

Rising fuel poverty

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On 1 October, energy bills for a typical household were due to rise to £3,549 a year, nearly treble the cost a year before. The cost was due to jump again in January 2023. But in September the government announced that the average bill would be capped at £2,500 a year for the next two years. What impact will this have on fuel poverty, defined as spending more than 10 per cent of net income on fuel? How many households are spending even greater proportions of their income on fuel? And who will be worst affected by rising prices?

In October last year, the energy price cap was £1,277 a year. The new government 'energy price guarantee' means the average household energy bill will be £2,500 a year, which is nearly double that amount. While this intervention will bring costs down from what they would have been, fuel poverty will increase.

In 2019/20, according to the Living Costs and Food Survey, the mean weekly household domestic energy expenditure was £24.75 (£1,287 per year) or, if based on the median, £21.39 (£1,112 per year). Then, 27.9 per cent of households were spending more than 10 per cent of their net income on fuel (the conventional fuel poverty threshold). This is the latest survey-based estimate that we have, but in 2020 and 2021 there was very little change in the domestic fuel element of the Consumer Price Index.

This October, more than 38 per cent of households in the UK (10.4 million) will be spending more than 10 per cent of their net income on fuel after housing costs.¹ We estimate that 77.2 per cent of lone parents with two or more children and 69.3 per cent of couples with three children will be spending more than 10 per cent of their net income on fuel. On average (median), households will be spending £16.54 a week above the 10 per cent threshold.

But these figures take into account the £400 rebate all households are being given this autumn, which runs out in March 2023. All these numbers will increase then. In April 2023, 62.5 per cent of households will be in fuel poverty unless there is some further government action.

As well as the rate of fuel poverty rising, the depth (the gap between the amount of net income spent on fuel and the 10 per cent threshold) will also increase. These results are summarised in Table 1. Some commentators have suggested, given the huge price increases, we should also use other thresholds of spending, so Table 1 has estimates for 20 per cent, 25 per cent and 30 per cent as well.

Furthermore, there are some marked regional variations in fuel poverty, ranging from 33.5 per cent in the South East to 56 per cent in Northern Ireland now. Unless further support is put in place, we estimate that the fuel poverty rates from April 2023 will increase substantially, ranging from 56.4 per cent in London to 72.4 per cent in Northern Ireland. See Table 2 for a comparison of regions across the UK.

Many more families are at risk of living in fuel poverty due to the recent series of energy price rises.

Table 1: Weekly fuel expenditure, fuel poverty rates and fuel poverty gaps and numbers of households and individuals in fuel poverty

	Actual 2019/20	May 2022	October 2022 (with rebate)	April 2023
Average weekly fuel expenditure				
Mean £	24.75	38.12	33.03	48.41
Median £	21.39	32.94	26.45	41.83
% of UK households living in fuel poverty on different measures				
> 10% net income after housing costs	27.9%	48.9%	38.1%	62.5%
> 20% net income after housing costs	9.2%	18.0%	15.1%	27.0%
> 25% net income after housing costs	6.6%	12.6%	10.8%	18.6%
> 30% net income after housing costs	5.1%	9.5%	8.5%	13.8%
Average weekly fuel poverty gap on different measures				
> 10% net income after housing costs				
Mean £	14.88	22.27	26.65	28.57
Median £	9.57	15.55	16.54	20.51
> 20% net income after housing costs				
Mean £	18.93	25.18	31.42	29.18
Median £	11.70	16.43	18.69	18.63
> 25% net income after housing costs				
Mean £	20.99	27.16	33.79	31.70
Median £	12.59	18.38	21.55	20.02
> 30% net income after housing costs				
Mean £	23.23	29.13	35.39	33.64
Median £	14.34	18.46	22.30	22.50
Number of households living in fuel poverty on different measures				
> 10% net income after housing costs	7,595,000	13,310,000	10,373,000	17,010,000
> 20% net income after housing costs	2,492,000	4,900,000	4,105,000	7,354,000
> 25% net income after housing costs	1,782,000	3,427,000	2,948,000	5,047,000
> 30% net income after housing costs	1,374,000	2,572,000	2,299,000	3,766,000
Number of people living in fuel poverty on different measures				
> 10% net income after housing costs	19,626,000	33,797,000	27,676,000	42,811,000
> 20% net income after housing costs	6,181,000	12,581,000	10,954,000	19,042,000
> 25% net income after housing costs	4,100,000	8,657,000	7,668,000	12,954,000
> 30% net income after housing costs	3,068,000	6,351,000	5,796,000	9,510,000

Sources: LCFS 2019-20 weighted data. May 2022 price cap at £1,971 (represents a 54 per cent increase from baseline 2019/20). October 2022 price cap at £2,500 (or 27 per cent increase from May cap).

