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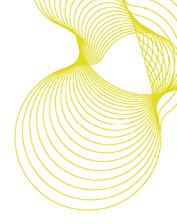
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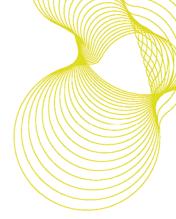
## **Executive Summary**

The 'UK Fuel Poverty Strategy' published in November 2001 sets out the approach of the Government and the Devolved Administrations to tackling fuel poverty. The Welsh Assembly Government's target is, that as far as reasonably practicable, fuel poverty should be eradicated in vulnerable households by 2010 and in all households by 2018. This was the commitment set out in the 'Fuel Poverty Commitment for Wales'.

The Welsh Assembly Government's previous estimate published in the 'Fuel Poverty in Wales 2004' report was that in 2004, 134,000 households were in fuel poverty. Prior to this, in 1998, an estimate based on the proxy of eligibility for the Assembly Government's Home Energy Efficiency Scheme suggested that 220,000 households were in fuel poverty. Further analysis of the 1998 Welsh House Condition Survey, from which this proxy estimate was made, suggested that the figure may have been closer to 360,000, or 31% of Welsh households. The progress made in reducing the number of households in fuel poverty was helped significantly by an era of stable energy prices. However since 2004 significant fuel price rises have occurred and in England, for which annual estimates are published, these have resulted in the downward trend in fuel poverty numbers reversing.

This report presents the results of the fuel poverty statistics calculated for Wales using the 2008 Living in Wales survey. The results are presented in six sections:

- First, the headline fuel poverty statistics are presented for the full and basic income definitions. A household is fuel poor if it cannot afford to keep adequately warm at a reasonable cost. Fuel poverty statistics for Wales, as for England, are reported against two definitions. These are the 'Full Income' definition in which a household is said to be in fuel poverty if, in order to maintain a satisfactory heating regime it would be required to spend more than 10% of its income (including Housing Benefit or Income Support for Mortgage Interest) on all household fuel use. This is the definition against which fuel poverty targets in the UK are set against. The 'Basic Income' definition in which a household is in fuel poverty if, in order to maintain a satisfactory heating regime it would be required to spend more than 10% of its income (excluding Housing Benefit or Income Support for Mortgage Interest) on all household fuel use is used in order to enable historical comparisons. Statistics for the vulnerable households are also shown, as is the severity of fuel poverty in the fuel poor households.
- Second, a more detailed analysis of the household characteristics of the fuel poor is presented. The household characteristics investigated include tenure, household size and composition, ages of household members, ethnicity, working status, income and receipt of benefits and under-occupancy. The results of the analysis of all households under the 'full income' definition are discussed in detail. Tables for the same analysis but using 'basic income' and also for vulnerable households are provided in an appendix.
- Third, the characteristics of the dwellings lived in by fuel poor households are described. The characteristics examined include the dwelling age, type and size, the council tax band that a property is in, the heating and insulation characteristics and the SAP ratings.
- Fourth, the geographical distribution of fuel poverty within Wales is reported. A preliminary analysis of fuel poverty has been carried out at the level of North, Mid and South Wales as the sample sizes are currently too small for a robust analysis of fuel poverty to be carried out at a more detailed regional level.
- Fifth, the change in the fuel poverty status in Wales since 2004 is described.



 Sixth, analysis of how the Welsh fuel poverty statistics fit into the bigger picture of fuel poverty in the UK

#### Results

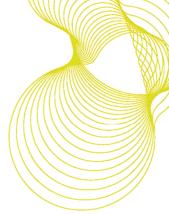
The Living in Wales survey is a sample survey which means that all estimates are subject to sampling error. Annex A.3 of the main report presents the 95% confidence intervals ('standard errors') associated with the key statistics.

### 1. Headline Fuel Poverty Statistics

- 332,000 households were estimated to be fuel poor in Wales in 2008 under the full income definition. This is 26% of all households. Under the basic income definition, approximately 356,000 households were fuel poor which is 28% of all households.
- Vulnerable households (i.e. those with a member aged 60 or over, with any children aged under 16 or with any long-term sick or disabled member) account for 86% of the fuel poor. Of this 86% households containing multiple categories of vulnerability (predominantly households with someone aged 60+ and someone long-term sick/disabled) make up the largest proportion, followed very closely by households with someone aged 60+. Households containing someone aged 60+ or long-term sick/disabled are far more likely to be fuel poor compared to households which are vulnerable due to having children (~35% fuel poor for the former two groups compared to 18% for the latter).
- Any household spending more than 10% of its income on fuel use is said to be fuel poor. The severity of fuel poverty for a household increases as a greater percentage of their income is spent on household fuel use. Fuel poverty 'groups' have been defined in the English reporting procedure so that households spending more than 20% of their income on fuel are severely fuel poor. In 2008 in Wales, approximately 60,000 households are required to spend more than 20% of their income on fuel. For these households it is lower incomes, rather than higher fuel costs, that is the main driver for their severity of fuel poverty.

#### 2. Household Characteristics of the Fuel Poor

Households that are particularly likely to be fuel poor are those living in private rented accommodation, single person households, households in which the person is over pension age and unemployed/economically inactive households. Not surprisingly, the greatest number of fuel poor households (119,000 households; 36% of the total fuel poor) are in the lowest decile income band and together, the lowest 3 deciles comprise nearly 75% (247,000 households) of the fuel poor. Approximately 240,000 fuel poor households (72% of the total fuel poor) receive a state benefit and further analysis has shown that this reflects the propensity of pensioners to be fuel poor, as the receipt of benefits is dominated by the state-retirement pension. The eligibility for a Home Energy Efficiency Scheme (HEES) benefit has also been investigated and it was found that the proportion of fuel poor households eligible for a standard HEES benefit was 14% (46,000 households). However the targeting of fuel poor households is significantly increased by the



'HEES-Plus' grant for which households eligible for a HEES-Plus grant make up 42% (~141,000 households) of the fuel poor under the full income definition. Households that are under-occupying their dwellings are significantly more likely to be fuel poor than average with nearly 35% of all under-occupying households being fuel poor.

#### 3. Dwelling Characteristics of the Fuel Poor

The physical characteristics of a dwelling largely determine the fuel costs for the household living in it. Factors such as the building structure, amount of insulation present and the type of heating system determine the energy efficiency of that dwelling; a more energy-efficient home requires less space heating to keep it at a comfortable temperature and therefore the energy consumption for that dwelling is lower. The type of fuel used by a household also determines the fuel costs as different fuels have different prices. Dwelling characteristics that have the greatest influence on the fuel poverty status of the occupying household are older dwellings of solid wall construction, large semi-detached and detached dwellings and dwellings with non central heating. It is these dwelling characteristics leading to higher fuel costs, rather than lower incomes of the households living in these dwelling types, that result in the increased likelihood for households in these dwellings to be fuel poor.

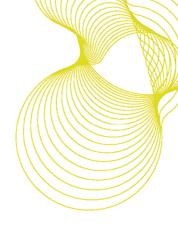
The method of payment that a household uses to pay for its metered fuels (gas and electricity) also has a strong impact on the incidence of fuel poverty with the proportion of households paying by standard credit or pre-payment being significantly more likely to be fuel poor than those households that pay for their fuels by direct debit.

The Standard Assessment Procedure (SAP) is the UK Government's recognised methodology for calculating energy performance of dwellings. The 2005 SAP rating is based on a scale from 0 to 100 and the higher the SAP rating, the better the standard of the dwelling and the lower the running costs. 31% of fuel poor households have a SAP rating of less than 35 and it is clear from the results that a household has a much higher risk of being fuel poor if their home has a lower SAP rating.

#### 4. Geographical Characteristics of the Fuel Poor

Nearly 34% of rural households are fuel poor compared to 22% of urban households. This is in part driven by the fact that dwellings in rural areas are much more likely to be off the gas network compared to dwellings in urban areas.

The occurrence of fuel poverty is less in South Wales compared to the Mid and North regions with levels of fuel poverty standing at 23%, 35% and 28% respectively. Further analysis suggests that this is due to a higher average SAP rating and corresponding lower fuel expenditure for households in South Wales rather than these households having higher incomes. The average SAP rating for households in South Wales is approximately 11 points higher than that of Mid-Wales and 8 points higher than that of North Wales, both regarded as a significant difference in terms of SAP ratings.



## 5. Changes in Fuel Poverty Status in Wales since 2004

The underlying method of calculating the fuel poverty statistics in 2008 is the same as that used in 2004. However, there have been a number of methodological improvements made in the intervening years which have had a small impact on the results and these are discussed further in Appendix A. This means that the figures are not, strictly speaking, directly comparable although they do provide a reasonably robust estimate of the change in fuel poverty between 2004 and 2008.

The previous estimate for fuel poverty in Wales stood at 134,000 households (11%) in fuel poverty in 2004 and the results presented in this report suggest that approximately 198,000 households have moved into fuel poverty since 2004. The increase reflects the impact of rising fuel prices over this time. Average electricity prices increased by ~43% between 2004 and 2008 whilst average gas prices increased by ~55% in real terms and earnings income increased by ~10%.

The increase in fuel poverty rates has hit the vulnerable group harder than the non-vulnerable group with the proportion fuel poor in the former increasing by 141% (12% to 29%) whilst the proportion fuel poor in the latter by 123% (7% to 16%). In particular, it is households containing someone aged 60+ years for which fuel poverty numbers have increased the most. An additional 112,000 households containing someone aged 60+ years were fuel poor in 2008 compared to 2004. In terms of the change in the proportion fuel poor, households with someone aged <16 years have increased the most (up 270%, from 5% of this group being fuel poor in 2004 to 19% in 2008).

In terms of tenure, the increase in fuel poverty has affected households living in social housing slightly more than the owner occupied and private rented sector. The rate of fuel poverty within tenures has doubled for the latter two sectors whereas the rate has tripled within the social housing sector.

The total number of dwellings without a central heating system has halved since 2004 although the rate of fuel poverty within these dwellings has remained fairly constant between the years (~65% in 2008). The proportion of the fuel poor group without central heating is now just 5% which makes it a small group to target for remedial measures. Within fuel types households using mains gas have seen the largest increase in the rate of fuel poverty, followed by those using heating oil. It is these two fuels for which the largest price rises have occurred over the time period.

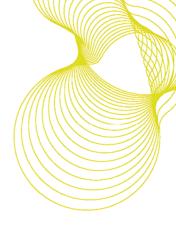
In addition to the ~200,000 households that have moved across the threshold into fuel poverty, an additional 50,000 households are now spending between 5 - 10% of their income on fuel.

## 6. Fuel Poverty in the U.K.

The number of households in fuel poverty in the UK in 2007 was 4 million, with 3.25 million of those being 'vulnerable' households. This is a rise of 2 million and 1.75 million respectively since 2004 when numbers were at their lowest. In England, there were 2.8 million fuel poor households in 2007 which was around 13% of all households, half the proportion of Wales in 2008. In Scotland there were 618,000 households (around 26.5%) in fuel poverty in 2008. In Northern Ireland, figures from the 2006 Northern Ireland House Condition Survey (NIHCS) show that 226,000 households (34% of all households) are fuel poor. Looking at the UK as a whole, Wales currently has the second smallest proportion of fuel poor households in the four

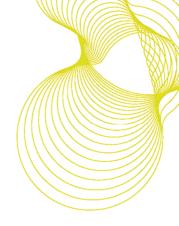


nations, after England. The energy efficiency of the Welsh housing stock (as inferred from the mean SAP rating) has been bought up to the level seen in the English housing stock although it is still the combination of lower incomes and higher fuel costs that leads to the higher incidence of fuel poverty in Wales compared to England. Further analysis shows that it is the *combination* of dwelling size, type, age and heating fuel particular to the Welsh housing stock that results in a greater average energy use and therefore fuel expenditure in Wales.



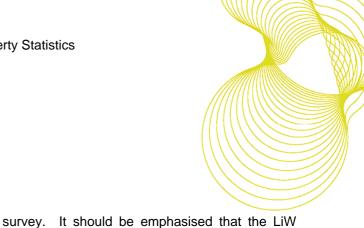
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errors')

#### Introduction 1

A.3 of the main report presents the 95% ('standard confidence intervals associated with the key statistics.

#### 1.1 **Background**

The 'UK Fuel Poverty Strategy' published in November 2001 sets out the approach of the Government and the Devolved Administrations to tackling fuel poverty. The Welsh Assembly Government's target is, that as far as reasonably practicable, fuel poverty should be eradicated in vulnerable households by 2010 and in all households by 2018. This was the commitment set out in the 'Fuel Poverty Commitment for Wales', published in 2003. In 2004 the Welsh Assembly Government commissioned a new continuous household survey for Wales, known as the 'Living in Wales Survey' (LiW), which followed on from the Welsh House Condition Survey. Analysis of data from that survey showed that 134,000 (11%) households were fuel The Welsh Assembly Government's previous estimate published in the Fuel Poverty Commitment for Wales was that in 1998 there were 220,000 households in fuel poverty. This estimate was based on the proxy of eligibility for the Assembly Government's Home Energy Efficiency Scheme. Further analysis of the 1998 Welsh House Condition survey, from which this proxy estimate was made, suggested that the figure may have been closer to 360,000 (31%) Welsh households. The progress made in reducing the number of households in fuel poverty was helped significantly by an era of stable energy prices. However since 2004 significant fuel price rises have occurred and in England, for which annual estimates are published, these have resulted in the downward trend in fuel poverty numbers reversing.

The fuel poverty statistics presented in this report are based on data collected in the 2008 LiW

#### 1.2 **Definitions of Fuel Poverty**

A household is fuel poor if it cannot afford to keep adequately warm at a reasonable cost. Fuel poverty statistics for Wales, as for England, are reported against two definitions. These are:

survey is a sample survey which means that all estimates are subject to sampling error. Annex

- 1) A household is in fuel poverty if, in order to maintain a satisfactory heating regime it would be required to spend more than 10% of its income (including Housing Benefit or Income Support for Mortgage Interest) on all household fuel use. This is known as the 'Full Income' definition and is the definition against which fuel poverty targets in the UK are set against.
- 2) A household is in fuel poverty if, in order to maintain a satisfactory heating regime it would be required to spend more than 10% of its income (excluding Housing Benefit or Income Support for Mortgage Interest) on all household fuel use. This is known as the 'Basic Income' definition and is used in order to enable historical comparisons.

Two factors determine the fuel poverty status of a household: the amount of income received by the household and the amount of this income that is spent on fuel. The fuel expenditure is itself influenced by various factors such as the energy efficiency of the home, the price of the fuel used and whether the home is under-occupied.

#### 1.3 **Outline of the Methodology**

The LiW survey comprises two parts; a household interview survey conducted with the Household Reference Person (HRP) or their



partner/spouse and a physical survey of the dwelling. The LiW interview survey was completed for 7,721 households between March and July 2008. Of these, a physical survey was completed for 2,741 households and these make up the 'core dataset' for the fuel poverty analysis.

In order to calculate the fuel poverty status of a household, the two main contributing factors of household income and the amount of income spent on fuel are broken down into three vital components: the energy consumption of the dwelling, the price of the fuel used by that dwelling and the income received by that household. A modelling process, which is directly comparable to that used to calculate the English fuel poverty statistics, has been used to derive the fuel poverty statistics from the LiW survey. This is described in detail in Appendix A.

## 1.4 Contents of the Report

This report presents the fuel poverty statistics calculated for Wales using the 2008 Living in Wales survey. The results are presented in six sections:

- First, the headline fuel poverty statistics are presented for the full and basic income definitions, statistics for the vulnerable households are also shown, as is the severity of fuel poverty in the fuel poor households.
- Second, a more detailed analysis of the household characteristics of the fuel poor is presented. The results of the analysis of all households under the 'full income' definition are discussed in detail. Tables for the same analysis but using 'basic income' and also for vulnerable households are provided in an appendix but not specifically discussed.
- Third, the characteristics of the dwellings lived in by the fuel poor households are described.
- Fourth, the geographical distribution of fuel poverty within Wales is reported.

- Fifth, the change in the fuel poverty status in Wales since 2004 is described.
- Sixth, analysis of how the Welsh fuel poverty statistics fit into the bigger picture of fuel poverty in the UK

Three appendices follow the main report. Appendix A provides a detailed description of the methodology employed in calculating the statistics, along with a description of the validation procedures used and the results of these. Appendices B and C contain the data tables discussed in the main report; Appendix B presents the tables for all households and Appendix C for vulnerable households only.



## 2 Headline Fuel Poverty Statistics

## 2.1 All households

The number of households in fuel poverty in Wales in 2008 is estimated to be 332,000 under the full income definition, 26% of all households. Under the basic income definition, approximately 356,000 households were fuel poor which is 28% of all households (Tables B2.1a and B2.1b).

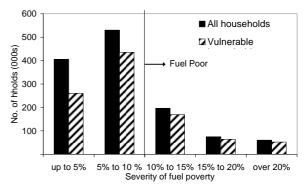
### 2.2 Vulnerable households

For the vulnerable households, i.e. those with a member aged 60 or over, with any children aged under 16 or with any long-term sick or disabled member, there are estimated to be 285,000 households in fuel poverty under the full income definition (29% of vulnerable households) and around 310,000 households under the basic income definition (32% of vulnerable households). Vulnerable households account for ~86% of the fuel poor (Tables B2.2a and B2.2b). The vulnerability of fuel poor households split by qualifying criteria is shown in Tables B2.2c and B2.2d. Vulnerable households containing multiple categories of vulnerability (predominantly households with someone aged 60+ and someone long-term sick/disabled) make up the largest proportion of the fuel poor (99,000 households, 30% of the fuel poor under the full income definition), followed very closely by households that had someone aged 60+ (98,000 households, 30% of the fuel poor under the full income definition). Households containing someone aged 60+ or long-term sick/disabled are far more likely to be fuel poor compared to households which are vulnerable due to having children with just over a third of the two former categories being fuel poor compared to just under a fifth for the latter category.

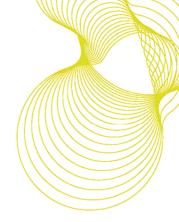
## 2.3 Severity of fuel poverty

Any household spending more than 10% of its income on fuel use is said to be fuel poor. The severity of fuel poverty for a household increases as a greater percentage of their income is spent on household fuel use. Fuel poverty 'groups' have been defined in the English reporting procedure so that households spending between 10% and 15% of their income on fuel are said to be in marginal fuel poverty, those spending between 15% and 20% of their income on fuel are in moderate fuel poverty and those spending more than 20% of their income on fuel are severely fuel poor. Tables B2.3a-d show the severity of fuel poverty in all households and vulnerable households under the full and basic income definitions. Also shown are the mean fuel expenditure, mean household income and mean SAP rating for each severity band. Figure 1 shows the severity of fuel poverty for all households and the subset of vulnerable households under the full income definition.

Figure 1: Severity of fuel poverty (full income definition)



Approximately 60,000 households are required to spend more than 20% of their income on fuel, making them severely fuel poor. For these households it is the lower incomes rather than higher fuel costs, that is the main driver for their



severity of fuel poverty. Average income decreased by 36% from the 15-20% band to the >20% band, and mean fuel costs rose by 11% in comparison.

Just over half a million households are required to spend between 5 and 10% of their income on fuel – therefore within this group there is the potential for a significant number of households to be pushed into fuel poverty if fuel price rises continue to out-compete income rises.

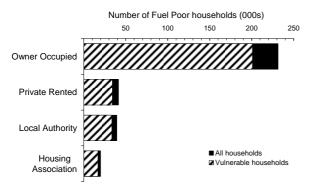


## 3 Household Characteristics of the Fuel Poor

## 3.1 Tenure

Under both income definitions owner occupiers make up the largest proportion of the fuel poor (231,000 households; 70% using full income) due to the predominance of this tenure in the housing stock (Figure 2; Table B3.1a). Within tenure groups, it is the private rented sector that has the greatest prevalence of fuel poverty, with 36% of that tenure being fuel poor, compared to the lowest prevalence of 24% in dwellings owned by Housing Associations.

