

Research briefing:

**Estimating the impact of the Energy Price Guarantee (October 2022)
on older households in England**

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Summary of Key Points

During 2022 wholesale gas prices continued to increase substantially, and in response to this the Government introduced the Energy Price Guarantee (EPG), which will see the energy price cap rise by 27% in October 2022 and then remain no higher than this level for the next two years. The EPG is in addition to the other measures introduced by Government in 2022 to support households with rising energy prices and the cost of living, yet even after this support, from October 2022:

- around three-in-ten (29%) older households in England will be living in fuel stress, up from around one in ten (10%) a year earlier. This equates to around an additional 1.8m older households (including around 620,000 on a lower income), bringing the total number of older households in England living in fuel stress from October 2022 to around 2.8m (including around 1.3m on a lower income). Among lower income older households in England, half (53%) will be living in fuel stress from October 2022 compared to a quarter (27%) a year earlier
- the typical (median) older household in England will be spending the equivalent of 7 pence in every £1 of their after-tax household income on energy bills (compared to 5 pence a year earlier). For a quarter of older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 11 pence in every £1 from October 2022 (from at least 7 pence a year earlier), and for one in ten older households in England to at least 15 pence (from at least 10 pence a year earlier)
- the typical (median) lower income older household in England will be spending the equivalent of 11 pence in every £1 of their after-tax household income on energy bills (compared to 7 pence a year earlier). For a quarter of lower income older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 15 pence in every £1 from October 2022 (from at least 10 pence a year earlier), and for one in ten lower income older households in England to at least 22 pence (from 15 pence a year earlier).
- nearly nine in ten (86%) older households in England living in homes with an efficiency rating F/G will be living in fuel stress, up from less than half (45%) a year earlier. This equates to around an additional 175,000 older households in England, bringing the total number of older households in England in homes with an energy efficiency rating of F/G living in fuel stress in England from October 2022 to around 365,000

- around one in three (34%) older households in England living in homes with an efficiency rating D/E will be living in fuel stress, up from around one-in-eight (12%) a year earlier. This equates to around an additional 1.2m older households in England, bringing the total number of older households in England in homes with an energy efficiency rating of D/E living in fuel stress from October 2022 to around 1.9m
- around one in six (16%) older households in England living in homes with an efficiency rating A/B/C will be living in fuel stress, up from around four percent (4%) a year earlier. This equates to around an additional 420,000 older households in England, bringing the total number of older households in England in homes with an energy efficiency rating of A/B/C living in fuel stress from October 2022 to around 575,000
- among older households in England living in homes with an energy efficiency rating of F/G the typical (median) older household in such a home will be spending the equivalent of 16 pence in every £1 of their after-tax household income on energy bills (compared to 10 pence a year earlier). For a quarter of older households in such homes in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 21 pence in every £1 from October 2022 (from at least 13 pence a year earlier), and for one in ten older households in such homes in England to at least 29 pence (from at least 17 pence a year earlier)
- among older households in England living in homes with an energy efficiency rating of D/E the typical (median) older household in such a home will be spending the equivalent of 8 pence in every £1 of their after-tax household income on energy bills (compared to 5 pence a year earlier). For a quarter of older households in such homes in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 11 pence in every £1 from October 2022 (from at least 8 pence a year earlier), and for one in ten older households in such homes in England to at least 16 pence (from at least 11 pence a year earlier)
- among older households in England living in homes with an energy efficiency rating of A/B/C the typical (median) older household in such a home will be spending the equivalent of 6 pence in every £1 of their after-tax household income on energy bills (from 4 pence a year earlier). For a quarter of older households in such homes in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 8 pence in every £1 from October 2022 (from at least 6 pence a year earlier), and for one in ten older households in such homes in England to at least 12 pence (from at least 8 pence a year earlier)

Whilst the Energy Price Guarantee means the maximum that energy companies can charge households per unit (kWh) of electricity and gas will be fixed for two years from October 2022, the unit rate is almost double that a year earlier, and with prices of other goods & services rising older households – not limited to but especially the poorest – will increasingly struggle. Without further targeted Government support, many households – including but not limited to older households - will be forced to choose whether to cut back on spending on essentials such as food or to keep their home warm through colder periods.

Introduction

The Office of Gas and Electricity Markets (Ofgem) is responsible for the energy price cap, which sets the maximum amount that energy companies can charge per unit (kWh) of electricity and gas, to households on standard variable tariffs in Great Britain. The energy price cap was introduced in January 2019 with the aim of helping to protect households from paying high prices because they remain with the same energy provider, by ensuring energy companies can pass on reasonable costs to customers, but not charge them more than a fair price to make excessive profits.

Rises in global gas prices since the second half of 2021 led Ofgem to increase the energy price cap by 54% from 1st April 2022 and announce that it would rise by a further 80% from 1st October 2022. This would have meant that from October 2022, the typical household in Great Britain on a standard variable tariff would be paying almost three-times the price for energy than a year earlier (figure 1).

The dramatic increases in the energy price cap in 2022 has meant that as households come to the end of their existing fixed energy tariffs, the cheapest option for them is to be on the standard variable tariff. Around 24 million households in Great Britain, nearly nine in ten, are on a standard variable tariff¹. With the energy price cap having been forecast to rise further from 1st January 2022, and more households coming to the end of their fixed energy tariff, the Government announced the Energy Price Guarantee (EPG) on 8th September 2022².

