



Abigail McKnight

February 25th, 2025

## There's a problem with how we measure fuel poverty

*Numerous households live in homes that are too cold for their physical and mental health and well-being. But the way we measure fuel poverty across the UK varies wildly, making policymaking solutions harder to come by. Abigail McKnight argues that we need a better way of measuring fuel poverty if we are to tackle it.*

---

Enjoying this post? Then sign up to our [newsletter](#) and receive a weekly roundup of all our articles.

---

Large increases in energy prices, falling real incomes, increases in the energy price cap, the withdrawal of temporary support with energy bills and the government's recent decision to withdraw the Winter Fuel Allowance from the majority of pensioner households have brought to the fore the problem of fuel poverty. The main issue is that fuel poor households are living in homes which are too cold because they cannot afford to heat them to minimum levels necessary to maintain **physical and mental health and well-being**, or to do this they go into debt or cut back on other essentials such as food.

These problems are well known. Here I want to highlight a different problem which is that we do not know how many households in the UK face fuel poverty this winter, or for that matter any winter. This doesn't just matter because we don't have an accurate picture of fuel poverty in the UK, but the consequence is that policy makers' ability to reduce fuel poverty is stymied and real suffering follows.



*These different measures produce estimates which are not comparable so we can't simply sum estimates across UK nations to produce a UK wide figure.*



## No agreed measure of fuel poverty

Why don't we have an accurate picture of how many households in the UK face fuel poverty? Firstly, a simple answer is that devolution has led to the adoption of different official measures of fuel poverty in [England](#), [Scotland](#), [Wales](#) and [Northern Ireland](#) as fuel poverty policy is a devolved matter. These different measures produce [estimates which are not comparable](#) so we can't simply sum estimates across UK nations to produce a UK wide figure. Secondly, some measures are better than others at providing meaningful assessments of the prevalence of fuel poverty. Finally, there are long lags between data collection and the publication of fuel poverty statistics. This means that we won't know how many households were fuel poor this winter until well after the winter has passed.

Fuel poverty has been a distinct policy area for the last quarter of a century, first becoming subject to legislation in England and Wales in the [Warm Homes and Energy Conservation Act 2000](#), and for Scotland in the [Housing \(Scotland\) Act 2001](#). The Acts introduced legislative requirements to set targets for achieving the objective of ensuring that as far as reasonably practicable persons do not live in fuel poverty. Both Acts defined a person as fuel poor if they live in a low income household in a property which cannot be kept warm at a reasonable cost. While neither Act set out how fuel poverty should be measured, fuel poverty measurement took on a new importance as targets needed to be defined in terms of measures.

The [UK Fuel Poverty Strategy 2001](#) set out the approach of the government and the devolved administrations to tackling fuel poverty. It adopted the "widely accepted" definition that a fuel poor household is one which needs to spend more than 10 per cent of its income on all fuel use and to heat its home to an adequate standard of warmth. At the time, all UK nations used this definition.

Since then the Acts have been amended or superseded and measures have diverged. The greatest divergence has occurred in England. In 2013 the 10 per cent measure was replaced by the [Low Income High Cost](#) (LIHC) measure as recommended by John Hills's [independent review](#). This measure was subsequently replaced by the Low Income Low Energy Efficiency (LILEE) in 2020.



*Fuel poverty estimates are not directly comparable even between nations using a 10 per cent measure.*



In contrast to England, Scotland, Wales and Northern Ireland have continued to use variants of the 10 per cent measure. However, there are differences in how income is measured and in key assumptions related to heating regimes (such as minimum room temperatures), energy needs for vulnerable groups, whether and how low income households are identified. In addition, Scotland introduced a **revised measure** in 2019 which addresses some of the concerns raised by Hills about the earlier 10 per cent measure (such as how income is measured and the need to identify low income households). Northern Ireland currently has no statutory targets to reduce fuel poverty although they are working towards establishing a strategy in 2025 which could include a new fuel poverty measure. This means that fuel poverty estimates are not directly comparable even between nations using a 10 per cent measure.