Figure 2: Fuel Poverty by Tenure

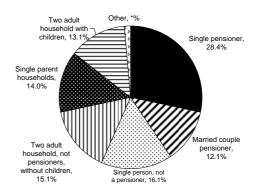


## 3.2 Household size and composition

Tables B3.2a and B3.2c show the distribution of fuel poverty with household size and composition respectively under the full income definition. The likelihood of being fuel poor is significantly increased for one person households, with 46% of this group being fuel poor, compared to 24% for 2 person households and around 15% for multi-person households. That fuel poverty is a particular problem for single person households is also borne out in the fact that 45% of the total

fuel poor population is made up of single person households<sup>1</sup>. Single pensioners make up the largest proportion of the fuel poor at 28% (Figure 3) and just over half of this group is fuel poor.

Figure 3: Breakdown of the fuel poor by household composition



## 3.3 Ages of household members

With the exception of the youngest age band (16-24 years), the incidence of fuel poverty increases as the age of the HRP increases (Table B3.3a and B3.3c). Those aged over 85 years are particularly prone to being fuel poor with 50% of this group being fuel poor, closely followed by households in which the HRP is aged between 75-84 or 16-24 years. These households have significantly lower incomes compared to the stock average.

## 3.4 Ethnicity

The sample sizes are insufficient to reliably report any results on the difference in the proportion of fuel poor in the white and ethnic minority groups (Table B3.4a).

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<sup>&</sup>lt;sup>1</sup> This percentage rises to 57% if single parent households are included within the single person group.



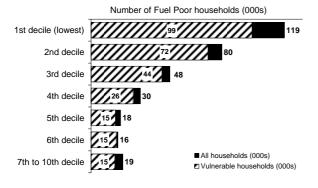
## 3.5 Working status

As would be expected, households with at least one of the HRP or partner working have the lowest incidence of fuel poverty compared to households in which both the HRP and partner are either unemployed or inactive (Table B3.5a). Within the fuel poor group, it is the inactive households that make up the majority as 66% of fuel poor households fall into this category, followed by the working group which accounts for 27% of the fuel poor.

#### 3.6 Income

Figure 4 and Table B3.6a show the relationship of fuel poverty with banded income. Not surprisingly, the greatest numbers of fuel poor households (36% of the total) are in the lowest decile income band and together, the lowest 3 deciles comprise nearly 75% of the fuel poor. Of those households receiving an income that is in the lowest decile band, over 90% of them are in fuel poverty. Figure 4 also shows the split between vulnerable and non vulnerable groups for each decile band.

Figure 4: Fuel Poverty by banded Income



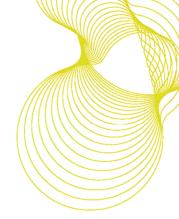
### 3.7 Receipt of benefits

The social welfare system in the UK provides both universal (available to anyone) and meanstested (dependant on need) benefits. In Wales, the Home Energy Efficiency Scheme (HEES) is the equivalent to the Warm Front grant scheme in England which allows a range of energy efficiency measures to be installed in homes. Households are eligible for a HEES grant if the HRP or partner has a child under 16 and receives one or more of the following benefits - income support, income-based jobseeker's allowance, income-related employment and support allowance, housing benefit, council tax benefit or working tax credit/child tax credit - together with an income of less than £15,460. Tables B3.7a and B3.7c show the numbers and percentage of fuel poor receiving any benefit (not including council tax benefit or housing benefit) and those eligible for a standard HEES benefit, respectively. Further analysis has shown that the high percentage (~75%) of fuel poor households receiving any benefit reflects the propensity of pensioners to be fuel poor, as the receipt of benefits is dominated by the state-retirement pension. 34% of fuel poor households receive the state retirement pension, 20% receive child benefit and 14% receive child tax credit. The proportion of fuel poor households eligible for a HEES benefit is much less, at 14%.

The targeting of fuel poor households is significantly increased by the 'HEES-Plus' grant which is available for households in which a) either the HRP/partner is over 60 years old or a lone parent with a child under 16 years and receives either income support, income-based iobseeker's allowance, income-related employment and support allowance, housing benefit, council tax benefit or pension credit or b) the HRP/partner is disabled and in receipt of one or more disability benefits<sup>2</sup> or c) the HRP/partner is over 80 years old. Households eligible for a HEES-Plus grant make up 42% of the fuel poor under the full income definition (Table B3.7e).

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<sup>&</sup>lt;sup>2</sup> Income support/Working Tax Credit/Housing Benefit or Council Tax Benefit with a disability premium; War Disablement Pension with Constant Attendance Allowance or a mobility supplement; Industrial Injuries benefit with Constant Attendance Allowance; Disability Living Allowance or Attendance Allowance



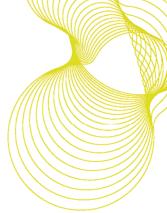
Combined, households eligible for either HEES grant make up 47% of the fuel poor (Table B3.7g).

## 3.8 Under-occupancy

The size of a property and number of bedrooms in that property compared to the numbers of occupants is a major contributor to fuel poverty, particularly when one person is trying to heat a family-sized home. The fuel poverty modelling methodology is based on the assumption that all under-occupying households are on a partial heating regime in which only approximately half the dwelling is heated<sup>3</sup>. The majority of underoccupiers are single or two person households. Table B3.8a shows that 176,000 fuel poor households are defined as under-occupying, accounting for just over half of the total fuel poor. Under-occupying households are significantly more likely to be fuel poor than the average with nearly 35% of all under-occupying households being fuel poor.

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<sup>&</sup>lt;sup>3</sup> The modelling methodology has been updated since 2004 so that there are now two heating regimes for under-occupiers. For those that are in all day, half the house is heated for 16 hours a day, every day. For those that are not in all day, half the house is heated for 9 hours a day on weekdays and 16 hours a day at weekends.



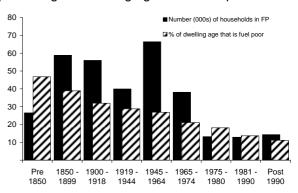
# 4 Dwelling Characteristics of the Fuel Poor

The physical characteristics of a dwelling largely determine the fuel costs for the household living in it. Factors such as the building structure, the amount of insulation present and the type of heating system determine the energy efficiency of that dwelling; a more energy-efficient home requires less space heating to keep it at a comfortable temperature and therefore the energy consumption for that dwelling is lower. The type of fuel used by a household is also a major contributing factor to the fuel costs as different fuels have different prices.

## 4.1 Age of dwelling

Dwellings built pre-1975 account for nearly 90% of the fuel poor and as a general rule, the older a dwelling is, the more likely it is that a household living in it will be fuel poor (Table B4.1a; Figure 5). This is predominantly due to households living in older dwellings having higher fuel costs (rather than lower incomes); a result of their dwelling tending to be thermally inefficient due to its method of construction. Pre-1918 dwellings are predominantly solid walled constructions which have poor thermal properties resulting in excessive heat loss and are generally more costly to improve. Cavity wall construction became increasingly common post-1945; this type of construction has better thermal performance due to the air gap between walls which can also be filled with insulation to further improve thermal efficiency.

Figure 5: Fuel poverty by dwelling age and percentage of dwelling age that is fuel poor

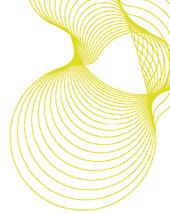


## 4.2 Dwelling type

In general, the more exposed walls a dwelling has (and therefore the greater the heat loss area), the more likely a household living in that dwelling will be fuel poor (Table B4.2a). In terms of absolute numbers, households living in semidetached and detached dwellings (configurations with more exposed walls) account for the majority of the fuel poor and these dwelling types are the most common in the whole stock. Households living in purpose built flats are the least likely to be fuel poor due, not due to their incomes which are on average the lowest of all the dwelling types, but because they have the lowest mean fuel costs of all the dwelling types. This results from their small size and subsequently smaller area of exposed walls. At the other end of the spectrum, households living in converted flats (which includes non-residential dwellings with flats above) are the most likely to be fuel poor. This arises due to a combination of lower than average mean incomes and higher than average mean fuel costs.

## 4.3 Dwelling size

The size of the dwelling is represented by the floor area in square metres. Generally, the larger the dwelling, the greater the requirement for space heating per metre square of floor area which is manifested in the largest dwelling



category (>150m²) having the greatest proportion of fuel poor households compared to non-fuel poor households (Table B4.3a).

### 4.4 Council tax band

Households living in dwellings rated band A, B and G are slightly more likely to be fuel poor than the national average and those in the middle bands (C-F) are slightly less likely to be fuel poor compared to the national average (Table B4.4a). This distribution results from the opposing drivers coming into force. For the lowest bands, although fuel costs are lower than average due to small dwelling sizes, lower than average incomes override this to increase the incidence of fuel poverty. The situation is reversed for the higher council tax bands. It should be noted that a significant proportion (~29%) of the council tax band information was not recorded in the original data and therefore required imputation, which may affect the reliability of this analysis.

## 4.5 Presence of central heating

The presence of a central heating system is defined by data relating to the main heating system in a dwelling and includes boiler systems with radiators, storage heaters, warm air and 'other' systems (mainly underfloor heating) and communal systems. Room heaters and portable heaters are not central heating systems. A small percentage (2%) of all households in Wales did not have central heating in 2008, and of these, just under 65% of the households living in them were fuel poor (Table B4.5a) which shows that households without a central heating system are significantly more likely to be fuel poor compared to those with a central heating system. Non central heating systems are very inefficient at heating a whole house to the required level of Households without central heating warmth. make up only 5% of the total fuel poor, the remainder of the fuel poor population having a central heating system of some description.

# 4.6 Main heating system, fuel and type of boiler

The type of heating system and fuel used in a dwelling has a major impact on the fuel poverty status of a household (Table B4.6a and Figure 6). As discussed in section 4.5, room/portable heaters are very inefficient at heating a whole house to the required level of warmth and therefore households with these systems are much more likely to be fuel poor because they use more energy, and therefore have higher fuel costs, than households using boiler systems with radiators or storage radiators. The 18% of Welsh households that have a condensing boiler as part of their central heating system are significantly less likely to be fuel poor than households with back boilers (Table B4.6c). Whilst part of this can be attributed to the differences in the efficiency of these heating systems (back boilers have typical efficiencies of 65% while condensing boilers are typically ~80% efficient<sup>4</sup>) leading to higher average fuel costs for households with back further analysis has shown households with back boilers also have a lower mean income than households with condensing boilers and this is thought to be due to the higher proportion of back boilers located in the social housing tenure. Currently, gas is on average the cheapest form of fuel which is reflected by the percentage of fuel poor households with mains gas being considerably lower than average. The minority of households that use standard electricity as their main heating fuel are particularly susceptible to being fuel poor (Table B4.6e).

<sup>&</sup>lt;sup>4</sup> SAP 200<u>5 Table 4b</u>

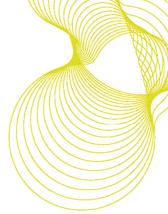
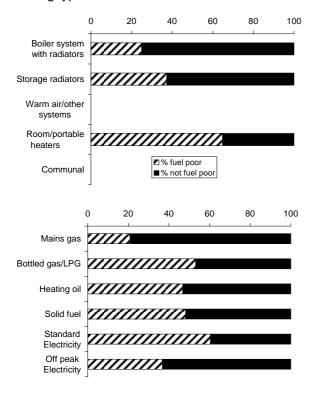


Figure 6: Proportion (%) of fuel poor for each heating type and fuel.



### 4.7 On/off the gas network

Although the LiW survey does not directly identify dwellings off of the gas network, a proxy can be developed using data obtained from the physical survey on whether a gas system is present and whether it is a mains gas supply. Using this proxy we find that just over one third of fuel poor households in Wales live in dwellings off the gas network (Table B4.7a). It is recognised that a dwelling not on the gas network is likely to face higher fuel bills than one on the gas network, due to the (currently) cheaper cost of gas compared to other fuels. This is demonstrated by the significantly higher proportion of properties containing fuel poor households (44%) compared to on gas dwellings (21%).

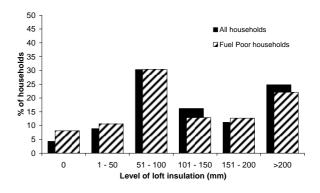
# 4.8 Methods of payment for metered fuels

The price a household pays for its metered fuels (gas and electricity) is dependent on the method of payment. For example, paying by direct debit is generally recognised as being less expensive than paying by standard credit or pre-payment. This is borne out in the fact that for both gas and electricity, the proportion of households paying by standard credit or pre-payment that are fuel poor is significantly greater than that of households who pay by direct debit (Tables B4.8a and B4.8c).

#### 4.9 Level of loft insulation

Figure 7 shows the levels of loft insulation in fuel poor and all households. It can be seen that generally, fuel poor households are not dissimilar in their levels of loft insulation compared to the total stock although the exception is households with no loft insulation present, for whom a significantly higher proportion are fuel poor. From Table 4.9a and Figure 7 it can easily be seen that the largest proportion of Welsh households have loft insulation in the band 50-100mm, although this is closely followed by ~25% of households having over 200mm of loft insulation.

Figure 7: Levels of loft insulation in fuel poor and all households





#### 4.10 Wall construction and insulation

Households living in non-cavity walled dwellings are more likely to be fuel poor (~36%) compared to households living in cavity walled dwellings (21%) (Table B4.10a). Solid walls are poorer thermal insulators than cavity walls; in addition it is more costly to apply standard insulation measures to solid wall dwellings and so it is likely that this is a contributing factor to the fuel poverty status of a household. For the cavity walled dwellings, nearly 44% of the Welsh stock currently have cavity wall insulation (CWI) (Table B4.10c). Although this insulation measure makes a significant improvement to the thermal property of a dwelling, households living in insulated cavity walled dwellings are no less likely to be fuel poor compared to households living in uninsulated cavity walled dwellings. Further analysis shows that this is due to mean household incomes being lower than average for households in CWI dwellings, perhaps due to the fact that social housing providers are more likely to have installed CWI than the owner occupier/private rented tenures.

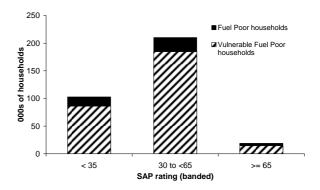
### 4.11 SAP rating

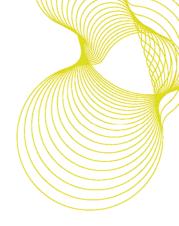
The Standard Assessment Procedure (SAP) is the UK Government's recognised methodology for calculating energy performance of dwellings. The 2005 SAP rating is based on a scale from 0 to 100 and the higher the SAP rating, the better the standard and the lower the running costs. 31% of fuel poor households have a SAP rating of less than 35, ~63% have a SAP rating of between 35 and <65 and the remainder have a SAP rating of 65 or over (see Table B4.11a and Figure 8). It is clear from the table that a household has a much higher risk of being fuel poor if their home has a lower SAP rating; ~58% of properties with a SAP of < 35 are fuel poor, compared to ~9% of those with a SAP greater than 65. The average SAP rating of Welsh properties is around 50. The average SAP rating of dwellings containing fuel poor households is

- 41. The main factors leading to dwellings having a low SAP rating and a fuel poor household are:
  - 1. Using portable heaters with fuels other than mains gas)
  - Having a large (>150m) dwelling floor area.

It is important to note that the SAP methodology used to report on the 2004 Living in Wales data was the 2001 methodology. The major change in SAP 2005 which has implications for the fuel poverty statistics is the inclusion of a new thermal bridging algorithm which results in an increase in the numbers of fuel poor. This is reported on in more detail in Appendix A (section A.2).

Figure 8: Banded SAP rating for fuel poor households





## 5 Geographical Distribution of the Fuel Poor

#### 5.1 Urban/rural location

Nearly 33% of rural households are fuel poor compared to 22% of urban households (Table B5.1a). This is in part driven by the fact that dwellings in rural areas are much more likely to be off the gas network compared to dwellings in urban areas.

## 5.2 Geographical Region

The LiW survey is designed for use at the national level only. For this report we have carried out a regional analysis of North, Mid and South Wales only. Table B5.2a shows that the occurrence of fuel poverty is less in South Wales compared to the Mid and North regions with levels of fuel poverty standing at 23%, 35% and 28% respectively. Further analysis suggests that this is due to households in South Wales having average a higher SAP rating and corresponding lower fuel expenditure rather than them having higher incomes. The average SAP rating for households in South Wales is approximately 11 points higher than that of Mid-Wales and 8 points higher than that of North Wales, both regarded as a significant difference in terms of SAP ratings.



# 6 Change in Fuel Poverty Status in Wales since 2004

The underlying method of calculating the fuel poverty statistics in 2008 is the same as that used in 2004. However, there have been a number of methodological improvements made in the intervening years which have had a small impact on the results and these are discussed further in Appendix A. This means that the figures are not, strictly speaking, directly comparable although they do provide a reasonably robust estimate of the change in fuel poverty between 2004 and 2008.

The number of fuel poor households in Wales has risen from 134,000 in 2004 to 332,000 in 2008, a rise of ~198,000 households. percentage terms this is an increase of 15 percentage points, up from 11% to 26% of households being fuel poor. The predominant reason for this is an increase in fuel prices. The fuel poverty results show that mean household fuel expenditures increased by 71% whereas mean household 'full incomes' increased by only 26% between 2004 and 2008. energy price and earnings statistics show that average electricity prices increased by ~43%5 and gas prices increased by ~55% in real terms between 2004 and 2008 whilst earnings income increased by ~10%<sup>7</sup>.

In this section we report on the changes seen in the proportion of fuel poor households within various household and dwelling groups since 2004. The data for 2004 have been taken from the 'Fuel Poverty in Wales, 2004' report, with the exception of the household composition variable which has been re-created for 2004<sup>8</sup>. Changes in the numbers and percentages of fuel poor households of each group in 2004 and 2008 are presented in Table D1 in Appendix D to aid comparison.

The increase in fuel poverty has hit the vulnerable group harder than the non-vulnerable group with the proportion fuel poor in the former increasing by 141% (12% to 29%) whilst the proportion fuel poor in the latter by 123% (7% to 16%). In particular, it is households containing someone aged 60+ years for which fuel poverty numbers have increased the most (an additional 112,000 of these households were fuel poor in 2008) although in terms of the change in the proportion fuel poor, households with someone aged <16 years have increased the most (up 270%, from 5% of this group being fuel poor in 2004 to 19% in 2008). An additional 55.000 single pensioner households were fuel poor in 2008 compared to 2004 (Figure 9). As the total number of these households has increased only slightly over the years, the proportion of this group that is fuel poor has more than doubled, from just under a quarter (23.2%) of all single pensioner households being fuel poor in 2004 to over a half (53.2%) in 2008. However, the proportion of the fuel poor that this group makes up has actually decreased since 2004 (30% to 28%); it is the two-adult households (not pensioners) without children that now make up a greater proportion of the fuel poor compared to 2004 (10% in 2004, 15% in 2008) (Figure 10). This is because for this group mean household incomes have risen significantly less than the

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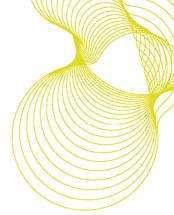
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<sup>&</sup>lt;sup>5</sup> DECC. Average annual domestic electricity bills for UK countries (Quarterly Energy Prices 2.2.2). Data used are for England and Wales.

<sup>&</sup>lt;sup>6</sup> DECC. Average annual domestic gas bills for UK countries (Quarterly Energy Prices 2.3.2). Data used are for England and Wales.

<sup>&</sup>lt;sup>7</sup> ONS ASHE earnings data

<sup>&</sup>lt;sup>8</sup> The derivation of the household composition variable published for the 2004 LiW data has subsequently been found to be incorrect. The variable has been recreated for the 2004 data using the methodology consistent with that used for the 2008 data. Therefore the statistics for the 2004 household composition presented in Table D1 and discussed here are not the same as those published in the 2004 fuel poverty report.



average due to the increased proportion of >55 year olds in 2008 compared to 2004 for whom the average income is less than for those aged <55 years.

Figure 9: Number of households in fuel poverty by household composition in 2004 and 2008.

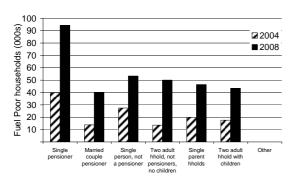
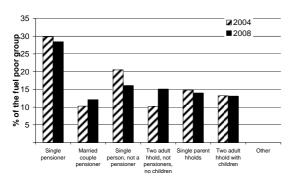


Figure 10: Change in the composition of the fuel poor group between 2004 and 2008.