Table 2: Estimated percentages and numbers of households living in fuel poverty by region

Region	October 2022 (with rebate)							
	Fuel poverty thresholds, after housing costs							
	10%		20%		25%		30%	
	Count (000s)	% within region	Count (000s)	% within region	Count (000s)	% within region	Count (000s)	% within region
North East	439	37.2%	159	13.5%	103	8.7%	90	7.6%
North West & Merseyside	1,289	40.6%	520	16.4%	372	11.7%	289	9.1%
Yorkshire and the Humber	829	35.4%	299	12.8%	226	9.6%	178	7.6%
East Midlands	772	38.6%	302	15.1%	198	9.9%	144	7.2%
West Midlands	924	38.8%	377	15.8%	271	11.4%	190	8.0%
Eastern	872	34.4%	276	10.9%	181	7.1%	146	5.8%
London	1,141	35.9%	521	16.4%	389	12.3%	350	11.0%
South East	1,218	33.5%	425	11.7%	308	8.5%	225	6.2%
South West	894	38.0%	336	14.3%	237	10.1%	166	7.1%
Wales	562	41.3%	228	16.7%	177	13.0%	145	10.7%
Scotland	1,039	44.0%	468	19.8%	343	14.5%	272	11.5%
Northern Ireland	393	56.0%	195	27.7%	144	20.5%	104	14.8%
Total	10,372	38.1%	4,106	15.1%	2,949	10.8%	2,299	8.5%

Region	April 2023							
	Fuel poverty thresholds, after housing costs							
	10%		20%		25%		30%	
	Count (000s)	% within region	Count (000s)	% within region	Count (000s)	% within region	Count (000s)	% within region
North East	738	62.5%	323	27.3%	196	16.6%	142	12.0%
North West & Merseyside	2,072	65.3%	886	27.9%	656	20.7%	499	15.7%
Yorkshire and the Humber	1,516	64.7%	605	25.8%	386	16.5%	313	13.4%
East Midlands	1,281	64.0%	608	30.4%	388	19.4%	289	14.4%
West Midlands	1,546	64.8%	635	26.6%	438	18.4%	335	14.0%
Eastern	1,496	59.0%	535	21.1%	331	13.1%	246	9.7%
London	1,792	56.4%	832	26.2%	640	20.2%	479	15.1%
South East	2,060	56.7%	799	22.0%	527	14.5%	369	10.2%
South West	1,470	62.5%	656	27.9%	416	17.7%	301	12.8%
Wales	920	67.5%	417	30.6%	288	21.1%	211	15.5%
Scotland	1,611	68.2%	767	32.5%	568	24.1%	412	17.4%
Northern Ireland	508	72.4%	290	41.3%	214	30.4%	170	24.2%
Total	17,010	62.5%	7,353	27.0%	5,048	18.6%	3,766	13.8%

Sources: LCFS 2019-20 weighted data. May 2022 price cap at £1,971 (represents a 54 per cent increase from baseline 2019/20). October 2022 price cap at £2,500 (or 27 per cent increase from May cap).

Notes on these figures

These estimates take account of the £400 reduction that is being paid to all electricity customers between October 2022 and April 2023 (equivalent to £15.38 a week), but not the other mitigations for means-tested benefit recipients, pensioners and disabled people which are being paid this year.

The estimates are based on equivalised household net income after housing costs (ie, net of rent, rates, council tax, water, mortgage interest and other housing regular payments).

The analysis takes no account of any behavioural response to fuel price increases.

It applies estimated gas and electricity price increases to all domestic fuel consumption including oil and solid fuels.

The Living Costs and Food Survey is based on a national sample of 5,438 households in the UK, but the breakdowns by region and household type are based on a much smaller number and although the survey is weighted to represent the population, there will be quite large sampling errors.

Northern Ireland consumers are not covered by the price cap and are more reliant on oil central heating, which started rising in price earlier than the gas and electricity price cap.



This October, more than 38 per cent of households in the UK will be spending more than 10 per cent of their net income on fuel after housing costs... In April 2023 [when the £400 rebate for all households runs out], 62.5 per cent of households will be in fuel poverty unless there is some further government action.

There is overlap between income poverty (equivalent to income less than 60 per cent of median after housing costs) and fuel poverty, as Table 3 shows. In 2019/20, among the 27.9 per cent of households in fuel poverty, 57.5 per cent were also in income poverty while 42.5 per cent were not. When the £400 rebate runs out, it's estimated that as many as 66.4 per cent of households not in income poverty will be in fuel poverty, while 33.6 per cent of households will be in both fuel and income poverty.

Table 4 shows which types of households will be more or less likely to be in fuel poverty in October 2022 and April 2023. The households most likely to be in fuel poverty will be larger families with children and lone-parent families with two or more children.

This analysis illustrates just how significant these price increases are for households and their ability to meet their costs, despite government action so far. And, of course, fuel is not the only cost that is soaring. Families face a very difficult winter ahead, and the government must introduce measures that meet the scale of the challenge.

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Footnote

1. After housing costs is the preferred measure, as housing costs vary hugely in the UK and account for one of the largest household expenditures which is also less easy to cut down. Calculating fuel poverty after housing costs have been deducted from net income arguably gives a more accurate picture. There are also other more sophisticated measures incorporating the thermal efficiency of dwellings, but they are difficult to operationalise with existing data sources. See J Hills, *Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review*, 2012, available at http://eprints.lse.ac.uk/51237/1/_libfile_REPOSITORY_Content_CASE_CASEreports_CASereport72.pdf.

