

## Reducing Electricity use in the home – how are you doing?

There's a lot of help out there about how to save energy (for example at the Energy saving Trust <http://www.energysavingtrust.org.uk/Easy-ways-to-stop-wasting-energy>), but perhaps less about judging how well you are doing. This note aims to fill this gap. It is really relevant to Wiltshire but the conclusions will be similar elsewhere in the UK. One caveat – this note assumes that you do not use electricity for heating. Some areas in Wiltshire (particularly to the east of the county) do not have access to mains gas and some may use electricity for heating.

If you are using less than 4000 kWh a year in your home you are doing better than the average. However this is not the end of the story. Some homes use much more than the average, which tends to distort the statistics.

Perhaps a better way of thinking about it is to consider the median value. That is the figure where 50% of households use more than this amount of electricity and 50% use less. The median value in the South West is about 3500 kWh.

But again this is not quite the whole story! Another way of thinking is what is the 'most popular' level of use – or the mode. This is actually about 2500 kWh. We do have to be careful because the statistics are not perfect.

There is no easy answer, but it would be good if the Department of Energy and Climate Change (DECC) provided a better way of deciding how you are doing. But based on this data for an 'average home' (all from DECC sources):

Doing well:                    less than 2000 kWh a year

Doing OK:                    3000 kWh a year

Could do better :            4000 kWh

Why so high?                5000 kWh

That said, it does all depend on your lifestyle. If you are in a family of 6 then it is very different to a 1 person household. Equally the type of house will have an influence. As a rough correction the following may be useful. If you have more accurate figures please let us know!:

How am I doing?	Lifestyle energy usage (kWh a year)			
	1 person household	2 person household	2 adults + 2 Children	2 adults + 4 children
Doing well	1200	1800	2200	2600
Doing OK	1800	2700	3300	3900
Could do better	2400	3600	4400	5200
Why so high?	3000	4500	5500	6500

Of course, this really only shows how you are doing in comparison with others and not what needs to be done. A renewable energy future can only be achieved if there is a major reduction in energy use. Another way of thinking about it – if we half our electrical energy use then we double the effectiveness of renewable electricity energy sources such as wind power!