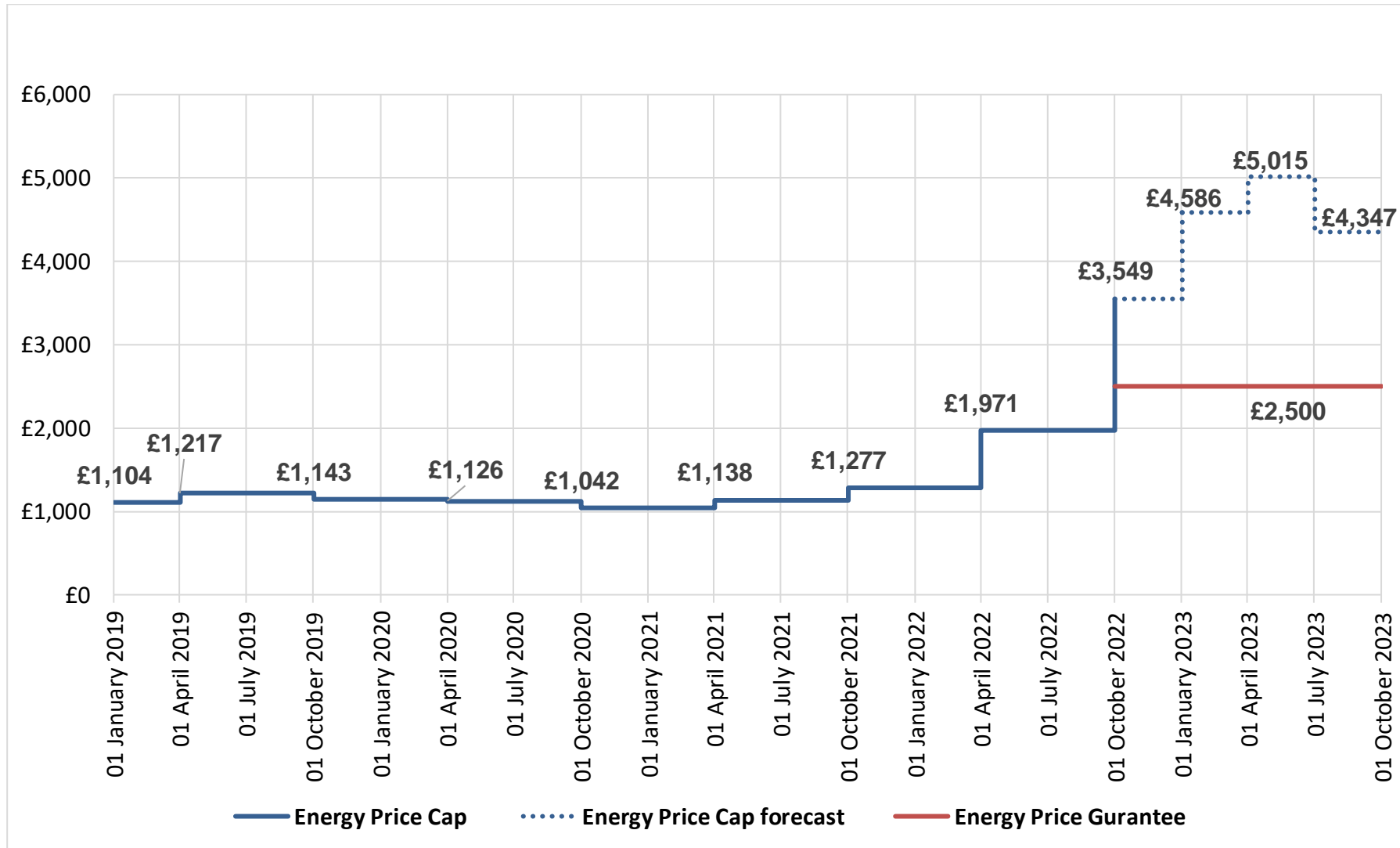
The Energy Price Guarantee (EPG) means that from 1st October 2022 the energy price cap will rise by 27% and remain no higher than this level for two years. This will mean that from October 2022, the typical household in Great Britain on a standard variable tariff will be paying almost double the price for energy than a year earlier (figure 1).

This paper presents the impact on older households, defined as households with at least one person aged 60 or over, in England of the introduction of the EPG in addition to the support that had already been made available by Government (as of end of August 2022). It presents the impact on older households' energy spend as a proportion of their after-tax income and on the proportion of older households experiencing fuel stress, alongside a discussion of these impacts. The appendix describes the calculations for the analysis presented in this paper.

¹ Office of Gas and Electricity Markets (Ofgem). 26th August 2022. *Ofgem updates price cap level and tightens up rules on suppliers*. [online] Available at <https://www.ofgem.gov.uk/publications/ofgem-updates-price-cap-level-and-tightens-rules-suppliers>. Accessed 13th September 2022.

² HM Government. 8th September 2022. *Government announces Energy Price Guarantee for families and businesses while urgently taking action to reform broken energy market*. [online] Available at <https://www.gov.uk/government/news/government-announces-energy-price-guarantee-for-families-and-businesses-while-urgently-taking-action-to-reform-broken-energy-market>. Accessed 13th September 2022

Figure 1: energy price cap for typical household in Great Britain



Source: Author's visualisation of data from Money Saving Expert

Impact on older households in England – energy costs as a proportion of after-tax household income

The median (50th percentile) is one measure of the average and represents the middle value within a population, which means half the population will have a value below this and half the population will have a value above this.

The third or upper quartile (75th percentile) is the value at which 75% of the population have a value below this and 25% of the population will have a value above this.

The 90th percentile is the value at which 90% of the population have a value below this and 10% of the population will have a value above this.

Table 1 presents the amount of after-tax household income, in terms of pence in every pound, spent on energy use in the home by older households in England. It shows in 2021 the typical (median) older household in England was spending the equivalent of 5 pence in every £1 of their after-tax household income on energy bills. This was expected to rise to 11 pence in every £1 of their after-tax household income from October 2022. The Government’s decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at 7 pence in every £1 of their after-tax household income. Table 1 also shows for a quarter of older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 11 pence in every £1 from October 2022 (from at least 7 pence a year earlier), and for one in ten of older households in England to at least 15 pence (from at least 10 pence a year earlier).

