

ENERGY FILE 1



Low Energy Light Bulbs - Basic Facts

Amount of electricity used

Low energy (L/E) light bulbs produce light in a different way from traditional bulbs. They use considerably less electricity to produce an equivalent amount of light so are less expensive to run, see below:

TRADITIONAL BULBS	100 watt	60 watt	40 watt	25 watt
Energy cost (1000 hours)	£10.00	£6.00	£4.00	£2.50
LOW ENERGY BULBS	20-25 watt	11-18 watt	8-11 watt	6 watt
Energy cost (1000 hours)	£2 - £2.50	£1.10 - £1.30	£0.80 - £1.10	£0.60

Replacing a 100watt traditional bulb with a 20watt L/E bulb can save about £8, assuming the bulb is on for about 3 hrs per day (1000hrs), and an average electricity tariff of 10p per kilowatt-hour.

Lifetime of bulbs

Low energy bulbs last considerably longer than traditional bulbs; the amount claimed by the manufacturers varies between 6 to 15 times.

Traditional Bulb: 1000 hours approx.

Low energy bulb: 6000 hours approx.

Cost of bulbs

The average cost of a low energy bulb is higher than that of a traditional bulb; the price varies considerably depending on the manufacturer and sales outlet; (e.g. on-line: an 11watt, bayonet fitting, L/E bulb can vary in price from £1.62 to £6.10 for apparently the same type of bulb).

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Availability:	Arnolds	Arnolds will allow a buyer to try out a bulb and, if not suitable, return it. They also recycle dead bulbs.
Local sources in Bovey Tracey	Tesco	The supermarket stocks a small range of energy efficient bulbs.
	GK Lighting gklighting@hotmail.co.uk 01626 833440	GK Lighting will offer a home visit service and will match old bulbs to their low energy equivalents. They will also dispose of old bulbs.
	Efficient Light www.efficientlight.co.uk	Efficient are a local company that stock a wide range of low energy lighting, available online.

Other considerations

Total energy consumption

The energy required to produce an L/E light bulb is greater than that for a traditional one. However, the L/E light bulb uses less electricity and lasts longer, so the net energy use per bulb is less.



Delay in brightness

Some L/E light bulbs are dim for a short time when they are first switched on. This can make them unsuitable for some situations (e.g. on stairs). This does not seem to be a problem with the newer types of bulbs; when in doubt – ask before buying.

Dimmer switches

Although most ordinary L/E bulbs are not suitable for use with a dimmer switch, it is possible to buy L/E bulbs specifically for this purpose.

Disposing of bulbs

L/E light bulbs contain minute traces of mercury, so should not go in landfill. They should be disposed of at the local authority

recycling/waste disposal centres, or at Arnolds if you buy your bulbs from them (see 'Availability').

Type of light produced

The early low energy lights gave an unnatural light due to the higher temperature at which the light was produced. This has changed and the light is similar to conventional bulbs although for technical reasons they all have opaque glass.

Standards

The Energy Saving Trust has its own logo (EST) which means the bulb has met their criteria and been independently tested. However, there are many L/E light bulbs on the market which do not have this logo so the lack of logo does not necessarily mean that the bulb is less efficient.

Net CO₂ savings

Using low energy light bulbs will reduce the amount of energy used and therefore the CO₂ produced. A savings of around £7.00 could reduce the CO₂ released by about 26 Kg per year. (EST)

Halogen and LED bulbs are also available - but are beyond the scope of this fact sheet.

Sources

Electricity Savings Trust (EST): www.energysavingtrust.org.uk, DEFRA

BCA has compiled the information as a guide. The information should be checked before you rely on it.

Bulb fitting

Low energy bulbs are available in bayonet and screw fitting, in both normal and small sizes. They are similar in



most respects to traditional bulbs but are usually a little larger and heavier. Therefore, when

buying an L/E bulb for a specific fitting it can help to take the existing traditional



bulb, or its detailed measurements, with you. Or buy one to try from a local dealer who would be prepared to exchange it if it isn't suitable (see 'Availability' below).

Low energy bulbs, even if a bit larger than the



traditional equivalent, can be used within enclosed spaces (ceiling globes etc) as they give off less heat than conventional bulbs.

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