



## Sub-regional Fuel Poverty in England, 2025 (2023 data)

30 April 2025

Official Statistics in Development

### Summary findings:

- The overall level of fuel poverty in England in 2023 was 11.4 per cent using the Low Income Low Energy Efficiency (LILEE) fuel poverty metric.
- The West Midlands was the region with the highest rate of fuel poverty (16.7 per cent) followed by Yorkshire and the Humber (14.7 per cent).
- The 20 Local Authorities with the highest rates of fuel poverty in 2023 all had a fuel poverty rate higher than 15%. Over half of these Local Authorities were in the West Midlands (12), with the other Local Authorities in the Yorkshire and Humber (4), North West (3), and South West (1).
- The lowest regional levels of fuel poverty were in London (9.3 per cent), the South East (9.7 per cent) and the East (9.7 per cent).
- The 20 Local Authorities with the lowest levels of fuel poverty in 2023 all had a fuel poverty rate lower than 8%. Just under half of these Local Authorities were in the South East (9), with the other Local Authorities in London (5), East of England (5), and South West (1).

### What you need to know about these statistics:

Estimates of fuel poverty at the regional level are taken from the national fuel poverty statistics for 2023. Estimates at the sub-regional level are official statistics in development, and are modelled and constrained to regional totals. These should only be used to look at general trends and identify areas of particularly high or low fuel poverty. They should not be used to identify detailed trends over time.



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# Sub-regional fuel poverty, 2025 (2023 data)

## 1 Introduction

Fuel poverty in England is measured using the Low Income Low Energy Efficiency (LILEE) fuel poverty metric, which was set out in the [Fuel Poverty Sustainable Warmth strategy](#) published in February 2021. The Government is now reviewing this strategy and published a [consultation](#) in February 2025 seeking views on a new strategy to accelerate progress to deliver warm homes. The LILEE indicator considers a household to be fuel poor if:

- it is living in a property with an energy efficiency rating of band D, E, F or G as determined by the most up-to-date [Fuel Poverty Energy Efficiency Rating \(FPEER\) Methodology](#); and
- its disposable income (income after housing costs (AHC) and energy needs) would be below the poverty line<sup>1</sup>.

The Government is interested in the amount of energy people need to consume to have a warm, well-lit home, with hot water for everyday use, and the running of appliances. Therefore, fuel poverty is measured based on required energy bills rather than actual spending. This ensures that those households who have low energy bills simply because they actively limit their use of energy at home, for example, by not heating their home are not overlooked.

The [Annual fuel poverty statistics](#) are Accredited Official Statistics which provide a comprehensive view of the latest statistical trends and analysis of fuel poverty in England. These statistics report on the proportion of all households in fuel poverty in England and the depth of their fuel poverty. The report also looks at the key drivers of fuel poverty and how fuel poverty in England varies by dwelling and household characteristics.

The sub-regional statistics are Official Statistics in Development (see Annex). These complement the Accredited Official Statistics on fuel poverty, by estimating the number and proportion of fuel poor households at smaller geographical levels, for example, Local Authority level. The sub-regional statistics do not report on the average fuel poverty gap.

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<sup>1</sup> The poverty line (income poverty) is defined as an equivalised disposable income of less than 60 per cent of the national median in Section 2 of the ONS publication: [Persistent poverty in the UK and EU: 2017](#).

The headline statistics detailed in the 2025 annual report are based on projections to 2024, so provide more timely estimates of fuel poverty down to regional level. The sub-regional fuel poverty estimates are based on the 2023 modelled data and cannot be run for 2024 using this methodology.

This year's annual report, and a detailed methodology on how fuel poverty is calculated, can be found as part of the [fuel poverty statistics collection](#). Since 2019, sub-regional breakdowns have been produced based on the LILEE indicator. However, sub-regional breakdowns are also available between 2010 and 2018 based on the LIHC indicator.

### Accompanying tables

For each of the following geographical levels, estimates are available for the total number of households, the number of fuel poor households, and the proportion of households in fuel poverty:

- Table 1: English Region<sup>2</sup>
- Table 2: Region, County, Unitary & Local Authority
- Table 3: Parliamentary Constituency
- Table 4: Lower Super Output Area (LSOA)

### Interactive map

An interactive map for indicators of domestic energy efficiency and energy consumption is available which includes the percentage of households in fuel poverty down to Lower Layer Super Output Area. The fuel poverty data for 2023 will be made available through our [interactive map](#).

