

Annex 4A: Who are the Fuel Poor?

Introduction

4A.1 Fuel poverty is known to be a function of expenditure on energy, energy needs and income, but there are a range of influencing factors associated with a household's personal circumstances, such as spending habits, income, and the general quality of the housing in which they live.. Some of the same factors also influence energy demand.

4A.2 Using data from the English House Condition Survey (EHCS) 2004, it is possible to establish the characteristics of those deemed to be in fuel poverty in England in 2004.

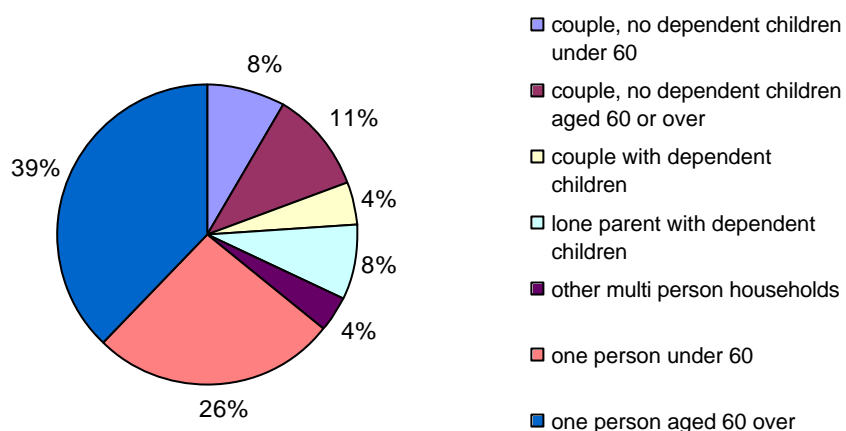
Personal Characteristics

4A.3 Analysis of data from the 2004 English House Condition Survey suggests that in that year, 1.0 million of the 1.2 million households estimated to be in fuel poverty in England could be classified as vulnerable, i.e. containing children or someone who is elderly, disabled or has a long-term sickness. There was no change in these figures between 2003 and 2004, although it is likely that price increases since 2004 will result in increased numbers of households in fuel poverty in future years' data.

4A.4 In that year, almost half of the total number of fuel poor households (around 604,000) contained one or more people aged 60 or over. Additionally, some 43 per cent of the households experiencing fuel poverty (around 512,000) contained someone with a long-term illness or disability. Around 145,000 households contained one or more children.

4A.5 It is somewhat difficult to make sweeping statements about these particular categories, given that they are all part and parcel of everyday life. A common thread, however, is the need to be indoors for longer periods of time (the elderly, long term sick and families with very young babies and toddlers), with the relative amount of time spent at home creating a greater demand for energy. It is, therefore, not surprising that a greater need for fuel equates with higher proportional spend than for those whose lifestyles allow them to be out of the house for longer periods of time. Case study material bears this out, and also points to these vulnerable groups and individuals as being socially marginalized, or excluded. The chart below demonstrates the household composition of the fuel poor in England in 2004.

Chart 4A.1: Household Composition of the Fuel Poor in England (2004)



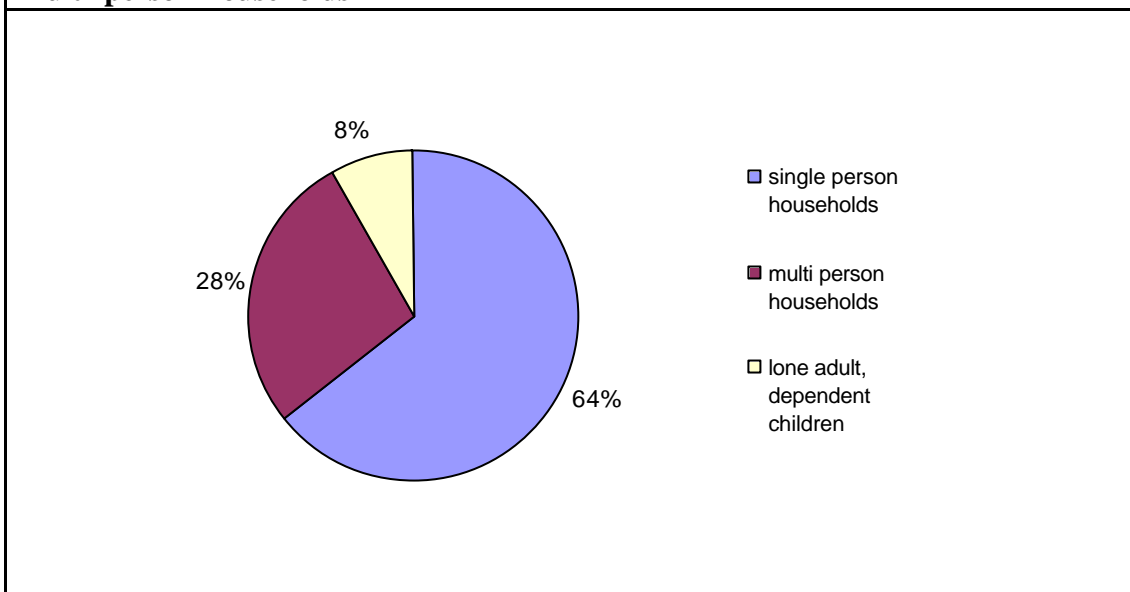
Source: DTI and Defra based on EHCS 2004 (DCLG)

