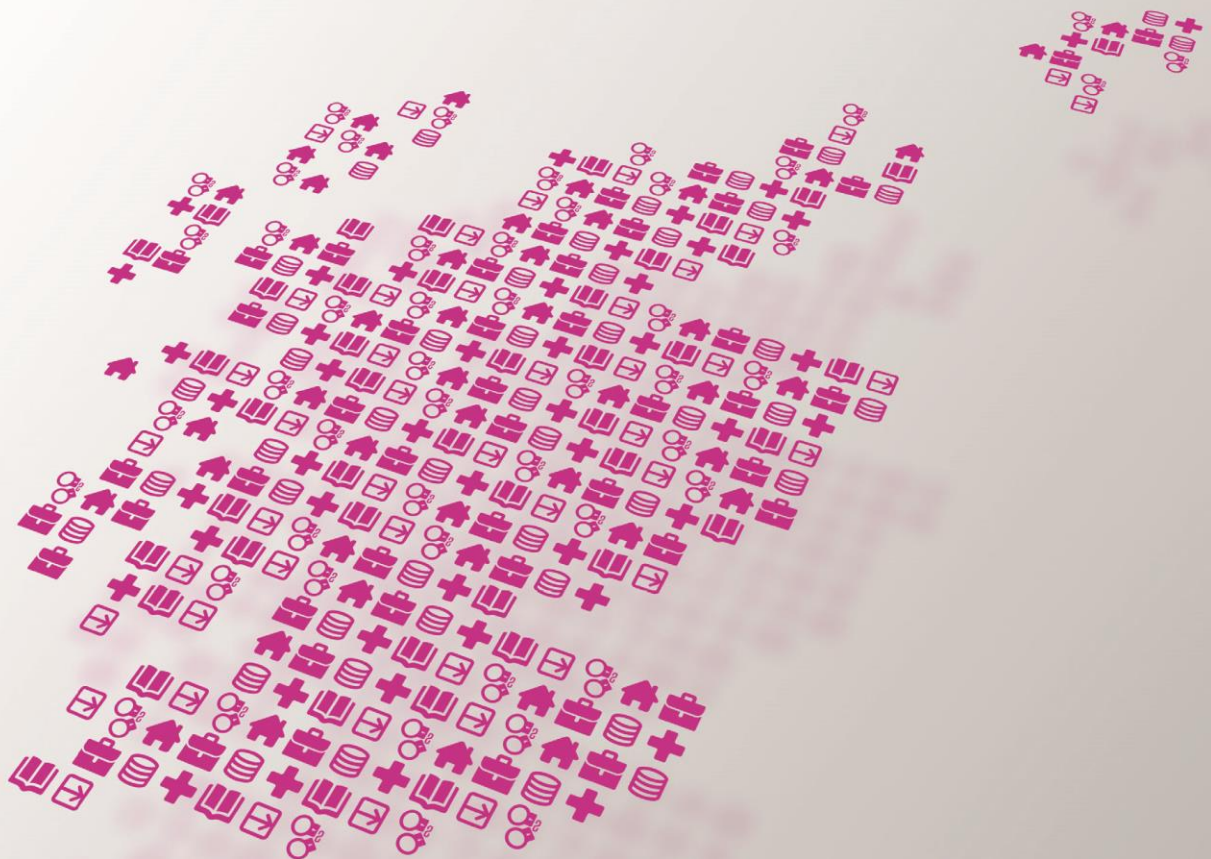




# Fuel Poverty in Dumfries & Galloway

A rural deprivation case study



# Introduction

Fuel poverty is a significant problem in Dumfries & Galloway, affecting almost half of the population. The council area has one of the highest rates of fuel poverty in Scotland. Rural households in particular are thought to be at highest risk of fuel poverty, due to a lack of access to cheaper fuels.

The main aim of this case study is to demonstrate how the Scottish Index of Multiple Deprivation (SIMD) can be used with other publicly available data to explore fuel poverty in rural areas, using Dumfries & Galloway as an example.

## What we did

We used publicly available data and reports to describe fuel poverty in Dumfries & Galloway.