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<sup>2</sup> These are Official Statistics and are presented in the Fuel Poverty detailed tables 2025 (2023 data), alongside the Annual fuel poverty statistics report: 2025.

## 2 Regional fuel poverty

There was a high level of variation in the rates of fuel poverty between regions, ranging from 9.3 per cent in London to 16.7 per cent in the West Midlands. A detailed breakdown of fuel poverty statistics by region for 2023 is available in Table 5 of the [supplementary tables](#). Overall fuel poverty levels dropped between 2022 and 2023, largely driven by an increased share of households achieving an A-C fuel poverty energy efficiency ratings (FPEER) rating.

The highest regional rates of fuel poverty in 2023 were in the West Midlands (16.7 per cent) and Yorkshire and the Humber (14.7 per cent). Both regions had a combination of median (AHC) incomes less than the national average of £28,816, median FPEER below the national median of 69, and median equivalised fuel costs above the national average of £2,152.

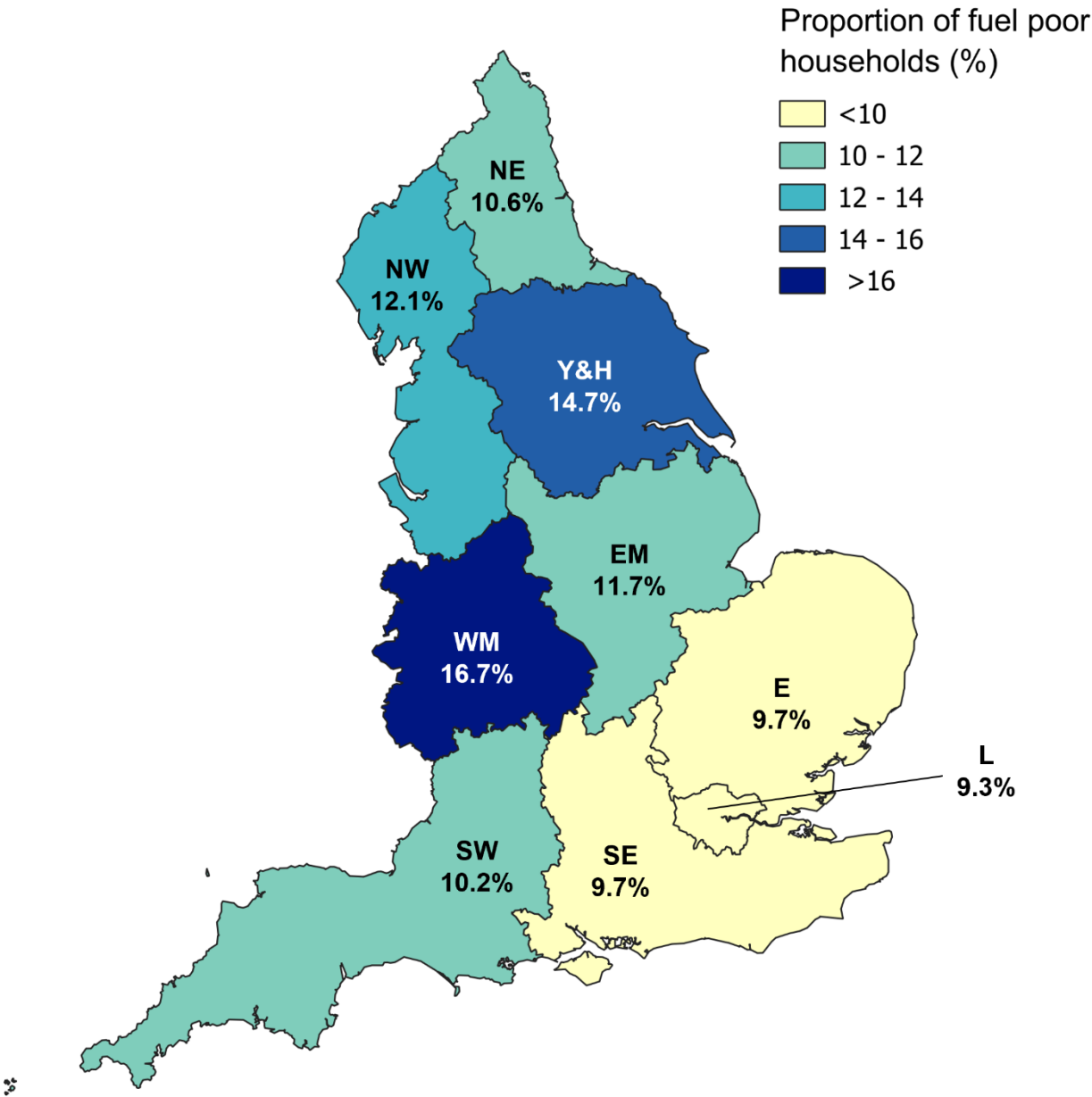
Households in the North East and North West had median (AHC) incomes under the national median of £28,816 and smaller than typical home sizes, with median floor area less than the national median of 85m<sup>2</sup>. However, the rate of fuel poverty was lower due to higher median FPEER, at 70 and 69 respectively, and lower median equivalised fuel costs than the West Midlands and Yorkshire and the Humber, which reduced the number of households in fuel poverty.

