

Energy Performance of Buildings Certificates: Statistics Release Q1 2008 to Q2 2014 England and Wales

- This statistical release presents experimental official statistics which have been extracted from the complete set of Certificates that have been lodged on the Energy Performance of Buildings (EPB) Register for England and Wales. The statistics relate to both Energy Performance Certificates (EPCs) - covering domestic and non-domestic buildings - and Display Energy Certificates (DECs) covering buildings occupied by public authorities.
- Information lodged on the EPB Register records information about certificates issued for domestic and non-domestic buildings that have been built, bought or let since 2008, and of larger public authority buildings since 2008. The statistics do not, therefore, relate to the entire building stock across England and Wales.
- Data held on the EPB Register will include properties which have received multiple EPC or DEC Certificates over time as well as properties which have been given only a single Certificate.
- The data are presented as 'Experimental' official statistics because they are still subject to evaluation and testing. As 'work-in-progress', 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 in order to encourage user feedback.

Energy Efficiency

Experimental Official Statistics Release

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Summary

Statistics for the latest complete quarter ending June 2014 (Q2 2014)

LODGEMENT OF ENERGY PERFORMANCE CERTIFICATES (EPCs)

All Properties

A total of 579,100 Energy Performance Certificates (EPCs) were lodged on the EPC Register during the quarter – an increase of 10 per cent on the same quarter last year. They covered a total floor area of 67,314,200 square metres – a similar increase of 10 per cent on the same quarter last year.

Domestic properties accounted for 97 per cent of these Certificates during the quarter – a category which embraces dwellings such as Houses (which accounted for 67 per cent of all EPCs), Flats (19 per cent), Bungalows (9 per cent), and Maisonettes (2 per cent). Non-domestic properties accounted for the remaining 3 per cent of all EPC lodgements.

All Dwellings

A total of 560,700 EPCs covering domestic properties were lodged on the EPC Register during the quarter, an increase of 11 per cent on the same quarter last year. They covered a total floor area of 52,426,000 square metres – an increase of 15 per cent on the same quarter last year.

Rated on their Fuel Costs, 7 per cent of these domestic properties were given an Energy Efficiency Rating of either A (the highest) or B; 68 per cent were given a Rating of C or D; and the remaining 25 per cent were given a Rating of E, F or G (the lowest).

Rated on their CO₂ Emissions, 9 per cent of these domestic properties were given an Environmental Impact Rating of either A (the highest) or B; 55 per cent were given a Rating of C or D; and the remaining 36 per cent were given a Rating of E, F or G (the lowest).

Lodgements of Domestic EPCs during this quarter, and during the same quarter last year, indicate the following averages per dwelling.

Table 1 – All Dwellings

Year	Floor Area (m2)	Energy Use (kWh/m2 pa)	(kWh/m2		Heating Costs (£ pa)	Hot Water Costs (£ pa)	
Q2 2013	90.3	244.24	4.10	73	685	132	
Q2 2014	93.5	248.96	4.31	80	783	144	

New Dwellings (New Builds, Conversions, Change-of-Use)

A total of 41,300 EPCs covering new dwellings were lodged on the Register during the quarter, an increase of 12 per cent on the same quarter last year. They covered a total floor area of 3,884,900 square metres – a similar increase of 12 per cent on the same quarter last year. New Dwellings accounted for 7 per cent of all Domestic EPCs lodged during the quarter.

Rated on their Fuel Costs, 74 per cent of these new dwellings were given an Energy Efficiency Rating of either A (the highest) or B; 25 per cent were given a Rating of C or D; and the remaining 1 per cent were given a Rating of E, F or G (the lowest).

Rated on their CO₂ Emissions, 82 per cent of these new dwellings were given an Environmental Impact Rating of either A (the highest) or B; 17 per cent were given a Rating of C or D; and the remaining 1 per cent were given a Rating of E, F or G (the lowest)

EPCs for New Dwellings lodged during this quarter, and during the same quarter last year, indicate the following averages per dwelling.

Year	Floor Area (m2)	Energy Use (kWh/m2 pa)	CO ₂ Emissions (tonnes pa)	Lighting Costs (£ pa)	Heating Costs (£ pa)	Hot Water Costs (£ pa)
Q2 2013	94.0	98.50	1.64	59	311	94
Q2 2014	94.1	103.34	1.61	59	300	100

Non-Domestic Properties

A total of 18,400 EPCs covering non-domestic properties were lodged on the EPC Register during the quarter, a decrease of 13 per cent on the same quarter last year. They covered a total floor area of 14,888,200 square metres – a decrease of 6 per cent on the same quarter last year.

Within this total, 10 per cent of non-domestic properties were given an Energy Performance Asset Rating of either A, A+ (the highest), or B; 58 per cent were given a Rating of C or D; and the remaining 32 per cent were given a Rating of E, F or G (the lowest).

