

# Research briefing:

**Estimating the impact of the October 2022 energy price cap rise  
on older households in England**

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## Summary of Key Points

In 2022 the energy price cap was increased twice – 54% in April 2022 and 80% in October 2022 – by the Office of Gas and Electricity Markets (Ofgem). In response to the scale of the increases the Government introduced a series of support measures. Even after taking into account the support made available by Government (as of end of August 2022):

- around two-in-three (65%) older households in England - around 6.2m - will be living in fuel stress from October 2022, and this is projected to increase towards nine-in-ten (89%) - around 8.5m - from January 2023
- around one-in-six (18%) older households in England – around 1.7m older - will be living in severe fuel stress from October 2022, and this is projected to increase towards half (47%) – around 4.5m - from January 2023
- around nine-in-ten (87%) lower-income older households in England - around 2.1m – will be living in fuel stress from October 2022, and the number projected to rise towards almost all (98%) - around 2.4m - from January 2023
- around two-in-five (39%) lower-income older households – around 935,000 – will be living in severe fuel stress from October 2022, and the number projected to rise towards three-in-four (74%) – around 1.8m - from January 2023
- the typical (median) older household will be spending the equivalent of 12p in every £1 of after-tax household income on energy bills from October 2022; and this is projected to increase to the equivalent of 20p in every £1 of after-tax household income from January 2023
- the typical (median) lower-income older household will be spending the equivalent of 17 pence in every £1 of after-tax household income on energy bills from October 2022; and this is projected to increase to the equivalent of 28 pence in every £1 of after-tax household income from January 2023

With the energy price cap expected to rise further into 2023, and inflation in general set to continue to rise, the energy price support measures announced by Government (as of end of August 2022) are increasingly insufficient and older households – not limited to but especially the poorest – will increasingly struggle. Many 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.

## 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 Britain. The energy price cap helps protect households from paying high prices because they remain with the same energy provider and ensures the maximum price per unit of energy is fixed on a quarterly basis for most consumers.

Ofgem announced on 26<sup>th</sup> August 2022 that the energy price cap would rise by 80% from 1<sup>st</sup> October 2022. This decision was justified on the basis of continued increases in global wholesale gas prices over the last six months. This decision follows on from a 54% increase in the energy price cap on 1<sup>st</sup> April 2022, with a further substantial rise projected to come into effect on 1<sup>st</sup> January 2023.

This paper presents the impact of the Ofgem announcement to increase the energy price cap by 54% from 1<sup>st</sup> April 2022 and a further 80% from 1<sup>st</sup> October 2022, taking into account the support made available by Government (as of end of August 2022) as mitigation measures against the magnitude of the rise in the energy price cap<sup>1</sup>. It shows how older households in England, defined as households with at least one person aged 60 or over, will be impacted by the energy price cap increases and how the impact on lower-income older households will be greater than older households in general. It also presents the methodology behind the analysis.

This paper covers the impact of the rise in the energy price cap on energy spend as a proportion of after-tax income; the impact on the proportion of older households experiencing fuel stress; and a discussion of these impacts. The appendix describes the calculations for the analysis presented in this paper.