Table 1: amount of after-tax household income (pence in every pound) spent on energy use in the home by older households in England

	median	75 th percentile	90 th percentile
2021	5	7	10
2022 (Oct energy price cap rise)	11	16	23
2022 (Oct Energy Price Guarantee)	7	11	15

Source: Author’s analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister’s Office

We define lower income households as households living in relative poverty (i.e. with an equivalised after-tax household income after housing cost of below 60% of median income) and/or those which are (theoretically) in receipt of means-tested benefits; “theoretically” because households flagged as being in receipt of means-tested benefits have been identified through modelling by the Department for Business, Energy & Industrial Strategy (BEIS)³

Table 2 presents the amount of after-tax household income, in terms of pence in every pound, spent on energy use in the home by lower income older households in England. It shows in 2021 the typical (median) lower income older household in England was spending the equivalent of 7 pence in every £1 of their after-tax household income on energy bills. This was expected to rise to 16 pence in every £1 of their after-tax household from October 2022. The Government’s decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at 11 pence in every £1 of their after-tax household income. Table 2 also shows for a quarter of lower income older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 15 pence in every £1 from October 2022 (from at least 10 pence a year earlier), and for one in ten of lower income older households in England to at least 22 pence (from at least 15 pence a year earlier).

Table 2: amount of after-tax household income (pence in every pound) spent on energy use in the home by lower income older households in England

	median	75 th percentile	90th percentile
2021	7	10	15
2022 (Oct energy price cap rise)	16	23	33
2022 (Oct Energy Price Guarantee)	11	15	22

Source: Author’s analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister’s Office

³ The Department for Business, Energy & Industrial Strategy (BEIS) model households in receipt of means-tested benefits based on household characteristics – see page 21 for more detail

Table 3 presents the amount of after-tax household income, in terms of pence in every pound, spent on energy use in the home by older households in England living in homes with an energy efficiency rating A/B/C. It shows in 2021 the typical (median) older household in England living in a home with energy efficiency rating A/B/C was spending the equivalent of 4 pence in every £1 of their after-tax household income on energy bills. This was expected to rise to 10 pence in every £1 of their after-tax household from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at 6 pence in every £1 of their after-tax household income. Table 3 also shows for a quarter of older households in England living in a home with energy efficiency rating A/B/C, the amount of their after-tax household income spent on energy bills is expected to rise to at least 8 pence in every £1 from October 2022 (from at least 6 pence a year earlier), and for one in ten such older households to at least 12 pence (from at least 8 pence a year earlier).

Table 3: amount of after-tax household income (pence in every pound) spent on energy use in the home by older households in England living in homes with an energy efficiency rating A/B/C

	A/B/C		
	Median	75 th percentile	90 th percentile
2021	4	6	8
2022 (Oct energy price cap rise)	10	13	18
2022 (Oct Energy Price Guarantee)	6	8	12

Source: Author's analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister's Office

Table 4 presents the amount of after-tax household income, in terms of pence in every pound, spent on energy use in the home by older households in England living in homes with an energy efficiency rating D/E. It shows in 2021 the typical (median) older household in England living in a home with energy efficiency rating D/E was spending the equivalent of 5 pence in every £1 of their after-tax household income on energy bills. This was expected to rise to 12 pence in every £1 of their after-tax household income from October 2022. The Government’s decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at 8 pence in every £1 of their after-tax household income. Furthermore, for a quarter of older households in England living in a home with energy efficiency rating D/E, the amount of their after-tax household income spent on energy bills is expected to rise to at least 11 pence in every £1 from October 2022 (from at least 8 pence a year earlier), and for one in ten such older households to at least 16 pence (from at least 11 pence a year earlier).

Table 4: amount of after-tax household income (pence per every pound) spent on energy use in the home by older households in England living in homes with an energy efficiency rating D/E or F/G

	D/E			F/G		
	Median	p75	p90	median	p75	p90
2021	5	8	11	10	13	17
2022 (Oct energy price cap rise)	12	17	24	23	30	42
2022 (Oct Energy Price Guarantee)	8	11	16	16	21	29

Source: Author’s analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister’s Office

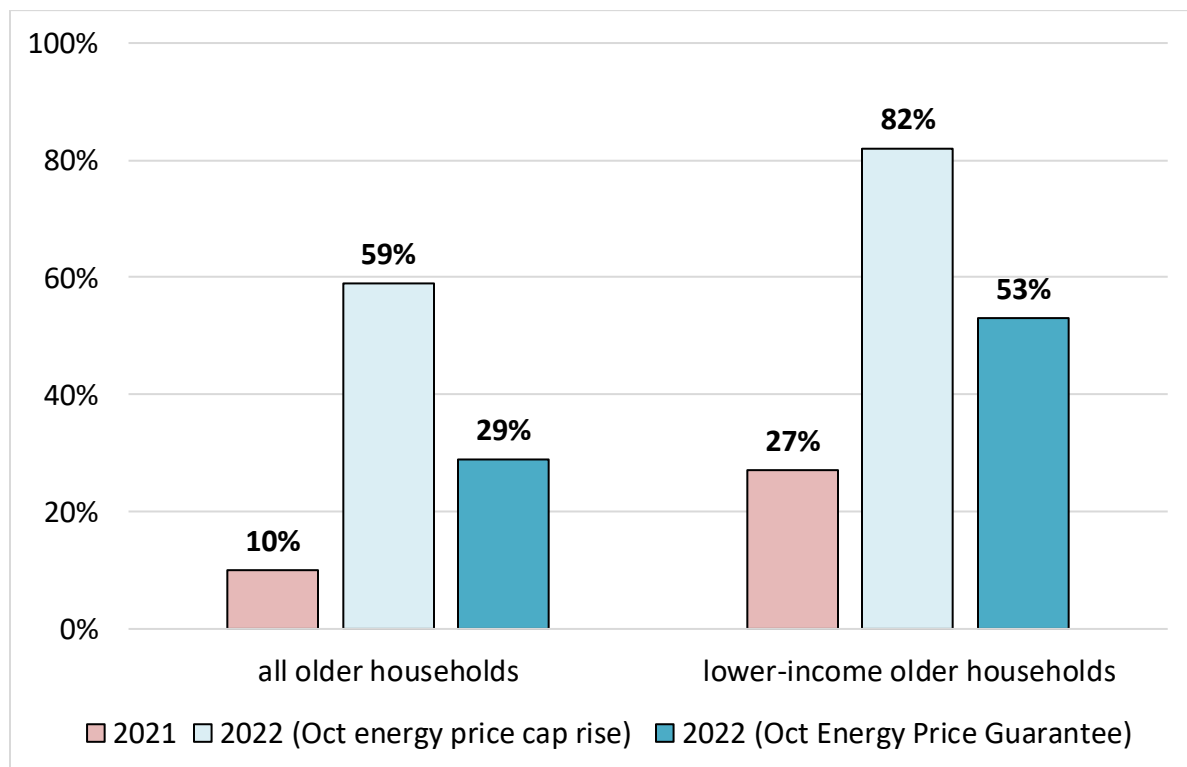
Table 4 also shows the amount of after-tax household, in terms of pence in every pound, spent on energy use in the home by older households in England living in homes with an energy efficiency rating F/G. It shows in 2021 the typical (median) older household in England living in a house with energy efficiency rating F/G was spending the equivalent of 10 pence in every £1 of their after-tax household income on energy bills. This was expected to rise to 23 pence in every £1 of their after-tax household income from October 2022. The Government’s decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at 16 pence in every £1 of their after-tax household income. Furthermore, for a quarter of older households in England living in a home with energy efficiency rating F/G, the amount of their after-tax household income spent on energy bills is expected to rise to at least 21 pence in every £1 from October 2022 (from at least 13 pence a year earlier), and for one in ten such older households to at least 29 pence (from at least 17 pence a year earlier).