- We used SIMD<sup>1</sup> to identify the most deprived areas of Dumfries & Galloway.
- We used fuel poverty data from the Scottish House Conditions Survey (SHCS)<sup>2</sup> 2015 and SHCS Local Authority Report 2012-14 to look at how many people in Scotland and in Dumfries & Galloway live in fuel poverty.
- We looked at the risk factors for fuel poverty in rural households as modelled in a study using SHCS 2012-14 data<sup>3</sup>.
- We used local estimates of fuel poverty at the intermediate zone level<sup>4</sup> to identify areas with very high levels of fuel poverty..
- We used data from the Centre for Sustainable Energy<sup>5</sup> to identify the postcodes in Dumfries & Galloway which are not connected to the gas grid. People living at those postcodes are likely to have higher fuel costs. Using the SIMD postcode look-up tool<sup>6</sup>, we identified whether those without access to mains gas are also in deprived areas.
- We worked with Citizen's Advice Scotland to explore the experiences of people who are in fuel poverty.

It should be noted that the data sources listed above cover different time periods. A large drop in the oil price between 2014 and 2015 was the main driver for a decrease in fuel poverty between these two years. This change is not reflected in the SHCS Local Authority report, the risk factor study, or the local fuel poverty estimates.

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<sup>1</sup> <http://www.gov.scot/SIMD>

<sup>2</sup> <http://www.gov.scot/Topics/Statistics/SHCS>

<sup>3</sup> <http://www.gov.scot/Topics/Statistics/SHCS/Downloads/ProbRuralFP>

<sup>4</sup> <http://www.gov.scot/Topics/Statistics/SHCS/Downloads/LIFP-2014>

<sup>5</sup> <https://www.cse.org.uk/projects/view/1259>

<sup>6</sup> <http://www.gov.scot/Topics/Statistics/SIMD/look-up>

### **What it's like**

Evelyn (52) would like to work but is unable due to a long term health condition. She lives alone in a flat rented by a local housing association which has electric heating. Because of her health condition and the cold weather, she has had additional fuel costs this winter. She receives benefits but is struggling to make ends meet. Evelyn also has a small debt which she is repaying through debt recovery. Earlier in the year she sought advice about electricity consumption. She has also been referred to a food bank.

### **What do we mean by fuel poverty?**

Homes with poor energy efficiency, challenging weather and reduced heating options (especially in rural areas) can make fuel bills unaffordable, resulting in fuel poverty. A household is in fuel poverty if it would be required to spend more than 10% of its income on all household fuels in order to maintain a satisfactory heating regime.

### **What causes fuel poverty?**

The three main drivers of fuel poverty are high fuel costs, low income and energy inefficiency in the home.

### **How many people experience fuel poverty?**

In 2015, 30.7% (or around 784,000) of households were in fuel poverty across Scotland. It is estimated that fuel poverty has declined by about 4 percentage points (or around 97,000 fewer households) compared to 2014. This reduction can be attributed to the drop in domestic fuel prices, and to a lesser degree to improvements in home energy efficiency and higher household incomes.

Among rural households, fuel poverty levels have fallen by 15 percentage points to 35% in 2015. Rural fuel poverty is now close to the level of fuel poverty found in urban areas (30% in 2015).

## **What we found**

### **Who is at risk of fuel poverty?**

A recent study by the Scottish Government examined how different dwelling and household characteristics affect the risk of fuel poverty for rural households. The results showed that earnings and employment are key predictors of fuel poverty. For example, households that are not headed by a full-time employee have an increased risk of being fuel poor.

The study identified many risk factors, including living in a single-person household and being retired. Not having insulation and having types of heating fuel other than mains gas were also identified as having an increased chance of being fuel poor.

People living within the most deprived areas of Scotland were also more likely to be in fuel poverty than those who live within the least deprived areas.

## Fuel poverty in Dumfries & Galloway

The Scottish House Conditions Survey (SHCS) 2012-2014 found that 46% of households in Dumfries & Galloway are fuel poor.

Tables 1 and 2 show the proportions of households in fuel poverty by tenure and households composition respectively. Pensioners and those living in privately rented accommodation are most likely to live in fuel poverty.

