

# Electrical Appliances & Low Energy Lighting

One Unit of electricity is 1KWh, or 1000 Watts on for one hour. This is the unit you pay for on your bill. (Imagine a one bar electric fire on for one hour - that would use a Unit of electricity). One Unit costs about 10p to 13p, look at your electricity bill for the cost from your supplier. You may benefit from changing supplier.

## Handy tips for saving electricity

- Try to use a grill or microwave to cook if appropriate.
- If you have Economy 7 electricity you can use washing machines and tumble dryers during the 7 hours overnight at the cheap rate using a timer.
- When buying a new kettle, consider an energy efficient one which can heat small amounts of water.
- If you use an immersion heater to heat you water it may be worth fitting it with a timer and converting your electricity tariff to Economy 7. Check with your electricity company.
- Don't leave your TV, video or stereo in standby mode for long periods - switch off at the set.
- Buy low-energy light bulbs. These use about a fifth of electricity and last eight times longer than a traditional bulb.

## Electricity used by common appliances (approximate – appliances vary)

|                             |                              |             |
|-----------------------------|------------------------------|-------------|
| Single underblanket         | 1 ½ hours a night for 1 week | 1 unit      |
| Double underblanket         | 1 ½ hours a night for 1 week | 1 ½ units   |
| Oven (conventional)         | Medium heat for 1 hour       | 3 units     |
| Oven (fan assisted)         | Medium heat for 1 hour       | 2 units     |
| Microwave                   | 2 hours                      | 1½ units    |
| Kettle                      | 7 litres of boiling water    | 1 unit      |
| Freezer (upright)           | 24 hours                     | 2 -3 units  |
| Fridge                      | 24 hours                     | 1- 2 units  |
| Extractor fan               | 24 hours                     | 1 unit      |
| Dishwasher (cold fill)      | One full load, average       | 3 - 4 units |
| Washing Machine             | One full load at 40°C        | 2-3 units   |
| Tumble Dryer                | 1 hour                       | 3 units     |
| Iron                        | 1 hour                       | 1 unit      |
| Immersion heater            | 1 hour                       | 3 units     |
| Shower (8.5kW)              | 6 x 10 minute showers        | 8.5 units   |
| Hair Dryer (500W)           | 12 ten minute sessions       | 1 unit      |
| Vacuum cleaner (cylinder)   | ½ hour                       | 1 unit      |
| Dehumidifier (250W)         | 4 hours use                  | 1 unit      |
| Convactor heater (2kW)      | ½ hour warmth                | 1 unit      |
| Fan heater (3kW)            | 20 mins warmth               | 1 unit      |
| One bar electric fire (1kW) | 1 hour warmth                | 1 unit      |
| Oil-filled radiator(1kW)    | 1 hour warmth                | 1 unit      |
| Panel heater (1.5kW)        | 40 mins warmth               | 1 unit      |
| Television                  | 6 hours                      | 1 unit      |
| Digital / cable box         | 11 hours                     | 1 unit      |
| Computer                    | 1½ hours                     | 1 unit      |

Low-energy light bulbs use about a fifth of the electricity of an ordinary light bulb, and they last eight times longer - about ten to fifteen thousand hours. Electricity companies have been providing free or heavily discounted low energy lights for some years. Although some designs are more expensive than traditional bulbs, they are much cheaper to run.

### Choosing low energy light bulbs

Low energy lights are available in both bayonet or screw fitting and can usually be fitted simply by removing the old bulb and replacing it with a low-energy light.

### The best position

The longer a light is on, the faster you will save money so it is best to replace your most heavily used lights first. This may be your living room, kitchen, hall, outside light, or other location. Low energy lights will not work with dimmer switches, some electric timing devices or with automatic presence detectors.

### Design and shape

The lights come in several designs, the most common is the 'stick' or 'twisted or looped stick' type. But the lamps can now be found to

replace candle styles lamps, or spotlights although these are slightly more expensive.

### Lampshades

If you are buying new lampshades, look for those which can be adjusted inside to take the shape of the low-energy light. Some shops sell shades specially designed for low-energy lamps.

### Brightness

The Brightness of traditional light bulbs is usually described by its wattage. There are low energy lights which will give you roughly the same amount of light for lower wattages. Here is a guide to equivalent wattages when choosing replacements. If in doubt, choose the next wattage up. Some low-energy lights take a little time to reach their full brightness.

|                        |       |        |        |        |      |
|------------------------|-------|--------|--------|--------|------|
| Traditional Light Bulb | 40W   | 60W    | 75W    | 100W   | 150W |
| Low Energy Light       | 7-10W | 11-14W | 15-18W | 20-25W | 32W  |



FREE is a rural energy advisory programme, aimed at off-grid communities across England, and targeted at helping people in fuel poverty. The programme brings practical independent advice and information to residents regarding fuel choices, energy efficient technologies, and carbon reduction measures. It helps individual households to focus on reducing their fuel consumption and fuel costs, and also encourages local communities to work together to promote best practice in energy efficiency and carbon reduction.

This publication is funded by Calor FREE, material derived from NEA and the Energy Advice Handbook



For more information please contact us at Cheshire Community Action on Tel: 01606 350042 or visit our website: [www.cheshireaction.org.uk](http://www.cheshireaction.org.uk)

Cheshire Community Action. Registered Charity: 1074676 Company Number: 3555199  
Registered in England and Wales Registered Office: Unit 3 Royal Mews, Gadbrook Park, Northwich, CW9 7UD  
Registered Name: Cheshire Community Council. A Company Limited by Guarantee.

