



**Isle of Man
Government**

Reiltys Ellan Vannin

Isle of Man Fuel Poverty Report

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Introduction

The Cold, Hunger and Homelessness Action Plan¹ committed the Isle of Man Government to measure fuel poverty on the Isle of Man using the Low Income, High Cost (LIHC) model.

However, there is more than one way to measure fuel poverty, with the LIHC model only used by England, whilst the model of 10% or more of spending on fuel is used in the other devolved administrations of Scotland, Wales and Northern Ireland.

To allow for comparison across the various administrations, this report measures fuel poverty on the Isle of Man using the following two methods:

- 1- 10% of income, after housing costs, spent on fuel
- 2- Low Income High Cost model

Under the 10% indicator, a household is considered fuel poor if it is required to spend more than 10% of its household income, after housing costs, to maintain a satisfactory level of heating.

Under the Low Income High Costs indicator a household is considered fuel poor if,

- Their fuel costs are higher than the national median level.
- If they were to spend that amount on fuel, they would be left with an income below a defined level of disposable income².

Executive Summary

- Fuel poverty on the Isle of Man has decreased from 9.9% in 2013 to 9.3% in 2018 under the LIHC indicator and 16.6% to 15.8% under 10% indicator.
- Average weekly expenditure for households on all fuel types other than gas and coal has decreased compared to 2013.
- Weekly expenditure on fuel in the Isle of Man is £42.50 per week, compared with £23.80 in the UK, with expenditure on oil being much greater than in the UK.
- For individuals aged under 64, weekly expenditure on all fuel types has decreased compared to 2013, and for individuals aged over 65, weekly expenditure on all fuel types other than gas has decreased.
- The proportion of fuel poor households is lower on the Isle of Man (9.3%) compared to England (10.9%).
- The average fuel poverty gap per household on the Island (£338 per annum) is slightly higher compared to England (£321 per annum), with the total fuel poverty gap being £1,124,278.

¹ Action Plan for Cold, Hunger and Homelessness for 2019/20, Cabinet Office, September 2019, 2019/0065, <http://www.tynwald.org.im/business/opqp/sittings/20182021/2019-GD-0065.pdf>

² 60% of the median equivalised disposable income

Part A - Isle of Man Residents – Actual spending on fuel

Table 1 compares weekly fuel costs from the past three Household Income and Expenditure Surveys from 2009/07³, 2012/13⁴ and 2018/19⁵.

Table 1 Household fuel expenditure

Fuel type	2006/07	2012/13	2018	Change between 2013 to 2018
Electricity	10.92	16.03	15.41	-4%
Gas	7.88	9.16	9.37	2%
Oil	5.27	16.62	15.79	-5%
Coal	0.84	1.56	1.94	24%
Wood/Other	0.08	0.52	0.31	-40%
Total – weekly	24.99	43.89	42.81	-2%
Total – annual	1,299	2,282	2,226	-2%

Over the period between 2006 to 2013, inflation, as measured by RPI was 28%, whilst fuel costs rose much faster over this period (76%), driven by large increases in oil prices. For the period from 2013 to 2018, inflation, using CPI (the CPI measure began production in 2008) was 8.6%. However, actual fuel spending for households over this period fell by 2%.

Average weekly expenditure for households on all fuel types other than gas and coal has decreased compared to 2013. The greatest decrease in expenditure is seen for wood/other and the greatest increase is for coal however, the total proportion of household income spent on these two fuel types is still comparatively lower compared to electricity, oil and gas.

Part B – Spending by quartile and a comparison with the UK

Table 2 compares the average spending of each quartile, based on income, from the 2018/19 Isle of Man HIES. A quartile is determined by ordering all of the data in ascending order and splitting it into four quartiles. Quartile 1 relates to the lowest income households, whilst Quartile 4 relates to the highest income households.

The table also presents the weekly average income of each quartile.

