

## **Borough's Energy Consumption Note**

### **1. Domestic Energy Consumption**

Advice from the County Council Environment section is there are no definitive statistics for domestic or non-domestic energy consumption available for Ribble Valley.

There are national average figures available through the Department of Energy and Climate Change (DECC) that date from July 2013 (see reference 1 below). These include summaries of recent trends in such matters as consumption by fuel type; end use; and also per head and by income.

In general domestic energy use has increased by 6% since 1990, whilst there has been a national increase in the number of households of 20% and a 12% increase in national population. However, at a per household level energy consumption has fallen by 12% since 1990. Domestic energy consumption is 29% of total national energy consumption.

Nationally there has also been a change in the fuel mix since 1970 with very significant reductions in the use of coal and increases in the use of gas (68% of total) and electricity (23%). Space heating remains the primary domestic energy use.

In terms of household use electricity consumption in kilowatt hours (kWh) has remained relatively unchanged since 2008 whilst gas consumption, as may be expected as it is the major space heating fuel, has shown some variability since 2008 due to colder or milder winters but has on average shown a decline from approx 17000 kWh in 2008 to approx 15000 kWh in 2012.

It would appear reasonable, in the absence of any evidence to the contrary, to assume that Ribble Valley will have in general terms followed the above national trends.

The specific temperature corrected average household consumption figures for gas and electricity from 2008 to 2012 are:

Electricity:	2008	4599	kWh,	2012	4277	kWh	
Gas	:	2008	16976	kWh,	2012	15257	kWh

An extrapolation across Ribble Valley's 24,045 households (2011 census) would therefore indicate that the Borough's domestic consumption of energy is :

Electricity	-	10,284,046	kWh	(or	10.24	MWh)
Gas	-	36,685,456	kWh	(or	36.68	MWh)

### **2. Industrial Energy Consumption**

Again, there are no Ribble Valley specific figures for industrial energy consumption. There are national figures available through DECC sources (see reference 2 below).

The data solely refers to a variety of industrial sectors and therefore does not include other elements of wider commercial energy use such as the office or retail sectors.

Nationally 2012 industrial energy consumption was 3% lower than in 2011 and 35% lower than in 1990. The industrial sector accounts for 17% of national energy consumption. The reductions are considered to be due to energy efficiency improvements in electricity generation, changes in the structural nature of the industrial sector and efficiency of the final use of energy as it is transformed from primary into secondary fuels. The actual consumption of energy in any one area will depend on its unique combination of enterprises and therefore making any comparisons across adjacent geographical areas is difficult. Also there is no one relatively simple average industrial consumption figure, such as the national domestic household figure, available. Therefore it is not possible to derive a figure for Ribble valley industrial energy consumption. There seems to be no reason to assume that Ribble Valley's enterprises are any more or less energy efficient than other areas and therefore the national assumptions would seem to be relevant as a way of judging overall consumption.

In general terms there has been a significant reduction in the national use of coal and oil as industrial energy fuels and a rise in the use of gas and electricity, which combined now account for 72% of industrial energy.

## **References**

1. Energy Consumption in the UK (2013), Chapter 3 Domestic Energy Consumption in the UK between 1970 and 2012. URN: 13D/158, July 2013.
2. Energy Consumption in the UK (2013), Chapter 4 Industrial Energy Consumption in the UK Between 1970 and 2012. URN: 13D/160, July 2013