**Table 1: Percentage of households in fuel poverty by tenure, for Dumfries & Galloway and for the whole of Scotland**

Tenure	Households in D&G that live in fuel poverty	Households in Scotland that live in fuel poverty
Owner occupied	46%	33%
Social rented	33%	38%
Private rented	54%	32%

**Table 2: Percentage of households in fuel poverty by household composition, for Dumfries & Galloway and for the whole of Scotland**

Household composition	Households in D&G that live in fuel poverty	Households in Scotland that live in fuel poverty
Families	27%	21%
Pensioners	59%	51%
Adult only	45%	31%

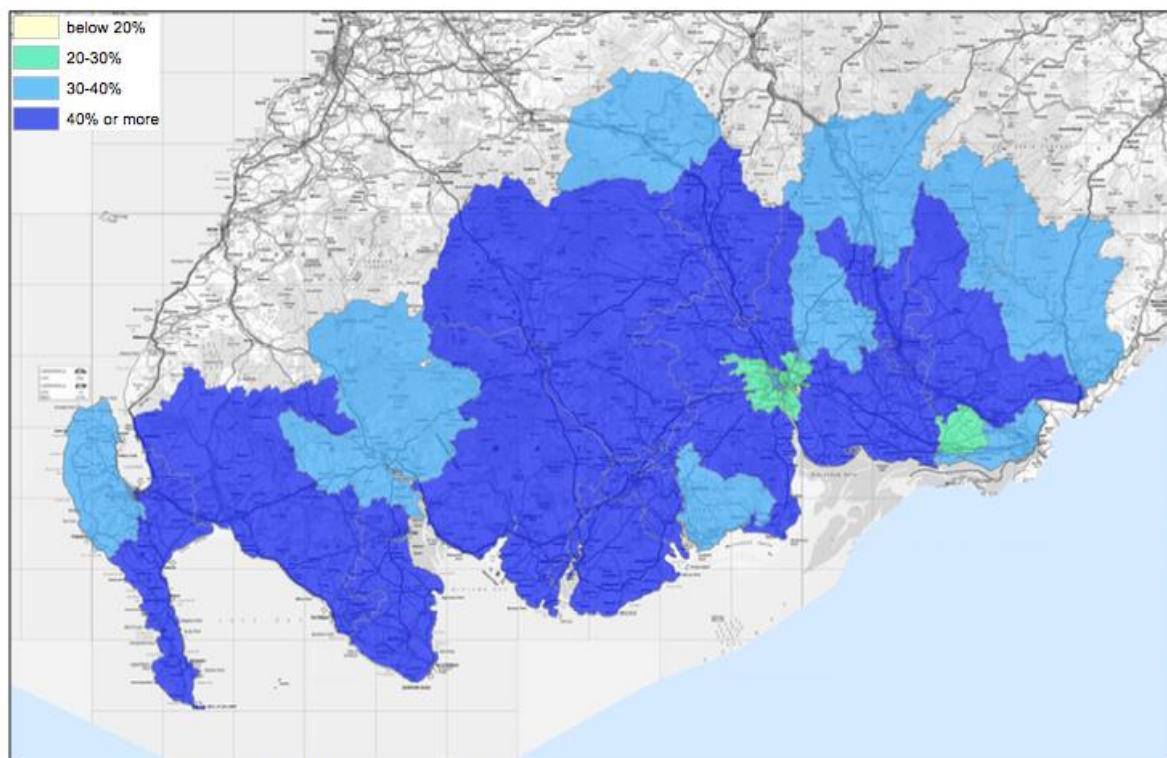
Estimates of fuel poverty were carried out under the UKSA Quality Improvement Fund in 2014. The estimates were created at the Intermediate Zone level. There are 40 intermediate zones in Dumfries & Galloway. Data from the SHCS combined with administrative and commercial sources were used to calculate the estimates. They provide an indication of a relative distribution of fuel poverty in Scotland. They can help identify areas with very high levels of fuel poverty.

The study categorises areas with different levels of fuel poverty as follows:

- Low – Fewer than 20% of households are fuel poor
- Medium – 20-29% of households are fuel poor
- High – 30-39% of households are fuel poor
- Very high – 40% or more of households are fuel poor

Map 1 shows the proportion of households in fuel poverty in Dumfries & Galloway by intermediate zone, 2010-2012. There are no areas where there are less than 20% of households in fuel poverty and that most of Dumfries & Galloway has 'very high' levels of fuel poverty. Places with the smallest proportions of fuel poor households include parts of Dumfries and Gretna Green.

**Map 1: Proportions of Households in Fuel Poverty by Intermediate Zone, Dumfries & Galloway, 2010-2012.**



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### **Where are the deprived areas?**

The most deprived area in Dumfries & Galloway, according to SIMD, is a data zone in West Stranraer. This data zone, along with another in West Stranraer and the Lochside and Lincluden data zone are within the 5% most deprived in Scotland.

