

Ministry of Housing, Communities & Local Government

Energy Performance of Buildings Certificates Statistical Release: Q1 2018: England and Wales

Energy Performance Certificates (EPCs)

In the quarter ending March 2018:

- 325,000 EPCs were lodged; a decrease of 9 per cent on the same quarter in 2017.
- Most (302,000) of these EPCs were for the sale and letting of existing dwellings and the construction/sale of new dwellings; a decrease of 11 per cent on the same quarter last year.
- The remaining 22,000 EPCs were for non-domestic properties; an increase of 26 per cent compared with the corresponding quarter last year. Only 10 per cent of these were in Band A or B.
- Eighteen per cent (53,000) of domestic EPCs were for new build dwellings and conversions; an increase of 6 per cent on the equivalent quarter in 2017.
- For new dwellings, more than 80 per cent were in Band A or B on both the carbon and the cost measures of energy efficiency.

In the year ending March 2018:

- A total of 1,169,000 domestic EPCs were lodged, a decrease of 18 per cent on the previous year.
- Of these, 226,000 EPCs covered new build dwellings and conversions, an increase of 3 per cent on the previous year, and the largest annual total for new properties since 2008 when the statistical record began.

Display Energy Certificates (DECs)

 9,100 Display Energy Certificates (DECs) were lodged in the quarter ending March 2018, an increase of 2 per cent on the corresponding period last year. Thirty-six per cent of these lodgements were placed in Band D.

Throughout this commentary the statistics on lodgements have been quoted to the nearest thousand for EPCs and the nearest hundred for DECs. Percentage changes have been calculated using unrounded figures.

Energy Efficiency

Experimental
Official Statistics
Release

26 April 2018

Introduction	2
All Domestic Properties	2
New Domestic	
Properties	4
Non-Domestic	
Properties	5
Display Energy	
Certificates	5
All Certificates	6
Accompanying Tables	8
Open Data	10
Definitions	10
Notes	13

Responsible Statistician:

Anna Carlsson-Hyslop

Statistical enquiries:

Office hours:

0303 444 2513

<u>Housing.statistics@communitie</u> s.gov.uk

Media Enquiries:

0303 444 1209

newsdesk@communities.gsi. gov.uk

Date of next publication:

26th July 2018

Introduction

This statistical release presents experimental official statistics based on Energy Performance Certificates (EPCs) issued for domestic and non-domestic buildings and Display Energy Certificates (DECs) issued for buildings occupied by public authorities. The certificates are lodged on the Energy Performance of Buildings Registers ("the Registers") for England and Wales.

Energy Performance Certificates

An Energy Performance Certificate (EPC) indicates the energy efficiency of building. The assessments are banded from A to G, where A (or A+ for non-domestic properties) is the most efficient in terms of likely fuel costs and carbon dioxide emissions. An EPC is required whenever a building is newly constructed, sold or let. The purpose of an EPC is to show prospective tenants or buyers the energy efficiency of the property. EPCs are valid for up to 10 years.

Display Energy Certificates

Larger properties occupied by public authorities and frequently visited by the public must display a Display Energy Certificate (DEC) in a prominent place. DECs show the actual energy consumption of a building and are accompanied by reports which provide recommendations on potential energy saving measures.

Experimental Official Statistics

Experimental statistics are defined in the Code of Practice for Statistics as 'new official statistics undergoing evaluation'. They are published in order to involve users and stakeholders in their development and as means to build in quality at an early stage.

These statistics are based on information from EPCs and DECs lodged on the Registers. This administrative data is subject to continuing quality investigation and improvement (see Technical Notes on Data Quality). They have been released because they have been judged to be of immediate value to interested parties and to encourage user feedback.

All Domestic Properties

In the first quarter (January to March) of 2018, 302,000 EPCs were lodged on the Register covering all domestic properties (sales, lets and new dwellings). While this represents a decrease of 11 per cent on the same quarter last year, when there were 339,000 lodgements, this is an increase on the previous quarter (i.e. Q4 2017) of 17% (from 257,000 lodgements). This is likely to be a seasonal effect, as the data often shows a decrease in Q4 followed by an increase in Q1. This is in line with seasonality patterns for new build completions and for sales/lettings.