Impact on older households in England – experiencing fuel stress

We define households experiencing fuel stress as households spending more than 10% of their after-tax income on energy costs, so as to maintain an adequate standard of warmth. This definition was used to calculate the fuel poverty statistics in England from 2001 to 2011, and continues to be the definition used in Wales, Scotland, and Northern Ireland to calculate their respective fuel poverty statistics.

Figure 2 presents the proportion of older households in England experiencing fuel stress. It shows in 2021 around ten percent (995,000) of older households in England were living in fuel stress. This was expected to rise to around fifty-nine percent (5.7m) of older households from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around twenty-nine percent (2.8m) of older households in England. This will mean around 2.8m older households in England, nearly 3 times the number in 2021, will still be living in fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 3: proportion of older households in England experiencing fuel stress



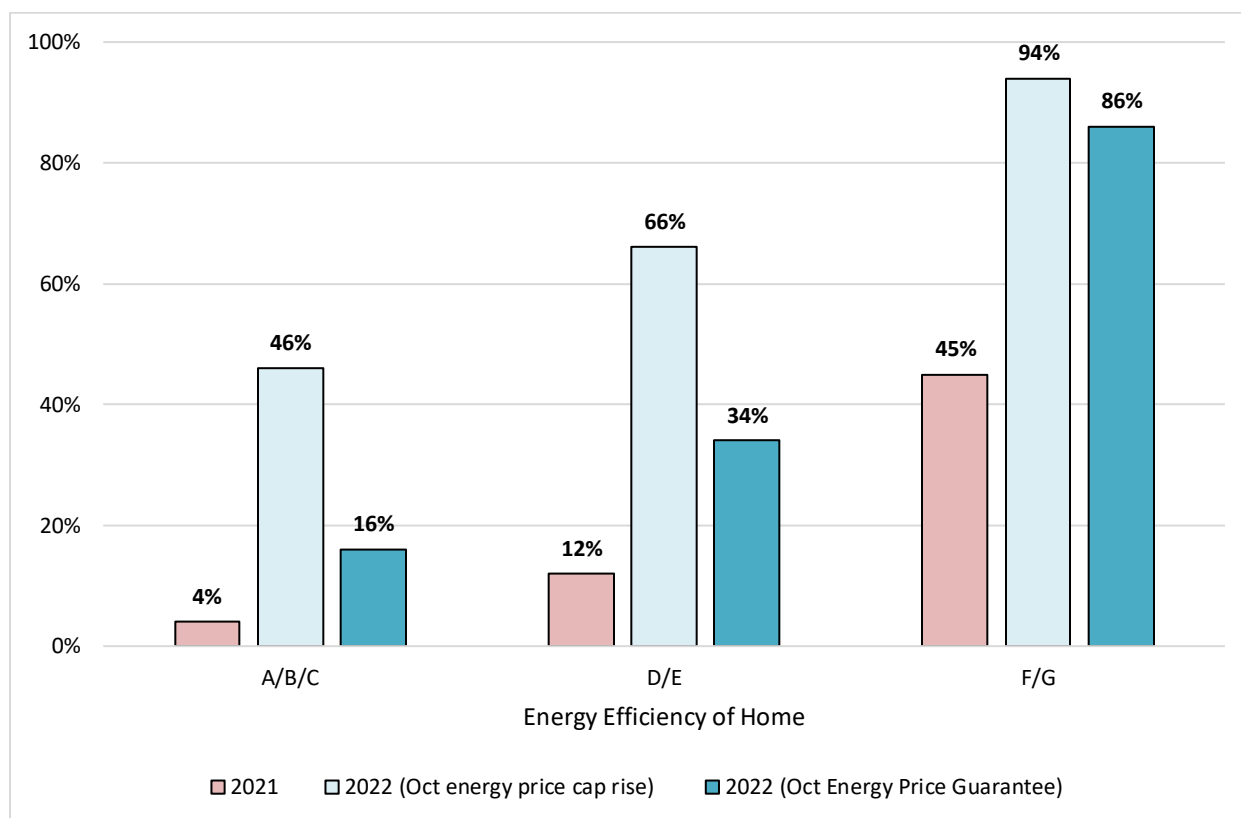
Source: Author's analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister's Office