See also Department for Business, Energy and Industrial Strategy, *Consultation on the fuel poverty strategy for England*, 2019, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819606/fuel-poverty-strategy-england-consultation.pdf.

See also Resolution Foundation, *Higher and higher: Averting a looming energy bill crisis*, 2022, available at www.resolutionfoundation.org/publications/higher-and-higher/



In October 2022 and April 2023 the households most likely to be in fuel poverty will be larger families with children and lone-parent families with two or more children.

Table 3: Overlaps between fuel poverty and income poverty in households, after housing costs

	% in fuel poverty but not income poverty	% in fuel poverty and income poverty	% in fuel poverty
With rebate			
October 2022 (10% definition)	59.9%	40.1%	38.1%
October 2022 (20% definition)	34.9%	65.1%	15.1%
October 2022 (25% definition)	27.0%	73.0%	10.8%
October 2022 (30% definition)	20.2%	79.8%	8.5%
Without rebate			
Actual 2019/20 (10% definition)	42.5%	57.5%	27.9%
April 2023 (10% definition)	66.4%	33.6%	62.5%
April 2023 (20% definition)	41.6%	58.4%	27.0%
April 2023 (25% definition)	30.2%	69.8%	18.6%
April 2023 (30% definition)	22.0%	78.0%	13.8%

Sources: LCFS 2019-20 weighted data. May 2022 price cap at £1,971 (represents a 54 per cent increase from baseline 2019/20). October 2022 price cap at £2,500 (or 27 per cent increase from May cap).

Table 4: Estimated fuel poverty rates by household type

October 2022 (with rebate)								
Family type	Fuel poverty thresholds, after housing costs							
	10%		20%		25%		30%	
	Count (000s)	% within family type	Count (000s)	% within family type	Count (000s)	% within family type	Count (000s)	% within family type
Single	1,132	30.0%	581	15.4%	499	13.2%	459	12.2%
Couple	1,324	25.4%	429	8.2%	307	5.9%	254	4.9%
Couple with 1 child	770	35.7%	329	15.3%	234	10.8%	144	6.7%
Couple with 2 children	1,140	45.5%	387	15.4%	265	10.6%	177	7.1%
Couple with 3 children	543	69.3%	203	25.9%	144	18.4%	106	13.5%
Couple with 4 or more children	123	73.2%	57	33.9%	41	24.4%	27	16.1%
Lone parent with 1 child	309	51.2%	164	27.2%	122	20.2%	85	14.1%
Lone parent with 2 or more children	404	77.2%	227	43.5%	171	32.7%	151	28.9%
Pensioner, single	1,269	33.6%	517	13.7%	356	9.4%	301	8.0%
Pensioner couple	1,607	39.0%	532	12.9%	365	8.8%	260	6.3%
Other pensioners (living with dependent children or multi-unit*)	420	53.5%	169	21.6%	81	10.3%	56	7.1%
Other (multi-unit*)	1,331	47.7%	507	18.2%	362	13.0%	280	10.0%
Total	10,372	38.1%	4,102	15.1%	2,947	10.8%	2,300	8.5%

April 2023								
Family type	Fuel poverty thresholds, after housing costs							
	10%		20%		25%		30%	
	Count (000s)	% within family type	Count (000s)	% within family type	Count (000s)	% within family type	Count (000s)	% within family type
Single	1,937	51.4%	1,063	28.2%	859	22.8%	712	18.9%
Couple	2,299	44.1%	874	16.7%	545	10.4%	408	7.8%
Couple with 1 child	1,334	61.8%	597	27.7%	375	17.4%	285	13.2%
Couple with 2 children	1,810	72.3%	649	25.9%	425	17.0%	306	12.2%
Couple with 3 children	686	87.6%	415	53.0%	279	35.6%	185	23.6%
Couple with 4 or more children	159	94.6%	107	63.7%	68	40.5%	50	29.8%
Lone parent with 1 child	471	78.1%	264	43.7%	187	31.0%	162	26.8%
Lone parent with 2 or more children	469	89.7%	375	71.8%	288	55.1%	224	42.8%
Pensioner, single	2,575	68.2%	1,015	26.9%	678	18.0%	480	12.7%
Pensioner couple	2,782	67.5%	959	23.2%	644	15.6%	450	10.9%
Other pensioners (living with dependent children or multi-unit*)	574	73.1%	258	32.9%	169	21.6%	79	10.1%
Other (multi-unit*)	1,913	68.6%	777	27.9%	529	19.0%	426	15.3%
Total	17,009	62.5%	7,353	27.0%	5,046	18.6%	3,767	13.8%

* A household with more than one benefit unit.

Sources: LCFS 2019-20 weighted data. May 2022 price cap at £1,971 (represents a 54 per cent increase from baseline 2019/20). October 2022 price cap at £2,500 (or 27 per cent increase from May cap).



The fuel price rises have put even more pressure on families, who are facing other soaring costs as well.