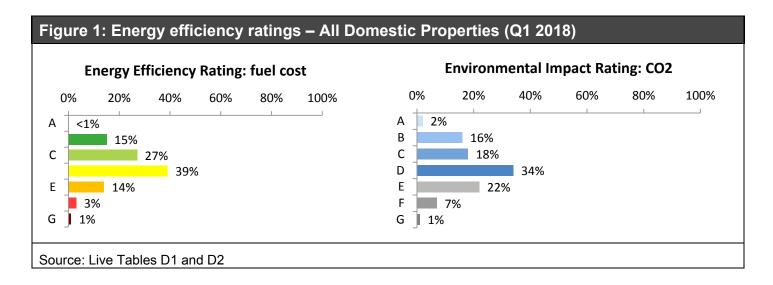
In the year ending March 2018, 1,169,000 EPCs were lodged, a fall of 18 per cent on the previous year (Live Table D1), and the lowest annual total since 2008.

Table 1 covers EPCs lodged during the first quarters of 2017 and 2018 and compares their average values over a range of indicators. The higher energy efficiency in this quarter may be a function of smaller properties (as measured by floor area) getting a certificate lodged.

Table 1: Mean Floor Area, Energy Use, CO ₂ Emissions and Fuel Costs for all Domestic Properties, England and Wales						
Floor Area (m ²)	Energy Use (kWh/m ² per annum)	CO ₂ Emissions (tonnes per	Lighting Costs (£ per	Heating Costs (£ per annum)	Hot Water Costs (£ per	
		,	•		annum)	
93	266	4.42	82	760	142	
88	253	3.76	77	630	134	
	Floor Area (m²)	Floor Area (kWh/m² per annum) 93 266 88 253	Floor Area (m²) Energy Use (kWh/m² Emissions per annum) CO₂ Emissions (tonnes per annum) 93 266 4.42 88 253 3.76	Floor Area (m²) Energy Use (kWh/m² per annum) CO₂ Emissions (tonnes per annum) Lighting Costs (£ per annum) 93 266 4.42 82 88 253 3.76 77	Floor Area (m²) (kWh/m² per annum) Emissions (tonnes per annum) Lighting Costs (£ per annum) Heating Costs (£ per annum) 93 266 4.42 82 760 88 253 3.76 77 630	

An EPC for domestic properties shows an energy efficiency rating based on estimated fuel costs and an environmental impact rating based on CO₂ emissions. Both measures are estimated from the characteristics of the property. The numerical ratings are then banded A to G, with A being the most energy efficient and G the least. The better the rating, the more energy efficient the property is, and the lower the fuel bills and CO₂ emissions are likely to be.

The distributions by Rating Band for all domestic certificates lodged in the first quarter of 2018 are shown in Figure 1. For both the energy efficiency rating (based on fuel costs) and the environmental impact rating (based on carbon emissions) the greatest proportion of lodgements were Band D.



New Domestic Properties

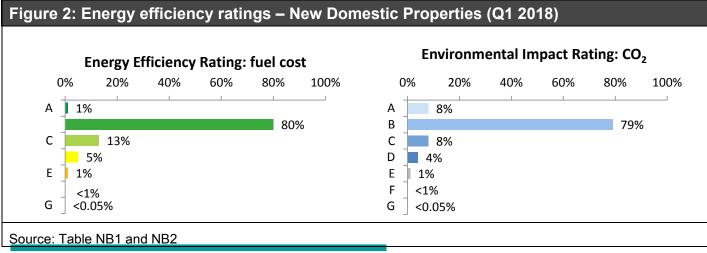
In the first quarter of 2018, 53,000 EPCs were lodged on the Register for **new** domestic properties (new builds, conversions and change of use). This compares with 50,000 lodgements during the corresponding quarter in 2017, an increase of 6 per cent. In the year to March 2018, 226,000 EPCs for new domestic properties were lodged, up 3 per cent on the previous year, and the largest annual total since the statistical record began in 2008 (Live Table NB1).

New domestic properties accounted for 18 per cent of all domestic EPCs lodged during the first quarter of 2018 (Live Tables NB1 and A1). In terms of dwelling type, 58 per cent were houses, 38 per cent were flats, 3 per cent were bungalows and 1 per cent was maisonettes (Live Table NB7).