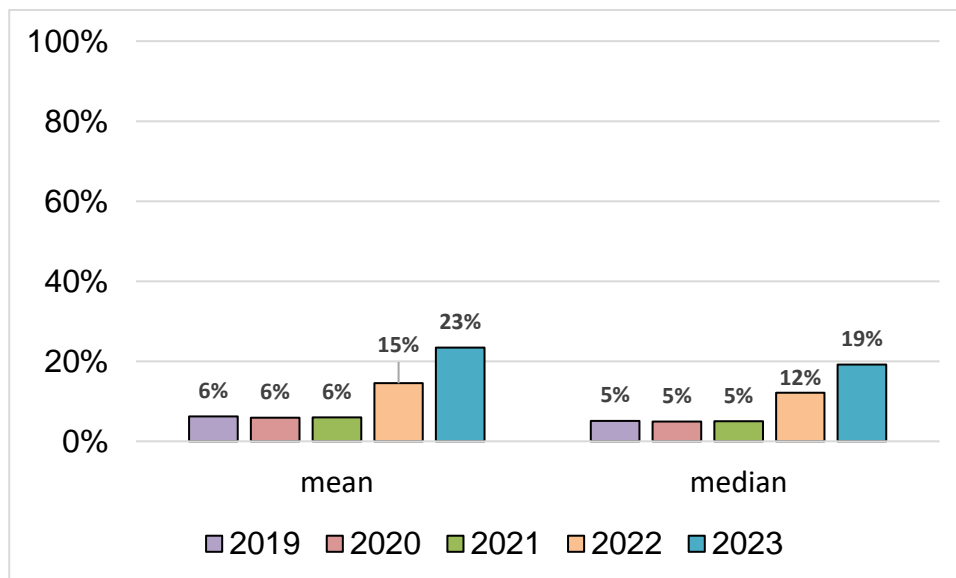
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<sup>1</sup> The Government announced an Energy Bills Rebate support package to help households with rising energy bills on 3<sup>rd</sup> February 2022 and on 26<sup>th</sup> May 2022 the Chancellor announced a further package of measures intended to help with the cost of living.

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

Figure 1 presents the proportion of household income spent on energy used in the home by older households in England. In 2021 the typical (median) older household spent around 5% of their after-tax household income on energy costs. After taking into account the support made available by Government (as of end of August 2022), this is expected to rise towards 12% from 1<sup>st</sup> October 2022 and could rise further towards 19% from January 2023<sup>2</sup>.

Figure 1: Proportion of after-tax household income spent on energy by older households in England

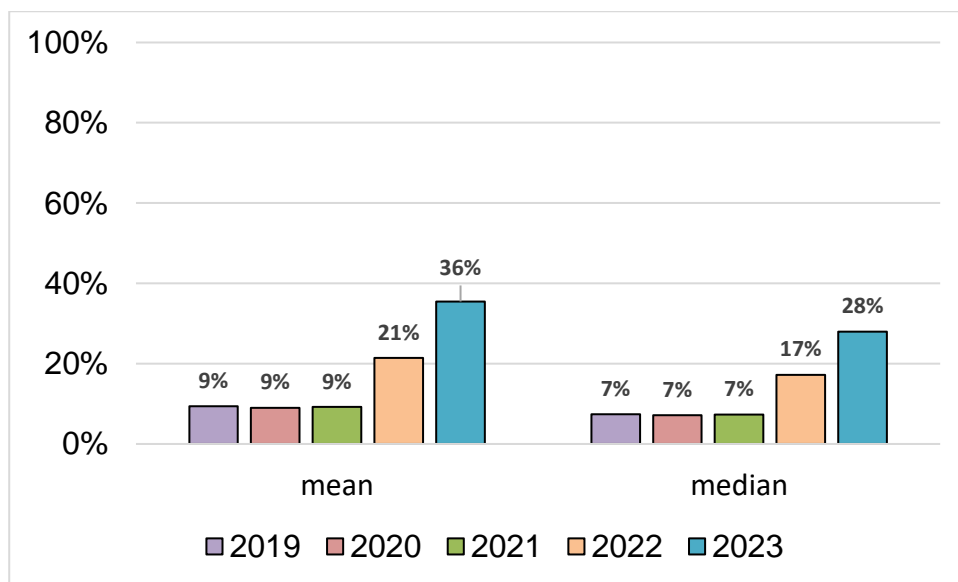


Source: Author's analysis of Fuel Poverty Database; HMT; BEIS; ONS; OBR; Cornwall Insights

