
Coverage: UK
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Geographical Area: UK
Theme: Economy
Theme: People and Places
Household Energy Spending: 7 things you should know

1. UK households spent an average of £106 a month on household energy in 2012. This was a 55% rise on the 2002 monthly spend, after accounting for inflation. This is despite a decline in average energy usage.

Source: Office for National Statistics

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UK households spent an average of £106 a month on electricity, gas and other household fuels\(^1\) in 2012. This compares to £69 a month in 2002, after adjusting for inflation using the Consumer Price Index (CPI). This means there was a 55% increase in average household spending on energy between 2002 and 2012.

Over this same time period, household energy use has fallen, with figures from the Department of Energy and Climate Change (DECC) showing that the average amount of energy used per
household was 17% lower in 2012 than in 2002. This means the increase in the average amount households are spending is explained solely by rises in energy prices.

Average household energy use has fallen for a number of reasons. These include the installation of energy efficiency measures (such as loft and wall insulation, and more efficient boilers), households responding to higher bills by reducing use, and generally increasing public awareness of energy consumption and environmental issues. However, energy prices have risen faster than average household consumption has fallen, resulting in rising average bills.

Most of the increase in average spending on energy came between 2004 and 2009, reflecting the significant increases in energy prices which occurred over this period. By 2009, the average household spent the equivalent of £108 a month (in 2012 prices) on energy. Since then, there has been relatively little change in the average monthly spend on energy.

The limited change in expenditure since 2009 may be explained by a combination of factors, including a fall in domestic energy prices in 2010, and price rises in subsequent years appearing to be offset by lower energy use, partly due to milder winter temperatures.

¹These include coal, oil for central heating, paraffin and wood. Transport fuels (i.e. petrol and diesel) are not covered by this publication.
2. Average household spending on gas increased 56%, while average spending on electricity increased 43% between 2002 and 2012, after accounting for inflation.

In 2002, households using electricity had an average monthly spend of £35 (in 2012 prices). In 2012 this had risen to £51, a 43% increase. Households that used gas in 2002 were spending an average of £37 a month on this fuel (in 2012 prices) but this had risen to £57 in 2012, a 56% rise.

The larger increase in the average spend on gas is largely explained by the fact that gas prices have risen more sharply than electricity prices in recent years, rather than any changes in the amounts used. Despite some year on year fluctuations, possibly reflecting variations in average temperatures, there have not been any substantial changes in the fuel mix for household use over this time. Figures from DECC show that in 2012, 67.6% of household energy use was natural gas, while electricity made up 22.9%. This represents only a relatively small change from 2002 when the percentages were 68.2% and 21.7% respectively.
In 2012, only 7% of households recorded spending on other household fuels such as coal, oil for central heating, paraffin and wood. However, for these households, average spend on these fuels was £131 a month in 2012, up from £68 in 2002, a 92% increase.

3. On average, households spent the equivalent of 5.1% of their income on household energy in 2012, up from 3.3% in 2002. Most of this rise occurred between 2004 and 2009.

While spending on energy has risen significantly between 2002 and 2012, households have not seen a comparable increase in their disposable income, that is, the amount of money that they have available for spending and saving after accounting for direct taxes (such as income tax and council tax). Between 2002 and 2007, the average household’s disposable income grew by 6.9%, after taking into account the effect of inflation. However, since 2007 disposable incomes have fallen by approximately 6.7% in real terms.
As a result of this, expenditure on household energy is now equivalent to 5.1% of household disposable income for the average household, up from 3.3% in 2002. Most of this increase occurred between 2004 and 2009, although the fall in disposable income since 2007 has increased the impact of recent energy price rises.

4. The poorest fifth of households spent 11% of their income on household energy in 2012, up from 8% in 2002. The richest fifth spent just 3% in 2012 up from 2% in 2002.

In 2012, the poorest fifth of households spent £93 a month on household energy (equivalent to 11% of the average disposable income for this group), compared with £126 a month for the richest fifth (equivalent to 3% of their disposable income). This difference is likely to be partly explained by the poorest fifth of households having, on average, fewer rooms than the richest fifth, which may
influence their energy needs and therefore use. However, it is probable that a range of other factors which affect spending decisions and priorities are also important.

Concentrating on the poorest fifth of households, the percentage of their disposable income spent on household energy has risen from 8% in 2002 to 11% in 2012. This increase is explained by energy prices rising at a faster rate than incomes. Although, after adjusting for inflation, disposable incomes for the poorest fifth of households grew by around 11% between 2002 and 2012, average spend on energy rose by 51%.

As with the overall population, the majority of this increase occurred between 2004 and 2009, reflecting the significant price increases over this period. The slight fall in the percentage of income spent on energy in 2011 may be due to a combination of factors, including a reduction in spending resulting from a relatively mild winter compared to the year before.

For the richest fifth of households, spending on energy grew by 36% between 2002 and 2012, while average disposable incomes actually fell by 1% over this period, after adjusting for inflation.
5. Retired households consistently spent a greater percentage of their income on household fuel than non-retired households, even after accounting for winter fuel payments.