Figure 3 also presents the proportion of lower income older households in England experiencing fuel stress. In 2021 around twenty-seven percent (660,000) of lower income older households in England were living in fuel stress. This was expected to rise to around eighty-two percent (2.0m) of older households from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around half (1.3m) of lower income older households in England. This will mean around 1.3m lower income older households in England, around two times the number in 2021, will still be living in fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 4 presents the proportion of households in England experiencing fuel stress by the energy efficiency rating of their home. It shows in 2021 around four percent (155,000) of older households in England living in a home with energy efficiency rating A/B/C in were living in fuel stress. This was expected to rise to around half (1.7m) of older households in England living in a home with energy efficiency rating A/B/C from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around sixteen percent (575,000) of older households in England living in a home with energy efficiency rating A/B/C. This will mean around 575,000 older households in England living in a home with energy efficiency rating A/B/C, nearly 4 times the figure in 2021, will still be living in fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 4 also shows in 2021 around twelve percent (650,000) of older households in England living in a home with energy efficiency rating D/E were living in fuel stress. This was expected to rise to around sixty-six percent (3.6m) of older households in England living in a home with energy efficiency rating D/E from October 2022. The Government's decision to introduce the Energy Price Guarantee (8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected hold this figure at around thirty-four percent (1.9m) of older households in England living in a home with energy efficiency rating D/E. This will mean around 1.9m older households in England living in a home with energy efficiency rating D/E, around 3 times the figure in 2021, will still be living in fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 4: proportion of older households in England experiencing fuel stress by energy efficiency rating of their home



Source: Author's analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister's Office

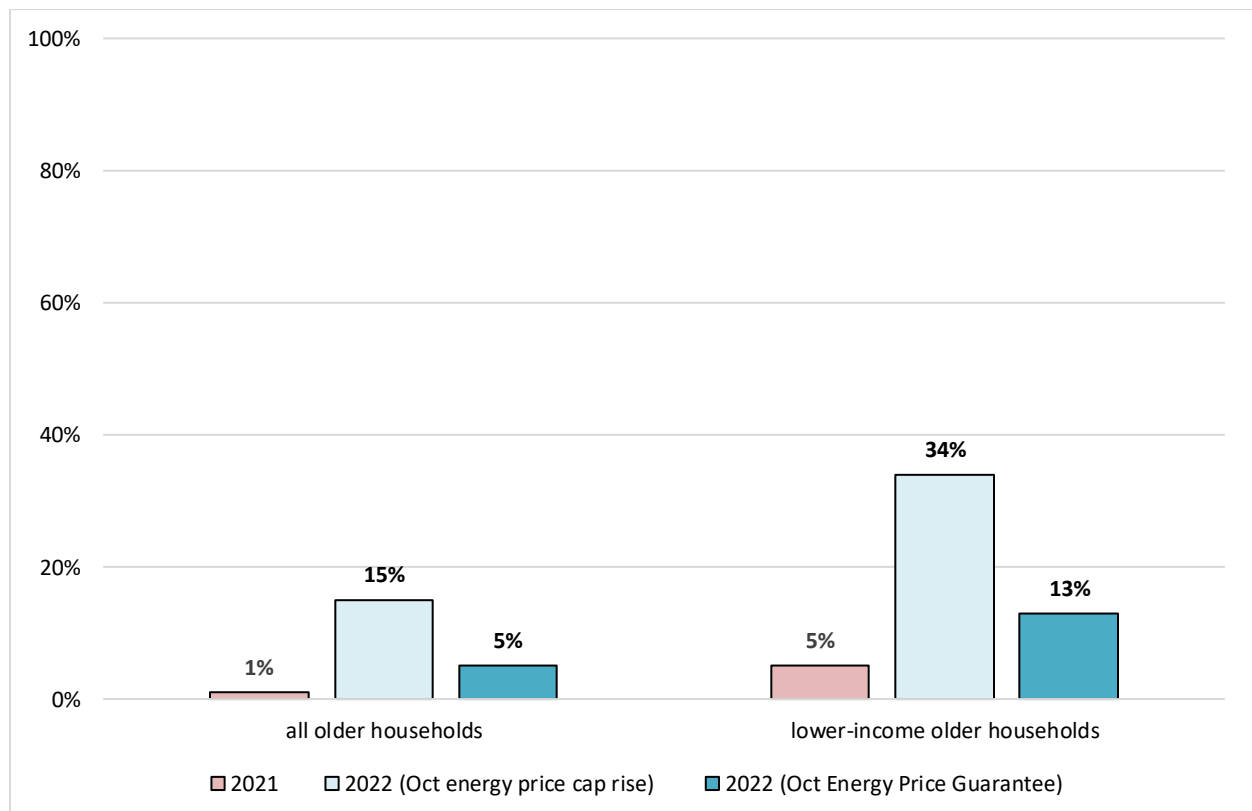
Figure 4 also shows in 2021 around forty-five percent (190,000) of older households in England living in a home with energy efficiency rating F/G were living in fuel stress. This was expected to rise to around ninety-five percent (400,000) of older households in England living in a home with energy efficiency rating F/G from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th August 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around eight-five percent (365,000) of older households in England living in a home with energy efficiency rating F/G. This will mean around 365,000 older households in England living in a home with energy efficiency rating F/G, around twice the figure in 2021, will still be living in fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Impact on older households in England – experiencing severe fuel stress

We define households experiencing severe fuel stress as households spending more than 20% of their after-tax income on energy costs, so as to maintain an adequate standard of warmth. The Scottish Government classify households meeting this definition as being in extreme fuel poverty.