The increasing fuel bills have affected the unemployed to a greater extent than the inactive group with the proportion of fuel poor households in the unemployed group rising by nearly 40 percentage points compared to a rise of 25 percentage points for the inactive group. This is the result of a much smaller increase in mean household income for the unemployed group compared to the average. However, some part of this is likely to be the result of the change in methodology of the low income imputation routine of the income model (see Appendix A.2) and therefore the results should be treated with

caution. In terms of benefit receipt, the data show that eligibility for the HEES Plus benefit has had the greatest impact on limiting the increase in fuel poverty compared to groups receiving any other benefits or eligibility for the HEES (standard) benefit.

Although there has been a substantial rise in the total number of households under-occupying in Wales, due to a greater number of single and double occupancy households living in semi- and detached dwellings, the proportion of the fuel poor that under-occupiers make up has decreased from 56% to 53% over the years from 2004 to 2008.

In terms of tenure, the increase in fuel poverty has affected households living in social housing slightly more than the owner occupied and private rented sector. The rate of fuel poverty within tenures has doubled for the latter two sectors whereas the rate has tripled within the social housing sector (Figure 11). A similar pattern in terms of the total numbers of fuel poor households within each tenure is also seen (Figure 12). Further analysis has shown that whilst mean energy costs have risen the least for households living in social housing, mean incomes also have not risen as much as for the other tenures which, combined with the significantly lower than average incomes for the social housing group, results in the distribution of fuel poverty seen.

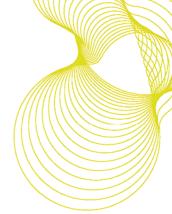


Figure 11: Change in the proportion of each tenure in fuel poverty between 2004 and 2008.

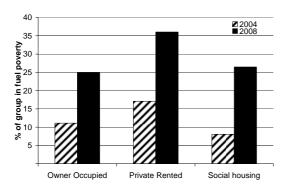
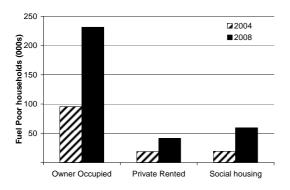


Figure 12: Number of households in fuel poverty by tenure in 2004 and 2008.



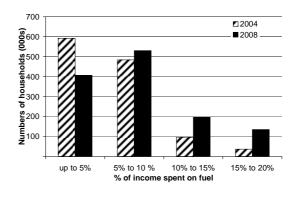
The total number of dwellings without a central heating system has halved since 2004 although the rate of fuel poverty within these dwellings has remained fairly constant between the years (~65% in 2008). The proportion of the fuel poor group without central heating is now just 5% which makes it a small group to target for remedial measures. Within fuel types, mains gas has seen the largest increase, by far, in the rate of fuel poverty, followed by heating oil. It is these two fuels for which the largest price rises have occurred over the time period<sup>9</sup>.

The number of energy efficiency improvement measures such as loft insulation and cavity wall insulation that have been made to dwellings since 2004 looks, from the data, to be significant. Although the SAP calculation methodology has changed since the 2004 fuel poverty report was published, analysis using a recalculated 2004 dataset based on the SAP 2005 methodology shows that the mean SAP of all dwellings has increased from 46.5 to 50.3 points between 2004 and 2008. The mean SAP of the fuel poor group has increased from an average of 29 points in 2004 to 41 points in 2008, suggesting that energy efficiency improvements have been particularly well targeted to the fuel poor group.

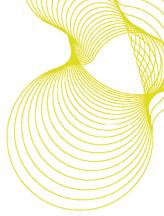
The increase in fuel poverty has affected urban households to a greater degree than rural households and it follows that the South Wales region has been the hardest hit of the three regions.

Figure 13 shows how the percentage of household income being spent on fuel has increased over the four year period from 2004 to 2008. In addition to the ~200,000 households that have moved across and along the fuel poverty threshold, a further 50,000 households are now spending between 5 - 10% of their income on fuel.

Figure 13: Proportion of household income spent on fuel.



<sup>&</sup>lt;sup>9</sup> DECC. Retail prices index: fuel components monthly figures. Table 2.1.3. June data used.

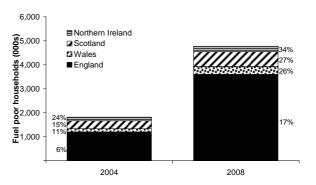


## 7 Fuel Poverty in the U.K.

The number of households in fuel poverty in the UK in 2007 was 4 million, with 3.25 million of those being 'vulnerable' households. In England, there were 2.8 million fuel poor households in 2007 which was around 13% of all households. Based on projections using the 2007 data an estimated 3.6 million households are predicted to be fuel poor in 2008 approximately 17% of households. This can be compared to the 26% (332,000) of Welsh households calculated to be living in fuel poverty in 2008. The latest figures for Scotland are based on the 2008 Scottish House Condition Survey (SHCS) and estimate 618,000 households (around 26.5%) to be fuel poor<sup>10</sup>. In Northern Ireland, figures from the 2006 Northern Ireland House Condition Survey (NIHCS) show that 226,000 households (34% of all households) are fuel poor.

Figure 14 summarises the status of fuel poverty in the UK, showing the change between 2004 and 2008 (projected 2008 numbers based on 2007 data for England; 2006 data for Northern Ireland).

Figure 14: Numbers (and percentages) of households in fuel poverty in the UK in 2004 and 2008.



Similar to the results reported in 2004, in 2008 Wales still has the second smallest proportion of fuel poor households in the four nations after England however the rate of fuel poverty in Wales is now only slightly below that reported for Scotland. The number of fuel poor households has increased by 200% for England, by 150% for Wales and by 90% for Scotland between 2004 and 2008. From Table 1 it can be seen that the energy efficiency of the Welsh housing stock (as inferred from the mean SAP rating) has been brought up to the level seen in the English housing stock although it is still the combination of lower incomes and higher fuel costs that leads to the higher incidence of fuel poverty in Wales compared to England.

<sup>&</sup>lt;sup>10</sup> Scottish House Condition Survey, Key Findings for 2008. Published 2009.

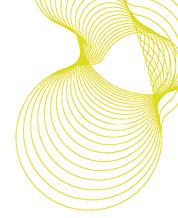


Table 1: Comparison of variables between Wales and England in 2008.

	Mean fuel expend- iture (£)	Mean Full household income (£)	Mean SAP Rating
All household	ls		
Wales	1,449	23,535	50
England	1,291	27,763	50
Fuel Poor			
Wales	1,783	11,710	41
England	1,515	10,455	41
Not Fuel Poor	•		
Wales	1,330	27,728	54
England	1,245	31,315	52

Further analysis of the data suggests that the higher average fuel costs reported for dwellings in Wales arise from several factors: dwellings are on average larger (as determined by mean floor area) in Wales than in England, most likely due to the larger proportion of detached dwellings and smaller proportion of purpose-built flats in Wales compared to England. Larger dwellings have a greater space heating energy requirement and detached dwellings in particular have higher heat losses due to the greater number of external Wales also has a greater proportion of pre-1919 dwellings, which typically have a higher energy requirement per m<sup>2</sup> due to the poorer thermal efficiency of the solid wall construction, and a greater number of dwellings using heating oil rather than mains gas. It is the combination of these factors that accounts for the situation of higher mean fuel costs in Wales.



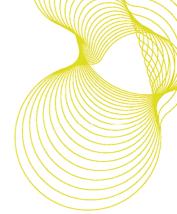
## 8 Summary

This report presents the results of the fuel poverty statistics calculated for Wales using the 2008 Living in Wales survey.

Approximately 332,000 households were estimated to be fuel poor in Wales in 2008 under the full income definition. This is 26% of all households.

- Vulnerable households account for 86% of the fuel poor (285,000 households) with vulnerable households containing someone aged 60+ years making up the largest proportion.
- Nearly 60,000 households (5% of all households) are required to spend more than 20% of their income on fuel. A further 75,000 households (6% of all households) are required to spend between 15-20% of their income on fuel.
- Households that are particularly likely to be fuel poor are those living in private rented accommodation, single person households, particularly ones in which the householder is over pension age, and the unemployed and economically inactive households.
- Dwelling characteristics that have the greatest influence on the fuel poverty status of the occupying household are older dwellings of solid wall construction, large semi-detached and detached dwellings and dwellings without central heating.
- Approximately 200,000 households have moved into fuel poverty since 2004. This is mainly due to increasing fuel prices.

Looking at the UK as a whole, fuel poverty rates have risen in all four nations between 2004 and 2008 as a result of increased fuel prices. The proportion of fuel poor households has increased less for Wales than for England over this time period, however mean household incomes are still lower, and mean household fuel expenditure still higher in Wales compared to England.



## Appendix A – Methodology

## A.1 The Living in Wales Survey

The Welsh Assembly Government commissioned the 2008 Living in Wales survey which was managed by the Local Government Data Unit -Wales on their behalf. Addresses were randomly chosen across Wales from the Postcode Address File (PAF). The sample was structured to provide a minimum of 300 successful interviews in each local authority. Interviewers conducted an interview with a household if the address was occupied and was not a second or holiday home. The interview survey was extensive and collected a wide range of household data including incomes, occupancy levels economic status. The physical survey was carried out by trained surveyors and provided detailed data relating to the physical nature of the dwellings including construction type, dimensions, physical condition, windows, heating systems, heating fuels and insulation. The 'core' cases for which both an interview and physical survey were obtained were used to calculate the fuel poverty statistics. Grossing factors were provided by MORI.

### A.2 The Fuel Poverty Methodology

The calculation of the fuel poverty statistics requires three component models: an energy consumption model, a fuel price model and an income model. A short description of the methodology is presented below; a more detailed explanation of the Fuel Poverty Methodology can be found on the Fuel Poverty section of the DECC website. The models used to calculate the 2008 fuel poverty statistics are the same as those used to calculate the 2004 statistics. All three models were originally designed for use with English House Condition Survey data. The

models were adapted to run the 2004 LiW data maintaining, as far as possible, consistency in the fuel poverty calculations for the two countries. All updates to the models that have been applied for the EHCS data have also been applied to the LiW models. A full description of all methodological updates is published alongside the annual Fuel Poverty reports on the Department for Energy and Climate Change website<sup>11</sup>. The main modifications are described in the relevant sections below.

## **Calculating Energy Consumption**

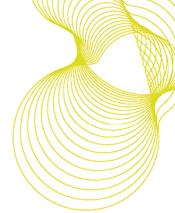
Energy consumption and fuel costs for each dwelling were calculated surveyed BREDEM 12 (BRE Domestic Energy Model). The model calculates energy use from space and water heating, lights and appliances and cooking. Two sets of input variables are required for the operation of the model. The core set is required for the calculation of SAP and provides information on the construction type, installed insulation measures and heating system. As part of this core process, a 'dimensions model' is used to calculate the heated volume and the areas of the external surfaces of each dwelling and the SEDBUK (Seasonal Efficiency of Domestic Boilers in the UK) database is used to determine the efficiencies of domestic boilers. The second group of variables is required for the BREDEM calculations and they are information on the detailed heating regime and the regional location of each dwelling.

A new algorithm for thermal bridging, published in the SAP 2005 specification, has been included in the calculation of heating costs. This accounts for non-repeating thermal bridges. The dimensions model has been revised in 2005.

A 'fourth heating regime' was implemented in 2007. This regime (known as the 'partial standard regime') is applied for all households

1

http://www.decc.gov.uk/en/content/cms/statistics/fuelpov\_stats/fuelpov\_stats.aspx



which are considered to be under-occupying their homes and which are also out of the house on weekdays. The regime consists of half house heating for 9 hours per day on weekdays and 16 hours per day at the weekend. Prior to this all under-occupying households were considered to heat half the house for 16 hours per day on all days of the week.

Our best estimate of the effect of the changes to the energy model (thermal bridging and fourth heating regime) is an increase in the numbers of fuel poor households of ~40,000. This is the net effect as the improvement to the thermal bridging algorithm will have acted to increase fuel poverty and the effect of the fourth heating regime will have been to reduce fuel poverty. The effect of the change in the dimensions model on the numbers of households in fuel poverty in Wales cannot be determined. However, if the changes are broadly similar to those seen in England in 2005, we would estimate a small increase of <4,000 households.

#### **Calculating Fuel Prices**

The fuel price model generates a case by case output to be fed into the energy consumption model. The price each household pays for its fuel depends on four main factors:

The household's location within the country (fuel prices vary regionally)

The choice of supplier

The choice of tariff

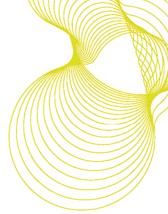
The method of payment where relevant (i.e. payment by direct debit, credit etc).

Wales is treated as a single Government Office Region by the Fuel Price model. A mean gas price for Wales was provided by the DECC using the Quarterly Domestic Fuels Inquiry. For electricity, the DECC provided electricity prices for the two DNOs (Distribution Network Operator)

that serve Wales: Manweb which covers North Wales and Western Power Distribution which covers South Wales. A mean electricity price for Wales was calculated by weighting the two suppliers prices by the number of households in each DNO region. The price of non-metered fuels is obtained from Sutherland Tables. These are independently produced reports which provide the average prices paid for fuels, split into four broad geographical regions. The reports are published twice yearly; once in May and once in October. The October price is used for fuel poverty calculations. The data methodology for the Sutherland Tables changed in October 2007 to employ a sample of prices collected over the preceding six months, rather than the price in the month of publication. It is not possible to directly determine the effect of this change on the fuel poverty calculations.

#### **Calculating Incomes**

The income model uses variables from the LiW interview survey to produce a value for income of the Household Reference Person (HRP) and any partner. This is combined with information on income from additional benefit units, winter fuel payment, housing benefit, Support for Mortgage Interest, Mortgage Payment Protection Insurance and council tax benefit to create 'basic' and 'full' household income variables. As in the 2004 data, several variables in the survey required significant imputations due to missing data. Those variables for which more than 10% of the data were missing were: private incomes, state benefit income received, savings income, income from additional benefit units (ABU), Winter Fuel Payments (WFP), council tax benefit amount and council tax band variables. Of these variables, the amount of income from state benefits, winter fuel payments, housing benefit and council tax benefit can be modelled accurately and the potential error lies in the assumption that all households eligible for winter fuel payments actually take them up.



Data on incomes from additional benefit units<sup>12</sup> is not collected in the LiW survey. This information could potentially be derived from two questions asked of the householder, one regarding the total gross income for the HRP and partner, and the second regarding total household income (i.e. including all ABUs). In 2004, a procedure was used in which cases with missing ABU incomes were imputed using sample means from cases with their ABU income amounts present. However, this method required approximately 75% of cases with at least one ABU present to be imputed. For the 2008 data, the method has been improved so that an income amount for each additional adult in a household is imputed by a 'hot decking' technique using data from the 2008 English Housing Survey. The variables used for the imputation were sex, age band and working status.

For savings, 14% of cases refused to answer/did not know whether or not they had any savings. CHAID analysis was used to determine the likelihood of these cases having a savings amount. From this, 82% of the group (grossed) were set to having savings. Of those that stated being in receipt of savings and those set to being in receipt of savings, 45% (grossed) did not provide an amount. For these cases, an imputation method based on CHAID was used.

Council tax bands (29% of cases with missing information) were imputed using the following

method: all cases were sorted by unitary authority and number of bedrooms. The file was then weighted, split by these two variables and the modal band is taken for each sub group. This value was then assigned to the missing cases in that group.

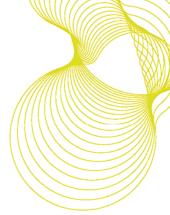
The imputation procedure for low income households has been changed following a full review of this methodology undertaken for the EHCS fuel poverty modelling. Under the old methodology, if a household's income was calculated to be below basic income support and the household was in receipt of one or more of the main benefits, then their income would be replaced or imputed to that basic income support level. If the household did not report receiving one of these benefits, their income was imputed to a group average for households of their type.

In the latest modelling, low incomes are now imputed for just two groups; elderly and lone parent households. Where the incomes of elderly households (HRP or partner over pension age) are below basic state pension they are imputed to the basic state pension level. Where they are above this level but below the level of the guarantee element of pension credit, they are imputed to an average calculated for a group of households that share similar characteristics. Lone parent households will have their incomes imputed to the theoretical minimum amount if their income is found to be below that amount (income support plus child premiums).

This means that there will be households in the dataset with very low and even negative incomes. When calculating the fuel poverty ratio for each household, any negative ratios (due to their incomes being negative) have been reset to 1. This modelling change, when implemented for the EHCS data resulted in no overall effect on the level of fuel poverty but did result in an increase in the severity of fuel poverty among low-income groups. It is predicted that a similar outcome is to be expected for the LiW data.

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Benefit units are single people or couples, with or without dependent children, who could potentially claim means-tested benefits in their own right. Most households consist of one primary benefit unit (PBU) although about 16% consist of two or more benefit units. These additional benefit units (ABU) normally comprise just one person e.g. a single non-dependent adult who is living with their parents or an elderly person who has moved in with his/her adult children but sometimes include single people with dependent children and couples (with or without children). Where there are single adults sharing a house e.g. a group of students, each person is classed as a separate benefit unit. Household income includes income from all benefit units that make up the household.



#### **Validation**

The outputs from all three models were validated using both internal consistency checks and external checks against previous years English Fuel Poverty data. Other external datasets used for validation of the individual components of the fuel poverty calculations are DUKES and the Domestic Energy Factfile for energy consumption, EnergyWatch for fuel prices and the 2008 Family Resources Survey (FRS) for some general income comparisons.

## A.3 Sampling error

The Living in Wales survey sample was conducted on a random sample of addresses chosen across Wales from the Postcode Address File (PAF). The sample was stratified and the responses have been weighted to represent Wales. All estimates presented in this report are therefore subject to a degree of uncertainty as any sample survey suffers from two types of error:

- 1. sampling error, a result of using a sample of a population to draw conclusions about the whole population *and*
- 2. measurement error, due to inaccuracies in individual measurements of survey variables.

For this report we consider the sampling errors only as the measurement errors are particularly hard to quantify. The method used to assess the magnitude of the sampling error is to calculate the confidence interval for an estimate. This is the interval, in this case chosen to be 95%, within which one can be reasonably confident that the true value lies. When estimating standard errors for a sample which is not simple, a correction factor, known as a design factor, should be used. However, these are complex to calculate and have not been carried out for the LiW sample. No adjustment has therefore been made but it should be kept in mind that design factors of around 20% could be possible.

In order to calculate the confidence interval of a statistic, the standard error of the percentage is calculated by:

 $Se(p) = \sqrt{(p(100-p)/n)}$ 

Where: p is the percentage estimate (in this case of fuel poor) and n is the unweighted sample size. The standard errors for all of the variables presented in the main report are shown in Table A1. For example, the data show that 26.2% of Welsh households are estimated to be fuel poor. The standard error of this estimate is 0.8%. giving a 95% confidence interval of 26% +/- 1.6% which means that we are 95% confident that the percentage of households in fuel poverty in Wales is between 24.6% and 27.8%. As the reliability of an estimate also depends on the size of the estimate itself we have calculated the percentage standard error. This is calculated as the standard error as a percentage of the estimate itself. For the estimate of number of fuel poor households in Wales this results in a percentage standard error of 3% (i.e.0.8/26.2\*100). The same calculation can be performed for all of the variables using the numbers presented in columns 1 and 2 in the table. For certain sub-groups, the number of sample cases is very small which tends to increase the margin of error. For example, the estimated percentage of fuel poor households in post-2002 dwellings was 7% but the 95% margin of error was +/- 6.3%. The percentage standard error of this estimate was therefore 44%. In this report, only statistics with a percentage standard error of less than 20% have been reported where sensible, sub-groups of variables have been combined to reduce the standard error. Those variables for which this was not possible have been replaced by an asterisk (\*) as they are considered too unreliable to be reported on.

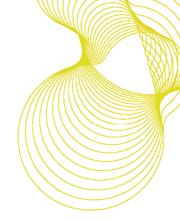
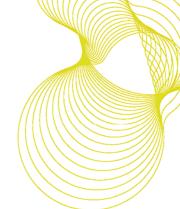
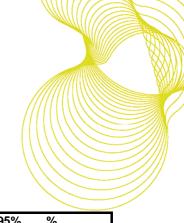


Table A1. Standard errors of variables in the 2008 Living in Wales Survey dataset.