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<th>Energy Comparison: Retired and Non-Retired Households</th>
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<td>Retired Households</td>
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<td>Average monthly spend on energy</td>
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<td>Average number of rooms</td>
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Source: Office for National Statistics

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In 2012, retired households spent, on average, £97 a month on household energy, compared with £110 for non-retired households. However, when taken as a percentage of disposable income (which includes Winter Fuel and Cold Weather payments, as well as other cash benefits, pensions, and earnings from employment), spending on energy is consistently higher for retired households than non-retired households. In 2012, retired households spent an average of 7% of their disposable income on household energy, compared with 4% for non-retired households.

The difference in the amount spent by retired and non-retired households is likely to be partly due to retired households having fewer people in them, on average, resulting in lower total energy requirements (though a higher energy requirement per person). In 2012 the average number of people in a retired household was 1.5 and in a non-retired household it was 2.6.
All figures on household spending on energy in this article are based on the amount actually paid, so are net of any discounts offered by suppliers, including those provided through the Warm Homes Discount Scheme. The Warm Homes Discount, which was introduced in 2011, is offered to people whose electricity supplier is part of the scheme and either receive the Guarantee element of Pension Credit or meet ‘broader group’ criteria, which can vary across suppliers.

6. The average Winter Fuel/Cold Weather payment to a retired household was equivalent to 20% of their typical energy bill in 2012.

Source: Office for National Statistics

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In 2012, retired households received an average of £216 a year in Winter Fuel and Cold Weather Payments. This was equivalent to around 20% of their typical annual energy bill. Non-retired households received an average of £24 a year in these payments, equating to around 2% of their annual spending on household energy.
Winter Fuel Payments of between £100 and £300 a year are paid to UK residents over the qualifying age (for Winter 2013/14, it is those born on or before 5 January 1952). Additionally, people who are in receipt of certain benefits such as Pension Credit and Income Support may be eligible for Cold Weather Payments during periods of prolonged cold weather.

7. The average household in Northern Ireland spent a substantially higher amount on energy than the average household in other UK countries.

Source: Office for National Statistics

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Considering the average household energy spend across the countries of the UK from 2010 to 2012, households in Northern Ireland were spending £154 a month on energy (in 2012 prices). This was £42 higher than in Scotland, £49 higher than in Wales and £51 higher than in England.
The higher average spend in Northern Ireland may be partly explained by the different nature and size of the energy market there. Due to a relatively limited gas network, many homes in Northern Ireland rely on oil-fired central heating, which is likely to lead to higher energy costs (the Northern Ireland House Conditions survey found that 68% of households used heating oil for central heating). Additionally, in those areas where mains gas is available, the market is not yet fully open to competition, with only a single supplier operating in some areas.

Across the rest of the UK, any differences in the average energy spend are very small. The average monthly spend in Scotland is slightly higher than in England and Wales, consistent with DECC figures on energy consumption per household.

**Glossary**

**Disposable Income:** Disposable income is arguably the most widely used household income measure. Disposable income is the amount of money that households have available for spending and saving after direct taxes (such as income tax and council tax) have been accounted for. It includes earnings from employment, private pensions and investments as well as cash benefits provided by the state.

**Equivalisation:** The income quintile groups used in this analysis are based on a ranking of households by equivalised disposable income. Equivalisation is the process of accounting for the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members. Equivalisation takes into account the number of people living in the household and their ages, acknowledging that whilst a household with two people in it will need more money to sustain the same living standards as one with a single person, the two person household is unlikely to need double the income.
Income quintiles: Households are grouped into quintiles (or fifths) based on their equivalised disposable income. The richest quintile is the 20% of households with the highest equivalised disposable income. Similarly, the poorest quintile is the 20% of households with the lowest equivalised disposable income.
Household energy: Spending on household energy includes expenditure on electricity, gas and other household fuels such as coal, oil for central heating, paraffin and wood.

Retired and non-retired persons and households: A retired person is defined as anyone who describes themselves (in the Living Costs & Food survey) as ‘retired’ or anyone over minimum National Insurance pension age describing themselves as ‘unoccupied’ or ‘sick or injured but not intending to seek work’. A retired household is defined as one where the combined income of retired members amounts to at least half the total gross income of the household.

Background notes

1. The figures in this article are based on the Living Costs and Food Survey (LCF) which is carried out by the Office for National Statistics. The LCF is an annual household survey of approximately 5500 households, designed to collect data on household expenditure and income. Households taking part in the survey have a face-to-face interview and also keep a two week expenditure diary.

2. Figures for average expenditure have been calculated on the basis of consuming households, i.e. only those households who consumed the particular fuel in question are included in the calculation of the average expenditure. These estimates therefore differ from those published in Family Spending, where the total of all households is used to calculate average fuel expenditure.

3. The household disposable income figures come from The Effects of Taxes and Benefits on Household Income (ETB) series, which is derived from the LCF. The most recent ETB income figures are for the 2011/12 financial year. Therefore, provisional estimates of income for 2012 have been produced for this article, based on the LCF data.

4. All expenditure and income measures reported in this article have been deflated to 2012 prices using the all items Consumer Price Index (CPI).
5. Supporting information on energy prices and consumption is taken from the Department for Energy and Climate Change (DECC) publications listed in the related statistics and analysis section.

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This document is also available on our website at www.ons.gov.uk.

Appendices

Related statistics and analysis

The following related publications are produced by ONS and DECC:

The Effects of Taxes and Benefits on Household Income, 2011/12

Family Spending, 2012

Household Energy Consumption in England & Wales, 2005-2011

Quarterly Energy Prices

Energy consumption in the UK

Sub-national total final energy consumption data