When we examine only the data zones in areas classified as rural (using the Scottish Government 2-fold definition), i.e. those in settlements with less than 3000 people, the three most deprived data zones are all within the Upper Nithsdale area. The fourth most deprived rural data zone is Machars South and the fifth most deprived is Rhins South. Upper Nithsdale (3), which is the most deprived rural area, also features in the ten most deprived data zones when looking at the individual SIMD domains for income, employment, health and housing.

### **What it's like**

Phil (70) is a retired widower and lives with his dog. He rents his home from a private landlord. Phil's house is not on the gas grid and has electric heating. He normally manages to budget his weekly fuel costs but due to the recent cold weather, his heating costs are higher than usual and he is struggling to make ends meet. Phil's pension is unable to cover this cost and as a result he is sourcing food from the local food bank. He is worried that he will struggle to afford food, heating and other essentials for the rest of the winter.

Table 3 shows the number of data zones in urban and rural areas of Dumfries & Galloway by SIMD quintile.

**Table 3: Data zones in urban and rural areas in Dumfries & Galloway by SIMD quintile**

SIMD quintile	Urban	Rural	Total
1 (most deprived)	15	2	17
2	31	21	52
3	27	50	77
4	17	20	37
5 (least deprived)	18	0	18

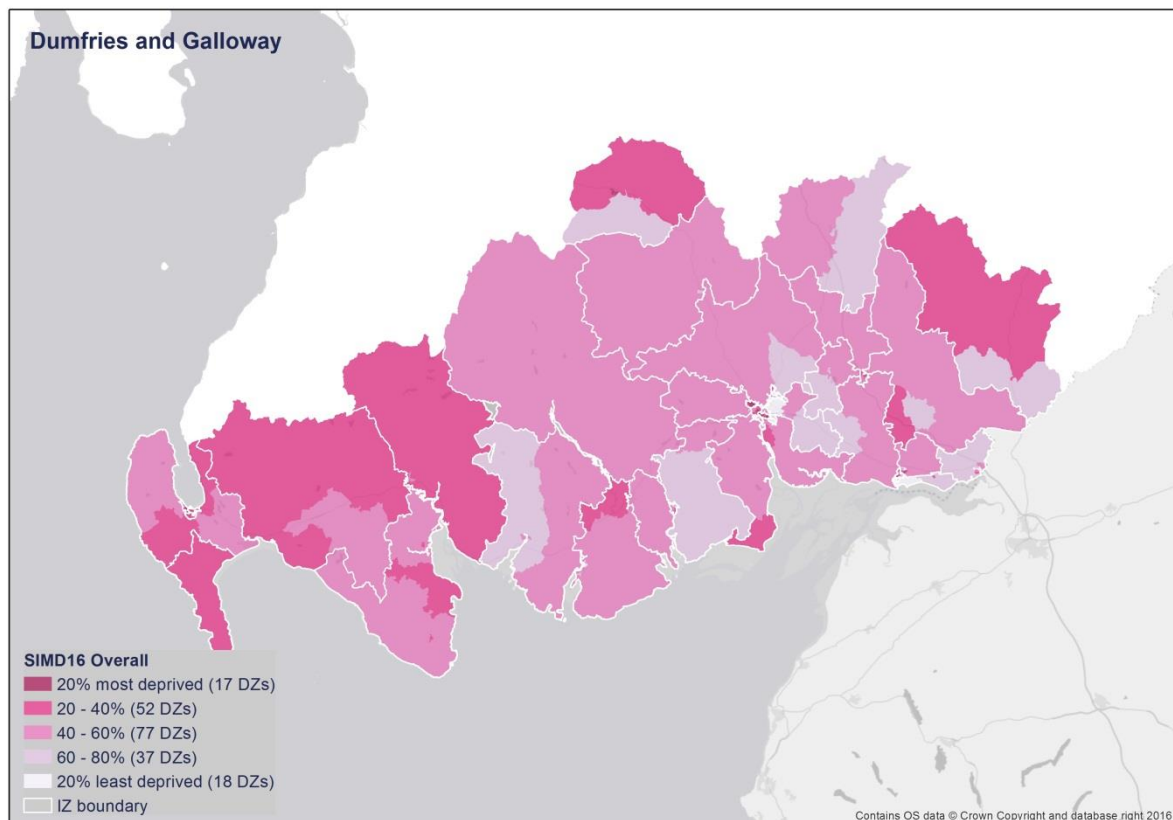
Map 2 illustrates the different levels of deprivation found in Dumfries & Galloway. Data zones are categorised by the 20% band (quintile) nationally in which their ranking is found.