Statistics for the 12-month period ended June 2014 (July 2013 to June 2014)

All Properties

A total of 2,403,700 Energy Performance Certificates (EPCs) were lodged on the EPC Register during this 12-month period – an increase of 47 per cent on the previous 12-month period. Domestic properties accounted for 97 per cent of these Certificates – a category which embraces dwellings such as Houses (which accounted for 66 per cent of all EPCs), Flats (20 per cent), Bungalows (9 per cent), and Maisonettes (2 per cent). Non-domestic properties accounted for the

remaining 3 per cent of all EPC lodgements.

Domestic properties

A total of 2,329,500 EPCs covering domestic properties were lodged on the EPC Register during this period, an increase of 50 per cent on the previous 12-month period.

Rated on their Fuel Costs, 6 per cent of these domestic properties were given an Energy Efficiency Rating of either A (the highest) or B; 69 per cent were given a Rating of C or D; and the remaining 25 per cent were given a Rating of E, F or G (the lowest).

Rated on their CO₂ Emissions, 8 per cent of these domestic properties were given an Environmental Impact Rating of either A (the highest) or B; 56 per cent were given a Rating of C or D; and the remaining 36 per cent were given a Rating of E, F or G (the lowest).

New Dwellings (New Builds, Conversions, Change-of-Use)

A total of 148,100 EPCs covering new dwellings were lodged on the EPC Register during this period, an increase of 11 per cent on the previous 12-month period. They accounted for 6 per cent of all Domestic EPCs lodged during this 12-month period.

Rated on their Fuel Costs, 72 per cent of these new dwellings were given an Energy Efficiency Rating of either A (the highest) or B; 27 per cent were given a Rating of C or D; and the remaining 1 per cent were given a Rating of E, F or G (the lowest).

Rated on their CO₂ Emissions, 84 per cent of these new dwellings were given an Environmental Impact Rating of either A (the highest) or B; 15 per cent were given a Rating of C or D; and the remaining 1 per cent were given a Rating of E, F or G (the lowest)

Non-Domestic Properties

A total of 74,200 EPCs covering non-domestic properties were lodged on the EPC Register during this period, a decrease of 18 per cent on the previous 12-month period.

Cumulative statistics for the period from 2008 to the end of June 2014

By the end of June 2014 a total of 12,092,500 Energy Performance Certificates (EPCs) had been lodged on the EPC Register since it first came into operation.

Domestic properties accounted for 96 per cent of this cumulative total – covering dwellings such as Houses (which accounted for 59 per cent of the total), Flats (26 per cent), Bungalows (8 per cent), and Maisonettes (3 per cent).

A total of 11,585,700 EPCs covering domestic properties have been lodged on the EPC Register since it first came into operation. Of these lodgements 930,000 covered new dwellings, accounting for 8 per cent of the cumulative total.

The 506,800 Non-domestic EPCs which had been lodged on the Register by the end of June accounted for the remaining 4 per cent of all cumulative EPC lodgements.

Lodgement of Display Energy Certificates (DECs)

Statistics for the latest complete quarter ending June 2014 (Q2 2014)

A total of 8407 Display Energy Certificates (DECs) were lodged on the Register during the latest quarter – an increase of 1 per cent on the same quarter last year.

Within this total 7 per cent of buildings were given an Energy Performance Operational Rating of either A (the highest) or B; 56 per cent were given a Rating of C or D; and the remaining 37 per cent were given a Rating of E, F or G (the lowest).

Lodgements of DECs during this quarter, and during the same quarter last year, indicate the following averages per building.

Table 3 - DECs

Quarter	Average Floor Area (m2)	Average Energy Use (kWh/m2 per annum)		Average Carbon Dioxide Emissions (tonnes per annum)		
		Heating	Electricity	Heating	Electricity	
Q2 2013	2,783	157.34	70.87	95.79	135.65	
Q2 2014	3,168	158.23	71.78	111.62	158.55	

Statistics for the 12-month period ended June 2014 (July 2013 to June 2014)

A total of 37,960 Display Energy Certificates (DECs) were lodged on the Register during the 12-month period – an increase of 3 per cent on the previous 12-month period.

Within this total 6 per cent of buildings were given an Energy Performance Operational Rating of either A (the highest) or B; 57 per cent were given a Rating of C or D; and the remaining 37 per cent were given a Rating of E, F or G (the lowest).

Cumulative statistics for the period from 2008 to the end of June 2014

By the end of June 2014, a total of 194,361 Display Energy Certificates (DECs) had been lodged on the EPC Register since it first came into operation.

