

Uses of data from Energy Performance of Buildings Certificates (EPCs)

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Overview

Contents:

- EPCs
- Data quality
- Data development
- Data usage



An Energy Performance Certificate (EPC) rates how energy efficient a building is using grades A to G (A most efficient or A+ for non-domestic)

An EPC contains a list of recommendations of improvements an owner can make to their house to improve their EPC rating with associated costs.

EPCs are required when a building is:

- Rented/sold (existing)
- Newly constructed (new) includes change of use

What is an EPC?

Energy Performance Certificate



overling type: Semi-detached house oute of assessment: 06 January 2016 oute of certificate: 07 January 2016 Reference number: Type of assessment: Total floor area:

RdSAP, existing dwelling 78 m²

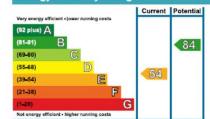
Use this document to:

- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

Estimated energy costs of dwelling for 3 years: Over 3 years you could save			£ 3,261 £ 1,440	
				Estimated energy costs of this home
	Current costs	Potential costs	Potential future savings	
Lighting	£ 312 over 3 years	£ 156 over 3 years	You could save £ 1,440 over 3 years	
Heating	£ 2,550 over 3 years	£ 1,413 over 3 years		
Hot Water	£ 399 over 3 years	£ 252 over 3 years		
Totals	£ 3,261	£ 1,821		

These figures show how much the average household would spend in this property for heating, lighting and hot water and is not based on energy used by individual households. This excludes energy use for running appliances like TVs, computers and cookers, and electricity generated by microgeneration.

Energy Efficiency Rating



The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

The EPC rating shown here is based on standard assumptions about occupancy and energy use and may not reflect how energy is consumed by individual occupants

Top actions you can take to save money and make your home more efficient

Recommended measures	Indicative cost	Typical savings over 3 years
Internal or external wall insulation	£4,000 - £14,000	£ 1,017
2 Floor insulation (suspended floor)	£800 - £1,200	£ 153
3 Low energy lighting for all fixed outlets	£50	£ 132

See page 3 for a full list of recommendations for this property.

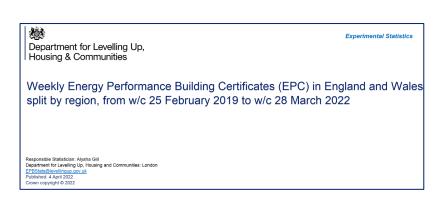
To find out more about the recommended measures and other actions you could take today to save money, visit www.gov.uk/energy-grants-calculator or call 0300 123 1234 (standard national rate). The Green Deal may enable you to make your home warmer and cheaper to run.



Department for Levelling Up, What DLUHC publish – for England and Wales Housing & Communities

- 1. Quarterly Energy Performance of Building Certificates statistics (EPC stats)
 - National and regional level
- 2. <u>Weekly Energy Performance of Building Certificates</u> <u>statistics (EPC stats)</u>
 - National and regional level
- 3. Open Data Communities (ODC)
 - Address level









Data quality

EPC Assessor audits:

- Smart audits to find potentially defective EPCs
- 2% audited a year

Certificates lodged on the EPB Register

20th Sept 2020 Register taken in house:

- 1. Data need to fit specific schemas
- 2. Validations added against expected ranges

Data ingested into our data store:

- 1. Data transformations validated
- 2. Data types of headers checked

Data quality assured by statisticians using automated checks:

- 1. Missing data
- 2. Inconsistencies
- 3. Checks across and within tables





Data Development Work

- Attaching Unique Property Reference Numbers (UPRNs)
- User engagement
- Attitudinal investigations
- EPC consultation

And many plans in the works...



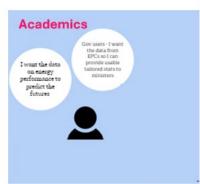
Within DLUHC:

- Housing Supply statistics
- Future homes standard
- Dashboards monitoring Housing Supply
- DLUHC policy on climate change and net zero
- EPC action plan

Outside of DLUHC:

- Office for National Statistics (ONS)
- Department for Energy Security and Net Zero
- Homes England
- Banking industry
- Housing market analysts
- Local Authorities
- Academics

Who uses the data





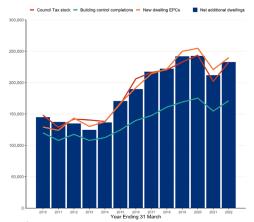












Sources:
Housing supply: net additional dwellings, Live Table 120;
Council Tax: stock of properties, Table CTSOP1.0;
EPCs for all new domestic properties, Live Table NB1;
Building control recorded new high dwellings. Live Table 21:

Data Linking Work

Office for National Statistics (ONS) have several projects using linked EPC data

- Data linking to the COVID infection survey
- Integrated Data Service (IDS)
- Representativeness Project

Academic projects

- University College London
- University of Graz
- Resolution Foundation

Future projects

- Validation work using Land Registry data
- Matching English Housing Survey data with EPC data





Thank you!

Feel free to contact either Claire Smith or Poppy Azmi

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