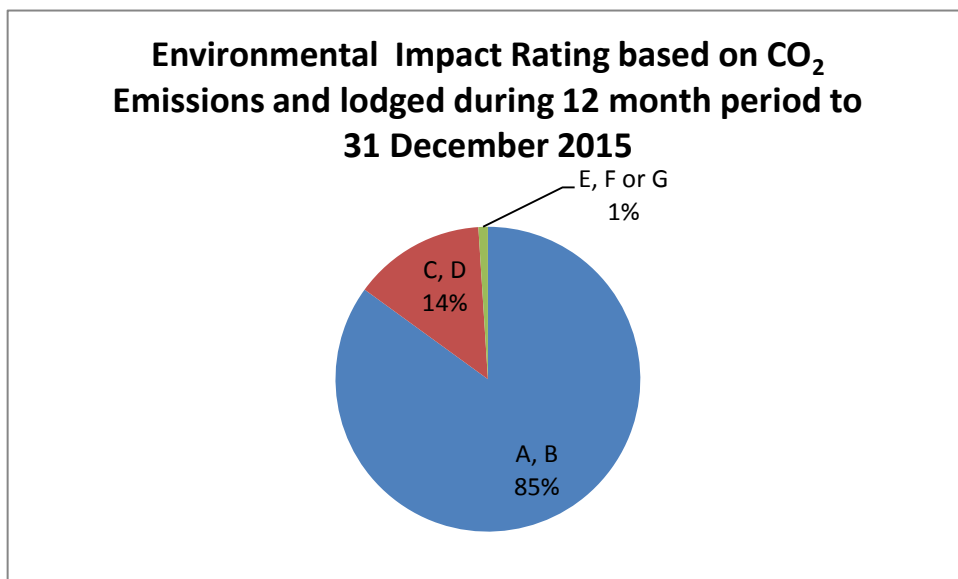
New domestic properties accounted for 11 per cent of all domestic EPCs lodged on the Domestic

Register during the 12 month period ending 31 December 2015.

Based on their fuel costs, 78 per cent of new domestic properties for which EPCs were lodged on the Domestic Register during this 12 month period were awarded an Energy Efficiency Rating of either A (the highest) or B. A further 20 per cent were awarded a Rating of C or D and the remaining 2 per cent were awarded a Rating of E, F or G (the lowest).



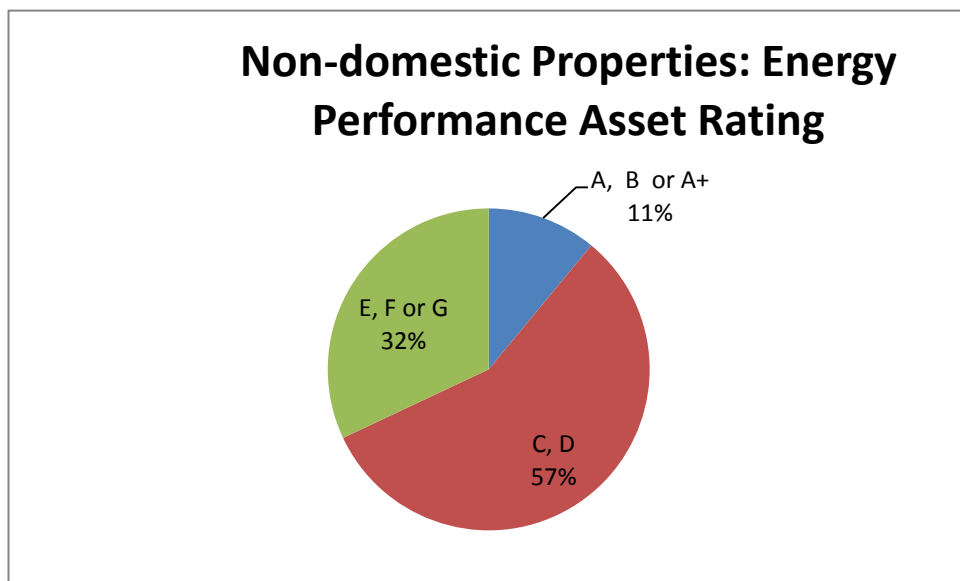
Rated on their CO₂ emissions, 85 per cent of new domestic properties for which EPCs were lodged on the Domestic Register during this 12 month period were awarded an Environmental Impact Rating of either A (the highest) or B. A further 14 per cent were awarded a Rating of C or D and the remaining 1 per cent were awarded a Rating of E, F or G (the lowest).