Figure 5 presents the proportion of older households in England experiencing severe fuel stress. It shows in 2021 around one percent (125,000) of older households in England were living in severe fuel stress. This was expected to rise to around fifteen percent (1.4m) of older households from October 2022. The Government’s decision to introduce the Energy Price Guarantee (announced 8th August 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around five percent (460,000) of older households living in England. This will mean around 460,000 older households in England, nearly 4 times the figure in 2021, will still be living in severe fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 5: proportion of older households in England experiencing severe fuel stress



Source: Author’s analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister’s Office

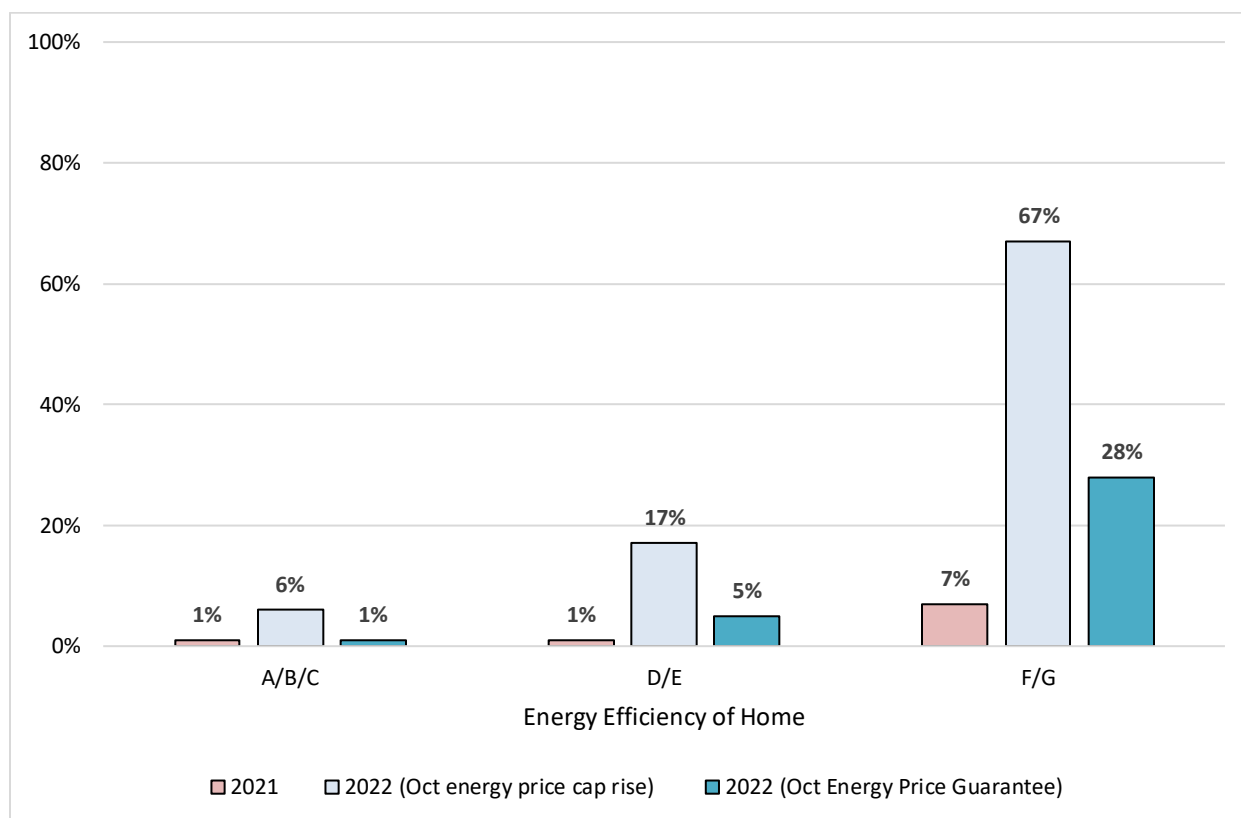
Figure 5 also presents the proportion of lower income older households in England experiencing severe fuel stress. In 2021 around five percent (120,000) of lower income older households in England were living in severe fuel stress. This was expected to rise to around thirty-four percent (825,000) older households from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th August 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around thirteen percent (320,000) of lower income older households in England. This will mean around 320,000 lower income older households in England, almost three times the figure in 2021, will still be living in severe fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Figure 6 presents the proportion of households in England experiencing severe fuel stress by energy efficiency rating of their home. It shows in 2021 around less than one percent⁴ (20,000) of older households in England living in a home with energy efficiency rating A/B/C were living in severe fuel stress. This was expected to rise to around six percent (210,000) of older households in England living in a home with energy efficiency rating A/B/C from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around one percent (45,000) of older households in England living in a home with energy efficiency rating A/B/C. This will mean around 45,000 older households in England living in a home with energy efficiency rating A/B/C, around two and a half times the figure in 2021, will still be living in severe fuel stress even after the support made available by Government (as of 8th September 2022).

Figure 6 also shows in 2021 around one percent (78,000) of older households in England living in a home with energy efficiency rating D/E were living in severe fuel stress. This was expected to rise to around seventeen percent (925,000) of older households in England living in a home with energy efficiency rating D/E from October 2022. The Government's decision to introduce the Energy Price Guarantee (8th September 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around five percent (300,000) of older households in England living in a home with energy efficiency rating D/E. This will mean around 300,000 older households in England living in a home with energy efficiency rating D/E, nearly four times the figure in 2021, will still be living in severe fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

⁴ The figure in the figure has been rounded to the nearest one percent

Figure 6: proportion of older households in England experiencing severe fuel stress by energy efficiency rating of their home



Source: Author's analysis of Fuel Poverty Database; BEIS; ONS; OBR; HMT; Prime Minister's Office

Figure 6 also shows in 2021 around seven percent (28,000) of older households in England living in a home with energy efficiency rating F/G were living in severe fuel stress. This was expected to rise to around sixty-seven percent (280,000) of older households in England living in a home with energy efficiency rating F/G from October 2022. The Government's decision to introduce the Energy Price Guarantee (announced 8th August 2022) and continue with the support made available by the previous administration (announced 3rd February 2022 and 26th May 2022) is expected to hold this figure at around twenty-eight percent (115,000) of older households in England living in a home with energy efficiency rating F/G. This will mean around 115,000 older households in England living in a home with energy efficiency rating F/G, nearly four-and-a-half times the figure in 2021, will still be living in severe fuel stress from October 2022 even after the support made available by Government (as of 8th September 2022).