*John Hills concluded that the 10 per cent measure was too sensitive to energy price changes, high income households could be classified as fuel poor and technicalities within its calculation resulted in a misleading impression of trends and an underestimation of the impact of key policies.*



## Changes to the way fuel poverty is measured in England

Good reasons have been given for changing the way fuel poverty is measured in England. John Hills **concluded** that the 10 per cent measure was too sensitive to energy price changes, high income households could be classified as fuel poor and technicalities within its calculation resulted in a misleading impression of trends and an underestimation of the impact of key policies. The LIHC measure went some way in solving these issues but a number of issues were found. One issue is that it is a relative measure: household's fuel poverty status is determined relative to average income and average energy costs. Its relative nature meant that the estimated share of fuel poor households in England had remained stable (10-12 per cent) but households were found to "churn" in and out of fuel poverty between one year and the next depending on their income and fuel costs relative to the average, even if their circumstances were unchanged. This meant that tracking progress against targets was challenging and, due to the relative nature of the measure, the rate of progress in improving the energy efficiency of homes had little impact on estimates. However, in an attempt to address these issues, England ended up with a new measure which is arguably not fit for purpose.



*While not disputing the need to improve energy efficiency of homes, a meaningful fuel poverty measure needs to be sensitive to other key drivers of fuel poverty.*



## Problems with the low income-low energy efficiency measure

The LILEE measure is a blunt instrument which assumes households cannot be fuel poor if they are living in properties deemed to be energy efficient. This means that it is largely insensitive to soaring energy prices and falling real incomes. Overall, the current measure for England leads to an overly skewed policy focus on energy efficiency measures with not enough emphasis on other drivers of fuel poverty (income, energy prices and household behaviour). In addition, the fuel poverty policy target for England is defined solely in terms of improving the energy efficiency of "fuel poor homes". While not disputing the need to improve energy efficiency of homes, a meaningful fuel poverty measure needs to be sensitive to other key drivers of fuel poverty.

Concern about the reliability of the LILEE measure, has led to the **official publication** on fuel poverty in England also reporting estimates based on a 10 per cent measure. The gap in estimates between these two measures is now substantial. Official estimates based on a 10 per cent measure identified more than 5 million additional households as fuel poor in 2023 relative to estimates based on the LILEE measure.



*Fuel poverty, as commonly understood and experienced, has become an increasingly serious problem for many UK households. How fuel poverty is measured needs to reflect this reality.*



## Why we need a consistent fuel poverty measure

In 2024, the **Committee on Fuel Poverty** called for a further review on how fuel poverty is measured in England as the LILEE “no longer captures the full range of households facing unaffordable energy bills”. In February 2025, the government announced a **review of the fuel poverty strategy** for England. I think we should take an important step further and ask fuel poverty experts and policy makers from across the UK to agree a single measure of fuel poverty so that we can answer key questions on prevalence of fuel poverty and develop a more effective policy regime. This is important as key policy levers are managed by the UK government such as setting most social security benefit levels and the Energy Company Obligation (**ECO**) which is responsible for delivering the main energy efficiency scheme in Great Britain to tackle fuel poverty (which confusingly uses a different method for identifying households at risk of fuel poverty). In addition, Ofgem (the national energy regulator for Great Britain) sets the GB wide energy price cap and administers ECO. An agreed single measure wouldn't remove the autonomy of devolved administrations to set their own fuel poverty targets and strategies nor have additional measures of fuel poverty linked to these targets but it would solve a number of key problems with the current situation.

Whichever measure is used, fuel poverty, as commonly understood and experienced, has become an increasingly serious problem for many UK households. How fuel poverty is measured needs to

reflect this reality.

---

*All articles posted on this blog give the views of the author(s), and not the position of LSE British Politics and Policy, nor of the London School of Economics and Political Science.*

*Image credit: **Monkey Business Images** in Shutterstock*

---

*Enjoyed this post? Sign up to our **newsletter** and receive a weekly roundup of all our articles.*

## About the author

### Abigail McKnight

Abigail McKnight is Director of the Centre for Analysis of Social Exclusion at the LSE and Associate Professorial Research Fellow. She is a Fellow of the Royal Society of Arts, Manufactures and Commerce (RSA).

**Posted In:** Economy and Society | Housing | LSE Comment | Welfare



© LSE 2025