Non-domestic Properties

A total of 67,889 EPCs covering non-domestic properties were lodged on the Non-domestic Register during the 12 month period ending 31 December 20145 - a decrease of 4 per cent compared to the previous 12 month period ending December 2014. They covered a total floor area of 55,665,833 square metres – an increase of 3 per cent compared to the previous 12 month period ending December 2014.

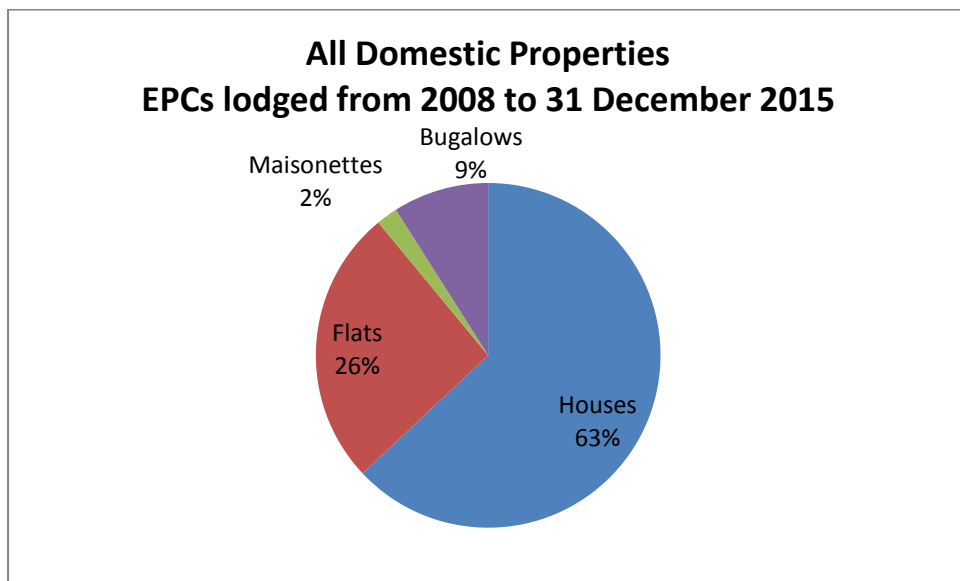
Of the total number of non-domestic buildings 11 per cent achieved an Energy Performance Asset Rating of either A+ (the highest), A or B. A further 57 per cent were given a Rating of C or D and the remaining 32 per cent were awarded a Rating of E, F or G (the lowest).



Cumulative statistics for the period beginning Q1 2008 to quarter ending 31 December 2015