The average values for a range of energy performance indicators are shown in Table 2. New properties tend to be more energy efficient. Being smaller, new flats tend to produce fewer emissions and have lower lighting and heating costs than new houses even though flats have a higher energy use per square metre.

Table 2: Mean Floor Area, Energy Use, CO ₂ Emissions and Fuel Costs for New Domestic Properties							
Year/ Quarter lodged	Property type	Floor Area (m²)	Energy Use (kWh/m ² per	CO ₂ Emissions (tonnes per annum)	Lighting Costs (£ per annum)	Heating Costs (£ per annum)	Hot Water Costs (£ per annum)
			annum)				
Q1 2017	All new	93	103	1.51	59	277	107
Q1 2018	All new	92	104	1.50	60	273	104
Q1 2018	New flats	62	128	1.20	47	227	115
Q1 2018	New houses	112	88	1.67	70	300	96
Source: Live Table NB3 and NB7							

Figure 2 shows how EPCs for new domestic properties during the first quarter of 2018 were distributed across each Rating Band. This again shows that new properties tend to be more energy efficient, with more rated B compared with all domestic (new and existing) properties.

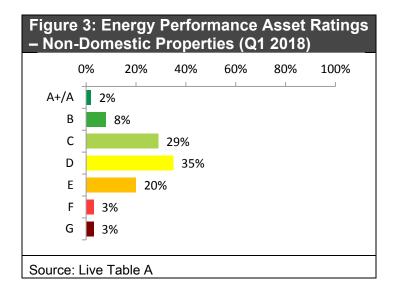


⁴ Energy Performance of Buildings Certificates Statistical Release

Non-Domestic Properties

During the first quarter of 2018, 22,000 EPCs were lodged for non-domestic properties, an increase of 26 per cent compared with the corresponding quarter in 2017. In the year ending March 2018, 80,000 non-domestic EPCs were lodged, an increase of 16 per cent on the number lodged during the previous year (Live Table A).

The distribution by EPC band is shown in Figure 3. Non-domestic buildings have an additional A+ band. The highest proportion of Certificates lodged (35 per cent) were placed in Band D, whilst the lowest proportion were in Band A/A+.



Display Energy Certificates (DECs)

Larger properties occupied by a public authority and frequently visited by the public must display a Display Energy Certificate (DEC). DECs show the actual energy consumption of a building and are accompanied by reports which provide recommendations on potential energy saving measures.

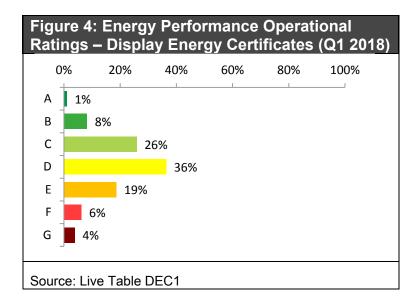
During the first quarter of 2018, 9,100 DECs were lodged relating to buildings in England and Wales, an increase of 2 per cent compared with the corresponding quarter in 2017. Over the whole of the year ending March 2018, 36,600 DECs were lodged, a decrease of 1 per cent compared with the previous year (Live Table DEC1).

Table 3 shows the average values over a range of indicators for DECs lodged during the first quarter of 2018 compared with those lodged during the equivalent period in 2017.

Table 3: Display Energy Certificates – Mean Floor Area, Energy Use, CO ₂ Emissions, Eng	j-
land and Wales	

Year/ Quarter	Floor Area (m²)	Average Energy Use (kWh/m2 per annum)		Average Carbon Dioxide Emiss (tonnes per annum)		
Lodged		Heating	Electricity	Heating	Electricity	
Q1 2017	3,355	125	64	108	166	
Q1 2018	3,396	108	55	105	157	
Source: Live Table DEC2						

The distribution of DECs by Energy Performance Operational Ratings is shown in Figure 4. The highest proportion of Certificates (36 per cent) were in band D, whilst the lowest were in Band A (1 per cent).