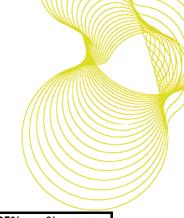
Variable	Sample size (not weighted)	Fuel poor sample size (not weighted)	% fuel poor (from weighted sample) [x]	Standard error of the %	95% CI (%)	% standard error
All households	2741	725	26	0.8	1.6	3
Vulnerable households	2144	615	29	1.0	1.9	3
Non-vulnerable households	597	110	16	1.5	3.0	9
Vulnerability						
Anyone 60+ years old	1145	373	34	1.4	2.7	4
Anyone < 16	770	149	19	1.4	2.8	7
Anyone long term sick/disabled	1000	300	31	1.5	2.9	5
Severity of FP						
up to 5%	2741	0	0			
5% to 10 %	2741	0	0			
10% to 15%	2741	427	59	0.9	1.8	2
15% to 20%	2741	168	23	0.8	1.6	3
over 20%	2741	130	18	0.7	1.4	4
Severity of FP in vulnerable households						
up to 5%	2144	0	0			
5% to 10 %	2144	0	0			
10% to 15%	2144	365	59	1.1	2.1	2
15% to 20%	2144	141	22	0.9	1.8	4
over 20%	2144	109	18	0.8	1.6	5
Tenure						
Owner Occupied	1791	456	25	1.0	2.0	4
Private Rented	251	85	36	3.0	5.9	8
Local Authority	451	127	28	2.1	4.1	8
Housing Association	248	57	24	2.7	5.3	11
Household size						
1	733	322	46	1.8	3.6	4
2	1030	255	24	1.3	2.6	6
3	443	67	15	1.7	3.3	11
4 or more	535	81	14	1.5	3.0	11
Household composition						
Single pensioner	414	199	53	2.5	4.8	5
Married couple pensioner	292	77	28	2.6	5.1	9
Single person, not a pensioner	319	123	37	2.7	5.3	7
Two adult household, not pensioners, without children	566	109	18	1.6	3.2	9
Single parent households	341	112	33	2.5	5.0	8



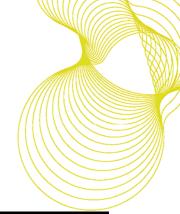
Variable	Sample size (not weighted)	Fuel poor sample size (not weighted)	% fuel poor (from weighted sample) [x]	Standard error of the %	95% CI (%)	% standard error
Two adult household with children	764	97	12	1.2	2.3	10
Other	45	8	21	6.1	11.9	29
Age of Household Reference	Person					
16 - 24	88	39	40	5.2	10.2	13
25 - 34	325	54	16	2.0	4.0	13
35 - 49	737	139	18	1.4	2.8	8
50 - 59	532	129	22	1.8	3.5	8
60 - 74	736	232	33	1.7	3.4	5
75 - 84	264	101	40	3.0	5.9	7
85 or more	59	31	50	6.5	12.8	13
Age of Oldest Person in hous	sehold					
16 - 24	73	33	40	5.7	11.3	14
25 - 34	294	52	17	2.2	4.3	13
35 - 49	716	132	17	1.4	2.8	8
50 - 59	513	135	24	1.9	3.7	8
60 - 74	780	232	32	1.7	3.3	
75 - 84	287	102	38	2.9	5.6	8
85 or more	78	39	46	5.6	11.1	12
Age of Youngest Person in he	ousehold					
0 - 4	315	71	22	2.3	4.6	11
5 - 10	265	47	17	2.3	4.5	14
11 - 15	190	31	15	2.6	5.1	17
16 - 24	284	55	16	2.2	4.2	14
25 - 59	834	200	23	1.5	2.8	(
60 - 74	603	206	37	2.0	3.8	į
75 - 84	207	89	46	3.5	6.8	8
85 or more	43	26	58	7.5	14.8	13
Ethnicity of household						
White	2703	716	26	0.8	1.7	3
Ethnic minority**	38	9	23	6.8	13.3	30
Unknown**	0	0	0			
Working status of household						
Working	1498	196	12	0.9	1.7	7
Unemployed	89	54	63	5.1	10.1	8
Inactive	1149	472	44	1.5	2.9	3
Unknown**	5	3	50	22.4	43.8	45



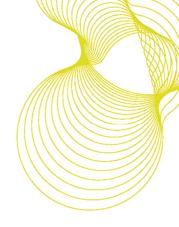
Variable	Sample size (not weighted)	Fuel poor sample size (not weighted)	% fuel poor (from weighted sample) [x]	Standard error of the %	95% CI (%)	% standard error
Banded income (deciles)						
1st decile (lowest)	290	266	94	1.4	2.8	2
2nd decile	307	183	63	2.7	5.4	4
3rd decile	296	99	38	2.8	5.5	7
4th decile	283	64	24	2.5	5.0	11
5th decile	281	39	14	2.1	4.1	15
6th decile	275	35	13	2.0	4.0	16
7th to 10th decile	1009	39	4	0.6	1.2	16
Receipt of any benefit						
No	926	190	20	1.3	2.6	7
Yes	1815	535	30	1.1	2.1	4
Eligible for a HEES benefit						
No	2424	615	25	0.9	1.7	4
Yes	317	110	37	2.7	5.3	7
Eligible for a HEES Plus bene						
No	1805	414	22	1.0	1.9	4
Yes	936	311	36	1.6	3.1	4
Eligible for a HEES or HEES F	Plus benefit					
No	1696	373	21	1.0	1.9	5
Yes	1045	352	36	1.5	2.9	4
Under-occupancy						
Not under-occupying	1714	353	20	1.0	1.9	5
Under-occupying	1027	372	35	1.5	2.9	4
Age of Dwelling						
Pre 1850	114	55	47	4.7	9.2	10
1850 - 1899	305	120	39	2.8	5.5	7
1900 - 1918	345	108	32	2.5	4.9	8
1919 - 1944	279	79	29	2.7	5.3	9
1945 - 1964	618	175	27	1.8	3.5	7
1965 - 1975	421	95	21	2.0	3.9	9
1976 - 1981	179	33	18	2.9	5.6	16
1982 - 1990	209	30	14	2.4	4.7	17
Post 1990	271	30	11	1.9	3.7	17
Dwelling type	000					
End terrace	308	79	26	2.5	4.9	10
Mid terrace	606	143	24	1.7	3.4	7
Semi detached	841	224	26	1.5	3.0	6
Detached	720	218	29	1.7	3.3	6
Purpose built flat	226	40	18	2.6	5.1	14



Variable	Sample size (not weighted)	Fuel poor sample size (not weighted)	% fuel poor (from weighted sample) [x]	Standard error of the %	95% CI (%)	% standard error
Converted flat (including non- residential plus flat)	40	21	52	7.9	15.5	15
Dwelling size						
<60	282	50	19	2.3	4.5	12
60-80	622	159	26	1.8	3.4	7
80-100	785	211	27	1.6	3.1	6
100-120	382	98	24	2.2	4.3	9
120-150	271	60	21	2.5	4.8	12
>150	399	147	35	2.4	4.7	7
Council tax band						
Α	354	102	31	2.5	4.8	8
В	664	195	30	1.8	3.5	6
С	455	104	22	1.9	3.8	9
D	746	196	25	1.6	3.1	6
E	284	62	21	2.4	4.8	11
F	124	33	26	3.9	7.7	15
G	70	19	27	5.3	10.4	20
H and I**	44	14	32	7.0	13.7	22
Central heating						
Central heating present	2689	692	25	0.8	1.6	3
Central heating not present	52	33	65	6.6	13.0	10
Main heating system						
Boiler system with radiators	2540	644	25	0.9	1.7	3
Storage radiators	124	46	37	4.3	8.5	12
Warm air/other systems**	6	0	0	0.0	0.0	
Room/portable heaters	52	33	65	6.6	13.0	10
Communal**	19	2	11	7.1	13.9	66
Type of boiler						
Standard boiler (floor or wall)	654	191	29	1.8	3.5	6
Back boiler (to fire or stove)	495	172	35	2.1	4.2	6
Combination boiler	912	213	22	1.4	2.7	6
Condensing boiler**	50	8	13	4.8	9.4	36
Condensing-combination boiler	437	60	14	1.7	3.3	12
No boiler	193	81	43	3.6	7.0	8
Main heating fuel						
Mains gas	2132	446	21	0.9	1.7	4
Bottled gas/LPG	50	28	53	7.1	13.8	13
Heating oil	306	149	47	2.9	5.6	6
Solid fuel	85	39	48	5.4	10.6	11
Electricity (standard tariff)	27	16	60	9.4	18.4	16



Variable	Sample size (not weighted)	Fuel poor sample size (not weighted)	% fuel poor (from weighted sample) [x]	Standard error of the %	95% CI (%)	% standard error
Electricity (off peak)	122	45	37	4.4	8.6	12
Communal heating**	19	2	11	7.1	13.9	66
Method of payment for gas						
Direct Debit	1185	186	16	1.1	2.1	7
Standard credit	583	166	29	1.9	3.7	7
Pre-payment	426	123	31	2.2	4.4	7
Method of payment for electric	icity					
Direct Debit	1425	294	21	1.1	2.1	5
Standard credit	736	249	34	1.8	3.4	5
Pre-payment	580	182	32	1.9	3.8	6
Off the gas network	230	. 32	32	0	3.3	· ·
On the gas network	2156	462	21	0.9	1.7	4
Off the gas network	585	263	44	2.1	4.0	5
Level of loft insulation						
No Loft Space	145	26	20	3.3	6.5	17
0	110	53	50	4.8	9.3	10
1 - 50	234	75	31	3.0	5.9	10
51 - 100	800	213	26	1.6	3.0	6
101 - 150	453	99	21	1.9	3.7	9
151 - 200	312	92	30	2.6	5.1	9
> 200	687	167	23	1.6	3.2	7
Cavity walls?						
Yes	1888	416	21	0.9	1.8	4
No	853	309	36	1.6	3.2	5
Cavity wall insulation						
Yes	853	182	21	1.4	2.7	7
No	1035	234	22	1.3	2.5	6
Banded SAP						
< 35	381	221	58	2.5	5.0	4
35 to <65	1879	458	24	1.0	1.9	4
>= 65	481	46	9	1.3	2.6	14
Urban or rural						
Rural	946	330	34	1.5	3.0	5
Urban	1795	395	22	1.0	1.9	4
Region						
North Wales	610	177	28	1.8	3.5	7
Mid Wales	542	195	35	2.0	4.0	6
South Wales	1589	353	23	1.0	2.1	5



## Appendix B - Detailed Tables - All Households

Table B2.1a Headline figures - Full Income Definition Table B2.1b Headline figures - Basic Income Definition Table B2.2a Vulnerable Households - Full Income Definition Table B2.2b Vulnerable Households - Basic Income Definition Table B2.2c Vulnerability of Households - Full Income Definition Table B2.2d Vulnerability of Households - Basic Income Definition Table B2.3a Severity of Fuel Poverty - Full Income Definition Table B2.3b Severity of Fuel Poverty in Vulnerable Households - Full Income Definition Table B2.3c Severity of Fuel Poverty - Basic Income Definition Table B2.3d Severity of Fuel Poverty in Vulnerable Households - Basic Income Definition Table B3.1a Tenure - Full Income Definition Table B3.1b Tenure - Basic Income Definition Table B3.2a Household size - Full Income Definition Table B3.2b Household size - Basic Income Definition Table B3.2c Household composition - Full Income Definition Table B3.2d Household composition - Basic Income Definition Table B3.3a Age of Household Reference Person - Full Income Definition Table B3.3b Age of Household Reference Person - Basic Income Definition Table B3.3c Age of Oldest Person in Household - Full Income Definition Table B3.3d Age of Oldest Person in Household - Basic Income Definition Table B3.3e Age of Youngest Person in Household - Full Income Definition Table B3.3f Age of Youngest Person in Household - Basic Income Definition Table B3.4a Ethnicity of Household - Full Income Definition Table B3.4b Ethnicity of Household - Basic Income Definition Table B3.5a Working status of Household - Full Income Definition Table B3.5b Working status of Household - Basic Income Definition Table B3.6a Banded Income - Full Income Definition Table B3.6b Banded Income - Basic Income Definition Table B3.7a Receipt of any benefit - Full Income Definition Table B3.7b Receipt of any benefit - Basic Income Definition Table B3.7c Eligible for HEES - Full Income Definition Table B3.7d Eligible for HEES - Basic Income Definition Table B3.7e Eligible for HEES Plus - Full Income Definition Table B3.7f Eligible for HEES Plus - Basic Income Definition Table B3.7g Eligible for HEES or HEES Plus - Full Income Definition Table B3.7h Eligible for HEES or HEES Plus - Basic Income Definition Table B3.8a Under-occupancy - Full Income Definition Table B3.8b Under-occupancy - Basic Income Definition Table B4.1a Age of Dwelling - Full Income Definition Table B4.1b Age of Dwelling - Basic Income Definition Table B4.2a Dwelling Type - Full Income Definition

Table B4.2b Dwelling Type - Basic Income Definition Table B4.3a Dwelling Size - Full Income Definition

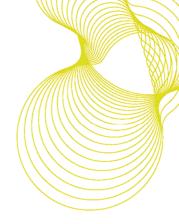


Table B4.3b Dwelling Size - Basic Income Definition

Table B4.4a Council tax band of dwelling - Full Income Definition

Table B4.4b Council tax band of dwelling - Basic Income Definition

Table B4.5a Central Heating - Full Income Definition

Table B4.5b Central Heating - Basic Income Definition

Table B4.6a Main heating system - Full Income Definition

Table B4.6b Type of boiler - Basic Income Definition

Table B4.6c Type of boiler - Full Income Definition

Table B4.6d Main heating system - Basic Income Definition

Table B4.6e Main heating fuel - Full Income Definition

Table B4.6f Main heating fuel - Basic Income Definition

Table B4.7a Off the Gas Network - Full Income Definition

Table B4.7b Off the Gas Network - Basic Income Definition

Table B4.8a Method of Payment for Gas - Full Income Definition

Table B4.8b Method of Payment for Gas - Basic Income Definition

Table B4.8c Method of Payment for Electricity - Full Income Definition

Table B4.8d Method of Payment for Electricity - Basic Income Definition

Table B4.9a Level of Loft Insulation - Full Income Definition

Table B4.9b Level of Loft Insulation - Basic Income Definition

Table B4.10a Cavity walls predominant? - Full Income Definition

Table B4.10b Cavity walls predominant? - Basic Income Definition

Table B4.10c Cavity walls insulated? - Full Income Definition

Table B4.10d Cavity walls insulated? - Basic Income Definition

Table B4.11a Banded SAP - Full Income Definition

Table B4.11b Banded SAP - Basic Income Definition

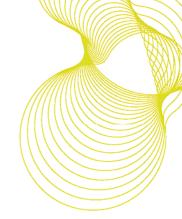
Table B5.1a Urban or Rural - Full Income Definition

Table B5.1b Urban or Rural - Basic Income Definition

Table B5.2a Geographical Region - Full Income Definition

Table B5.2b Geographical Region - Basic Income Definition

Note: As described in Appendix A.3 of the main report, statistics with a percentage standard error of greater than 20% have not been reported on due to their unreliability. These statistics have been replaced by an asterisk (\*) in the following tables.



## **Headline Figures**

Table B2.1a Headline figures - Full Income Definition

Table Balla Headille	9400	
	No. of house- holds (000s)	% of house- holds
Fuel Poor	332	26.2
Not Fuel Poor	936	73.8
Total	1,268	100.0

Table B2.1b Headline figures - Basic Income Definition

	No. of house- holds (000s)	% of house- holds
Fuel Poor	356	28.1
Not Fuel Poor	912	71.9
Total	1,268	100.0

Table B2.2a Vulnerable Households - Full Income Definition

		Fuel Poor			el Poor	Total				
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Vulnerable	285	(85.9)	29.1	695	(74.3)	70.9	980	(77.3)	100	
Not vulnerable	47	(14.1)	16.3	241	(25.7)	83.7	288	(22.7)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1268	(100.0)	100	

Table B2.2b Vulnerable Households - Basic Income Definition

		Fuel Poor			el Poor		Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Vulnerable	310	(87.2)	31.7	670	(73.5)	68.3	980	(77.3)	100
Not vulnerable	46	(12.8)	15.9	242	(26.5)	84.1	288	(22.7)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1268	(100.0)	100

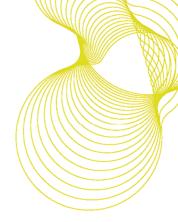


Table B2.2c Vulnerability of Households - Full Income Definition

			Fuel Poor			Not Fuel P	oor		Total	
•		No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Household contains anyone 60+ years	Yes	183	(55.1)	20.3	353	(37.6)	65.8	536	(42.2)	100
	No	149	(44.9)	34.2	584	(62.4)	79.7	733	(57.8)	100
	Total	332	(100.0)	26.2	936	(100.0)	73.8	1268	(100.0)	100
Someone < 16 years old	Yes	64	(19.3)	18.5	282	(30.1)	81.5	346	(27.3)	100
	No	268	(80.7)	29.0	654	(69.9)	71.0	922	(72.7)	100
	Total	332	(100.0)	26.2	936	(100.0)	73.8	1268	(100.0)	100
Someone long term sick/disabled	Yes	138	(41.6)	31.4	302	(32.3)	68.6	440	(34.7)	100
	No	194	(58.4)	23.4	634	(67.7)	76.6	828	(65.3)	100
	Total	332	(100.0)	26.2	936	(100.0)	73.8	1268	(100.0)	100

Table B2.2d Vulnerability of Households - Basic Income Definition

			Fuel Poor			Not Fuel P	oor		Total	
•		No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Household contains anyone 60+ years	Yes	183	(51.2)	34.1	353	(38.7)	65.9	536	(42.2)	100
•	No	174	(48.8)	23.7	559	(61.3)	76.3	733	(57.8)	100
	Total	356	(100.0)	28.1	912	(100.0)	71.9	1268	(100.0)	100
Someone < 16 years old	Yes	82	(23.0)	23.7	264	(29.0)	76.3	346	(27.3)	100
2 2	No	274	(77.0)	29.7	648	(71.0)	70.3	922	(72.7)	100
	Total	356	(100.0)	28.1	912	(100.0)	71.9	1268	(100.0)	100
Someone long term sick/disabled	Yes	156	(43.8)	35.4	284	(31.2)	64.6	440	(34.7)	100
Sick/disabled	No	200	(56.2)	24.2	628	(68.8)	75.8	828	(65.3)	100
	Total	356	(100.0)	28.1	912	(100.0)	71.9	1268	(100.0)	100

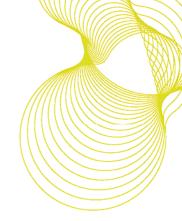


Table B2.3a Severity of Fuel Poverty - Full Income Definition

Table B2.3a Seventy	No. of house- holds	% of house-holds	Mean fuel expendi	Mean Full househ	Mean Sap Rating
	(000s)		ture	old income	
up to 5%	406	32.0	1,250	37,850	57
5% to 10 %	530	41.8	1,392	19,981	51
10% to 15%	197	15.5	1,541	12,793	45
15% to 20%	75	5.9	2,032	12,046	36
over 20%	60	4.8	2,262	7,761	34
Total	1,268	100.0	1,449	23,535	50

Table B2.3b Severity of Fuel Poverty - Basic Income Definition

	No. of house- holds (000s)	% of house- holds	Mean fuel expendi ture	Mean Full househ old income	Mean Sap Rating
up to 5%	425	33.5	1,269	38,545	56
5% to 10 %	488	38.4	1,413	20,255	51
10% to 15%	212	16.7	1,526	12,647	46
15% to 20%	79	6.3	1,944	11,408	39
over 20%	65	5.1	2,039	6,934	39
Total	1,268	100.0	1,449	23,871	50

Table B2.3c Severity of Fuel Poverty in Vulnerable Households - Full Income Definition

	No. of house- holds (000s)	% of house- holds	Mean fuel expendi ture	Mean Full househ old income	Mean Sap Rating
up to 5%	260	26.5	1,299	37,561	57
5% to 10 %	436	44.4	1,384	19,727	52
10% to 15%	169	17.3	1,524	12,652	46
15% to 20%	63	6.4	2,021	11,984	36
over 20%	52	5.3	2,319	8,086	33
Total	980	100.0	1,477	22,103	50

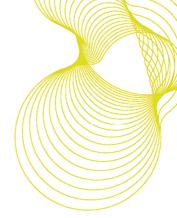


Table B2.3d Severity of Fuel Poverty in Vulnerable Households - Basic Income Definition