All Properties

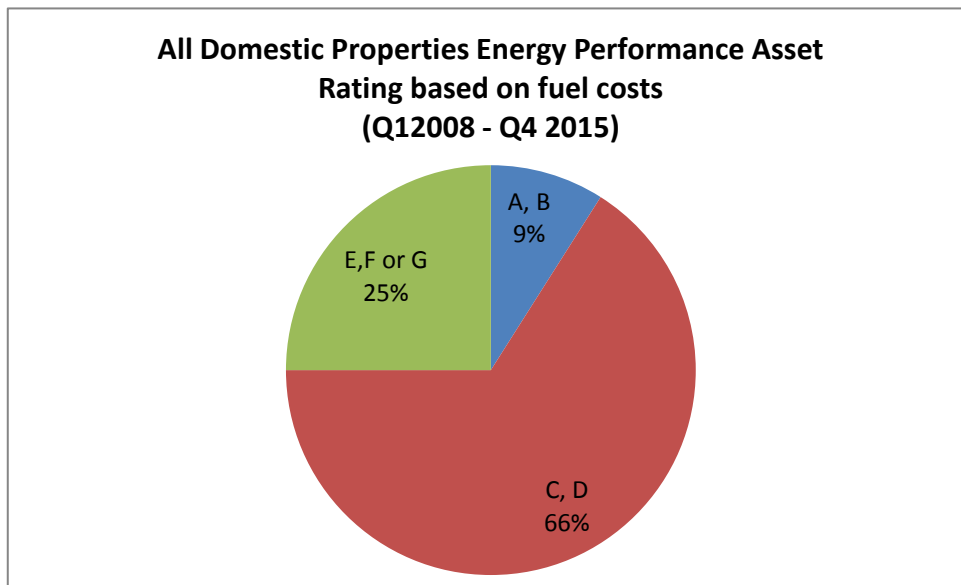
A total of 15,053,794 EPCs have been lodged on the Registers since 2008. Domestic properties accounted for 96 per cent of EPCs lodged. This category includes domestic properties such as houses (63 per cent of EPCs lodged), flats (26 per cent), bungalows (9 per cent) and maisonettes (2 per cent). Non-domestic buildings accounted for the remaining 4 per cent of EPCs lodged.



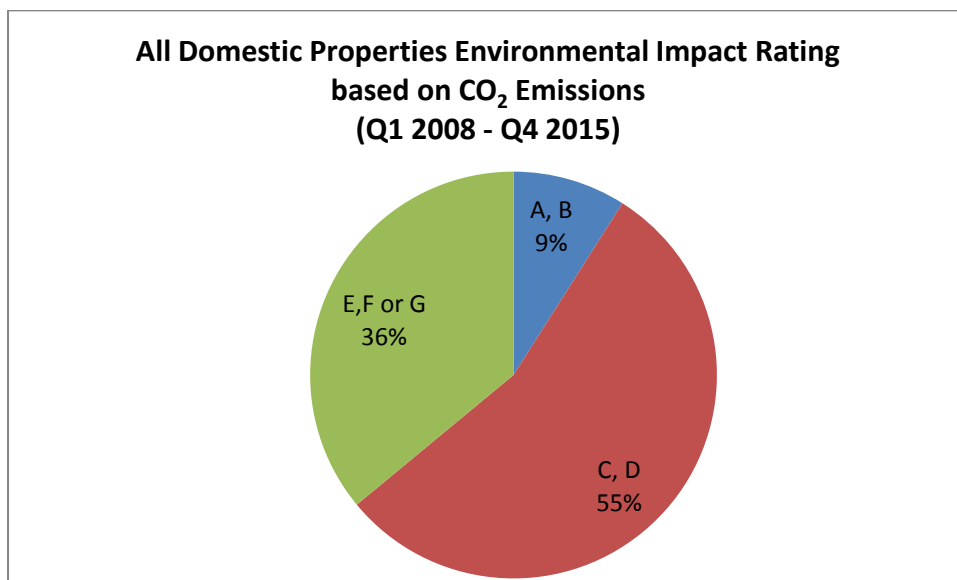
All Domestic Properties

A total of 14,445,372 EPCs covering domestic properties have been lodged on the Domestic Register between 2008 and period ending 31 December 2015.

Based on their fuel costs over this period, 9 per cent of domestic properties were given an Energy Performance Asset Rating of either A (the highest), or B. A further 66 per cent were given a Rating of C or D and the remaining 25 per cent were awarded a Rating of E, F or G (the lowest).