There is a 68 per cent chance that the fuel poor occupier will actually own and be living in their own home, and that they are unlikely to be from an ethnic minority group.

Expenditure on Fuel

4A.6 The composition statistics can be broken down still further, to show that a fuel poor household is much more likely to contain just one adult who can take on responsibility for paying fuel bills. This applies in some 74 per cent of cases, regardless of level of vulnerability (a rise of just over 2 per cent since the previous year).

Chart 4A.2: Fuel Poor Household Composition 2004 (England): Single versus multi-person households



Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.7 The ability to make such payments is obviously crucial in determining fuel poverty status, and it might be easier for those 74 per cent of single person households if there was an additional person there to assist with bill payment. This is especially true in a year which has seen unprecedented increases in energy prices.

4A.8 Expenditure on fuel is itself related to the type of payment method used. Data from Quarterly Energy Prices¹ shows that, in 2004, prepayment consumers were typically paying £35 for electricity and £42 for gas per year more than those using the cheaper direct debit option. Those figures rise to £39 and £49 respectively in 2005. It might therefore be expected that those households in fuel poverty would be mainly using the more expensive prepayment option. However, almost half of the fuel poor households in 2004 were using the standard credit payment option, with a roughly equal split using direct debit and prepayment. This applied equally to electricity and gas consumers. This could be due to the lower proportion of households using prepayment meters generally and the fact that such meters are unpopular with elderly consumers who make up a large proportion of the fuel poor.

4A.9 The actual percentage of income spent on fuel is shown in the table below, which groups households into bands according to the percentage spend on fuel, and also demonstrates the strong relationship between average income and average SAP (Standard Assessment Procedure) rating.

¹ www.dti.gov.uk/energy/statistics/publications/prices/index.html

Table 4A.1: Fuel Poverty Severity analysis of Whole Stock

FP Severity	Per cent of Whole Stock	Number of Households (1,000s)	Average Full Income	Average Fuel Costs	Average SAP
Up to 5%	70.2	14686	29875	692	55
5% to 10 %	23.9	5009	11383	747	47
10% to 15%	4.4	915	7383	858	37
15% to 20%	1.0	206	6673	1112	26
Over 20%	0.6	116	4800	1233	21
Total	100.0	20,724	23,053	694	52

Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.10 Thankfully, there is a relatively small percentage of people (1.6 per cent) considered to be in moderate to severe fuel poverty (although this still represents a quarter of the total fuel poor), with the majority of the fuel poor paying between 10 per cent and 15 per cent of their incomes on fuel. As expected, the average income of a household falls with its likelihood of being in fuel poverty, as does the energy efficiency of the home. So, it can be inferred that the fuel poor do in fact need to use more fuel to heat less energy efficient homes, but actually have less annual income through which this can be achieved.

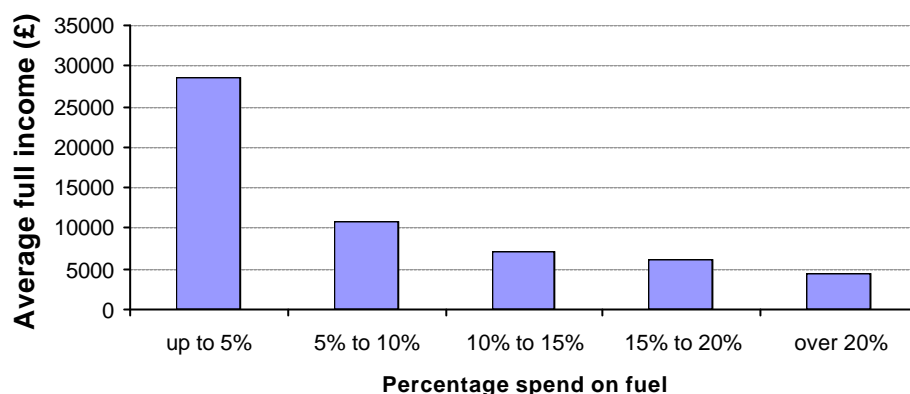
4A.11 While those in fuel poverty need to spend more than 10 per cent of their incomes on all fuel to maintain an adequate standard of heating, this can be contrasted with the average proportion of expenditure on fuel, which the 2004/06 Food and Expenditure Survey² shows stood at 2.9 per cent across all households, or 1.0 per cent for those in the highest income decile in 2004/05.