	No. of house- holds (000s)	% of house- holds	Mean fuel expendi ture	Mean Full househ old income	Mean Sap Rating
up to 5%	272	27.8	1,321	38,351	56
5% to 10 %	398	40.6	1,405	19,961	52
10% to 15%	185	18.9	1,503	12,435	47
15% to 20%	71	7.2	1,895	11,097	39
over 20%	54	5.5	2,150	7,427	37
Total	980	100.0	1,477	22,312	50

### **Household Characteristics**

Table B3.1a Tenure - Full Income Definition

	Fuel Poor			I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Owner Occupied	231	(69.7)	24.9	699	(74.6)	75.1	930	(73.3)	100	
Private Rented	41	(12.4)	36.0	73	(7.8)	64.0	115	(9.0)	100	
Local Authority	39	(11.8)	28.1	101	(10.7)	71.9	140	(11.0)	100	
Housing Association	20	(6.0)	23.8	64	(6.8)	76.2	84	(6.6)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B3.1b Tenure - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Owner Occupied	211	(59.2)	22.7	719	(78.8)	77.3	930	(73.3)	100	
Private Rented	55	(15.3)	47.6	60	(6.6)	52.4	115	(9.0)	100	
Local Authority	56	(15.9)	40.4	83	(9.1)	59.6	140	(11.0)	100	
Housing Association	34	(9.6)	40.9	50	(5.4)	59.1	84	(6.6)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

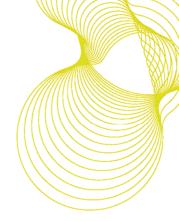


Table B3.2a Household size - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
1	148	(44.5)	45.7	175	(18.7)	54.3	323	(25.5)	100	
2	118	(35.5)	24.1	370	(39.5)	75.9	488	(38.5)	100	
3	31	(9.4)	15.0	177	(18.9)	85.0	208	(16.4)	100	
4 or more	35	(10.7)	14.2	214	(22.9)	85.8	250	(19.7)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B3.2b Household size - Basic Income Definition

	<u> </u>	Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
1	161	(45.1)	49.8	162	(17.8)	50.2	323	(25.5)	100
2	116	(32.7)	23.9	371	(40.7)	76.1	488	(38.5)	100
3	41	(11.4)	19.5	167	(18.4)	80.5	208	(16.4)	100
4 or more	38	(10.8)	15.4	211	(23.2)	84.6	250	(19.7)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

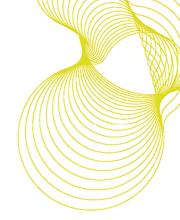


Table B3.2c Household composition - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Single pensioner	94	(28.4)	53.2	83	(8.9)	46.8	177	(14.0)	100
Married couple pensioner	40	(12.1)	27.6	105	(11.2)	72.4	145	(11.5)	100
Single person, not a pensioner	53	(16.1)	36.6	92	(9.9)	63.4	146	(11.5)	100
Two adult household, not pensioners, without children	50	(15.1)	18.4	222	(23.7)	81.6	272	(21.5)	100
Single parent households	46	(14.0)	33.4	93	(9.9)	66.7	139	(11.0)	100
Two adult household with children	43	(13.1)	11.8	325	(34.7)	87.8	369	(29.1)	100
Other	*	*	*	*	*	*	20	(1.6)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.2d Household composition - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Single pensioner	100	(28.2)	56.6	77	(8.4)	43.4	177	(14.0)	100
Married couple pensioner	37	(10.3)	25.1	109	(11.9)	74.9	145	(11.5)	100
Single person, not a pensioner	60	(17.0)	41.5	85	(9.3)	58.5	146	(11.5)	100
Two adult household, not pensioners, without children	48	(13.5)	17.7	224	(24.6)	82.3	272	(21.5)	100
Single parent households	63	(17.6)	45.1	76	(8.4)	54.9	139	(11.0)	100
Two adult household with children	43	(12.2)	11.8	325	(35.7)	88.2	369	(29.1)	100
Other	*	*	*	*	*	*	20	(1.6)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

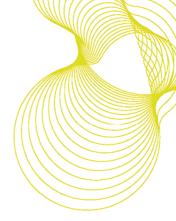


Table B3.3a Age of Household Reference Person - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	15	(4.4)	40.1	22	(2.3)	59.9	36	(2.9)	100
25 - 34	24	(7.3)	16.3	125	(13.4)	83.7	149	(11.8)	100
35 - 49	61	(18.3)	17.7	283	(30.3)	82.3	344	(27.1)	100
50 - 59	54	(16.3)	22.1	191	(20.4)	77.9	245	(19.3)	100
60 - 74	115	(34.6)	33.5	228	(24.3)	66.5	343	(27.0)	100
75 - 84	50	(15.2)	40.3	75	(8.0)	59.7	125	(9.9)	100
85 or more	13	(3.9)	49.8	13	(1.4)	50.2	26	(2.0)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.3b Age of Household Reference Person - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	17	(4.7)	45.8	20	(2.2)	54.2	36	(2.9)	100
25 - 34	30	(8.5)	20.4	119	(13.0)	79.6	149	(11.8)	100
35 - 49	74	(20.8)	21.5	270	(29.6)	78.5	344	(27.1)	100
50 - 59	57	(16.1)	23.4	188	(20.6)	76.6	245	(19.3)	100
60 - 74	113	(31.7)	33.0	230	(25.2)	67.0	343	(27.0)	100
75 - 84	51	(14.2)	40.4	75	(8.2)	59.6	125	(9.9)	100
85 or more	14	(4.0)	54.6	12	(1.3)	45.4	26	(2.0)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

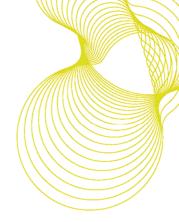


Table B3.3c Age of Oldest Person in Household - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	12	(3.7)	40.3	18	(2.0)	59.7	31	(2.4)	100
25 - 34	22	(6.7)	16.6	111	(11.9)	83.4	133	(10.5)	100
35 - 49	58	(17.4)	17.4	275	(29.3)	82.6	333	(26.2)	100
50 - 59	57	(17.1)	24.0	180	(19.2)	76.0	236	(18.6)	100
60 - 74	115	(34.7)	31.6	249	(26.6)	68.4	364	(28.7)	100
75 - 84	51	(15.4)	37.9	84	(9.0)	62.1	135	(10.7)	100
85 or more	17	(5.0)	46.2	19	(2.1)	53.8	36	(2.8)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.3d Age of Oldest Person in Household - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house-holds	% of group
16 - 24	15	(4.2)	48.3	16	(1.7)	51.7	31	(2.4)	100
25 - 34	29	(8.1)	21.7	104	(11.4)	78.3	133	(10.5)	100
35 - 49	71	(19.8)	21.2	262	(28.7)	78.8	333	(26.2)	100
50 - 59	59	(16.7)	25.1	177	(19.4)	74.9	236	(18.6)	100
60 - 74	114	(32.1)	31.4	250	(27.4)	68.6	364	(28.7)	100
75 - 84	51	(14.4)	38.0	84	(9.2)	62.0	135	(10.7)	100
85 or more	17	(4.7)	46.8	19	(2.1)	53.2	36	(2.8)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

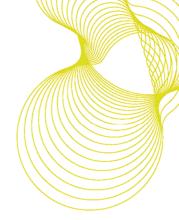


Table B3.3e Age of Youngest Person in Household - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
0 - 4	31	(9.2)	21.8	110	(11.8)	78.2	141	(11.1)	100
5 - 10	21	(6.2)	17.1	99	(10.6)	82.9	120	(9.5)	100
11 - 15	13	(3.9)	15.1	73	(7.8)	84.9	86	(6.7)	100
16 - 24	21	(6.5)	15.9	114	(12.2)	84.1	135	(10.7)	100
25 - 59	89	(26.8)	22.7	304	(32.4)	77.3	393	(31.0)	100
60 - 74	103	(30.9)	36.8	176	(18.8)	63.2	279	(22.0)	100
75 - 84	45	(13.4)	45.6	53	(5.7)	54.4	98	(7.7)	100
85 or more	10	(3.1)	57.9	7	(.8)	42.1	18	(1.4)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.3f Age of Youngest Person in Household - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
0 - 4	37	(10.4)	26.4	104	(11.4)	73.6	141	(11.1)	100
5 - 10	26	(7.4)	21.8	94	(10.3)	78.2	120	(9.5)	100
11 - 15	19	(5.2)	21.8	67	(7.3)	78.2	86	(6.7)	100
16 - 24	23	(6.5)	17.1	112	(12.3)	82.9	135	(10.7)	100
25 - 59	93	(26.1)	23.7	300	(32.9)	76.3	393	(31.0)	100
60 - 74	100	(28.1)	36.0	178	(19.6)	64.0	279	(22.0)	100
75 - 84	46	(13.0)	47.4	51	(5.6)	52.6	98	(7.7)	100
85 or more	11	(3.2)	64.9	6	(.7)	35.1	18	(1.4)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

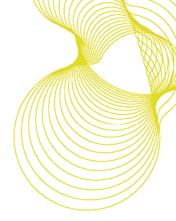


Table B3.4a Ethnicity of Household - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
White	328	(98.8)	26.2	923	(98.6)	73.8	1,251	(98.6)	100
Ethnic minority	*	*	*	*	*	*	17	(1.4)	100
Unknown	*	*	*	*	*	*		(.0)	0
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.4b Ethnicity of Household - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
White	350	(98.3)	28.0	901	(98.8)	72.0	1,251	(98.6)	100
Ethnic minority	*	*	*	*	*	*	17	(1.4)	100
Unknown	*	*	*	*	*	*		(.0)	0
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B3.5a Working status of Household - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Working	91	(27.3)	12.4	638	(68.1)	87.6	729	(57.4)	100
Unemployed	21	(6.3)	62.6	12	(1.3)	37.4	33	(2.6)	100
Inactive	219	(66.1)	43.5	285	(30.4)	56.5	504	(39.8)	100
Unknown	*	*	*	*	*	*	2	(.2)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

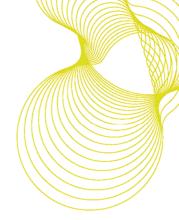


Table B3.5b Working status of Household - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Working	88	(24.6)	12.0	641	(70.3)	88.0	729	(57.4)	100	
Unemployed	25	(7.0)	75.4	8	(.9)	24.6	33	(2.6)	100	
Inactive	242	(68.0)	48.1	262	(28.7)	51.9	504	(39.8)	100	
Unknown	*	*	*	*	*	*	2	(.2)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

Table B3.6a Banded Income - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
1st decile (lowest)	119	(35.8)	93.8	8	(8.)	6.2	127	(10.0)	100	
2nd decile	80	(24.2)	63.4	46	(5.0)	36.6	127	(10.0)	100	
3rd decile	48	(14.6)	38.2	78	(8.4)	61.8	127	(10.0)	100	
4th decile	30	(9.1)	23.8	97	(10.3)	76.2	127	(10.0)	100	
5th decile	18	(5.5)	14.3	109	(11.6)	85.7	127	(10.0)	100	
6th decile	16	(5.0)	13.0	110	(11.8)	87.0	127	(10.0)	100	
7th to 10th deciles	19	(5.9)	3.8	488	(52.1)	96.2	508	(40.0)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

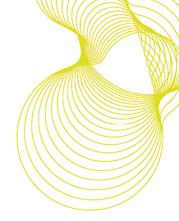


Table B3.6b Banded Income - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
1st decile (lowest)	121	(34.0)	95.6	6	(.6)	4.4	127	(10.0)	100
2nd decile	85	(24.0)	67.3	41	(4.5)	32.7	127	(10.0)	100
3rd decile	63	(17.7)	49.6	64	(7.0)	50.4	127	(10.0)	100
4th decile	31	(8.8)	24.8	95	(10.5)	75.2	127	(10.0)	100
5th decile	22	(6.1)	17.2	105	(11.5)	82.8	127	(10.0)	100
6th decile	16	(4.4)	12.3	111	(12.2)	87.7	127	(10.0)	100
7th to 10th deciles	18	(5.0)	3.5	490	(53.7)	96.5	508	(40.0)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B3.7a Receipt of any benefit - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	240	(72.2)	29.8	564	(60.2)	70.2	804	(63.4)	100	
No	92	(27.8)	19.9	372	(39.8)	80.1	465	(36.6)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B3.7b Receipt of any benefit - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	267	(74.8)	33.2	537	(58.9)	66.8	804	(63.4)	100
No	90	(25.2)	19.3	375	(41.1)	80.7	465	(36.6)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

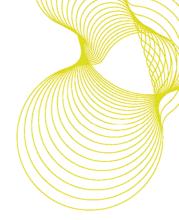


Table B3.7c Eligible for HEES - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	46	(13.7)	37.0	78	(8.3)	63.0	123	(9.7)	100
No	286	(86.3)	25.0	859	(91.7)	75.0	1,145	(90.3)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.7d Eligible for HEES - Basic Income Definition

		Fuel Poor		ļ	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	64	(18.1)	52.2	59	(6.5)	47.8	123	(9.7)	100
No	292	(81.9)	25.5	853	(93.5)	74.5	1,145	(90.3)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B3.7e Eligible for HEES Plus - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	141	(42.4)	35.7	254	(27.1)	64.3	394	(31.4)	100	
No	191	(57.6)	21.9	683	(72.9)	78.1	874	(68.9)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

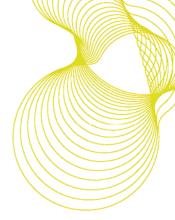


Table B3.7f Eligible for HEES Plus - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	174	(48.7)	44.0	221	(24.2)	56.0	394	(31.1)	100
No	183	(51.3)	20.9	691	(75.8)	79.1	874	(68.9)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B3.7g Eligible for HEES or HEES Plus - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	157	(47.2)	35.8	281	(30.0)	64.2	438	(34.5)	100	
No	175	(52.8)	21.1	656	(70.0)	78.9	831	(65.5)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B3.7h Eligible for HEES or HEES Plus - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	192	(53.8)	43.8	246	(27.0)	56.2	438	(34.5)	100	
No	165	(46.2)	19.8	666	(73.0)	80.2	831	(65.5)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

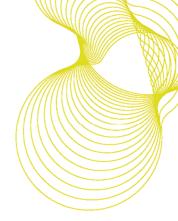
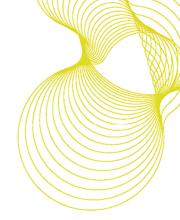


Table B3.8a Under-occupancy - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Not underoccupying	156	(47.1)	20.5	608	(64.9)	79.5	764	(60.2)	100
Underoccupying	176	(52.9)	34.8	329	(35.1)	65.2	504	(39.8)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B3.8b Under-occupancy - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Not underoccupying	183	(51.4)	24.0	581	(63.7)	76.0	764	(60.2)	100
Underoccupying	173	(48.6)	34.3	331	(36.3)	65.7	504	(39.8)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100



# **Dwelling Characteristics**

Table B4.1a Age of Dwelling - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Pre 1850	27	(8.0)	46.7	30	(3.2)	53.3	57	(4.5)	100
1850 - 1899	59	(17.7)	38.9	92	(9.9)	61.1	151	(11.9)	100
1900 - 1918	56	(16.9)	32.0	119	(12.7)	68.0	175	(13.8)	100
1919 - 1944	40	(12.0)	28.8	99	(10.6)	71.2	139	(10.9)	100
1945 - 1964	72	(21.8)	26.9	197	(21.0)	73.1	269	(21.2)	100
1965 - 1974	38	(11.5)	21.1	143	(15.2)	78.9	181	(14.3)	100
1975 - 1980	13	(4.0)	18.1	60	(6.4)	81.9	73	(5.7)	100
1981 - 1990	13	(3.9)	13.6	81	(8.7)	86.4	94	(7.4)	100
Post 1990	14	(4.3)	11.0	115	(12.3)	89.0	130	(10.2)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B4.1b Age of Dwelling - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Pre 1850	26	(7.3)	46.0	31	(3.4)	54.0	57	(4.5)	100
1850 - 1899	62	(17.4)	40.9	89	(9.8)	59.1	151	(11.9)	100
1900 - 1918	56	(15.7)	32.0	119	(13.0)	68.0	175	(13.8)	100
1919 - 1944	41	(11.6)	29.8	97	(10.7)	70.2	139	(10.9)	100
1945 - 1964	82	(22.9)	30.3	187	(20.6)	69.7	269	(21.2)	100
1965 - 1974	41	(11.6)	22.9	139	(15.3)	77.1	181	(14.3)	100
1975 - 1980	16	(4.6)	22.3	56	(6.2)	77.7	73	(5.7)	100
1981 - 1990	13	(3.8)	14.2	81	(8.9)	85.8	94	(7.4)	100
Post 1990	18	(5.1)	14.0	112	(12.2)	86.0	130	(10.2)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

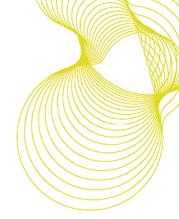


Table B4.2a Dwelling Type - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
End terrace	35	(10.6)	25.6	102	(10.9)	74.4	137	(10.8)	100
Mid terrace	65	(19.7)	23.7	211	(22.5)	76.3	276	(21.8)	100
Semi detached	100	(30.2)	25.8	289	(30.8)	74.2	389	(30.7)	100
Detached	104	(31.4)	29.0	255	(27.2)	71.0	359	(28.3)	100
Purpose built flat	16	(4.7)	18.4	69	(7.3)	81.6	84	(6.7)	100
Converted flats (+non-residential and flat)	11	(3.4)	51.6	11	(1.1)	48.4	22	(1.7)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B4.2b Dwelling Type - Basic Income Definition

		Fuel Poor		ļ	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
End terrace	38	(10.6)	27.6	99	(10.9)	72.4	137	(10.8)	100
Mid terrace	74	(20.8)	26.7	203	(22.2)	73.3	276	(21.8)	100
Semi detached	111	(31.2)	28.6	278	(30.5)	71.4	389	(30.7)	100
Detached	97	(27.3)	27.1	262	(28.7)	72.9	359	(28.3)	100
Purpose built flat	24	(6.6)	28.0	61	(6.7)	72.0	84	(6.7)	100
Converted flats (+non-residential and flat)	12	(3.4)	56.2	10	(1.0)	43.8	22	(1.7)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

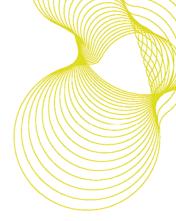


Table B4.3a Dwelling Size - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
<60	21	(6.4)	18.6	93	(9.9)	81.4	114	(9.0)	100
60-80	67	(20.3)	25.6	195	(20.8)	74.4	262	(20.7)	100
80-100	98	(29.5)	27.1	263	(28.1)	72.9	361	(28.5)	100
100-120	46	(13.7)	24.1	144	(15.4)	75.9	190	(14.9)	100
120-150	29	(8.8)	21.0	110	(11.7)	79.0	139	(10.9)	100
>150	71	(21.4)	35.1	131	(14.0)	64.9	202	(16.0)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B4.3b Dwelling Size - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
<60	31	(8.8)	27.4	83	(9.1)	72.6	114	(9.0)	100
60-80	80	(22.4)	30.4	183	(20.0)	69.6	262	(20.7)	100
80-100	104	(29.3)	28.9	257	(28.1)	71.1	361	(28.5)	100
100-120	43	(12.2)	22.9	146	(16.0)	77.1	190	(14.9)	100
120-150	29	(8.1)	20.9	110	(12.0)	79.1	139	(10.9)	100
>150	68	(19.2)	33.7	134	(14.7)	66.3	202	(16.0)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