If we compare Map 1 with Map 2, we can see that high levels of fuel poverty are not only found in the deprived areas.

Further information about the SIMD results for Dumfries & Galloway can be found in the council area profile. This can be found here:

<http://www.gov.scot/Resource/0051/00510715.pdf>

**Map 2: SIMD16 Quintiles in Dumfries & Galloway**



## Where are the households which are not connected to the gas grid? Are they also in the deprived areas?

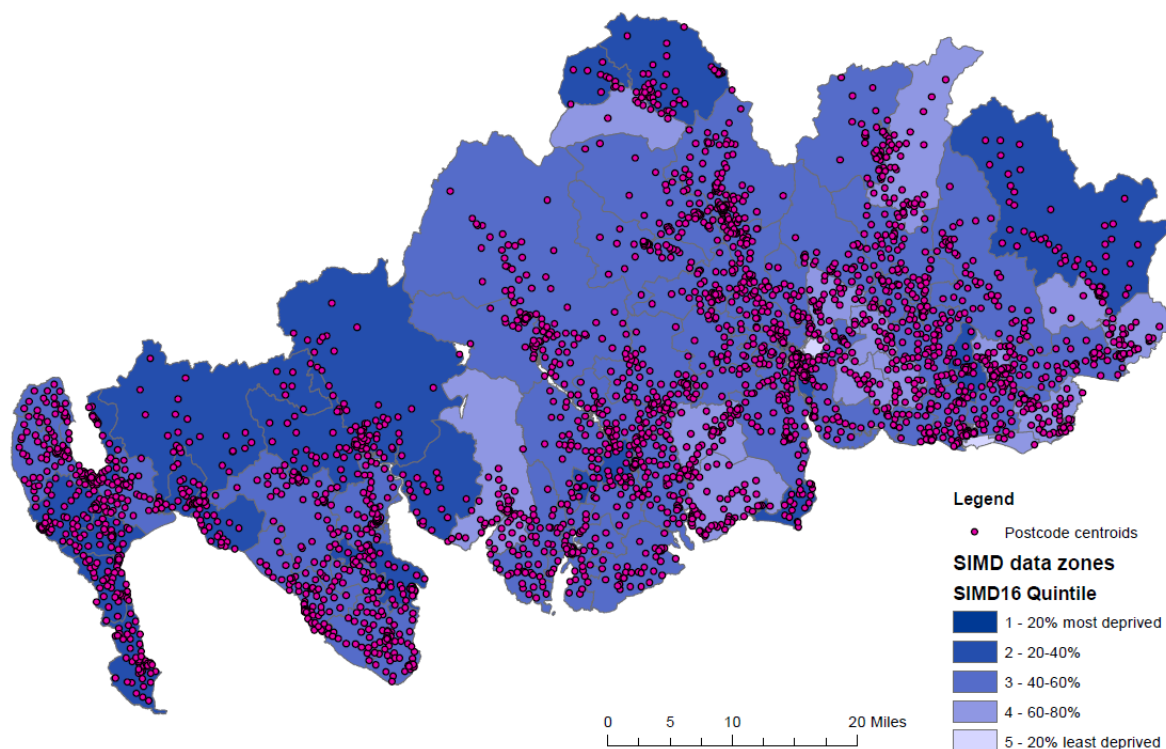
Households which do not use mains gas as their source of fuel are more likely to heat their homes using more expensive fuel sources such as electricity, oil or solid fuels. Therefore, households which are not connected to the gas grid are more likely to be in fuel poverty. However, this does not mean that everyone who is using other fuel sources is in fuel poverty. There are other factors to consider, including the household's income and energy efficiency.

In Dumfries & Galloway, 34% of dwellings are off the gas grid which is a higher proportion than for the whole of Scotland (16%).

Out of the 201 data zones in Dumfries & Galloway, 155 data zones contain postcodes which are not connected to the gas grid.