<sup>2</sup> The figures in this paper assume all older households experience an increase in the price of domestic fuel resulting from the rise in the energy price cap. This will not be the experience of all households - as discussed in the appendix, page 13 - and that is why we use the phrase 'rise towards' to reflect that the impact will not be fully realised overnight

Figure 2 presents the proportion of household income spent on energy used in the home by lower-income older households in England. It shows in 2021 the typical (median) lower-income older household spent around 7% of their after-tax household income on energy. This is expected to rise towards 17% from 1<sup>st</sup> October 2022 and could rise further towards 28% from January 2023, even after taking into account the support made available by Government (as of end of August 2022). We define lower-income older households as older 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 are (theoretically) in receipt of means-tested benefits<sup>3</sup>.

Figure 2: Proportion of after-tax household income spent on energy by lower income older households in England



Source: Author's analysis of Fuel Poverty Database; HMT; BEIS; ONS; OBR; Cornwall Insights

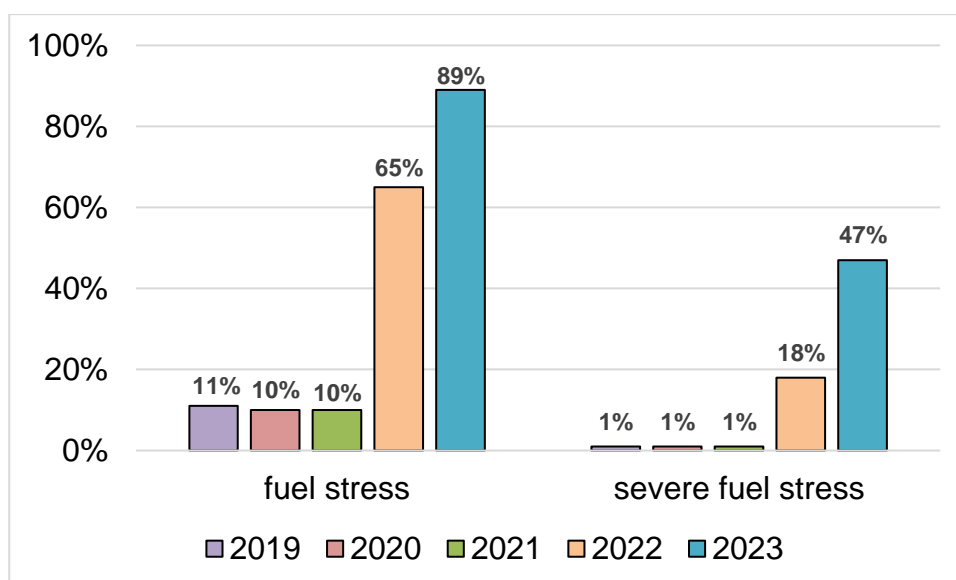
<sup>3</sup> The Department for Business, Energy & Industrial Strategy (BEIS) model households in receipt of means-tested benefits based on household characteristics – see page 11

## Impact on older households in England – experiencing fuel stress

Figure 3 presents the proportion of older households in England experiencing fuel stress. It shows in 2021 around one-in-ten (10%) older households in England were experiencing fuel stress. After taking into account the support made available by Government (as of end of August 2022), this is expected to rise towards around two-in-three (65%) from 1<sup>st</sup> October 2022 and could rise further towards around nine-in-ten (89%) from January 2023. 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.

Figure 3 also presents the proportion of older households in England experiencing severe fuel stress. It shows in 2021 around 1% of older households in England were experiencing severe fuel stress. After taking into account the support made available by Government (as of end of August 2022), this is expected to rise towards around one-in-six (18%) from 1<sup>st</sup> October 2022 and could rise further towards around half (47%) from January 2023. 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<sup>4</sup>.