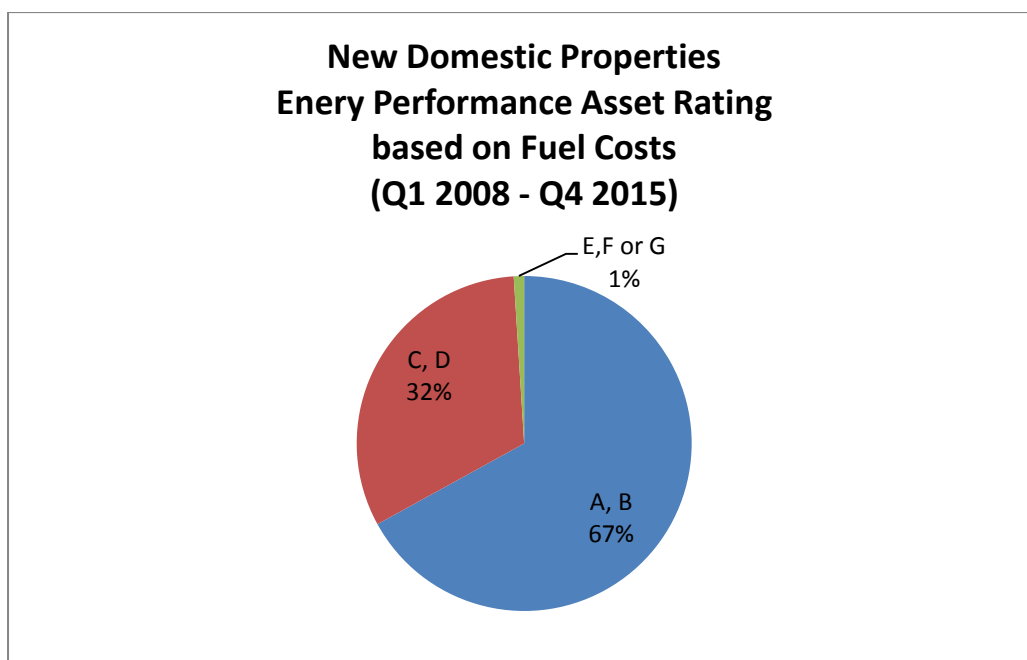
Based on their CO₂ emissions over this period, 9 per cent of domestic properties were given an Environmental Impact Rating of either A (the highest), or B. A further 55 per cent were given a Rating of C or D and the remaining 36 per cent were awarded a Rating of E, F or G (the lowest).



New Domestic Properties

A total of 1,218,611 EPCs covering new domestic properties have been lodged on the Domestic Register since 2008. They accounted for 8 per cent of all domestic EPCs lodged on the Register since 2008.

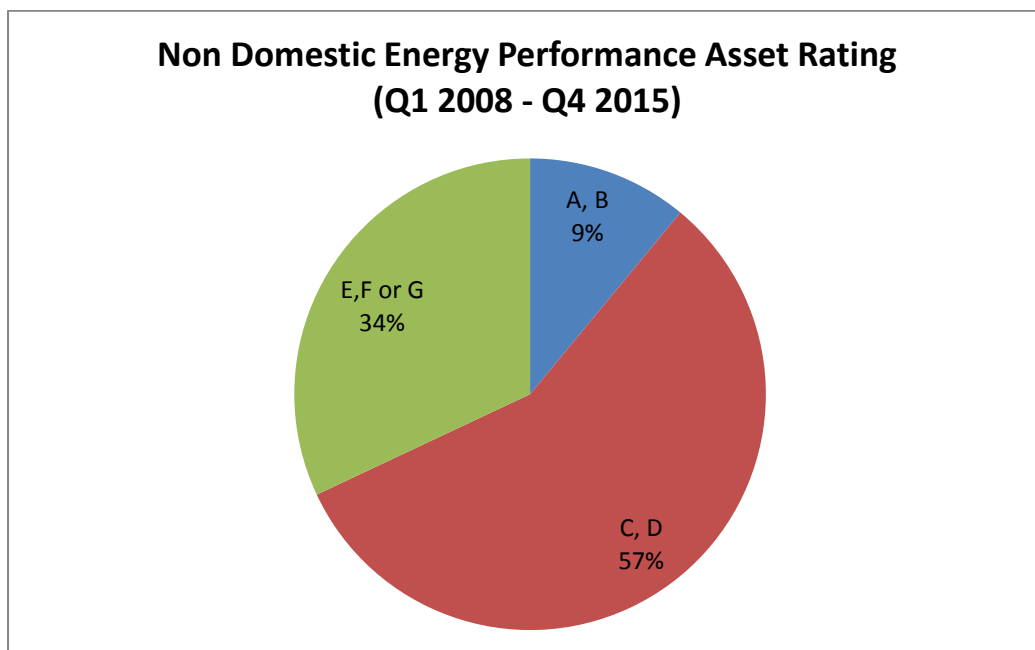
Rated on their fuel costs, 67 per cent of new domestic properties for which EPCs were lodged on the Register during this period were awarded an Energy Efficiency Rating of either A (the highest) or B. A further 32 per cent were awarded a Rating of C or D, 1 per cent awarded a Rating of E, F or G (the lowest).