The lowest fuel poverty rates were in London (9.3 per cent), the South East (9.7 per cent), and the East (9.7 per cent). London had the lowest rate of fuel poverty in England due to a combination of the highest median FPEER at 71, the smallest typical home sizes, with median floor area of 78m<sup>2</sup>, the lowest median equivalised fuel costs (£1,978), and median equivalised incomes higher than the national median of £28,816.

In the annual fuel poverty statistics (report section 3.1.7) the fuel poverty gap was reported on as an indicator of the depth of fuel poverty, but this is not modelled at sub-regional level. This indicator shows that in 2023, fuel poor households in the South West had deeper levels of fuel poverty compared to all other regions in England, requiring a larger reduction in fuel costs needed for a household to not be in fuel poverty. This is partly explained by a combination of energy costs above the national median, at £2,186, and larger than typical home sizes, with median floor area of 88m<sup>2</sup>.

Further information on the drivers of regional differences in fuel poverty is detailed in the annual fuel poverty report (section 3.1.7), based on estimates of fuel poverty to 2024.

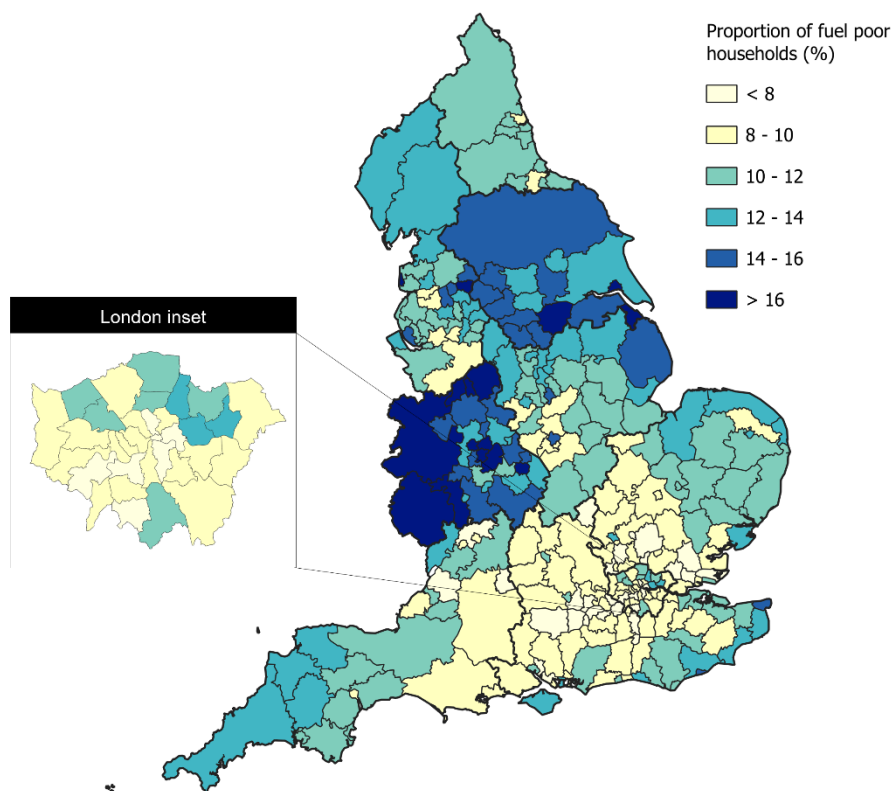
Figure 1: Proportion of households in fuel poverty, by region, 2023



### 3 Sub-regional fuel poverty

Maps provide a useful way of displaying variation in fuel poverty rates across different geographical areas. Figure 2 shows the proportion of households in fuel poverty in England at Local Authority level.