Table 2 Fuel expenditure by quartile 2018/19 HIES

	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Overall
Electricity	13.37	12.47	13.52	17.16	15.41
Gas	7.34	9.53	8.62	9.58	9.37
Oil	10.84	12.08	13.49	22.01	15.79
Coal	0.48	1.73	1.60	1.87	1.94
Total Cost	32.03	35.81	37.23	50.62	42.81

³ Isle of Man Household Income and Expenditure Survey 2006/07, GD 030/08

⁴ Isle of Man Household Income and Expenditure Survey 2012/13, GD 2014/0049, https://www.gov.im/media/385691/isle_of_man_household_income_and_expenditure_survey_2013.pdf

⁵ Household Income and Expenditure Survey 2018/19, GD 2019/0099, <https://www.gov.im/media/1367701/isle-of-man-household-income-and-expenditure-survey-2018-19-070120.pdf>

Weekly Income	329	635	1,056	2,373	1,099
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Table 3 compares weekly expenditure between the UK and the Isle of Man, with the most notable difference being the level of expenditure on oil. This is to be expected as only 1% of households in the UK are heated using oil, compared with 46% of properties on the Island.

Table 3 UK and Isle of Man Fuel Expenditure

Fuel Type	UK	Isle of Man
Electricity	11.4	15.4
Gas	9.8	9.4
Coal and coke*	1.6	1.9
Oil	1	15.8
Total	23.80	42.50

* The UK data for Other fuels and Paraffin has been included within coal and coke for comparative purposes.

Part C – Who spends the most/least on fuel

Table 4 presents fuel expenditure by the age of the household reference person who completed the survey. Whilst most households will be comprised of similar age adults, a household that is classified as Over 65 may have under 65 presents and similarly for those classified as 64 or under, that may have over 65s present.

Table 4 Fuel Expenditure by age

Fuel Type	2013		2018	
	Over 65	64 and under	Over 65	64 and under
Electricity	13.57	16.89	13.51	14.43
Gas	7.79	9.64	8.37	8.95
Oil	18.09	16.01	17.26	13.32
Coal	1.82	2.16	1.39	1.43
Total	41.27	44.80	40.53	38.13

For households classified as 64 and under, weekly expenditure on all fuel types has decreased compared to 2013, and for individuals aged over 65, weekly expenditure on all fuel types other than gas has decreased.

Part D – Fuel Poverty Modelling

10% Indicator

The 10% indicator is the more straight forward of the two measures to calculate. The 10% indicator is the number of households, who after housing costs, spend 10% or more of their weekly income on fuel.

Housing costs include mortgage payments and rental payments. The household incomes are equivalised, using the factors in Table 6, which are the same as those used by the UK. This process means that households with one person can be compared to a household of six people.

Fuel costs are also equivalised, using the factors in Table 5. Once this process is completed, if the household spends 10% or more of its income on fuel, it is classified as being in fuel poverty.

A limitation with the 10% indicator is that the number of households in fuel poverty is heavily influenced by the cost of fuel and without any policy change, the number of fuel poor households can change significantly.

Low Income, High Cost Indicator

The Low Income, High Cost (LIHC) indicator was designed to reduce the impact that changes in fuel prices has on the number of fuel poor households. It also seeks to compensate for households that may be fuel rationing themselves, meaning that they are spending less on their heating than they should, which might understate the level of fuel poverty.

The other benefit of the LIHC indicator is that it can be used to calculate the 'depth' or scale of fuel poverty that exists, both at a national level and as an average per fuel poor household.

The LIHC indicator is based on the following:

- Modelled heating costs to maintain a property to an adequate level of heating, equivalised for household size
- 60% of the median equivalised, after housing cost, household income

Modelled Heating Costs versus Actual Heating Costs

The LIHC relies on the modelled heating costs rather than the actual heating costs, which may be understated due to households self-rationing. The Isle of Man has undertaken a housing condition survey in 2007/08 and in 2019 (with the results not yet available) which estimates the average cost of heating, however it does not include electricity costs for appliance usage. The LIHC methodology includes the costs of all fuel, including electricity for appliance usage, therefore as the most appropriate measure (and consistent with the previous Isle of Man estimate), actual spending data from the HIES has been used.

The gap between modelled and actual spending came out to be 13% in the UK for 2012, which is why modelled costs were used instead of actual in the UK. However the gap disappeared in 2013 when modelled costs came out to be 2% lower than the actual spending. This was because actual spending on fuel was collected using questionnaires rather than diaries. The Isle of Man 2018/19 HIES also uses actual levels of spending on fuels rather than diaries and so is closer to UK 2013 Methodology, which supports using actual spend data.