4A.12 That survey also shows that expenditure on fuel is just one of a number of priorities or “essentials” that have to be budgeted for: others include housing and food. When these three payment categories are taken together, they account for some 63 per cent of the income of the group in the lowest income decile, compared to 31 per cent for those in the highest income decile.

Incomes

4A.13 It has already been shown above that the fuel poor earn substantially less than their non-fuel poor counterparts, and plotting average full incomes by fuel poverty status demonstrates this vividly.

² www.statistics.gov.uk/downloads/theme_social/Family_Spending_2004-04/FamilySpending2004-04.pdf

Chart 4A.3: Average Full Incomes by Fuel Poverty Status

Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.14 This differential is also borne out by the fact that the vast majority of the fuel poor (some 73 per cent) are in the lowest income decile. This represented an annual income of £5162 (or £99 a week)³ for the most recently available figures for 2004/05.

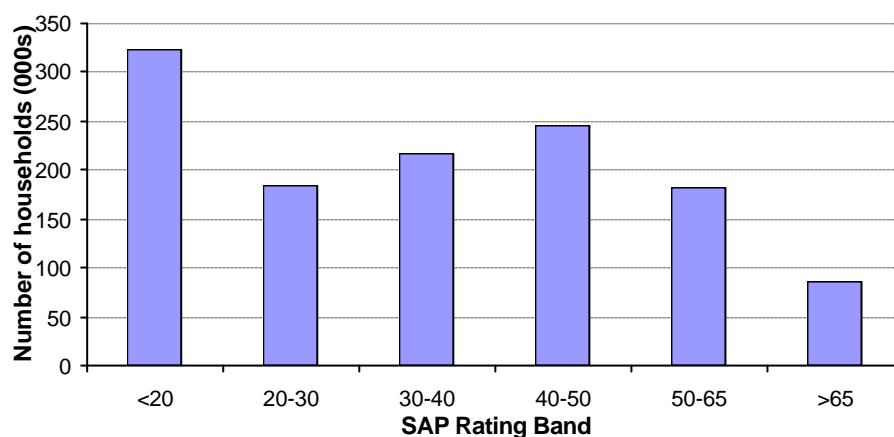
4A.15 Those in the lower income deciles are likely to pay as much as three times the proportion of their income on gas and electricity, so it is therefore not surprising to note that, within the vulnerable category, there are a greater proportion of households on some kind of benefit – either income support, housing benefit or tax credits. Almost 65 per cent (or 647,000) are in receipt of such benefits. This still leaves a substantial number of vulnerable households (353,000) not in receipt of these benefits. Without this kind of assistance, they may have less disposable income to spend on fuel and may be even more susceptible to fuel poverty than their counterparts in receipt of benefits, who may themselves be eligible for more forms of assistance, and installation of measures, for example under the Warm Front scheme in England (or its equivalents in Scotland, Wales or Northern Ireland) or EEC. These groups may ultimately be the hardest to identify, reach, and remove from fuel poverty.

Housing Characteristics

4A.16 So in what kind of property would we expect to find the vulnerable person most at risk from fuel poverty? Again, detailed analysis of the English House Condition Survey for 2004 suggests that of the 1.2 million fuel poor households, some 1,011,000 households are living in a house built before 1965. Around 232,000 households will be living in a home that fails to meet DCLG's Decent Homes Standard, a failure that may have been on thermal comfort grounds.

4A.17 This demonstrates that the energy efficiency rating of the household will also be important. Some 41 per cent of the fuel poor households have a SAP rating of less than 30, while less than 3 per cent of the households in fuel poverty have a SAP rating greater than 65.

³Source: Office for National Statistics

Chart 4A.4: SAP Rating of Fuel Poor Households 2004

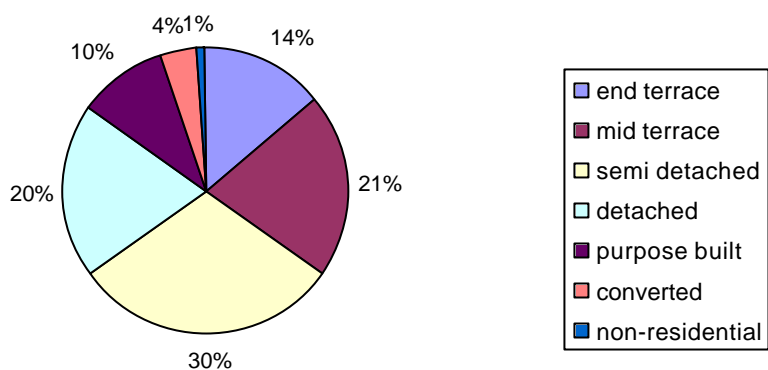
Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.18 Installing cavity wall insulation can usually generate significant energy efficiency savings (around 3,500 kWh per annum for a typical 3 bedroom property). Again, analysis of the EHCS data for 2004 showed that some 52 per cent of the fuel poor were living in properties that had cavity walls that had the potential to be insulated, but over 73 per cent of those with this capability had failed to take such a move. We can infer that the remaining properties (48 per cent of the total in fuel poverty) lived in solid walled (or hard to treat) properties, where the potential for achieving energy efficiency improvements is more limited.