**Figure 2: Proportion of households in fuel poverty by Local Authority, 2023**

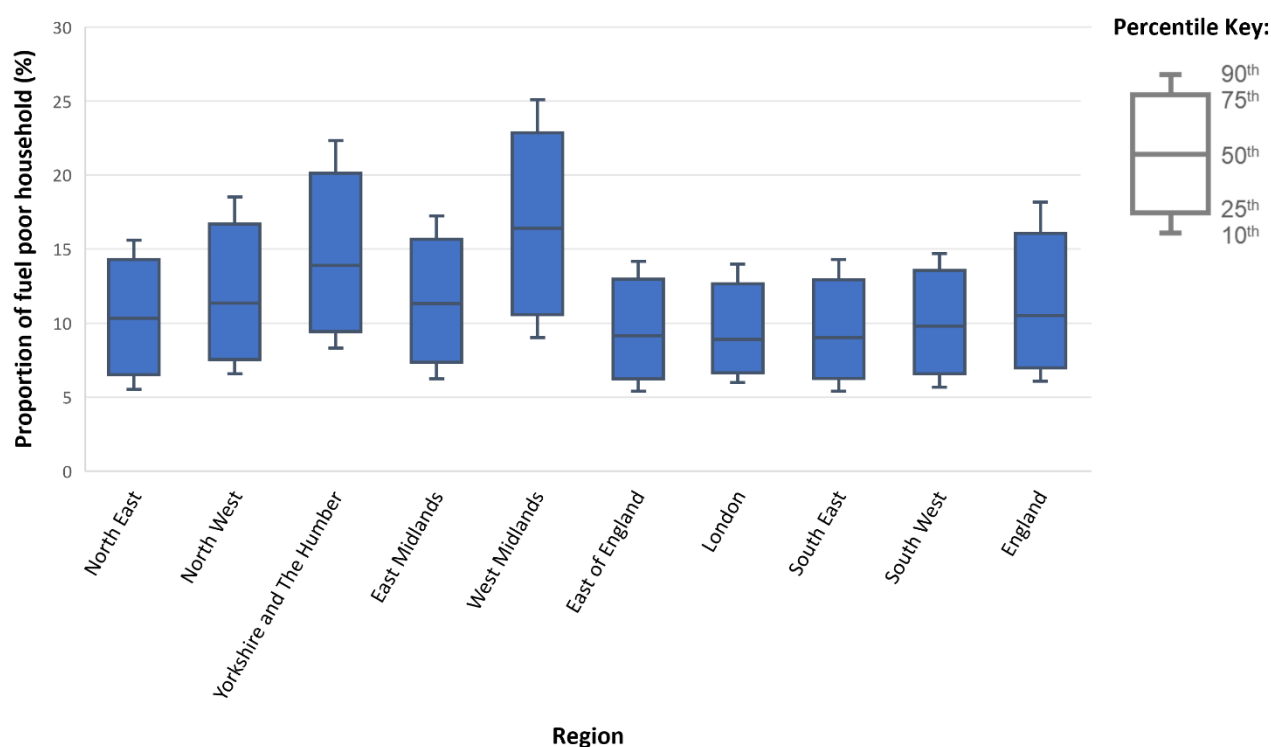


The Local Authorities with the highest rate of fuel poverty are shown in dark blue. The 20 Local Authorities with the highest rates of fuel poverty in 2023 all had a fuel poverty rate higher than 15 per cent. The 5 Local Authorities with the highest levels of fuel poverty were Stoke-on-Trent (21.3 per cent), Birmingham (19.3 per cent), Coventry (18.9 per cent), Wolverhampton (18.7 per cent), and Sandwell (18.5 per cent).

The Local Authorities with the lowest levels of fuel poverty are shown in light yellow. The 20 Local Authorities with the lowest levels of fuel poverty in 2023 all had a fuel poverty rate lower than 8 per cent. The 5 Local Authorities with the lowest levels of fuel poverty were City of London (4.6 per cent), Wokingham (6.2 per cent), Bracknell Forest (6.5 per cent), Surrey Heath (6.7 per cent), and Tower Hamlets (6.9 per cent).

The level of variation in the rate of fuel poverty within a region differs quite substantially at lower geographic areas. Figure 3 plots the fuel poverty rates for the 33,755 Lower layer Super Output Areas (LSOA) by region. This shows that the largest difference between the top and bottom 10 per cent of LSOAs was in the West Midlands where the 90<sup>th</sup> percentile was more than 16 percentage points higher than the 10<sup>th</sup> percentile. Therefore, as well as being the region with the highest rate of overall fuel poverty, it also had the largest variation between local areas. The second largest was the Yorkshire and the Humber with a gap of 14 percentage points. London had the smallest variation in fuel poverty rates with a difference of eight percentage points between the 90<sup>th</sup> and 10<sup>th</sup> percentiles.