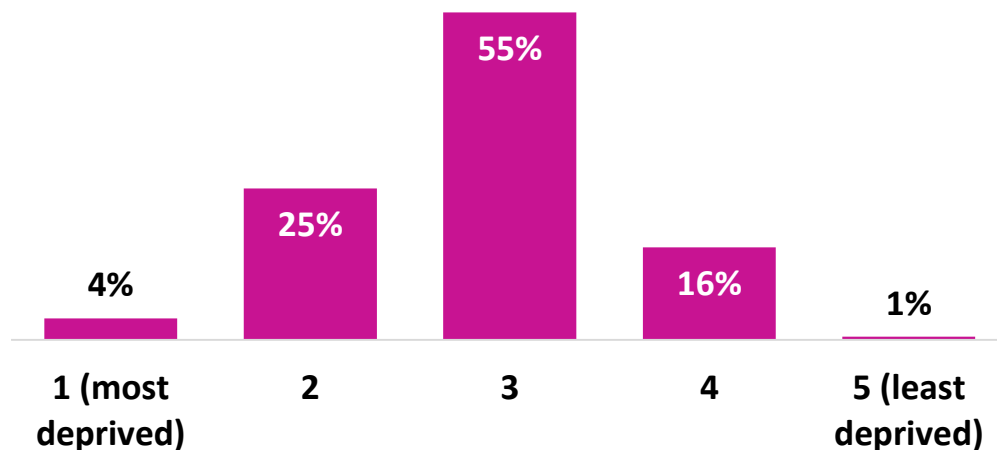
Map 3 shows the postcode areas that are not on the gas grid overlaying the SIMD quintiles. We can see that households which are not on the gas grid are scattered across the council area and are not necessarily concentrated in the more deprived areas.

**Map 3: Postcodes not on the gas grid and SIMD quintiles in Dumfries & Galloway**



We can present this information in a bar chart to assess the distribution of off-grid postcodes across the SIMD quintiles, as shown in Graph 1. We can see that the highest proportion is in the third quintile (55%) and the lowest is in the least deprived quintile (1%).

**Graph 1: Distribution of off-grid postcodes across SIMD quintiles**



We can also examine the distribution of off-grid postcodes by urban/rural classification. The total number of data zones containing off-grid postcodes is 155, with 89 in rural areas and 66 in urban areas.

### **What it's like**

Andy (30) lives with his girlfriend Sarah, 28, and their 4-year old son, Jack. They live in a 2-bed flat rented from a housing association. Their home is heated by solid brick storage radiators which are prepaid on an energy meter. Andy and Sarah are both unemployed and receive benefits. They applied for and received hardship payments but unfortunately these are not stretching far enough and they are struggling to afford food, warm clothing and to heat their home during the winter. Andy doesn't want Jack to become unwell, so keeps the heating on while at home. However, he is increasingly anxious about being able to afford the bills. Andy feels that their heating costs would be lower if they had a more efficient energy system but has limited control over this as he does not own his home. He has registered a complaint to his housing association and is waiting for them to assess whether the heating system can be upgraded and made more efficient.



## Summary & Recommendations

- Fuel poverty is a significant issue in Dumfries & Galloway with many areas experiencing high or very high levels of fuel poverty.
- Not everyone in fuel poverty or at risk of fuel poverty lives in a deprived area. In order to target people at risk, organisations should use data and information in addition to SIMD.
- SIMD may be useful for identifying areas where there are concentrations of the issues that sometimes exist alongside fuel poverty. The 'what it's like' examples show that people who experience fuel poverty may also be experiencing other issues such as income poverty and poor health. As a result of fuel poverty, they may be struggling to feed themselves and their families and may rely on local food banks.
- Households which are not connected to the gas grid and therefore likely to be paying higher prices for fuel are spread across SIMD quintiles. Living off the gas grid is not the only factor linked to fuel poverty. This case study only provides an example of useful data which is publicly available. It may be useful to explore the other risk factors mentioned. This can be done using census data.
- The benefits of using SIMD for exploring fuel poverty directly are limited and we are aware that the housing domain in SIMD16 does not capture fuel poverty very well. This is a problem when examining both rural and urban areas. We are exploring ways in which we can improve the housing domain for SIMD19.

**We are very grateful to the staff at Citizens Advice Scotland who provided insight into the real life experiences of people affected by fuel poverty.**