Discussion

The energy price cap has increased dramatically in 2022, and with further such rises expected in 2023, the Government announced the introduction of the Energy Price Guarantee (EPG) which capped the price energy companies can charge per unit (kWh) of electricity and gas for two years from October 2022.

Even with the introduction of the Energy Price Guarantee, the maximum that energy companies can charge households per unit (kWh) of electricity and gas from October 2022, will rise by more than a quarter compared to the current energy price cap and will be double the unit rate a year earlier. This will mean many older households will continue to struggle financially beyond October 2022.

From October 2022, around 2.3m older households in England will be living in fuel stress (including around 980,000 on a lower income). Around a further 460,000 older households in England will be living in severe fuel stress (including around 320,000 on a lower income). This will be around an additional 1.8m older households (including around 620,000 on a lower income) living in fuel stress in England from October 2022 compared to one year earlier, and around an additional 335,000 (including around 200,000 on a lower income) in severe fuel stress.

Furthermore, the typical (median) older household in England will be spending the equivalent of 7 pence in every £1 of their after-tax household income on energy bills (compared to 5 pence a year earlier). For a quarter of older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 11 pence in every £1 from October 2022 (from at least 7 pence a year earlier), and for one in ten of older households to at least 15 pence (from at least 10 pence a year earlier).

Among lower income households the situation is worse with typical (median) lower income older household in England spending the equivalent of 11 pence in every £1 of their after-tax household income on energy bills (compared to 7 pence a year earlier). For a quarter of lower income older households in England, the amount of their after-tax household income spent on energy bills is expected to rise to at least 15 pence in every £1 from October 2022 (from at least 10 pence a year earlier), and for one in ten older households to at least 22 pence (from at least 15 pence a year earlier).

Compared to a year earlier, older households (including those on a lower income) in England will be spending around 1.5 times more of their after-tax household income on energy bills from October 2022. Among older households in England living in homes with an energy efficiency rating of F/G the situation is even worse, with the typical (median)

older household in such a home in England spending the equivalent of 16 pence in every £1 of their after-tax household income on energy bills (compared to 10 pence a year earlier). For a quarter of older households in such homes in England, the amount of their after-tax household income spent on energy bills is expected to rise to 21 pence in every £1 from October 2022 (compared to 13 pence a year earlier), and for one in ten older households in such homes in England to 29 pence (compared to 17 pence a year earlier).

Whilst the Energy Price Guarantee means the maximum that energy companies can charge households per unit (kWh) of electricity and gas will be fixed for two years from October 2022, the unit rate is almost double that a year earlier, and with prices of other goods & services rising older households – not limited to but especially the poorest – will increasingly struggle. Without further targeted Government support, many households – including but not limited to older households - will be forced to make difficult decisions as to whether to cut back on spending on essentials such as food or to keep their home warm through colder periods.

Appendix – Methodology

This appendix presents the assumptions, calculations and datasets used to estimate the impact on older households of the introduction of the Energy Price Guarantee. For the purposes of this analysis, older households are defined as households where the oldest person is aged 60 or over.

The starting point for the analysis was the Fuel Poverty Database 2019. This database is derived from the 2019 English Housing Survey, which is a national survey created by the Department for Levelling Up, Housing and Communities (DLUHC), designed to build a picture of people's housing circumstances and the condition of the housing stock in England. The fieldwork was carried out between April 2018 and March 2020, with April 2019 the midpoint and this the reference date for the database. At the time of the analysis, the Fuel Poverty 2019 database was the latest available version. The Fuel Poverty 2019 database is based on a sample of 11,974 households in England, which after applying the weighting factor equates to 23,661,751 households in England⁵.

We took information on energy spend and full household income (after-tax) for the year 2019 from the Fuel Poverty 2019 database. The next step was to project this energy spend and full household income figures into future years for each of the sampled households. Table 1 below shows the assumptions made in the annual change in energy prices since 2019, and Table 2 shows the assumptions made in the annual change in household income since 2019. These assume energy consumption and tax paid as a proportion of income per household in subsequent years is the same as in 2019.

⁵ The Office for National Statistics estimate there were 23,183,000 households in England in 2019 (with 95% confidence interval of between 23,082,000 and 23,284,000) and 23,487,000 households in 2021 (with 95% confidence interval of between 23,335,000 and 23,639,000).

Source: Office for National Statistics (ONS). 2022. *Households by household size, regions of England and GB constituent countries. Table 10.* [online]. Published 9th March 2022. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/datasets/householdsbyhouseholdsizeofenglandandukconstituentcountries>

Table 1: Assumptions for change in the price of domestic energy since 2019

Year	% Change	Source
2019 to 2020	+ 3.3%	Quarterly Energy Prices, UK, Quarter 4 (October-December) 2020 Publication Date: 25/03/2021 Link to publication
2020 to 2021	+ 6.0%	Quarterly Energy Prices UK July to September and estimates for 2021 Publication Date: 23/12/2021 Link to publication
2021 to 2022 (April)	+ 54%	Ofgem Announcement – rise in energy price cap from 1 st April 2022 Announcement Date: 03/02/2022 Link to Announcement
2022 (April) to 2022 (October)	+ 80%	Ofgem Announcement – rise in energy price cap from 1 st October 2022 Announcement Date: 26/08/2022 Link to publication
2022 (April) to 2022 (October) Energy Price Guarantee	+ 27%	Government Announcement Publication Date: 08/09/2022 Link to publication

Table 2: Assumptions for change in household income since 2019

Year	% Change	Source
2020	+ 0.3%	Table 2.7 (real Household Disposable Income row + CPI row)
2021	+ 3.4%	
2022 (households not in receipt of means-tested benefits)*	+ 4.3%	Office for Budget Responsibility Economic and Fiscal Outlook: October 2021 Publication Date: 27/10/2021 Link to publication
2022 (households in receipt of means-tested benefits)*	+ 3.1%	Department for Work & Pensions Publication Date: 25/01/2021 Link to publication