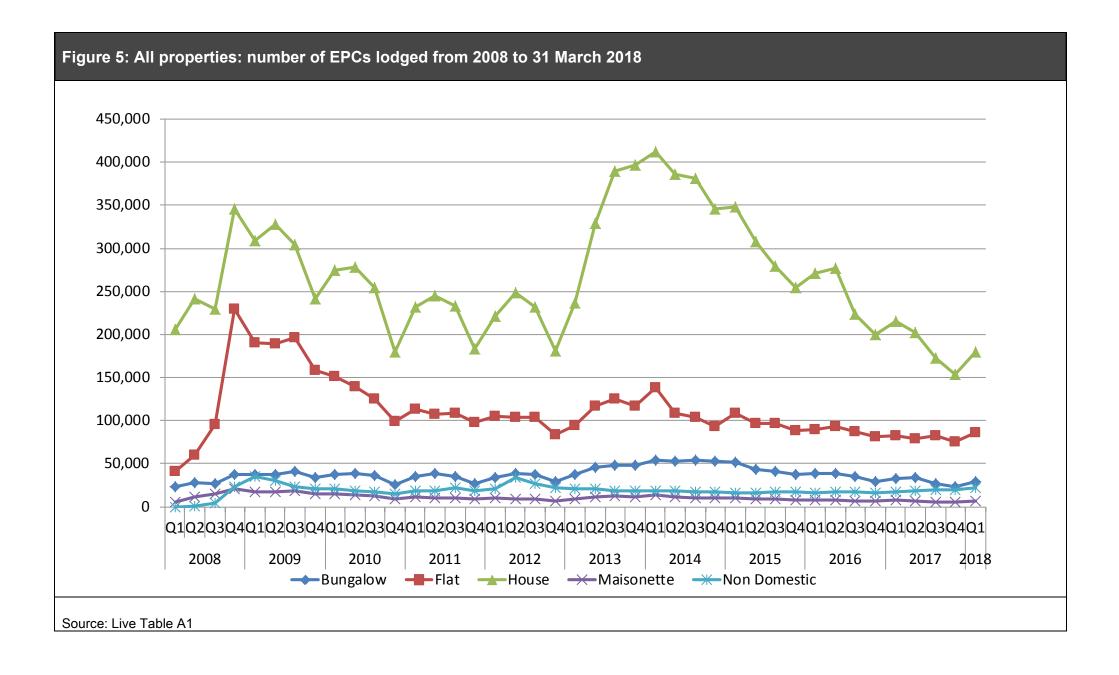
All Certificates – cumulative totals

Since 2008, 18,222,000 EPCs have been lodged on the Registers, with domestic properties accounting for 96 per cent of the total.

In the year to March 2018, 1,249,000 EPCs were lodged – a decrease of 17 per cent compared with the previous year. Of these, 325,000 were lodged during the first quarter – a fall of 9 per cent compared with the same guarter in 2017.

Since 2008, 17,448,000 EPCs covering domestic properties (including new properties) in England and Wales have been lodged on the Register. Of these, 1,713,000 EPCs (10 per cent of the total) covered **new** domestic properties (including new builds and conversions).

A total of 774,000 EPCs covering non-domestic properties and a total of 330,000 DECs have been lodged on the Registers since 2008 (Live table A1, NB1 and DEC1).



Accompanying tables

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 Dwellings 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 2014 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 Dwelling – 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 Dwellings 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 NB6 - Domestic Energy Performance Certificates for New Properties: Number of New Dwelling Energy Performance Certificates lodged on the Register in England & Wales, by Type of Property, by Environmental Impact 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 dwelling – 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/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

Previous MHCLG statistical releases are available at:

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

Open Data

Some of the statistics shown in this release are available in fully open and linkable data formats at Open Data Communities:

http://opendatacommunities.org/.

There are also property level EPC and DEC data available at Open Data Communities: https://epc.opendatacommunities.org/.

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

Technical notes

Data collection

Data lodged on the Registers record 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 date 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.

Coverage

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 Q1 2018 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 dwellings

If works are carried out to create a new building(s), either by means of new build or by conversion of an existing building (for example, subdivision of an existing building into flats or change of use 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 DECs (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 are 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.

Data quality

These are experimental official statistics 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 their development.