**Figure 3: Proportion of households in fuel poverty, LSOAs within Region, 2023**



*The box plot shows the median and interquartile range of the proportion of fuel poor households in LSOAs by region. The whiskers represent the 10<sup>th</sup> and 90<sup>th</sup> percentile LSOAs for each region.*



## 4 Methodology

Fuel poverty statistics are based on data from the English Housing Survey (EHS). Given the sample size of the EHS in 2023 (12,918 households with physical surveys in the combined 2022/23 and 2023/24 dataset<sup>3</sup>), it is not possible to reliably estimate fuel poverty levels in small geographical areas, such as Local Authorities, without the use of statistical modelling.

A logistic regression model is created, matching data from the EHS on whether a household is fuel poor or not (as the binary dependent variable) with data from other sources available for all [Census Output Areas \(OA\)](#), e.g. Census 2011 data (as the independent variables). The factors used in the modelling are set out in the [sub-regional methodology documentation](#), alongside other details of the methodology.

The model is used to estimate the levels of fuel poverty for all OAs across England; these are then aggregated to higher level geographies, which are constrained to the regional totals. This modelling approach introduces the possibility that atypical small areas are not accurately picked up by the model and will be influenced by the regional trend in fuel poverty rate. For example, the figure and trend for Cornwall will be influenced by the trend for the South West region.

In 2013, the former Department for Energy & Climate Change undertook an internal review of the methodology used to produce sub-regional estimates of fuel poverty, in conjunction with Office for National Statistics (ONS) Methodology Advisory Service. This review found that estimates of fuel poverty were robust at Local Authority level, but not robust at lower levels of geography. In particular, estimates of fuel poverty at Lower Super Output Area (LSOA) should be treated with caution. The estimates should only be used to look at general trends and identify areas of particularly high or low fuel poverty due to their high uncertainty. They should not be used to identify trends over time within an LSOA, to rank LSOAs within a year, or to compare LSOAs with similar fuel poverty levels due to very small sample sizes and consequent instability in estimates at this level.

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<sup>3</sup> More information on the EHS combined dataset can be found in Annex B.4 of the Annual Fuel Poverty Statistics report: <https://www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2025>

## Annex: Further information

### Revisions policy

The [Department's statistical revisions policy](#) sets out the revisions policy for these statistics, which has been developed in accordance with the UK Statistics Authority [Code of Practice for Statistics](#).

### Official Statistics in Development

These statistics are deemed Official Statistics in Development as work is ongoing to improve the modelling approach used to produce these statistics. The current approach uses constrained regional totals and limited predictor variables which are known to yield estimates that are of lower quality at smaller geographies.

Work is in progress to incorporate administrative data as the base from which fuel poverty is modelled at sub-regional level, rather than using a sample-based approach such as the EHS. Under this approach fuel poverty statistics would be based on small area data on energy efficiency (such as Energy Performance Certificates (EPC)), matched with other data sources, to form a more up to date and accurate picture of fuel poverty for small areas in England. This alternative approach should increase the reliability of estimating fuel poverty at sub-regional levels, by making more use of real-world data through EPCs to more accurately determine the household's Energy Efficiency Rating. The Government is now reviewing the fuel poverty strategy and published a [consultation](#) in February 2025. Any alternative approach to producing subregional fuel poverty statistics would be consistent with the outcome of this consultation and new strategy.

When alternative methods are sufficiently developed, we will share details of the new method and the impact on the estimates with users.

### User engagement

Users are encouraged to provide comments and feedback on how these statistics are used and how well they meet their needs. Comments on any issues relating to this statistical release are welcomed and should be sent to:

[fuelpoverty@energysecurity.gov.uk](mailto:fuelpoverty@energysecurity.gov.uk)

The Department's statement on [statistical public engagement and data standards](#) sets out the department's commitments on public engagement and data standards as outlined by the [Code of Practice for Statistics](#).

## Pre-release access to statistics

Some ministers and officials receive access to these Official Statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the posts that receive pre-release access to these statistics can be found in the [Department's statement of compliance](#) with the Pre-Release Access to Official Statistics Order 2008.

## Contact

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