Non-domestic Properties

A total of 608,422 EPCs covering non-domestic buildings have been lodged on the Non-domestic Register since 2008.

During this period, 9 per cent of non-domestic buildings were given an Energy Performance Asset Rating of either A+ (the highest), A or B. A further 57 per cent were given a Rating of C or D. The remaining 34 per cent were awarded a Rating of E, F or G (the lowest).



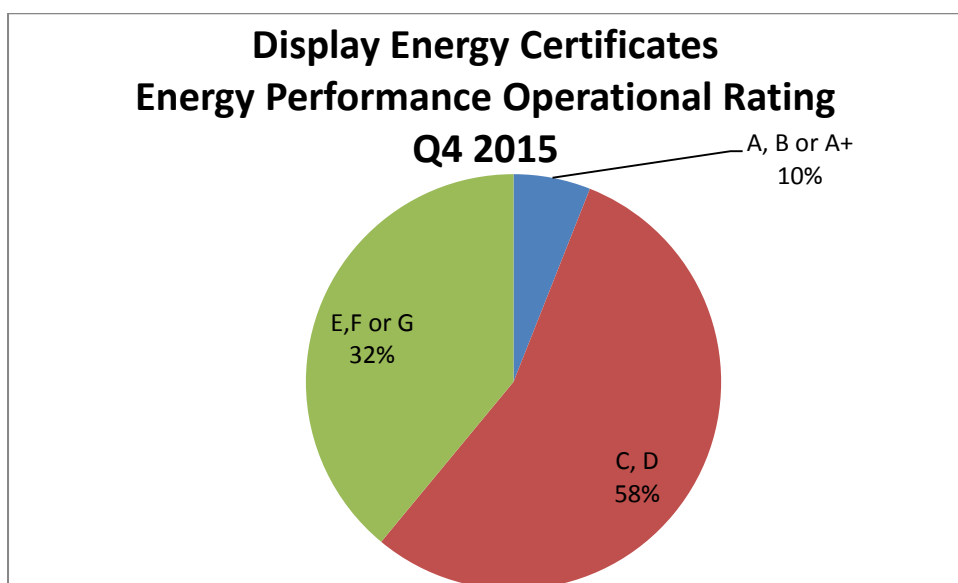
Lodgement of Display Energy Certificates (DECs)

Statistics for the latest complete quarter ending 31 December 2015

(Q4 2015)

A total of 11,465 DECs were lodged on the Non-domestic Register during the quarter. This amounts to an increase of less than 1 per cent compared to the same quarter in 2014.

Of the total number of DECs lodged on the Non-domestic Register 10 per cent were given an Energy Performance Operational Rating of either A+ (the highest) A or B. A further 58 per cent were awarded a Rating of C or D. The remaining 32 per cent were awarded a Rating of E, F or G (the lowest).