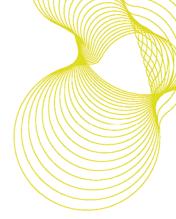


Table B4.4a Council tax band of dwelling - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Α	43	(12.9)	31.1	95	(10.2)	68.9	138	(10.9)	100
В	87	(26.1)	29.7	205	(21.9)	70.3	292	(23.0)	100
С	48	(14.4)	22.2	167	(17.9)	77.8	215	(17.0)	100
D	90	(27.3)	25.3	267	(28.5)	74.7	357	(28.2)	100
E	31	(9.4)	21.5	114	(12.2)	78.5	146	(11.5)	100
F	16	(4.9)	25.9	46	(4.9)	74.1	62	(4.9)	100
G	10	(2.9)	27.3	26	(2.7)	72.7	35	(2.8)	100
H and I	*	*	*	*	*	*	23	-2	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B4.4b Council tax band of dwelling - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Α	51	(14.3)	37.0	87	(9.5)	63.0	138	(10.9)	100
В	101	(28.5)	34.8	190	(20.9)	65.2	292	(23.0)	100
С	50	(14.1)	23.4	165	(18.1)	76.6	215	(17.0)	100
D	92	(25.9)	25.8	265	(29.1)	74.2	357	(28.2)	100
E	31	(8.6)	21.1	115	(12.6)	78.9	146	(11.5)	100
F	16	(4.4)	25.1	47	(5.1)	74.9	62	(4.9)	100
G	9	(2.4)	24.6	27	(2.9)	75.4	35	(2.8)	100
H and I	*	*	*	*	*	*	23	(1.8)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

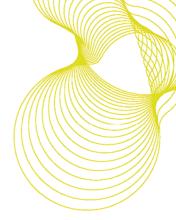


Table B4.5a Central Heating - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Central heating present	316	(95.3)	25.4	928	(99.1)	74.6	1,244	(98.1)	100
No central heating present	16	(4.7)	64.8	8	(.9)	35.2	24	(1.9)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B4.5b Central Heating - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Central heating present	341	(95.8)	27.4	903	(99.0)	72.6	1,244	(98.1)	100
No central heating present	15	(4.2)	61.5	9	(1.0)	38.5	24	(1.9)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B4.6a Main heating system - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Boiler system with radiators	295	(88.9)	25.0	885	(94.5)	75.0	1,180	(93.0)	100
Storage radiators	21	(6.2)	37.4	35	(3.7)	62.6	55	(4.3)	100
Warm air/other systems	*	*	*	*	*	*	3	0	100
Room/portable heaters	16	(4.7)	64.8	8	(.9)	35.2	24	(1.9)	100
Communal	*	*	*	*	*	*	6	1	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

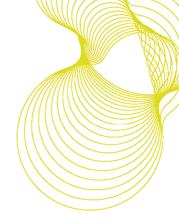


Table B4.6b Main heating system - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Boiler system with radiators	318	(89.3)	27.0	862	(94.5)	73.0	1,180	(93.0)	100
Storage radiators	22	(6.1)	39.2	34	(3.7)	60.8	55	(4.3)	100
Warm air/other systems	*	*	*	*	*	*	3	0	100
Room/portable heaters	15	(4.2)	61.5	9	(1.0)	38.5	24	(1.9)	100
Communal	*	*	*	*	*	*	6	1	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B4.6c Type of Boiler - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Standard boiler (floor or wall)	93	(27.9)	29.4	223	(23.8)	70.6	316	(24.9)	100
Back boiler (to fire or stove)	73	(22.1)	35.3	135	(14.4)	64.7	208	(16.4)	100
Combination boiler	97	(29.3)	22.4	337	(35.9)	77.6	434	(34.2)	100
Condensing boiler	*	*	*	*	*	*	25	(1.9)	100
Condensing- combination boiler	28	(8.5)	14.1	173	(18.4)	85.9	201	(15.8)	100
No boiler	37	(11.1)	43.4	48	(5.1)	56.6	85	(6.7)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

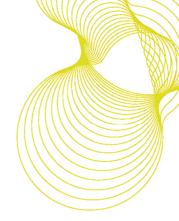


Table B4.6d Type of Boiler - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Standard boiler (floor or wall)	94	(26.3)	29.6	222	(24.4)	70.4	316	(24.9)	100
Back boiler (to fire or stove)	80	(22.3)	38.3	128	(14.1)	61.7	208	(16.4)	100
Combination boiler	105	(29.4)	24.1	329	(36.1)	75.9	434	(34.2)	100
Condensing boiler	*	*	*	*	*	*	25	(1.9)	100
Condensing- combination boiler	37	(10.4)	18.3	164	(18.0)	81.7	201	(15.8)	100
No boiler	38	(10.6)	44.5	47	(5.2)	55.5	85	(6.7)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B4.6e Main heating fuel - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Mains gas	207	(62.2)	20.8	786	(83.9)	79.2	992	(78.2)	100
Bottled gas/LPG	13	(4.0)	53.2	12	(1.2)	46.8	25	(2.0)	100
Heating oil	67	(20.1)	46.8	76	(8.1)	53.2	142	(11.2)	100
Solid fuel	18	(5.4)	48.3	19	(2.0)	51.7	37	(2.9)	100
Standard Electricity	7	(2.1)	60.4	5	(.5)	39.6	12	(.9)	100
Off peak Electricity	20	(6.0)	36.8	34	(3.7)	63.2	54	(4.3)	100
Communal heating	*	*	*	*	*	*	6	(.5)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

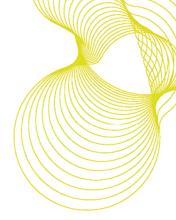


Table B4.6f Main heating fuel - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Mains gas	232	(65.1)	23.4	760	(83.4)	76.6	992	(78.2)	100
Bottled gas/LPG	13	(3.6)	51.6	12	(1.3)	48.4	25	(2.0)	100
Heating oil	66	(18.5)	46.3	76	(8.4)	53.7	142	(11.2)	100
Solid fuel	16	(4.5)	43.7	21	(2.3)	56.3	37	(2.9)	100
Standard Electricity	7	(1.9)	58.1	5	(.5)	41.9	12	(.9)	100
Off peak Electricity	21	(5.9)	38.6	33	(3.6)	61.4	54	(4.3)	100
Communal heating	*	*	*	*	*	*	6	(.5)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B4.7a Off the Gas Network - Full Income Definition

		Fuel Poor		ı	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Off the gas network	117	(35.3)	44.2	148	(15.8)	55.8	265	(20.9)	100	
On the gas network	215	(64.7)	21.4	789	(84.2)	78.6	1,003	(79.1)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B4.7b Off the Gas Network - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Off the gas network	116	(32.7)	43.9	149	(16.3)	56.1	265	(20.9)	100
On the gas network	240	(67.3)	23.9	763	(83.7)	76.1	1,003	(79.1)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

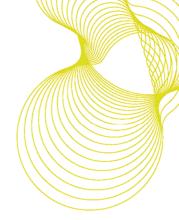


Table B4.8a Method of Payment for Gas - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Direct Debit	93	(42.2)	15.9	495	(61.9)	84.1	588	(57.6)	100	
Standard Credit	78	(35.2)	28.8	192	(24.1)	71.2	270	(26.5)	100	
Pre Payment	50	(22.5)	30.7	112	(14.1)	69.3	162	(15.9)	100	
Total	221	(100.0)	21.7	800	(100.0)	78.3	1,021	(100.0)	100	

Table B4.8b Method of Payment for Gas - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Direct Debit	94	(38.1)	16.0	494	(63.8)	84.0	588	(57.6)	100
Standard Credit	88	(35.6)	32.5	183	(23.6)	67.5	270	(26.5)	100
Pre Payment	65	(26.3)	40.0	97	(12.6)	60.0	162	(15.9)	100
Total	247	(100.0)	24.2	774	(100.0)	75.8	1,021	(100.0)	100

Table B4.8c Method of Payment for Electricity - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Direct Debit	145	(43.6)	20.5	561	(59.9)	79.5	705	(55.6)	100	
Standard Credit	117	(35.4)	34.3	224	(24.0)	65.7	342	(26.9)	100	
Pre Payment	70	(21.1)	31.6	151	(16.2)	68.4	221	(17.4)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

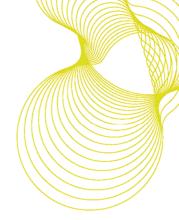


Table B4.8d Method of Payment for Electricity - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Direct Debit	144	(40.4)	20.4	562	(61.6)	79.6	705	(55.6)	100	
Standard Credit	124	(34.9)	36.4	217	(23.8)	63.6	342	(26.9)	100	
Pre Payment	88	(24.7)	39.8	133	(14.6)	60.2	221	(17.4)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

Table B4.9a Level of Loft Insulation - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
No Loft Space	11	(3.3)	19.7	45	(4.8)	80.3	56	(4.4)	100
0	27	(8.1)	49.8	27	(2.9)	50.2	54	(4.3)	100
1 - 50	35	(10.6)	31.4	77	(8.2)	68.6	112	(8.9)	100
51 - 100	101	(30.4)	26.2	283	(30.3)	73.8	384	(30.3)	100
101 - 150	43	(12.9)	20.8	162	(17.3)	79.2	205	(16.2)	100
151 - 200	42	(12.7)	29.6	100	(10.7)	70.4	142	(11.2)	100
>200	73	(22.1)	23.2	242	(25.8)	76.8	315	(24.8)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

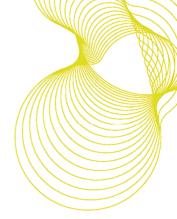


Table B4.9b Level of Loft Insulation - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
No Loft Space	17	(4.7)	30.2	39	(4.3)	69.8	56	(4.4)	100
0	27	(7.6)	50.1	27	(3.0)	49.9	54	(4.3)	100
1 - 50	34	(9.5)	30.1	79	(8.6)	69.9	112	(8.9)	100
51 - 100	106	(29.8)	27.6	278	(30.5)	72.4	384	(30.3)	100
101 - 150	46	(13.0)	22.6	159	(17.4)	77.4	205	(16.2)	100
151 - 200	44	(12.4)	31.1	98	(10.7)	68.9	142	(11.2)	100
>200	82	(23.0)	26.0	233	(25.6)	74.0	315	(24.8)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

Table B4.10a Cavity walls predominant? - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	182	(54.7)	21.3	670	(71.5)	78.7	851	(67.1)	100	
No	150	(45.3)	36.1	267	(28.5)	63.9	417	(32.9)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B4.10b Cavity walls predominant? - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	198	(55.5)	23.2	653	(71.6)	76.8	851	(67.1)	100	
No	158	(44.5)	38.0	259	(28.4)	62.0	417	(32.9)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

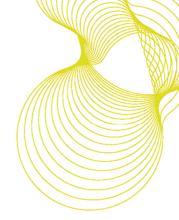


Table B4.10c Cavity walls insulated? - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	77	(42.6)	20.7	296	(44.2)	79.3	373	(43.8)	100	
No	104	(57.4)	21.8	374	(55.8)	78.2	478	(56.2)	100	
Total	182	(100.0)	21.3	670	(100.0)	78.7	851	(100.0)	100	

Table B4.10d Cavity walls insulated? - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	88	(44.6)	23.7	285	(43.6)	76.3	373	(43.8)	100	
No	110	(55.4)	22.9	369	(56.4)	77.1	478	(56.2)	100	
Total	198	(100.0)	23.2	653	(100.0)	76.8	851	(100.0)	100	

Table B4.11a Banded SAP - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
< 35	103	(31.0)	57.7	75	(8.0)	42.3	178	(14.0)	100
35 to <65	210	(63.3)	23.8	673	(71.8)	76.2	883	(69.6)	100
>= 65	19	(5.7)	9.1	188	(20.1)	90.9	207	(16.4)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

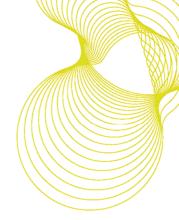


Table B4.11b Banded SAP - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
< 35	99	(27.7)	55.4	80	(8.7)	44.6	178	(14.0)	100
35 to <65	227	(63.8)	25.7	656	(71.9)	74.3	883	(69.6)	100
>= 65	30	(8.5)	14.7	177	(19.4)	85.3	207	(16.4)	100
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100

## **Geographical Characteristics**

Table B5.1a Urban or Rural - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Rural	152	(45.7)	33.6	300	(32.0)	66.4	451	(35.6)	100	
Urban	180	(54.3)	22.1	637	(68.0)	77.9	817	(64.4)	100	
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100	

Table B5.1b Urban or Rural - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Rural	154	(43.2)	34.1	298	(32.6)	65.9	451	(35.6)	100	
Urban	202	(56.8)	24.8	615	(67.4)	75.2	817	(64.4)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	

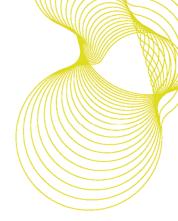
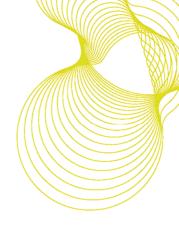


Table B5.2a Geographical Region - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
North Wales	75	(22.7)	27.6	198	(21.1)	72.4	273	(21.6)	100
Mid Wales	92	(27.7)	34.9	171	(18.3)	65.1	263	(20.8)	100
South Wales	165	(49.6)	22.5	567	(60.5)	77.5	732	(57.7)	100
Total	332	(100.0)	26.2	936	(100.0)	73.8	1,268	(100.0)	100

Table B5.2b Geographical Region - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
North Wales	76	(21.4)	27.8	197	(21.6)	72.2	273	(21.6)	100	
Mid Wales	95	(26.8)	36.2	168	(18.4)	63.8	263	(20.8)	100	
South Wales	185	(51.9)	25.2	547	(60.0)	74.8	732	(57.7)	100	
Total	356	(100.0)	28.1	912	(100.0)	71.9	1,268	(100.0)	100	



## Appendix C - Detailed Tables - Vulnerable Households

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Table C3.1a Tenure – Full Income Definition
Table C3.1b Tenure - Basic Income Definition
Table C3.2a Household size - Full Income Definition
Table C3.2b Household size - Basic Income Definition
Table C3.2c Household composition - Full Income Definition
Table C3.2d Household composition - Basic Income Definition
Table C3.3a Age of Household Reference Person - Full Income Definition
Table C3.3b Age of Household Reference Person - Basic Income Definition
Table C3.3c Age of Oldest Person in Household - Full Income Definition
Table C3.3d Age of Oldest Person in Household - Basic Income Definition
Table C3.3e Age of Youngest Person in Household - Full Income Definition
Table C3.3f Age of Youngest Person in Household - Basic Income Definition
Table C3.4a Ethnicity of Household - Full Income Definition
Table C3.4b Ethnicity of Household - Basic Income Definition
Table C3.5a Working status of Household - Full Income Definition
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Table C3.7a Receipt of any benefit - Full Income Definition
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Table C3.7c Eligible for HEES - Full Income Definition
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Table C3.7e Eligible for HEES Plus - Full Income Definition
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Table C4.1a Age of Dwelling - Full Income Definition

Table C3.8a Under-occupancy - Full Income Definition Table C3.8b Under-occupancy - Basic Income Definition

Table C4.1b Age of Dwelling - Basic Income Definition

Table C4.2a Dwelling Type - Full Income Definition

Table C4.2b Dwelling Type - Basic Income Definition

Table C4.3a Dwelling Size - Full Income Definition

Table C4.3b Dwelling Size - Basic Income Definition

Table C4.4a Council tax band of dwelling - Full Income Definition

Table C4.4b Council tax band of dwelling - Basic Income Definition

Table C3.7g Eligible for HEES or HEES Plus - Full Income Definition Table C3.7h Eligible for HEES or HEES Plus - Basic Income Definition

Table C4.5a Central Heating - Full Income Definition

Table C4.5b Central Heating - Basic Income Definition

Table C4.6a Main heating system - Full Income Definition

Table C4.6b Main heating system - Basic Income Definition

Table C4.6c Main heating fuel - Full Income Definition

Table C4.6d Main heating fuel - Basic Income Definition

Table C4.6e Main heating fuel - Full Income Definition

Table C4.6f Main heating fuel - Basic Income Definition

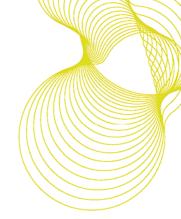


Table C4.7a Off the Gas Network - Full Income Definition

Table C4.7b Off the Gas Network - Basic Income Definition

Table C4.8a Method of Payment for Gas - Full Income Definition

Table C4.8b Method of Payment for Gas - Basic Income Definition

Table C4.8c Method of Payment for Electricity - Full Income Definition

Table C4.8d Method of Payment for Electricity - Basic Income Definition

Table C4.9a Level of Loft Insulation - Full Income Definition

Table C4.9b Level of Loft Insulation - Basic Income Definition

Table C4.10a Cavity walls predominant? - Full Income Definition

Table C4.10b Cavity walls predominant? - Basic Income Definition

Table C4.10c Cavity walls insulated? - Full Income Definition

Table C4.10d Cavity walls insulated? - Basic Income Definition

Table C4.11a Banded SAP - Full Income Definition

Table C4.11b Banded SAP - Basic Income Definition

Table C5.1a Urban or Rural - Full Income Definition

Table C5.1b Urban or Rural - Basic Income Definition

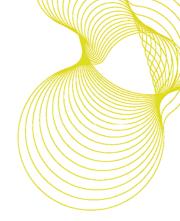
Table C5.2a Geographical Region - Full Income Definition

Table C5.2b Geographical Region - Basic Income Definition

#### **Household Characteristics**

Table C3.1a Tenure – Full Income Definition

	Fuel Poor			I	Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Owner Occupied	201	(70.4)	28.7	500	(71.8)	71.3	700	(71.4)	100	
Private Rented	34	(12.0)	40.1	51	(7.3)	59.9	85	(8.7)	100	
Local Authority	33	(11.7)	26.9	91	(13.0)	73.1	124	(12.6)	100	
Housing Association	17	(5.9)	23.8	54	(7.8)	76.2	71	(7.3)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	



**Table C3.1b Tenure - Basic Income Definition** 

	Fuel Poor				Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Owner Occupied	183	(58.9)	26.1	517	(77.2)	73.9	700	(71.4)	100	
Private Rented	47	(15.2)	55.4	38	(5.7)	44.6	85	(8.7)	100	
Local Authority	50	(16.1)	40.3	74	(11.1)	59.7	124	(12.6)	100	
Housing Association	30	(9.8)	42.8	41	(6.1)	57.2	71	(7.3)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

Table C3.2a Household size - Full Income Definition

	Fuel Poor			Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
1	126	(44.1)	54.9	103	(14.9)	45.1	229	(23.4)	100
2	99	(34.6)	27.5	260	(37.5)	72.5	359	(36.6)	100
3	28	(9.7)	16.4	142	(20.4)	83.6	170	(17.3)	100
4 or more	33	(11.6)	14.8	190	(27.3)	85.2	223	(22.7)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.2b Household size - Basic Income Definition

	Fuel Poor			Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
1	137	(44.2)	59.9	92	(13.7)	40.1	229	(23.4)	100
2	99	(32.0)	27.7	260	(38.7)	72.3	359	(36.6)	100
3	38	(12.1)	22.2	132	(19.7)	77.8	170	(17.3)	100
4 or more	36	(11.6)	16.2	187	(27.8)	83.8	223	(22.7)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

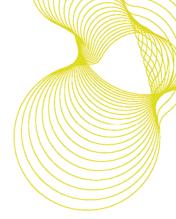


Table C3.2c Household composition - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Single pensioner	94	(33.1)	53.2	83	(11.9)	46.8	177	(18.1)	100
Married couple pensioner	40	(14.1)	27.6	105	(15.1)	72.4	145	(14.8)	100
Single person, not a pensioner	31	(11.0)	60.5	20	(2.9)	39.5	52	(5.3)	100
Two adult household, not pensioners, without children	37	(12.9)	23.0	123	(17.7)	77.0	160	(16.3)	100
Single parent households	40	(13.9)	34.3	76	(11.0)	66.7	116	(11.8)	100
Two adult household with children	41	(14.2)	12.8	277	(39.8)	87.2	317	(32.3)	100
Other	*	*	*	*	*	*	13	(1.3)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.2d Household composition - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Single pensioner	100	(32.3)	56.6	77	(11.5)	43.4	177	(18.1)	100
Married couple pensioner	37	(11.8)	25.1	109	(16.2)	74.9	145	(14.8)	100
Single person, not a pensioner	37	(11.9)	71.2	15	(2.2)	28.8	52	(5.3)	100
Two adult household, not pensioners, without children	36	(11.7)	22.6	124	(18.5)	77.4	160	(16.3)	100
Single parent households	57	(18.3)	49.1	59	(8.8)	50.9	116	(11.8)	100
Two adult household with children	41	(13.2)	12.9	276	(41.2)	87.1	317	(32.3)	100
Other	*	*	*	*	*	*	13	(1.3)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