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.

In accordance with the regulations, the Ministry of Housing, Communities and Local Government and Landmark Information Group cannot alter data which has been lodged on the Registers.

Data used to produce these published tables is updated every 24 hours and can, therefore, 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 where we are required to use tables drawn down on different days or where reports are produced using different search criteria.

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 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 DECs 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.

Revisions policy

This policy has been developed in accordance with the UK Statistics Authority's *Code of Practice for Statistics* and the Department's own Revisions Policy (found at https://www.gov.uk/government/publications/statistical-notice-dclg-revisions-policy).

That policy covers two types of revision:

Non-Scheduled Revisions

Where a substantial error has occurred as a result of the compilation, imputation or dissemination process, the statistical release, live tables and other accompanying releases will be updated with a correction notice as soon as is practical.

Scheduled Revisions

MHCLG and Landmark do not alter the source data for these releases. The next quarterly release will include new certificates and any changes to existing ones (e.g. cancellations).

Uses of the data

The Energy Performance of Buildings Certificates statistical series is an important part of the evidence base which informs the development and evaluation of housing, energy and climate change policy by central and local government. An EPC is required for all properties when constructed, sold or let and this data source provides the most comprehensive evidence of energy efficiency and property attributes in buildings, which is widely used by housing market and energy analysts, environmental modellers, forecasters and decision makers, for example in the construction industry. They are used by the media in reports on the housing market, energy and climate change and by academics both in the UK and abroad. The statistics are also used for market research by a wide range of other businesses.

User engagement

We are considering reducing the frequency of this statistics release from quarterly to half yearly. If you have views on this or on the statistical release more generally, please contact us.

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.

The Department's engagement strategy to meet the needs of statistics users is published here: https://www.gov.uk/government/publications/engagement-strategy-to-meet-the-needs-of-statistics-users

Notes

- 1-These experimental official statistics based on EPCs and DECs are estimates and are provisional and subject to revision.
- 2-Throughout this commentary the statistics on lodgements have been quoted to the nearest thousand for EPCs and the nearest hundred for DECs. Percentage changes have been calculated using unrounded figures.
- 3-Sources are shown at the foot of individual accompanying tables and live tables.
- 4-Experimental Statistics are defined in the *Code of Practice for Statistics* as new official statistics undergoing evaluation. They are published in order to involve users and stakeholders in their development and as means to build in quality at an early stage.

5-Details of the Ministers and officials who receive pre-release access to this release up to 24 hours before publication can be found at: https://www.gov.uk/government/organisations/ministry-of-housing-communities-and-local-government/about/statistics

6-The next quarterly release will be published on 26th July 2018, and will provide estimates up to the end of the second quarter of 2018.

Devolved administration statistics

The requirement on domestic and non-domestic properties to have an EPC on construction, sale or let and for buildings occupied by public authorities to have a DEC are devolved matters in Scotland and Northern Ireland. Further information can be found on Devolved Administration websites:

Scottish Government: http://www.gov.scot/Home

Department of Finance Northern Ireland: https://www.finance-ni.gov.uk/

Enquiries

Media enquiries:

Office hours: 0303 444 1209

Email: newsdesk@communities.gsi.gov.uk

Public enquiries and Responsible Statistician:

Anna Carlsson-Hyslop

Email: housing.statistics@communities.gov.uk

Information on forthcoming Official Statistics is available via the 'gov.uk' Release Calendar: https://www.gov.uk/government/statistics/announcements

Information about statistics at MHCLG is available via the Department's website: https://www.gov.uk/government/organisations/ministry-of-housing-communities-and-local-government/about/statistics

© Crown copyright, 2018

Copyright in the typographical arrangement rests with the Crown.

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, 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.

This document/publication is also available on our website at http://www.gov.uk/mhclg

If you have any enquiries regarding this document/publication, complete the form at http://forms.communities.gov.uk/ or write to us at:

Ministry of Housing, Communities and Local Government Fry Building 2 Marsham Street London SW1P 4DF Telephone: 030 3444 0000

relephone. 000 0444

April 2018

For all our latest news and updates follow us on Twitter: https://twitter.com/mhclg

ISBN: 978-1-4098-5239-1