

Pam R

Bishops Itchington



This diary is for you to record what you find during a week with the Electrsave electricity monitor.

Note down readings of your electricity usage each day for a week and record any interesting discoveries you make about your energy use habits.

You may also find it useful to watch how much energy different appliances in your home use.

Record your electricity meter box reading for the beginning and the end of the week below:

| | |
|-------------------------------------|--------------------------|
| Meter reading at beginning of week: | 06253 night 16672 day |
| Meter reading at end of week: | 06263 night 16708 day |

You may wish to check your meter box reading each day to see if changing your energy use habits has a noticeable effect.

Please note that the Electrsave monitor should not be treated as a replacement for your electricity meter as the readings it displays will not meet the same degree of accuracy as your meter.

daily energy use

Use the Electrsave monitor to keep an eye on daily energy use in your home. Record your findings in the table opposite.

By pressing 'MODE' you can switch between different measures of the energy you are using:

1. cost in pence per hour - use this in the table

Shows how much the current level of power consumption in your home is costing you. This is based on the value you entered from your electricity bill. As power consumption rises, so will your electricity bill!

2. power consumption in kw

Shows the amount of power you are currently using. So this will rise when your demand for electricity increases, for example if you boil the kettle or turn on a light.

3. greenhouse gas emissions

These gases (such as carbon dioxide) are believed to play a key part in climate change. Since a major source of these gases is the generation of electricity, the Electrsave monitor calculates the effective amount of greenhouse emissions being produced by your current level of electricity use.

reducing the amount of energy we use can help combat climate change and save money at the same time!

give your readings in pence per hour

| day | typical reading for the day | any high readings do you know what caused the increase in electricity use? | when everything turned off for the night |
|-------|-----------------------------|--|--|
| Mon. | 4.1p | Oven (33p) 29p 11/2 hrs | 2.0 |
| Tues | 2.5p | Shower (88p) 85p 4-5mins | 2.0 |
| wed | 2.5p | Washing machine up to 1 hr 30p (34p) | 2.0 |
| thurs | 3.6p -5.9p | Kettle (34p)(30p 1min) indoors gas boiler on all time (monitoring on or on timer - which is most energy efficient) | 2.8 |
| Fri. | 6.9 Evening | Shower | 1p |
| Sat | 4.6 | Out all day + evening | 1.8p |
| Sun | 6.9 Evening | Iron (15.5p) For a minute while getting up to temp- then intermittent for about 15 sec. | 1.8p |

where the electricity goes...

Can you tell which appliances use the most electricity in your home? Note down the extra cost of powering these appliances - the difference between the reading on the display before and after the appliance is in use.

| appliance | rise in cost (pence/hour) |
|------------------|---------------------------|
| Toaster | 10p |
| EE fridge | 1.2p |
| Old fridge | 2.3p |
| Kettle | 30p |
| Computer | 2.5p |
| Oven 140C | 29p |
| TV | 1.3p |
| Grill | 15p |
| Washing machine | Up to 30p |
| Shower | 85p (5 mins max) |
| Hoover | 13.5p |
| Iron | 15.5p |
| Microwave (full) | 12.4p |

what is the cost of your electricity, as you set it on the electric save monitor?

10.6 pence per kwh

at the end of the week...

maximum and minimum energy use

Having monitored your electricity use over a week, you may have noticed times at which the most and the least electricity is being used. Can you give the highest and lowest readings you saw?

| | | |
|-----------------|----|----------------|
| highest reading | 94 | pence per hour |
|-----------------|----|----------------|

| | | |
|----------------|-----|----------------|
| lowest reading | 0.5 | pence per hour |
|----------------|-----|----------------|

The highest reading should show just how much it can cost to power your home when a lot of appliances are in use.

The lowest reading indicates a 'base load' - the electricity still used in your home even when most appliances are switched off. Appliances left on standby can use 25% of the energy they use when on - turn them off to save energy, money and to reduce the possibility of electrical fires.



the alarm

If you used the alarm function, what value did you set it to and did your household often exceed this?

alarm limit

| |
|----------------|
| pence per hour |
|----------------|

How often was this value exceeded, setting off the alarm? Please tick the most appropriate box.

often

occasionally

never



what you thought of the family challenge

Please tick the most appropriate box to answer the following questions.

1. How interesting did you find monitoring your electricity use for a week?

| | | | | | | |
|------------------------|---|---|---|---|---|------------------|
| not at all interesting | 1 | 2 | 3 | 4 | 5 | very interesting |
| | | | | | ✓ | |

2. How easy was the Electrisave monitor to install?

| | | | | | | |
|----------------|---|---|---|---|---|-----------|
| very difficult | 1 | 2 | 3 | 4 | 5 | very easy |
| | | | ✓ | | | |

3. Do you think that your energy use habits may change as a result of the Family Challenge?

yes no unsure

finally, were there any particular findings that you thought were interesting or surprising?

It was alarming when the reading shot up when the kettle, shower or oven was switched on. Then I realised the kettle and the shower are on for a very short while. The oven, however, could be on for quite a long time.

I was surprised how much CO2 is produced from electricity, even basic use (0.05KW=0.42 tonnes per year). Not sure how I could get rid of that. Interestingly, my mobile phone charger seemed to work on fresh air - the readings didn't change whenever I used it!

A fun exercise which I will tell people about - maybe they would like to try it. I might even buy one for the village to borrow!

thank you very much for your participation in the family challenge!

Please return to Dr Jackie Lawrence, Environmental management team, Warwickshire County Council, PO Box 48, Warwick, CV34 4SX. Tel: 01926 796824