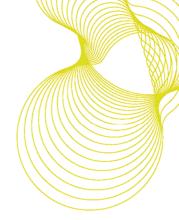


Table C3.3a Age of Household Reference Person - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	10	(3.6)	51.5	10	(1.4)	48.5	20	(2.0)	100
25 - 34	20	(6.9)	20.2	78	(11.2)	79.8	98	(10.0)	100
35 - 49	42	(14.9)	17.5	200	(28.7)	82.5	242	(24.7)	100
50 - 59	35	(12.2)	27.3	93	(13.3)	72.7	127	(13.0)	100
60 - 74	115	(40.2)	33.5	228	(32.8)	66.5	343	(34.9)	100
75 - 84	50	(17.7)	40.3	75	(10.7)	59.7	125	(12.8)	100
85 or more	13	(4.5)	49.8	13	(1.9)	50.2	26	(2.6)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.3b Age of Household Reference Person - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	12	(3.7)	58.5	8	(1.2)	41.5	20	(2.0)	100
25 - 34	27	(8.6)	27.4	71	(10.6)	72.6	98	(10.0)	100
35 - 49	56	(18.0)	23.1	186	(27.8)	76.9	242	(24.7)	100
50 - 59	39	(12.5)	30.4	89	(13.2)	69.6	127	(13.0)	100
60 - 74	113	(36.4)	33.0	230	(34.3)	67.0	343	(34.9)	100
75 - 84	51	(16.3)	40.4	75	(11.1)	59.6	125	(12.8)	100
85 or more	14	(4.5)	54.6	12	(1.8)	45.4	26	(2.6)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

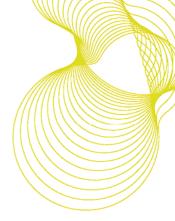


Table C3.3c Age of Oldest Person in Household - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	8	(2.9)	54.4	7	(1.0)	45.6	15	(1.6)	100
25 - 34	19	(6.8)	22.7	66	(9.5)	77.3	85	(8.7)	100
35 - 49	40	(14.0)	16.8	198	(28.5)	83.2	238	(24.3)	100
50 - 59	34	(12.1)	32.4	72	(10.4)	67.6	106	(10.9)	100
60 - 74	115	(40.4)	31.6	249	(35.8)	68.4	364	(37.2)	100
75 - 84	51	(17.9)	37.9	84	(12.1)	62.1	135	(13.8)	100
85 or more	17	(5.8)	46.2	19	(2.8)	53.8	36	(3.7)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.3d Age of Oldest Person in Household - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
16 - 24	10	(3.1)	63.3	6	(8.)	36.7	15	(1.6)	100
25 - 34	26	(8.4)	30.6	59	(8.8)	69.4	85	(8.7)	100
35 - 49	54	(17.3)	22.6	184	(27.5)	77.4	238	(24.3)	100
50 - 59	38	(12.4)	36.2	68	(10.1)	63.8	106	(10.9)	100
60 - 74	114	(36.8)	31.4	250	(37.3)	68.6	364	(37.2)	100
75 - 84	51	(16.5)	38.0	84	(12.5)	62.0	135	(13.8)	100
85 or more	17	(5.4)	46.8	19	(2.9)	53.2	36	(3.7)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

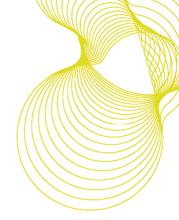


Table C3.3e Age of Youngest Person in Household - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
0 - 4	31	(10.7)	21.8	110	(15.8)	78.2	141	(14.4)	100
5 - 10	21	(7.2)	17.1	99	(14.3)	82.9	120	(12.2)	100
11 - 15	13	(4.5)	15.1	73	(10.4)	84.9	86	(8.7)	100
16 - 24	8	(2.9)	17.3	40	(5.8)	82.7	48	(4.9)	100
25 - 59	55	(19.4)	28.9	136	(19.6)	71.1	192	(19.6)	100
60 - 74	103	(36.0)	36.8	176	(25.3)	63.2	279	(28.4)	100
75 - 84	45	(15.6)	45.6	53	(7.7)	54.4	98	(10.0)	100
85 or more	10	(3.6)	57.9	7	(1.1)	42.1	18	(1.8)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.3f Age of Youngest Person in Household - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
0 - 4	37	(12.0)	26.4	104	(15.5)	73.6	141	(14.4)	100
5 - 10	26	(8.4)	21.8	94	(14.0)	78.2	120	(12.2)	100
11 - 15	19	(6.0)	21.8	67	(10.0)	78.2	86	(8.7)	100
16 - 24	10	(3.2)	20.7	38	(5.7)	79.3	48	(4.9)	100
25 - 59	60	(19.4)	31.4	132	(19.6)	68.6	192	(19.6)	100
60 - 74	100	(32.3)	36.0	178	(26.6)	64.0	279	(28.4)	100
75 - 84	46	(15.0)	47.4	51	(7.7)	52.6	98	(10.0)	100
85 or more	11	(3.7)	64.9	6	(.9)	35.1	18	(1.8)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

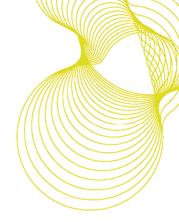


Table C3.4a Ethnicity of Household - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
White	283	(99.2)	29.2	685	(98.5)	70.8	968	(98.7)	100	
Ethnic minority	*	*	*	*	*	*	13	(1.3)	100	
Unknown	*	*	*	*	*	*		(.0)		
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

Table C3.4b Ethnicity of Household - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
White	306	(98.6)	31.6	662	(98.8)	68.4	968	(98.7)	100
Ethnic minority	*	*	*	*	*	*	13	(1.3)	100
Unknown	*	*	*	*	*	*		(.0)	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C3.5a Working status of Household - Full Income Definition

	<u> </u>	Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Working	61	(21.2)	13.0	404	(58.1)	87.0	465	(47.4)	100	
Unemployed	14	(4.9)	58.4	10	(1.4)	41.6	24	(2.5)	100	
Inactive	210	(73.5)	42.8	280	(40.3)	57.2	490	(49.9)	100	
Unknown	*	*	*	*	*	*	2	(.2)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

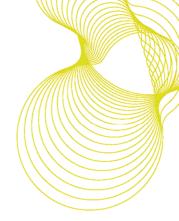


Table C3.5b Working status of Household - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Working	59	(18.9)	12.6	406	(60.6)	87.4	465	(47.4)	100	
Unemployed	17	(5.6)	72.6	7	(1.0)	27.4	24	(2.5)	100	
Inactive	233	(75.2)	47.7	256	(38.2)	52.3	490	(49.9)	100	
Unknown	*	*	*	*	*	*	2	(.2)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

Table C3.6a Banded Income - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
1st decile (lowest)	99	(34.7)	94.0	6	(.9)	6.0	105	(10.7)	100	
2nd decile	72	(25.2)	65.3	38	(5.5)	34.7	110	(11.2)	100	
3rd decile	44	(15.3)	39.6	66	(9.5)	60.4	110	(11.2)	100	
4th decile	26	(9.1)	23.6	84	(12.0)	76.4	110	(11.2)	100	
5th decile	15	(5.3)	15.0	85	(12.2)	85.0	100	(10.2)	100	
6th decile	15	(5.4)	15.1	87	(12.4)	84.9	102	(10.4)	100	
7th to 10th deciles	15	(5.1)	4.2	329	(47.3)	95.8	344	(35.1)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

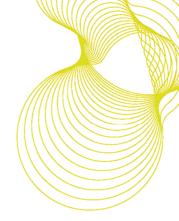


Table C3.6b Banded Income - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
1st decile (lowest)	101	(32.5)	95.7	4	(.7)	4.3	105	(10.7)	100
2nd decile	77	(24.7)	69.7	33	(5.0)	30.3	110	(11.2)	100
3rd decile	58	(18.8)	53.2	51	(7.7)	46.8	110	(11.2)	100
4th decile	28	(8.9)	25.2	82	(12.2)	74.8	110	(11.2)	100
5th decile	18	(5.9)	18.4	82	(12.2)	81.6	100	(10.2)	100
6th decile	14	(4.7)	14.2	87	(13.1)	85.8	102	(10.4)	100
7th to 10th deciles	14	(4.5)	4.1	330	(49.2)	95.9	344	(35.1)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C3.7a Receipt of any benefit - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	225	(78.9)	29.3	543	(78.1)	70.7	768	(78.3)	100	
No	60	(21.1)	28.3	152	(21.9)	71.7	212	(21.7)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

Table C3.7b Receipt of any benefit - Basic Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	251	(80.7)	32.6	518	(77.3)	67.4	768	(78.3)	100	
No	60	(19.3)	28.2	152	(22.7)	71.8	212	(21.7)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

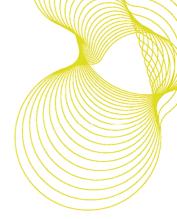


Table C3.7c Eligible for HEES - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	46	(16.0)	37.0	78	(11.2)	63.0	123	(12.6)	100
No	240	(84.0)	28.0	618	(88.8)	72.0	857	(87.4)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.7d Eligible for HEES - Basic Income Definition

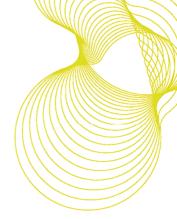
		Fuel Poor			Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	64	(20.7)	52.2	59	(8.8)	47.8	123	(12.6)	100	
No	246	(79.3)	28.7	611	(91.2)	71.3	857	(87.4)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

Table C3.7e Eligible for HEES Plus - Full Income Definition

	Fuel Poor				Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	137	(48.1)	35.4	250	(35.9)	64.6	387	(39.5)	100
No	148	(51.9)	24.9	445	(64.1)	75.1	593	(60.5)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C3.7f Eligible for HEES Plus – Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	170	(54.7)	43.9	217	(32.4)	56.1	387	(39.5)	100
No	141	(45.3)	24.7	453	(67.6)	76.3	593	(60.5)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100



### Table C3.7g Eligible for HEES or HEES Plus - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	153	(53.7)	35.6	277	(39.8)	64.4	430	(43.9)	100
No	132	(46.3)	24.0	418	(60.2)	76.0	550	(56.1)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

#### Table C3.7h Eligible for HEES or HEES Plus - Basic Income Definition

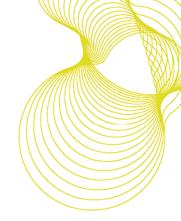
		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Yes	188	(60.5)	43.7	242	(36.2)	56.3	430	(43.9)	100	
No	123	(39.5)	22.3	428	(63.8)	77.7	550	(56.1)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

#### Table C3.8a Under-occupancy - Full Income Definition

		Fuel Poor		1	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Not underoccupying	135	(47.4)	22.0	480	(69.0)	78.0	615	(62.7)	100
Underoccupying	150	(52.6)	41.0	216	(31.0)	59.0	366	(37.3)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

#### Table C3.8b Under-occupancy - Basic Income Definition

	Fuel Poor				Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Not underoccupying	162	(52.2)	26.4	453	(67.6)	73.6	615	(62.7)	100
Underoccupying	148	(47.8)	40.6	217	(32.4)	59.4	366	(37.3)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100



## **Dwelling characteristics**

Table C4.1a Age of Dwelling - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Pre 1850	23	(8.2)	52.4	21	(3.1)	47.6	45	(4.6)	100
1850 - 1899	48	(16.8)	43.1	63	(9.1)	56.9	111	(11.3)	100
1900 - 1918	48	(16.9)	35.8	86	(12.4)	64.2	134	(13.7)	100
1919 - 1944	37	(12.9)	34.4	70	(10.1)	65.6	107	(10.9)	100
1945 - 1964	63	(21.9)	28.3	159	(22.8)	71.7	221	(22.6)	100
1965 - 1974	32	(11.3)	21.9	114	(16.4)	78.1	146	(14.9)	100
1975 - 1980	11	(3.9)	20.2	45	(6.4)	79.8	56	(5.7)	100
1981 - 1990	12	(4.1)	16.2	60	(8.7)	83.8	72	(7.3)	100
Post 1990	12	(4.0)	13.1	77	(11.0)	86.9	88	(9.0)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.1b Age of Dwelling - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Pre 1850	23	(7.4)	51.5	22	(3.2)	48.5	45	(4.6)	100
1850 - 1899	52	(16.7)	46.8	59	(8.8)	53.2	111	(11.3)	100
1900 - 1918	50	(16.0)	37.0	85	(12.6)	63.0	134	(13.7)	100
1919 - 1944	39	(12.4)	36.2	68	(10.2)	63.8	107	(10.9)	100
1945 - 1964	72	(23.0)	32.3	150	(22.4)	67.7	221	(22.6)	100
1965 - 1974	35	(11.3)	23.9	111	(16.6)	76.1	146	(14.9)	100
1975 - 1980	14	(4.5)	25.0	42	(6.3)	75.0	56	(5.7)	100
1981 - 1990	12	(3.9)	16.9	60	(8.9)	83.1	72	(7.3)	100
Post 1990	14	(4.6)	16.3	74	(11.0)	83.7	88	(9.0)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

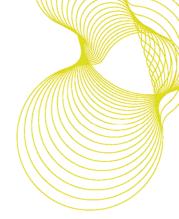


Table C4.2a Dwelling Type - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
End terrace	31	(10.7)	28.6	76	(10.9)	71.4	107	(10.9)	100
Mid terrace	57	(19.9)	27.1	152	(21.9)	72.9	209	(21.3)	100
Semi detached	89	(31.1)	28.5	222	(31.9)	71.5	311	(31.7)	100
Detached	91	(31.8)	32.4	189	(27.2)	67.6	280	(28.6)	100
Purpose built flat	11	(3.7)	17.4	51	(7.3)	82.6	61	(6.2)	100
Converted flats (+non-residential and flat)	8	(2.8)	60.7	5	(.7)	39.3	13	(1.3)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.2b Dwelling Type - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
End terrace	34	(11.1)	32.2	72	(10.8)	67.8	107	(10.9)	100
Mid terrace	66	(21.4)	31.7	143	(21.3)	68.3	209	(21.3)	100
Semi detached	100	(32.2)	32.2	211	(31.4)	67.8	311	(31.7)	100
Detached	83	(26.9)	29.8	197	(29.4)	70.2	280	(28.6)	100
Purpose built flat	17	(5.5)	28.0	44	(6.6)	72.0	61	(6.2)	100
Converted flats (+non-residential and flat)	9	(3.0)	71.2	4	(.6)	28.8	13	(1.3)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

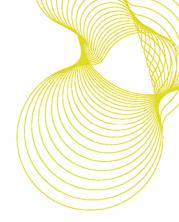


Table C4.3a Dwelling Size - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
<60	17	(5.9)	20.4	65	(9.4)	79.6	82	(8.3)	100
60-80	59	(20.5)	29.0	144	(20.6)	71.0	202	(20.6)	100
80-100	84	(29.6)	30.2	195	(28.1)	69.8	280	(28.5)	100
100-120	39	(13.5)	25.6	112	(16.1)	74.4	151	(15.4)	100
120-150	24	(8.4)	23.5	78	(11.3)	76.5	102	(10.4)	100
>150	63	(22.1)	38.4	101	(14.5)	61.6	164	(16.7)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.3b Dwelling Size - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house-holds	% of group
<60	26	(8.3)	31.5	56	(8.4)	68.5	82	(8.3)	100
60-80	71	(23.0)	35.4	131	(19.5)	64.6	202	(20.6)	100
80-100	91	(29.4)	32.6	188	(28.1)	67.4	280	(28.5)	100
100-120	37	(12.0)	24.7	114	(16.9)	75.3	151	(15.4)	100
120-150	25	(7.9)	24.0	78	(11.6)	76.0	102	(10.4)	100
>150	60	(19.4)	36.7	104	(15.5)	63.3	164	(16.7)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

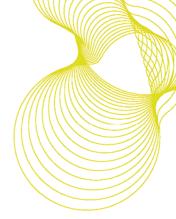


Table C4.4a Council tax band of dwelling - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Α	38	(13.2)	35.2	69	(9.9)	64.8	106	(10.9)	100
В	75	(26.2)	32.4	156	(22.4)	67.6	231	(23.5)	100
С	41	(14.3)	25.3	120	(17.3)	74.7	161	(16.4)	100
D	77	(27.1)	27.8	201	(28.9)	72.2	278	(28.3)	100
E	26	(9.1)	24.1	82	(11.8)	75.9	108	(11.1)	100
F	15	(5.2)	30.0	35	(5.0)	70.0	50	(5.1)	100
G	7	(2.6)	27.7	19	(2.7)	72.3	26	(2.7)	100
H and I	*	*	*	*	*	*	20	(2.0)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.4b Council tax band of dwelling - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Α	46	(14.9)	43.4	60	(9.0)	56.6	106	(10.9)	100
В	89	(28.7)	38.7	142	(21.1)	61.3	231	(23.5)	100
С	44	(14.0)	27.0	117	(17.5)	73.0	161	(16.4)	100
D	80	(25.7)	28.7	198	(29.6)	71.3	278	(28.3)	100
E	25	(8.2)	23.5	83	(12.4)	76.5	108	(11.1)	100
F	14	(4.7)	29.0	35	(5.3)	71.0	50	(5.1)	100
G	6	(2.1)	24.1	20	(3.0)	75.9	26	(2.7)	100
H and I	*	*	*	*	*	*	20	(2.0)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

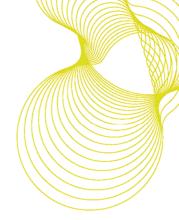


Table C4.5a Central Heating - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Central heating present	274	(96.2)	28.4	691	(99.3)	71.6	965	(98.4)	100
No central heating present	11	(3.8)	70.0	5	(.7)	30.0	15	(1.6)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.5b Central Heating - Basic Income Definition

	Fuel Poor			1	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Central heating present	300	(96.5)	31.0	665	(99.3)	69.0	965	(98.4)	100
No central heating present	11	(3.5)	70.0	5	(.7)	30.0	15	(1.6)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C4.6a Main heating system - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Boiler system with radiators	256	(89.9)	28.0	659	(94.8)	72.0	916	(93.4)	100
Storage radiators	17	(6.1)	41.6	24	(3.5)	58.4	42	(4.2)	100
Warm air/other systems	*	*	*	*	*	*	2	(.2)	100
Room/portable heaters	11	(3.8)	70.0	5	(.7)	30.0	15	(1.6)	100
Communal	*	*	*	*	*	*	6	0.6	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

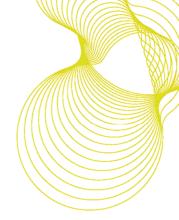


Table C4.6b Main heating system - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Boiler system with radiators	280	(90.1)	30.6	636	(94.9)	69.4	916	(93.4)	100
Storage radiators	18	(5.8)	43.4	24	(3.5)	56.6	42	(4.2)	100
Warm air/other systems	*	*	*	*	*	*	2	(.2)	100
Room/portable heaters	11	(3.5)	70.0	5	(.7)	30.0	15	(1.6)	100
Communal	*	*	*	*	*	*	6	0.6	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C4.6c Type of Boiler - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Standard boiler (floor or wall)	80	(27.9)	32.7	164	(23.6)	67.3	244	(24.8)	100
Back boiler (to fire or stove)	65	(22.9)	37.9	107	(15.4)	62.1	172	(17.6)	100
Combination boiler	83	(29.0)	25.1	246	(35.4)	74.9	329	(33.5)	100
Condensing boiler	*	*	*	*	*	*	21	(2.1)	100
Condensing- combination boiler	26	(9.0)	16.8	128	(18.4)	83.2	153	(15.7)	100
No boiler	29	(10.1)	46.5	33	(4.8)	53.5	62	(6.3)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