4A.19 Fuel poverty is also less prevalent in homes with central heating. While the majority of fuel poor households did actually have some form of central heating installed, the actual percentage level of fuel poverty within the group with central heating stood at 5 per cent, compared to 24.2 per cent within the category without it installed. Thus, it can be inferred that those households without central heating are over four and a half times more likely than those households with central heating to be in fuel poverty.

4A.20 Chart 4A.5 below shows that very few households deemed to be in fuel poverty have a modern form of condensing boiler installed, while a substantial majority have no recognisable boiler at all. Such households are generally found to be using more expensive forms of electric heating to heat their homes, for example night storage heaters or on-peak direct electric heating, as well as for water usage.

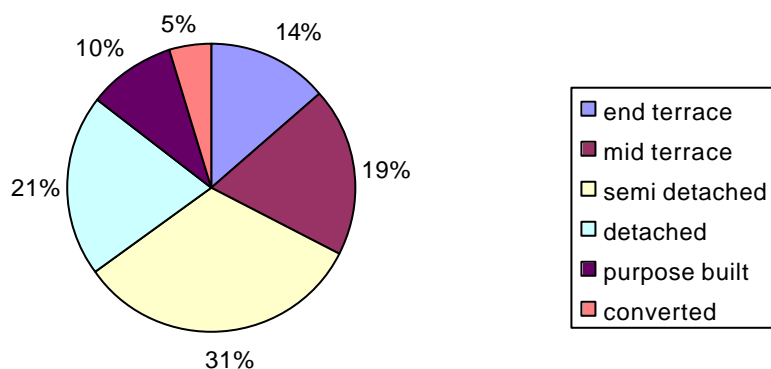
Chart 4A.5: Types of Boiler in Fuel Poor Households



Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.21 Very few of the fuel poor live in private houses built in the years since 1975, which is to be expected given the higher standards applied, for example, through refinements to Building Regulations. Only 2.1 per cent of households in properties built after 1975 were in fuel poverty, compared to 8.5 per cent of households in properties built before 1919. The chart below suggests that there is a relatively even spread in terms of actual dwelling type, although semi detached make up the highest proportion.

Chart 4A.6: Fuel Poor Households by Type of Property (2004)



Source: DTI and Defra based on EHCS 2004 (DCLG)

4A.22 Underoccupancy is sometimes seen as a cause of fuel poverty, and it has already been demonstrated that the fuel poor are more likely to be single adult households. Of those households in fuel poverty in England in 2004, 48 per cent were underoccupied, an increase of 5 per cent since the 2003 EHCS. Those people underoccupying their homes would still appear to be more than twice as likely to be in fuel poverty. In terms of household size, some 74 per cent of the fuel poor actually live in smaller homes, that is, within the A-C council tax bands.

Location

4A.23 In numerical terms, fuel poverty would appear to be a more urban than rural issue, with some 24 per cent of the fuel poor living in purely rural areas. However, percentages are higher in purely rural areas. The highest incidence of fuel poor is in the North East, having almost 10 per cent of their total population classed as fuel poor. The lowest percentages are to be found in London and the South East, due in part to the influence of outdoor temperatures.

Conclusion

4A.24 So, if there is such a thing as a “typical” fuel poor household, the probability is that it will be most likely to be a single person household living in their own property in a rural setting. The householder will be more likely to be either elderly or have a long-term sickness or disability, partially explaining why they spend more on fuel. They are overwhelmingly likely to be found in the lowest income decile, earning an average £5,162 per annum, although it is not possible to draw definite conclusions as to whether their income will be derived from benefits.

4A.25 The house in which this “typical” householder will be based will be relatively old, with a 70 per cent chance that it will be lived in by its actual owner. There is also a 53 per cent chance that that house will be either detached or semi-detached, itself a factor which would make it more prone to heat loss than other kinds of housing. The house itself would be much more likely to be relatively small in size, given that it stands an 74 per cent chance of falling within Council Tax Bands A to C.

4A.26 The SAP ratings of these houses would be likely to be lower than average, and it is unlikely that the householder will have taken the opportunity to install any of the energy efficiency measures that could make a difference to them.