The following table compares average values over a range of indicators for buildings for which DECs were lodged during this quarter compared with those were lodged during the same quarter in 2014.

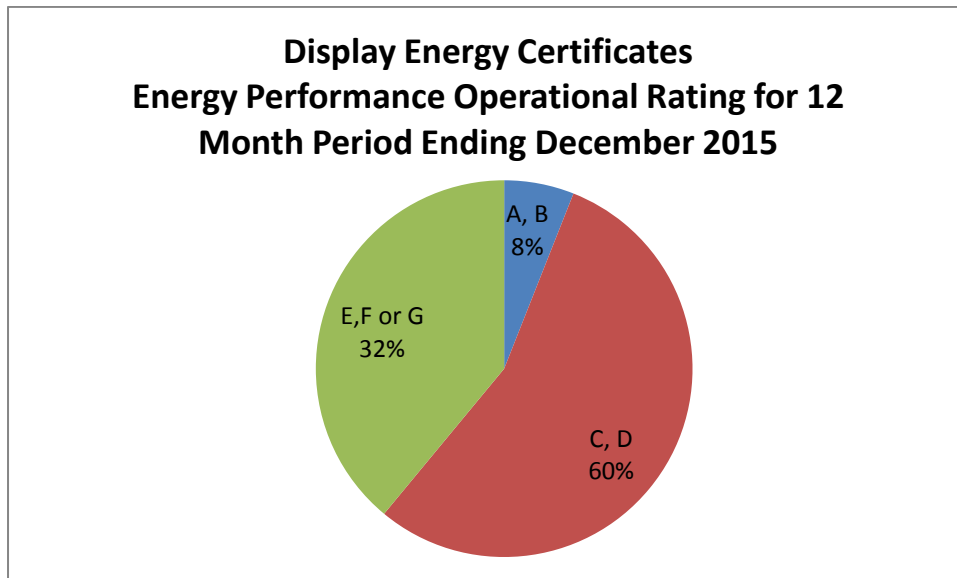
Table 3 – Display Energy Certificates (average values)

Lodged	Floor area (m ²)	Energy use (kWh/m ² p/a)		CO ₂ emissions (tonnes p/a)	
		Heating	Electricity	Heating	Electricity
Q4 2015	3,448	148	85	112	191
Q4 2014	3,843	149	74	130	195

Statistics for the 12 month period ending 31 December 2015

A total of 34,758 DEC's were lodged on the Non-domestic Register during the 12 month period ending 31 December 2015 - a decrease of 11 per cent compared to the previous 12 month period ending December 2014.

During this period, 8 per cent of DEC's lodged on the Non-domestic Register were given an Energy Performance Operational Rating of either A (the highest recorded) or B. A further 60 per cent were awarded a Rating of C or D. The remaining 32 per cent were awarded a Rating of E, F or G (the lowest).



Cumulative statistics for the period beginning Q1 2008 and ending December 2015

A total of 249,625 DEC's have been lodged on the Non-domestic Register since 2008.

Accompanying tables

Accompanying tables are available to download alongside this release. These are:

Table A1 – Energy Performance Certificates for All Properties: Number of Energy Performance Certificates lodged on the Register and Total Floor Area by Type of Property – in each Year/Quarter

Table D1 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by Energy Efficiency Rating – in each Year/Quarter

Table D2 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by Environmental Impact Rating – in each Year/Quarter

Table D3 – Domestic Energy Performance Certificates for All Properties: Floor Area, Size, Energy Use, Carbon Dioxide Emissions and Fuel Costs of Domestic properties assessed and lodged on the Register - in each Year/Quarter

Table D4a – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by Type of Transaction – in each Year/Quarter – up to and including 30 September 2014

Table D4b – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by Type of Transaction – in each Year/Quarter – from 30 September to latest quarter

Table D5 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by Type of Property by Energy Efficiency Rating – in each Year/Quarter