Temperature

The UK methodology differentiates between different areas to calculate their theoretical fuel needs based on the respective temperatures however this is not considered necessary for the Isle of Man as it is assumed that fuel requirements are broadly the same across the entire Island.

Part E – Fuel Poverty

Fuel cost threshold

The Fuel cost threshold is the minimum required level of fuel costs for households and is calculated as the weighted median for the equivalised required fuel costs for all households in the sample.

The minimum required level of fuel costs on the Isle of Man is assumed to be £2,226⁶ for all households and an equivalisation factor is applied to each household based on the number of persons in that household to get a respective required fuel costs. This is applied by dividing £2,226 by the number of people in the household and allows different size households to be compared.

Table 5 Equivalisation factors for fuel costs under Low Income High costs Indicator

Number of people in the household	Equivalisation factor
One	0.82
Two	1.00
Three	1.07
Four	1.21
Five or more	1.32

A weighted, based on household size, median of the individual household fuel cost thresholds is then calculated and this becomes the fuel cost threshold by which households are classified as fuel poor.

The fuel cost threshold for the Isle of Man for 2018/19 is **£2,291** per annum.

Household Income threshold

The income threshold is after the payment of housing costs, of rent and mortgage payments. Equivalisation factors are then applied to this after housing cost income to make it comparable across households with different sizes.

A relative low income threshold is then calculated as 60% of the weighted median of the Equivalised After Housing Costs income. The threshold is then made household specific by adding the required fuel costs of that household to the relative low income threshold.

This means that each household will have different poverty line based upon their required heating costs.

⁶ Average expenditure on fuel according to 2018/19 HIES

Table 6 After housing costs income equivalisation factors for the Low Income High Costs indicator

Number of people in the household	After Housing Costs (AHC) income equivalisation factor
First adult in the household	0.58
Subsequent adults (includes partners and children aged 14 or over)	0.42
Children under 14	0.20

The low income threshold for the Isle of Man for 2018/19 is **£21,422** per annum

Criteria used for Fuel Poverty

Under the Low Income High Costs indicator, a household is considered as fuel poor if:

1. The household's required fuel costs are greater than £2,291; and
2. The household's after housing cost income plus their required fuel costs is less than £21,422

Part F – Fuel Poverty Statistics

10% Indicator

Table 7 shows the percentage of households in fuel poverty, using the 10% indicator, by administration:

Table 7 Fuel Poverty using the 10% Indicator by administration

Administration	% of households in fuel poverty
Isle of Man – 2018	15.8%
Wales – 2018	12%
Scotland – 2017	25%
Northern Ireland – 2016	22%

The number of private households in the 2016 census was 35,763, therefore it is estimated that 5,651 households are in fuel poverty using the 10% indicator.

Table 8 presents the Isle of Man data by the same breakdown used in the HIES report, of Over 65, 64 and under and one person households.

Table 8 10% indicator by household type

Year	64 and under	Over 65	1 person	All
2013	10.7%	32.6%	28%	16.6%
2018	11.5%	4.3%	4.9%	15.8%

Low Income, High Cost Indicator

Table 9 shows the number of households in fuel poverty under the LIHC definition, with a comparison with England.

Table 9 Fuel poverty using the LIHC measure

Administration	% of households in fuel poverty
Isle of Man	9%
England	11%

Using the LIHC indicator, it is estimated that 3,326 households are in fuel poverty.

Table 10 presents the Isle of Man data in a same way as Table 8, by different household types.

Table 10 LIHC by household type

Year	64 and under	Over 65	1 person	All
2013	7.1%	8.7%	8.2%	9.9%
2018	4.7%	4.6%	9.3%	9.3%

Part G – Fuel poverty gap

The LIHC fuel poverty measure allows for the fuel poverty 'gap' to be measured, which is defined as the amount by which a fuel poor household's costs exceeds the fuel cost threshold.

This fuel poverty gap can be calculated as both an average per household and a total amount for all fuel poor households to give an indication of the scale of the issue nationally and to individual households.

For 2018, the average fuel poverty gap per household was £338 and the total fuel poverty gap is £1,124,278. In England, the equivalent fuel poverty gap per household was £321.



Isle of Man
Government

Reiltys Ellan Vannin



Isle of Man Government
Government Office
Bucks Road, Douglas
Isle of Man, IM1 3PN

Telephone: (+44) 01624 686107

Email: **economics@gov.im**

www.gov.im/