Figure 3: Proportion of older households in England experiencing (severe) fuel stress



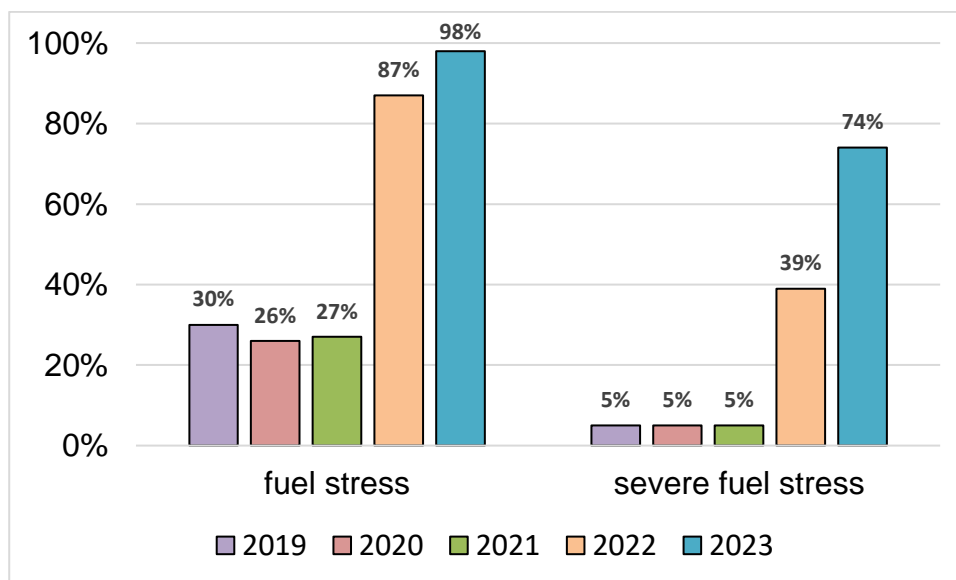
Source: Author's analysis of Fuel Poverty Database; HMT; BEIS; ONS; OBR; Cornwall Insights

<sup>4</sup> The Scottish Government call this extreme fuel poverty

Figure 4 presents the proportion of lower-income older households in England experiencing fuel stress. It shows in 2021 around one-in-four (27%) lower-income older households in England were experiencing fuel stress. After taking into account the support made available by Government (as of end of August 2022), this is expected to rise towards around nine-in-ten (87%) from 1<sup>st</sup> October 2022 and could rise further towards almost all (98%) lower-income older households experiencing fuel stress from January 2023. We define lower-income older households as older 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 are (theoretically) in receipt of means-tested benefits<sup>5</sup>.

Figure 4 also presents the proportion of lower-income older households in England experiencing severe fuel stress. It shows in 2021 around 5% of older households in England were experiencing severe fuel stress. After taking into account the support made available by Government (as of end of August 2022), this is expected to rise towards around two-in-five (39%) from 1<sup>st</sup> October 2022 and could rise further towards around three-in-four (74%) from January 2023.

Figure 4: Proportion of lower-income older households in England experiencing severe fuel stress



Source: Author's analysis of Fuel Poverty Database; HMT; BEIS; ONS; OBR; Cornwall Insights

<sup>5</sup> The Department for Business, Energy & Industrial Strategy (BEIS) model households in receipt of means-tested benefits based on household characteristics – see page 11

## Discussion

The increases in the energy price cap in 2022, and the projected increase from 1<sup>st</sup> January 2023, are substantially greater than the support packages announced by Government (as of end of August 2022). Together with rising inflation, this means many households are struggling with their energy costs and this will worsen through the winter months.

Even after taking into account the support made available by Government (as of end of August 2022), towards two-in-three (65%) older households in England - around 6.2m - will be living in fuel stress from October 2022, and this is projected to increase towards nine-in-ten (89%) - around 8.5m - from January 2023. This will be around six-and-a-half times (Oct 2022) and around nine times (Jan 2023) the proportion of older households living in such conditions in 2021. The situation is even worse for those on lower-incomes, with towards nine-in-ten (87%) lower-income older households in England - around 2.1m - living in fuel stress from October 2022, and the number projected to rise towards almost all (98%) - around 2.4m - from January 2023.