Table D6 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by type of Property by Environmental Impact Rating – in each Year/Quarter

Table D7 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register by type of Property, and Average Energy Use, Carbon Dioxide Emissions and Fuel Costs per domestic property – in each Year/Quarter

Table LA1 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register in each Local Authority by Energy Efficiency Rating – in each Year/Quarter

Table LA2 – Domestic Energy Performance Certificates for All Properties: Number of Domestic Energy Performance Certificates lodged on the Register in each Local Authority by Environmental Impact Rating – in each Year/Quarter

Table NB1 – Domestic Energy Performance Certificates for New Properties: Number of New Domestic Properties Energy Performance Certificates lodged on the Register by Energy Efficiency Rating – in each Year/Quarter

Table NB2 – Domestic Energy Performance Certificates for New Properties: Number of New Domestic Properties Energy Performance Certificate lodged on the Register by Environmental Impact Rating – in each Year/Quarter

Table NB3 – Domestic Energy Performance Certificates for New Properties: Floor Area, Size, Energy Use, Carbon Dioxide Emissions and Fuel Costs of New Domestic properties assessed - in each Year/Quarter

Table NB4 – Domestic Energy Performance Certificates for New Properties: Number of New Domestic Properties Energy Performance Certificates lodged on the Register and Total Floor Area by type of Property – in each Year/Quarter

Table NB5 – Domestic Energy Performance Certificates for New Properties: Number off New Domestic Properties Energy Performance Certificates lodged on the Register by type of Property and Energy Efficiency Rating – in each Year/Quarter

Table NB7 – Domestic Energy Performance Certificates for New Properties: Number of New Domestic Properties Energy Performance Certificates lodged on the Register by Type of Property, and Average Energy Use, Carbon Dioxide Emissions and Fuel Costs per domestic property – in each Year/Quarter

EPCs - Non-Domestic Properties

Table A – Non Domestic Energy Performance Certificates for All Properties: Number of Non-Domestic Energy Performance Certificates lodged on the Register by Energy Performance Asset Rating - in each Year/Quarter

Table B – Non Domestic Energy Performance Certificates for All Properties: Number of Non-Domestic Energy Performance Certificates lodged on the Register by Property Group - in each Year/Quarter

DECs

Table DEC1 – Display Energy Certificates: Number of Display Energy Certificates lodged on the Register by Local Authority and Energy Performance Operational Rating - in each Year/Quarter

Table DEC2 – Display Energy Certificates: Annual Energy Use and Carbon Dioxide Emissions of Buildings Assessed – in each Year/Quarter

These tables can be accessed at:

<https://www.gov.uk/government/collections/energy-performance-of-buildings-certificates>

Technical notes, definitions and user engagement

Definitions

For full details on how the requirements of the Energy Performance of Buildings Directive are applied to domestic and non-domestic buildings and buildings occupied by public authorities, users should consult the Energy Performance Certificates guidance collection on GOV.UK:

<http://www.gov.uk/government/publications/improving-the-energy-efficiency-of-our-buildings>

A consolidated glossary of all the terms related to energy performance of buildings certificates can be accessed on GOV.UK:

<http://www.gov.uk/government/collections/energy-performance-of-buildings-certificates>

The following explanations are provided to support users' interpretation of these statistics:

Coverage

This statistical release provides information about certificates lodged on the Registers for Domestic and Non-domestic buildings newly constructed, sold or let since 2008 and for buildings occupied by public authorities since 2008. However the Registers do not hold data for every domestic and non-domestic building or every building occupied by public authorities in England and Wales. These statistics should, therefore, not be interpreted as a true representation of the whole of the building stock in England and Wales, but viewed as part of a wider package of Government's provision of information on the energy efficiency of buildings.

Periodicity

The release covers certificates lodged between Q1 2008 and Q3 2015 and breaks the data down for each specified calendar quarter (Q1=Jan-Mar, Q2=Apr-Jun, Q3=Jul-Sep, Q4=Oct-Dec) within each specified calendar year.