*Households are identified as being in receipt of means-tested benefits based on whether they are flagged in the Fuel Poverty 2019 dataset as receiving qualifying benefits required to be eligible for the ECO Affordable Warmth Support. This flag is based on modelling for each household receipt of each qualifying benefit based on the Household Reference Person (and their partner's) theoretical entitlements to these benefits, with the numbers fixed to keep them in line with reported caseload figures for England recorded by the Department for Work & Pensions (DWP) and HM Revenue & Customs (HMRC). The qualifying benefits modelled for are: Pension Credit, income-based Jobseeker's Allowance (JSA), income-related Employment and Support Allowance (ESA), Child Tax Credit, Working Tax Credit and Universal Credit. This approach assumes that these modelled qualifying benefits are a reasonable approximation of households whose income is primarily sourced from welfare benefits, and therefore annual changes in their income reflects the annual change in benefit rates.

The projected full household income figures for each of the sampled households was also adjusted for three support packages made available by Government (as of end of August 2022) as mitigation measures:

- £150 was added to the projected 2022 full household income for all households, to reflect the Government announcement that every household with a Council Tax banding A to D would receive a £150 council tax rebate. As the 2019 Fuel Poverty dataset does not include the Council Tax banding, the £150 was added to all the sampled households. This means that the analysis will have attributed this addition to some households that they will not receive it, because for example they live in a home with Council Tax banding E to H or they are not liable for council tax. This means that the analysis may overestimate the impact of this support package measure. The magnitude of such an overestimation may however be minimal as the Government also announced a discretionary fund to support those households that will not benefit from the £150 Council Tax rebate.
- £300 was added to the projected 2022 full household income for all older households, to reflect the Government announcement that pensioner households will receive £300 one-off Pensioner Cost of Living Payment to be paid alongside the Winter Fuel Payment. As the 2019 Fuel Poverty dataset does not include information on whether a household includes someone aged over State Pension Age, the £300 is added to all households with someone aged 60 or over living in them. This means that the analysis will have attributed this addition to some households that they will not receive it because they do not include someone aged over State Pension Age. This means that the analysis may overestimate the impact of this support package measure.
- £650 was added to the projected 2022 full household income for households in receipt of qualifying means-tested benefits, to reflect the Government announcement that households in receipt of qualifying means-tested benefits will receive £650 one-off Cost of Living Payment. Households in receipt of one of the following means-tested benefits will receive the payment: Universal Credit; Working Tax Credit; Child Tax Credit; Pension Credit; Income-based Jobseekers Allowance; Income-related Employment and Support Allowance; Income Support. As the 2019 Fuel Poverty dataset does not include variables to reflect which households are in receipt of these qualifying benefits, the £650 is added to all the sampled households modelled to be theoretically in receipt of qualifying benefits required to be eligible for the ECO Affordable Warmth Support. The analysis may have attributed this addition to some households that will not receive it because whilst they have been modelled to be theoretically entitled to these benefits they may not be receiving them; and missed others because they receive the qualifying benefits but are not modelled to be theoretically entitled to the qualifying benefits.

The projected energy spend for each of the sampled households was also adjusted for the Energy Bills Support Scheme support packages made available by Government (as of end of August 2022):

- £400 was subtracted from the projected 2022 energy spend for each of the sampled households to reflect the Government announcement that every household will receive a £400 non-payable discount on their energy bills over six months from October 2022.

The Government also announced a one-off £150 Disability Cost of Living Payment to be paid to those in receipt of Disability Living Allowance, Personal Independence Payment, Attendance Allowance, Scottish Disability Benefits, Armed Forces Independence Payment, Constant Attendance Allowance and War Pension Mobility Supplement. The Fuel Poverty 2019 dataset does not have information to identify households with people who are in receipt of these benefits and therefore this analysis excludes the impact of this support package measure.

After projecting spend on energy and household income since 2019 the next step is to estimate, for each household and each subsequent year since 2019, the proportion of after-tax household income that is spent on energy costs and flag those households for which this figure is more than 10% as experiencing fuel stress, and those households for which it is greater than 20% as experiencing extreme fuel stress.

The final step is to calculate weighted figures as presented in this paper. The weighting factor provided in the dataset is applied to each household to make the dataset representative of the national level of fuel poverty, taking account of the sampling techniques used and issues of non-response within the English Housing Survey.

The weighted figures presented in this paper assume that the impact of the increase in the energy price cap will affect all households in England similarly. There are households in England on fixed term energy contracts which will not immediately be impacted by the rise in the energy price cap. This analysis therefore predicts an increase in energy costs for those households that will not be experienced immediately, and may overestimate the immediate impact of the increase in the energy price cap. The size of this impact is unclear, however standard energy tariffs which are subject to the energy price cap are increasingly the cheapest available and therefore in time the figures presented in this paper will represent the situation experienced by older households in England. Older households currently on fixed term contracts may experience an even more extreme price rise when their fixed term contract ends and they move to a standard tariff, which may mean the figures present underestimate the impact of the rise in the energy price cap. This is the reason the figures presented in this paper are flagged as 'rise towards' to reflect that the impact will not be overnight.

About Age UK

Age UK is the country's largest charity dedicated to helping everyone make the most of later life. Our vision is to make the UK a great place to grow older. Our ambition is that all 12.5 million older people across the UK can:

- Have enough money to live without the fear of poverty in later life
- Enjoy life and feel well
- Receive high quality health and care
- Be comfortable and secure at home
- Feel valued and able to participate

Age UK includes the charity, its charitable and trading subsidiaries, and national charities (Age Cymru, Age Scotland and Age NI). Age UK is a charitable company limited by guarantee and registered in England (registered charity no. 1128267 and registered company no. 6825798). The registered address is 7th Floor, One America Square, 17 Crosswall, London, EC3N 2LB