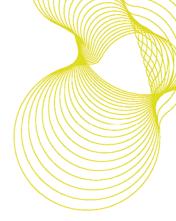


Table C4.6d Type of Boiler - Basic Income Definition

		Fuel Poor		1	Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Standard boiler (floor or wall)	80	(25.9)	33.0	163	(24.3)	67.0	244	(24.8)	100
Back boiler (to fire or stove)	72	(23.1)	41.7	100	(15.0)	58.3	172	(17.6)	100
Combination boiler	91	(29.3)	27.6	238	(35.5)	72.4	329	(33.5)	100
Condensing boiler	*	*	*	*	*	*	21	(2.1)	100
Condensing- combination boiler	34	(10.9)	22.1	120	(17.8)	77.9	153	(15.7)	100
No boiler	30	(9.8)	48.8	32	(4.7)	51.2	62	(6.3)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C4.6e Main heating fuel - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Mains gas	180	(63.0)	23.4	587	(84.4)	76.6	766	(78.1)	100
Bottled gas/LPG	10	(3.6)	55.0	9	(1.2)	45.0	19	(1.9)	100
Heating oil	58	(20.2)	51.2	55	(7.9)	48.8	113	(11.5)	100
Solid fuel	16	(5.7)	54.2	14	(2.0)	45.8	30	(3.1)	100
Standard Electricity	4	(1.4)	70.5	2	(.2)	29.5	6	(.6)	100
Off peak Electricity	17	(5.8)	40.6	24	(3.5)	59.4	41	(4.2)	100
Communal heating	*	*	*	*	*	*	6	(.6)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

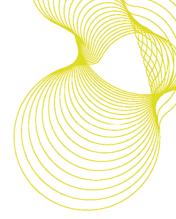


Table C4.6f Main heating fuel - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Mains gas	205	(66.1)	26.8	561	(83.7)	73.2	766	(78.1)	100
Bottled gas/LPG	10	(3.2)	52.8	9	(1.3)	47.2	19	(1.9)	100
Heating oil	57	(18.4)	50.6	56	(8.3)	49.4	113	(11.5)	100
Solid fuel	15	(5.0)	51.1	15	(2.2)	48.9	30	(3.1)	100
Standard Electricity	4	(1.3)	70.5	2	(.2)	29.5	6	(.6)	100
Off peak Electricity	17	(5.6)	42.4	24	(3.5)	57.6	41	(4.2)	100
Communal heating	*	*	*	*	*	*	6	(.6)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C4.7a Off the Gas Network - Full Income Definition

	Fuel Poor				Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Off the gas network	99	(34.6)	48.5	105	(15.1)	51.5	203	(20.7)	100
On the gas network	186	(65.4)	24.0	591	(84.9)	76.0	777	(79.3)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.7b Off the Gas Network - Basic Income Definition

	Fuel Poor			I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Off the gas network	99	(31.8)	48.5	105	(15.6)	51.5	203	(20.7)	100
On the gas network	212	(68.2)	27.3	565	(84.4)	72.7	777	(79.3)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

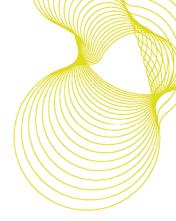


Table C4.8a Method of Payment for Gas - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Direct Debit	83	(43.3)	18.6	366	(61.2)	81.4	449	(56.9)	100
Standard Credit	67	(34.7)	32.1	142	(23.7)	67.9	208	(26.4)	100
Pre Payment	42	(22.0)	31.9	90	(15.1)	68.1	133	(16.8)	100
Total	193	(100.0)	24.4	598	(100.0)	75.6	791	(100.0)	100

Table C4.8b Method of Payment for Gas - Basic Income Definition

	Fuel Poor				Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Direct Debit	85	(38.7)	18.8	365	(63.8)	81.2	449	(56.9)	100
Standard Credit	76	(34.9)	36.6	132	(23.1)	63.4	208	(26.4)	100
Pre Payment	57	(26.3)	43.3	75	(13.2)	56.7	133	(16.8)	100
Total	218	(100.0)	27.6	572	(100.0)	72.4	791	(100.0)	100

Table C4.8c Method of Payment for Electricity - Full Income Definition

	Fuel Poor				Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Direct Debit	124	(43.6)	23.3	411	(59.1)	76.7	535	(54.6)	100	
Standard Credit	103	(36.0)	38.7	163	(23.4)	61.3	266	(27.1)	100	
Pre Payment	58	(20.3)	32.3	122	(17.5)	67.7	180	(18.3)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

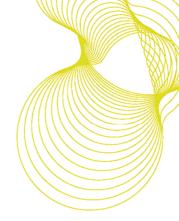


Table C4.8d Method of Payment for Electricity - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total			
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
Direct Debit	125	(40.1)	23.3	411	(61.3)	76.7	535	(54.6)	100	
Standard Credit	110	(35.3)	41.3	156	(23.3)	58.7	266	(27.1)	100	
Pre Payment	76	(24.6)	42.5	103	(15.4)	57.5	180	(18.3)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

Table C4.9a Level of Loft Insulation - Full Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
No Loft Space	7	(2.6)	19.3	31	(4.4)	80.7	38	(3.9)	100
0	21	(7.4)	52.3	19	(2.8)	47.7	40	(4.1)	100
1 - 50	30	(10.6)	36.1	53	(7.7)	63.9	83	(8.5)	100
51 - 100	87	(30.4)	30.3	199	(28.7)	69.7	286	(29.2)	100
101 - 150	38	(13.2)	24.1	118	(17.0)	75.9	156	(15.9)	100
151 - 200	35	(12.4)	31.6	76	(11.0)	68.4	112	(11.4)	100
>200	67	(23.5)	25.3	198	(28.4)	74.7	265	(27.0)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

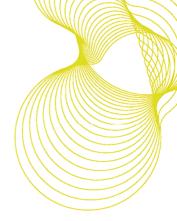


Table C4.9b Level of Loft Insulation - Basic Income Definition

		Fuel Poor			Not Fuel Po	or		Total	
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
No Loft Space	12	(3.8)	30.5	27	(4.0)	69.5	38	(3.9)	100
0	22	(6.9)	53.6	19	(2.8)	46.4	40	(4.1)	100
1 - 50	29	(9.4)	35.1	54	(8.1)	64.9	83	(8.5)	100
51 - 100	94	(30.3)	32.8	192	(28.7)	67.2	286	(29.2)	100
101 - 150	41	(13.3)	26.5	115	(17.1)	73.5	156	(15.9)	100
151 - 200	37	(12.0)	33.3	75	(11.1)	66.7	112	(11.4)	100
>200	75	(24.3)	28.5	189	(28.3)	71.5	265	(27.0)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

Table C4.10a Cavity walls predominant? - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	157	(55.0)	23.7	505	(72.6)	76.3	662	(67.5)	100
No	128	(45.0)	40.3	190	(27.4)	59.7	319	(32.5)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C4.10b Cavity walls predominant? - Basic Income Definition

	Fuel Poor			I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	172	(55.5)	26.0	490	(73.1)	74.0	662	(67.5)	100
No	138	(44.5)	43.4	180	(26.9)	56.6	319	(32.5)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

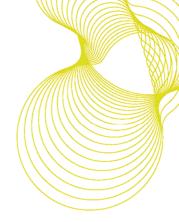


Table C4.10c Cavity walls insulated? - Full Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	65	(41.6)	21.3	241	(47.8)	78.7	307	(46.3)	100
No	92	(58.4)	25.8	264	(52.2)	74.2	355	(53.7)	100
Total	157	(100.0)	23.7	505	(100.0)	76.3	662	(100.0)	100

Table C4.10d Cavity walls insulated? - Basic Income Definition

	Fuel Poor			I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Yes	75	(43.6)	24.5	231	(47.3)	75.5	307	(46.3)	100
No	97	(56.4)	27.4	258	(52.7)	72.6	355	(53.7)	100
Total	172	(100.0)	26.0	490	(100.0)	74.0	662	(100.0)	100

Table C4.11a Banded SAP - Full Income Definition

		Fuel Poor			Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
< 35	86	(30.2)	61.8	53	(7.6)	38.2	139	(14.2)	100	
35 to <65	185	(64.7)	26.8	504	(72.5)	73.2	689	(70.2)	100	
>= 65	15	(5.1)	9.5	138	(19.9)	90.5	153	(15.6)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

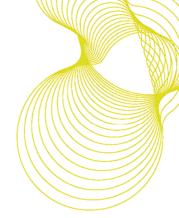


Table C4.11b Banded SAP - Basic Income Definition

		Fuel Poor		I	Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
< 35	83	(26.6)	59.4	57	(8.4)	40.6	139	(14.2)	100	
35 to <65	203	(65.5)	29.5	485	(72.4)	70.5	689	(70.2)	100	
>= 65	24	(7.9)	16.0	128	(19.1)	84.0	153	(15.6)	100	
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100	

#### **Geographical Distribution**

Table C5.1a Urban or Rural - Full Income Definition

		Fuel Poor		I	Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Rural	130	(45.6)	36.3	228	(32.8)	63.7	358	(36.5)	100
Urban	155	(54.4)	24.9	467	(67.2)	75.1	622	(63.5)	100
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100

Table C5.1b Urban or Rural - Basic Income Definition

		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
Rural	133	(43.0)	37.3	225	(33.5)	62.7	358	(36.5)	100
Urban	177	(57.0)	28.4	445	(66.5)	71.6	622	(63.5)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100

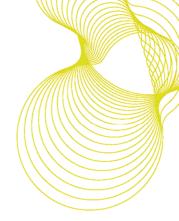
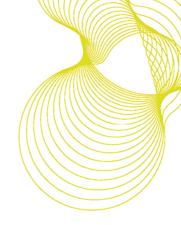


Table C5.2a Geographical Region - Full Income Definition

		Fuel Poor		I	Not Fuel Poor			Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group	
North Wales	64	(22.4)	30.1	149	(21.4)	69.9	212	(21.7)	100	
Mid Wales	77	(27.0)	36.2	135	(19.5)	63.8	212	(21.6)	100	
South Wales	144	(50.6)	26.0	411	(59.2)	74.0	556	(56.7)	100	
Total	285	(100.0)	29.1	695	(100.0)	70.9	980	(100.0)	100	

Table C5.1b Geographical Region - Basic Income Definition

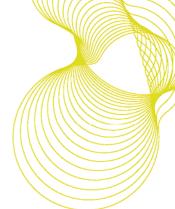
		Fuel Poor			Not Fuel Po	or	Total		
	No. of house- holds (000s)	% of FP house- holds	% of group	No. of house- holds (000s)	% of non-FP house- holds	% of group	No. of house- holds (000s)	% of all house- holds	% of group
North Wales	65	(21.0)	30.7	147	(22.0)	69.3	212	(21.7)	100
Mid Wales	81	(26.1)	38.1	131	(19.6)	61.9	212	(21.6)	100
South Wales	164	(52.9)	29.6	392	(58.4)	70.4	556	(56.7)	100
Total	310	(100.0)	31.7	670	(100.0)	68.3	980	(100.0)	100



# Appendix D - Change in Fuel Poverty Statistics since 2004

Table D1. Numbers and percentages of fuel poor households in 2004 and 2008

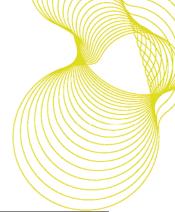
	Total no. of (000s		Numbers poor hhold		% of group pove		% of fue grou	
	2004	2008	2004	2008	2004	2008	2004	2008
Fuel Poor	1,209	1,268	134	332	11	26	100	100
Vulnerable								
Vulnerable	948	980	115	285	12	29	86	86
Non-vulnerable	261	288	19	47	7	16	14	14
Total	1,209	1,268	134	332	11	26	100	100
Vulnerability of Households								
Anyone 60+ years old	456	536	71	183	16	34	53	55
No-one 60+ years old	753	733	62	149	8	20	47	45
Total	1,209	1,268	134	332	11	26	100	100
Anyone < 16 years old	404	346	20	64	5	19	15	19
No-one < 16 years old	805	922	113	268	14	29	85	81
Total	1,209	1,268	134	332	11	26	100	100
Anyone long term sick/disabled	448	440	62	138	14	31	46	42
No-one long term sick/disabled	761	828	72	194	9	23	54	58
Total	1,209	1,268	134	332	11	26	100	100
Tenure								
Owner Occupied	861	930	96	231	11	25	72	70
Private Rented	110	115	19	41	17	36	14	12
Social housing	238	224	19	59	8	26	14	18
Total	1,209	1,268	134	332	11	26	100	100
Household size								
1	301	323	67	148	22	46	50	45
2	441	488	39	118	9	24	29	36
3	195	208	14	31	7	15	11	9
4 or more	272	250	13	35	5	14	10	11
Total	1,209	1,268	134	332	11	26	100	100



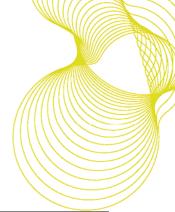
	-							
	Total no. o (000		Numbers poor hhole		% of grou		% of fue gro	-
	2004	2008	2004	2008	2004	2008	2004	2008
Household composition <sup>13</sup>								
Single pensioner	169	177	40	94	23	53	30	28
Married couple pensioner	134	145	14	40	10	28	10	12
Single person, not a pensioner	132	146	27	53	21	37	21	16
Two adult hhold, not pensioners, no children	236	272	13	50	8	18	10	15
Single parent hholds	139	125	16	41	13	33	12	13
Two adult hhold with children	375	328	16	40	5	12	12	12
Other	23	20	*	*	*	*	*	*
Total	1,209	1,268	134	332	11	26	100	100
Age of Household Reference Person								
16 - 34	209	186	13	39	6	21	10	12
35 - 49	337	344	23	61	7	18	18	18
50 - 59	237	245	31	54	13	22	23	16
60 - 74	296	343	40	115	14	33	30	35
75 or more	130	151	26	63	20	42	19	19
Total	1,209	1,268	134	332	11	26	100	100
Age of Oldest Person in Household								
16 - 34	185	164	12	35	7	21	9	10
35 - 49	329	333	22	58	7	17	17	17
50 - 59	239	236	28	57	12	24	21	17
60 - 74	303	364	39	115	13	32	29	35
75 or more	153	171	32	68	21	40	24	20
Total	1,209	1,268	134	332	11	26	100	100
Age of Youngest Person in Household								
0-15	377	261	20	51	5	20	15	15
16-24	135	86	16	13	12	15	12	4
25-59	345	135	40	21	12	16	30	7

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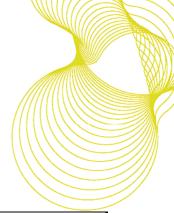
The derivation of the household composition variable published for the 2004 LiW data has subsequently found to be incorrect. The variable has been recreated for the 2004 data using the methodology consistent with that used for the 2008 data. Therefore the statistics for the 2004 household composition published in this table and discussed in section 6 of the main report are not the same as those published in the original 2004 fuel poverty report.



	Total no. o		Numbers poor hholo		% of group		% of fue	•
	(000)	(S)	poor nnoic	18 (0008)	pove	rty	gro	ир
	2004	2008	2004	2008	2004	2008	2004	2008
60-74	249	393	36	89	15	23	27	27
75 or more	103	394	22	157	21	40	16	47
Total	1,209	1,268	134	332	11	26	100	100
Working status of household								
Working	684	729	35	91	5	12	26	27
Unemployed	30	33	7	21	25	63	6	6
Inactive	491	504	89	219	18	44	67	66
Total	1,209	1,268	134	332	11	26	100	100
Income quintiles								
Lowest quintile	120	254	68	199	57	79	51	60
2nd quintile	98	254	23	79	24	31	17	24
3rd quintile	126	254	13	35	10	14	9	10
4th quintile	117	254	10	15	8	6	7	5
Highest quintile	748	254	20	4	3	2	15	1
Total	1,209	1,268	134	332	11	26	100	100
Receipt of any benefit								
Yes	795	804	98	240	12	30	73	72
No	414	465	36	92	9	20	27	28
Total	1,209	1,268	134	332	11	26	100	100
Eligible for HEES								
Yes	116	123	11	46	9	37	8	14
No	1,093	1,145	123	286	11	25	92	86
Total	1,209	1,143	134	332	11	26	100	100
Eligible for HEES Plus	1,203	1,200	134	332	7.1	20	100	100
Lingible for file of fide								
Yes	329	394	61	141	19	36	46	41
No	880	874	72	191	8	22	54	59
Total	1,209	1,268	134	332	11	26	100	100
Eligible for HEES or HEES Plus								
Yes	374	438	64	157	17	36	48	47
No	835	831	69	175	8	21	52	53
Total	1,209	1,268	134	332	11	26	100	100
Under-occupancy								
Not under-occupying	804	764	59	156	7	20	44	47
Under-occupying	405	504	75	176	18	35	56	53
Total	1,209	1,268	134	332	11	26	100	100
Dwelling age				_				
Pre 1850	53	57	20	27	37	47	15	8
1850 - 1899	159	151	25	59	16	39	19	18
1900 - 1918	149	175	16	56	11	32	12	17
1919 - 1944	138	139	20	40	15	29	15	12
1945 - 1964	249	269	30	72	12	27	22	22



							_	
	Total no. 0		Number poor hhol		% of gro			el poor oup
	2004	2008	2004	2008	2004	2008	2004	2008
Post 1964	461	478	22	78	5	16	16	24
Total	1,209	1,268	134	332	11	26	100	100
Dwelling type	,	,						
End terrace	139	137	16	35	11	26	12	11
Mid terrace	272	276	22	65	8	24	16	20
Semi-detached	383	389	46	100	12	26	35	30
Detached	309	359	42	104	14	29	32	31
Purpose built flat	*	84	*	16	*	18	*	5
Converted flats (+non- residential and flat)	*	22	*	11	*	52	*	3
Total	1,209	1,268	134	332	11	26	100	100
Dwelling size (m2)								
<60	145	114	13	21	9	19	10	6
60-80	284	262	26	67	9	26	19	20
80-100	343	361	35	98	10	27	26	30
100-120	174	190	24	46	13	24	18	14
120-150	136	139	15	29	11	21	11	9
>150	127	202	21	71	16	35	16	21
Total	1,209	1,268	134	332	11	26	100	100
Council tax band								
A	148	138	21	43	14	31	16	13
В	317	292	28	87	9	30	21	26
С	192	215	22	48	11	22	16	14
D	339	357	41	90	12	25	31	27
E and higher	213	266	21	64	10	24	16	19
Total	1,209	1,268	134	332	11	26	100	100
Central heating	4 400	1 0 1 1	407	0.1.0				
Central heating present	1,162	1,244	107	316	9	25	80	95
Central heating not present	47	24	26	16	56	65	20	5
Total	1,209	1,268	134	332	11	26	100	100
Main heating system								
Boiler system with radiators	1,085	1,180	92	295	8	25	69	89
Storage radiators	62	55	15	21	24	37	11	6
Warm air/other systems	*	*	*	*	*	*	*	*
Room/portable heaters	47	24	26	16	56	65	20	5
Communal	*	*		*		*		*
Total	1,209	1,268	134	332	11	26	100	100
Main heating fuel	,	,						
Mains gas	945	992	52	207	5	21	39	62
Bottled gas/LPG	22	25	12	13	56	53	9	4



	Total no. o (000		Numbers poor hhole		% of grou		% of fu	•
	2004	2008	2004	2008	2004	2008	2004	2008
Heating oil	97	142	21	67	21	47	15	20
Solid fuel	52	37	21	18	40	48	15	5
Electricity	84	66	28	27	33	41	21	8
Communal heating	*	*		*		*		*
Total	1,209	1,268	134	332	11	26	100	100
Off the gas network								
Off the gas network	230	265	70	117	30	44	52	35
On the gas network	979	1,003	64	215	6	21	48	65
Total	1,209	1,268	134	332	11	26	100	100
Level of loft insulation								
No Loft Space	54	56	4	11	7	20	3	3
0	67	54	21	27	31	50	16	8
1 - 50	162	112	18	35	11	31	14	11
51 - 100	585	384	58	101	10	26	43	30
101 - 150	201	205	22	43	11	21	16	13
> 150	140	457	11	115	8	25	8	35
Total	1,209	1,268	134	332	11	26	100	100
Cavity walls predominant								
Yes	781	851	59	182	8	21	45	55
No	428	417	74	150	17	36	56	45
Total	1,209	1,268	134	332	11	26	100	100
Cavity walls insulated								
Yes	250	373	*	77	*	21	*	43
No	531	478	55	104	10	22	92	57
Total	781	851	59	182	8	26	100	100
SAP band								
<35	176	178	77	103	44	58	58	31
35-65	838	883	52	210	6	24	39	63
>65	195	207	4	19	2	9	3	6
Total	1,209	1,268	134	332	11	26	100	100
Urban or rural								
Rural	426	451	71	152	17	34	53	46
Urban	783	817	62	180	8	22	47	54
Total	1,209	1,268	134	332	11	26	100	100
GOR								
North	267	273	44	75	16	28	33	23
Mid	206	263	42	92	20	35	31	28
South	736	732	48	165	6	23	36	50
Total	1,209	1,268	134	332	11	26	100	100