New build vs new domestic properties

If works are carried out to create a new building or new buildings, either by means of new build or by conversion of an existing building (for example, subdivision of an existing building into flats or conversion of an office), the builder or person responsible for the construction must obtain an EPC once construction has been completed. This will also apply if a building is converted into fewer or more units designed for separate occupation and there are changes to the heating, hot water provision or air conditioning/ventilation services.

Park Homes

This category of property means a caravan within the meaning of Part 1 of the Caravan Sites and Control of Development Act 1960 which is situated on a relevant protected site and which is occupied by the occupier as their only or main residence. EPCs for park homes have been lodged

on the Domestic Register from December 2014.

Multiple certificates

The statistical counts in the tables cover all valid EPCs and DECAs (i.e. only those lodged on the Registers where there are no doubts about their status) although individual buildings may have more than one certificate. EPCs are valid for up to 10 years. Depending on the size of the building, a new DEC may be issued annually. Data is kept on the Registers for 20 years; therefore, more than one EPC or DEC may be stored over a number of years for one building. While it is possible to identify the most recent certificate at property level, this duplication is not distinguishable from high-level statistics.

Technical notes on data quality

These are experimental official statistics series drawn from data which have been lodged on the Registers. Experimental official statistics are by definition still subject to evaluation and testing and may not meet the same rigorous quality standards as official statistics generally. In spite of any data quality variances which may exist, we are publishing these statistics because we believe them to be of immediate value and we welcome feedback from interested parties to aid development of the statistics.

Data used to produce these published tables is updated every 24 hours and therefore can vary from day to day. To ensure consistency between the information detailed in separate tables, the published tables are produced on the same day. Exceptionally, data between tables may vary marginally if we are required to use tables drawn down on different days.

Originally, Energy Assessor Accreditation Schemes had the option of lodging the underlying data used to produce the certificate in addition to the PDF document of the final certificate itself. After September 2008, lodging the data became a mandatory requirement. Due to the technical difficulty involved in formatting PDFs into searchable data, the statistics do not include data lodged in the form of a PDF document only.

In May 2009, additional validation checks were introduced into the Registers lodgement process to identify prescribed data quality issues. Before this period, statistics for domestic buildings may include anomalies which affect the quality of reported CO₂ emission rates. In addition, statistics for domestic and non-domestic buildings and for DECAs may include anomalies which affect total useful floor area figures.

On 1 April 2012, the first set of Scheme Operating Requirements came into effect for Domestic Energy Assessors, setting new rules for the operation of Energy Assessor Accreditation Schemes. One new requirement was to introduce quality assurance audit of EPCs. The result was a demonstrable improvement in the quality of data lodged on the Registers from mid-2012 onwards. Users are asked to consider this when interpreting figures prior to that period.

Fourth quarter statistics from 2014 onwards includes statistics for EPC lodged for properties defined as Park Homes.

These statistics are in the development stage and we are still refining the data search criteria we use. This process is aimed at producing more accurate statistics.

The Department for Communities and Local Government and Landmark Information Group cannot alter data which has been lodged on the Registers.

User engagement

Users are encouraged to provide feedback on how these statistics are used and how well they meet user needs. Comments on any issues relating to this statistical release are welcomed and encouraged. Comments about the statistics or other statistical enquiries should be sent to:

epbstats@communities.gsi.gov.uk.

The Department's engagement strategy to meet the needs of statistics users can be accessed on GOV.UK:

<http://www.gov.uk/government/publications/engagement-strategy-to-meet-the-needs-of-statistics-users>

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Information on Official Statistics is available via the UK Statistics Authority website:

www.statistics.gov.uk/hub/browse-by-theme/index.html

Information about statistics at DCLG is available via the Department's website:

www.gov.uk/government/organisations/department-for-communities-and-local-government/about/statistics



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