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 Dwellings: 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 Dwellings: 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 Dwellings: Floor Area, Size, Energy Use, Carbon Dioxide Emissions and Fuel Costs of Dwellings assessed and lodged on the Register - in each Year/Quarter

Table D4a – Domestic Energy Performance Certificates for all Dwellings: Number of Domestic Energy Performance Certificates lodged on the Register, by Type of Transaction – in each Year/Quarter – up to and including 30th September 2012

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

Table D5 – Domestic Energy Performance Certificates for All Dwellings: 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 Dwellings: 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 Dwellings: 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 Dwelling – in each Year/Quarter

Table LA1 – Domestic Energy Performance Certificates for All Dwellings: 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 Dwellings: 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 Dwellings: Number of New Dwelling Energy Performance Certificates lodged on the Register, by Energy Efficiency Rating – in each Year/Quarter

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

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

Table NB4 – Domestic Energy Performance Certificates for New Dwellings: Number of New Dwelling 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 Dwellings: Number off New Dwelling Energy Performance Certificates lodged on the Register by type of Property, and Energy Efficiency Rating – in each Year/Quarter

Table NB6 – Domestic Energy Performance Certificates for New Dwellings: Number of New Dwelling Energy Performance Certificates lodged on the Register by Type of Property and Environmental Impact Rating – in each Year/Quarter

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

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

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 and definitions

For full details on how the requirements of the Energy Performance of Buildings Directive are applied to domestic dwellings, non-dwellings and public buildings, users should consult the <u>Energy Performance Certificates guidance collection</u>.

For the purposes of reading the statistics, the following explanations are provided to support users' interpretation:

Coverage

This statistical release provides information from certificates currently lodged on the Registers - that is, domestic, non-domestic and public authority buildings built, bought, or let since 2008. It includes new homes built in the last six years, as an EPC is a legal requirement for new builds; however the registers do not hold data for every domestic, non-domestic and public building in England and Wales. These statistics should, therefore, not be interpreted as a true representation of the whole of the building stock, 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 2008 and Q2, 2014, 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. The statistics tables also include partial figures for Q3 2014. These have been included for reference purposes; however users should treat these as strictly provisional. The Q3 2014 figures will change in subsequent quarterly publications as the EPB Registers are updated with new EPCs and DECs.

New build vs new dwellings

If works are carried out to create a new dwelling or dwellings, 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, for example 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. This is a duty under Building Regulations.

Multiple certificates

The statistical counts in the tables cover all valid EPCs and DECs (i.e. only those 'entered' on the Register - 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 and depending on the size of the property, a DEC may be renewed annually. As data is kept on the register for 20 years, more than

one EPC or DEC may be stored over a number of years for one building. Whilst it is possible to identify the most recent certificate at property level, this duplication is not distinguishable from high-level statistics.

Data quality

This is a new <u>experimental official statistics</u> series drawn from data held on the Energy Performance of Buildings Register for England and Wales. Experimental official statistics are by definition still subject to evaluation and testing, and therefore may not meet the same rigorous quality standards as official statistics more generally. In spite of quality variances, we are publishing these figures because we believe them to be of immediate value and we welcome interested parties to become involved in their development.

Energy assessor accreditation schemes originally had the choice of lodging the underlying data used to produce domestic EPCs, in addition to the actual PDF document 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 as a PDF document only.

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

On 1 April 2012, the first set of Scheme Operating Requirements came into effect for Domestic Energy Assessors, which set new rules for the operation of 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 EPB Registers from mid-2012 onwards. Users are asked to consider this when interpreting figures prior to that period.

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. During the production of this report the refinement process led to some totals included in previous statistical reports to be revised downwards, leading to significantly lower levels of lodgement totals reported for 2013 when the statistics were compiled 'as at the end of 2014 quarter 2' than at the end of quarter 1.

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

Definitions

A consolidated glossary of all the terms used in the EPB Reports can be accessed at: https://www.gov.uk/government/collections/energy-performance-of-buildings-certificates

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. Responses should be addressed to the "Public enquiries" contact given in the "Enquiries" section below. Users can also provide feedback through a https://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

Energy Performance of Buildings Certificates statistics and the English Housing Survey

Further information about the energy performance of residential properties can be found in the recently published English Housing Survey (EHS) Report on the 'Energy Efficiency of English Housing' (2012). The performance statistics in the EHS Report relate to the period April 2012 to March 2013 and were derived from a sample of 12,763 occupied or vacant dwellings representative of the entire stock of housing in England. By contrast, the statistics in this report were extracted from the complete set (over 13 million) of Energy Performance Certificates (EPCs) that have been lodged on the EPC Register and covers dwelling bought, rented, or built in England and Wales in every quarter since 2008 as well as non-domestic properties.

Link to the EHS Report on the 'Energy Efficiency of Housing': https://www.gov.uk/government/statistics/english-housing-survey-2012-energy-efficiency-of-english-housing-reportrev

Information about statistics at DCLG is available via the Department's website: www.gov.uk/government/organisations/department-for-communities-and-localgovernment/about/statistics

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This document/publication is also available on our website at www.gov.uk/dclg

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