Furthermore, towards one-in-six (18%) older households in England – around 1.7m older - will be living in severe fuel stress from October 2022, and this is projected to increase towards half (47%) – around 4.5m - from January 2023. This will be around eighteen times (Oct 2022) and almost fifty times (Jan 2023) the proportion of older households living in such conditions in 2021. The situation is even worse for those on a lower-income, with towards two-in-five (39%) lower-income older households – around 935,000 - living in severe fuel stress from October 2022, and the number projected to rise towards three-in-four (74%) – around 1.8m - from January 2023.

The proportion of after-tax income spent on energy costs by the typical older household, which was 5% in 2021, is projected to increase towards 12% from 1<sup>st</sup> October 2022 and 19% from 1<sup>st</sup> January 2023. Therefore from 1<sup>st</sup> January 2023 half of older households in England could be spending towards one-fifth or more of their after-tax household income on energy costs – that is equivalent to at least 20 pence in every £1 of after-tax household income.

For lower-income older households the situation is worse with the typical lower-income older household, which was 7% in 2021, is projected to spend towards 17% of their after-tax household income on energy costs from 1<sup>st</sup> October 2022 and towards 28% from 1<sup>st</sup> January 2023. Therefore from 1<sup>st</sup> January 2023 half of lower-income older households in England could be spending towards three-tenths or more of their after-tax household income on energy costs – that is equivalent to at least 28 pence in every £1 of after-tax household income.



With the energy price cap expected to rise further into 2023, and inflation in general to continue to rise, the energy price support measures announced by Government (as of end of August 2022<sup>6</sup>) are insufficient and older households – not limited to but especially the poorest – will increasingly struggle. Without further Government support, many households – not just 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.

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<sup>6</sup> The Government announced an Energy Bills Rebate support package to help households with rising energy bills on 3<sup>rd</sup> February 2022 and on 26<sup>th</sup> May 2022 the Chancellor announced a further package of measures intended to help with the cost of living.

## Appendix – Methodology

This appendix presents the assumptions, calculations and datasets used to estimate the impact on older households of the rise in the energy price cap in April and October 2022, the projected rise in January 2023 and the support made available by Government as mitigation measures. 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, Communities and Local Government (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 England<sup>7</sup>.

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 these 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.

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<sup>7</sup> 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 9<sup>th</sup> March 2022. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/datasets/householdsbyhouseholdsizeregionsofenglandandukconstituentcountries>

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

<b>Year</b>	<b>% Change</b>	<b>Source</b>
2019 to 2020	+ 3.3%	Quarterly Energy Prices, UK, Quarter 4 (October-December) 2020 Publication Date: 25/03/2021 <a href="#">Link to publication</a>
2020 to 2021	+ 6.0%	Quarterly Energy Prices UK July to September and estimates for 2021 Publication Date: 23/12/2021 <a href="#">Link to publication</a>
2021 to 2022 (April)	+ 54%	Ofgem Announcement – rise in energy price cap from 1 <sup>st</sup> April 2022 Announcement Date: 03/02/2022 <a href="#">Link to Announcement</a>
2022 (April) to 2022 (October)	+ 80%	Ofgem Announcement – rise in energy price cap from 1 <sup>st</sup> October 2022 Announcement Date: 26/08/2022 <a href="#">Link to publication</a>
2022 (October) to 2023 (January) forecast	+ 52%	Cornwall Insights Publication Date: 26/08/2022 <a href="#">Link to publication</a>

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 <a href="#">Link to publication</a>
2022 (households in receipt of means-tested benefits)*	+ 3.1%	Department for Work & Pensions Publication Date: 25/011/2021 <a href="#">Link to publication</a>

\*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):

- £200 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. A further £200 is subtracted from the projected 2023 energy spend for each of the sampled households. We assume the £400 is split equally across the six months.

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