

# ENLIGHTENING ENERGY SAVING

As electrical contractors we are frequently asked about what is happening with light bulbs and what is being phased out, (or lamps as they are known in the industry) "why can't we get 100 watt bulbs any more", "how much longer are we going to be able to get 60 watt Bulbs" and "I don't like the energy saving bulbs, is there an alternative?"

Here are some answers and information on some of these queries about what is happening with energy saving lighting, alternatives, problems and recycling.

## A brief back ground

The Government has decided to phase out the old style "Pear shaped" bulbs, last year the 75 -100 watt and over were withdrawn, this January 60 watt and next year, 2011, 40 watt and 60 watt golf ball and candle bulbs will also be phased out.

We understand that if retailers and stockists still have these types of bulbs available they can still supply and sell them, but once the stocks are exhausted there will be no more of the old style bulbs manufactured, only the new energy saving types.

## Fluorescent lighting and CFL's (compact fluorescent lamps)

Most of us will know fluorescent lighting to be the long tubes in the kitchens, garages or offices and for many years it has been a very popular efficient way of providing quite a lot of light for a very reasonable amount of money, generally not particularly attractive but functional and very annoying when they start flickering.

In the last ten years we have seen the low energy bulbs enter the shops, the ones with multiples of straight and circular white tubes, these replace the standard bulbs, but seem to take ages to warm up.

These have been expensive compared to the "VALUE" bulbs which could be bought from the local supermarket or DIY stores, but technology is now improving and most of the current CFL's are more reasonably priced and better looking, a lot now look like the old style bulbs, plus there are different colours available, rather than the harsh white light of the long tubes, check the boxes for "warm white" or other softer white colours.

**Dimmer switches** are a problem, if you currently have a dimmer fitted to the standard light, the replacement low energy CFL bulbs will not work, they will flash and flicker, it is not faulty, it may work if the dimmer is turned to maximum, but we would suggest you change it back to a normal switch for the time being. Some dimmable CFL's are available, but they are currently very expensive, we would suggest waiting while the technology catches up and these bulbs become a more reasonable price.

If you have external flood lighting which has the 500 or 300 watt clear tube halogen lamps, there is now a fluorescent replacement available, a 24 watt lamp, which is roughly equivalent to a 150- 200 watt halogen lamp in brightness, has an estimated lamp life of 10,000 hrs compared to 1000hrs for halogen, so potentially a big saving if you have them switched on for long periods of time.

According to The Energy Saving Trust, replacing just one old style light bulb with the equivalent "energy saving bulb" will save you in the region of **£2.50 per year**, and if all are replaced in your house this can add up to approximately **£37.00 per year**, as they say every little helps.

### **A Fluorescent alternative**

If you really cannot stand the low energy fluorescent bulbs there is an alternative, these are called "Halogen Energy Savers", these are very similar to the old style "PEAR" shaped bulbs and they will work with any existing dimmer switches you may have fitted, plus the light is instant, no warming up. A few well known lighting manufacturers claim that their "Halogen Energy Saver" bulbs will give you a saving of 30% on running costs compared to the equivalent old style bulb and have a lamp life of 2000 hrs compared to 1000 hrs previously.

One manufacturer's 42 watt bulb will give 60 watts of light, another manufacturer produces a bulb which is 75 watts and gives equivalent light output of the old style 100 watt bulbs, all of these energy saver bulbs are all clear glass, the "PEARL" coloured bulbs are no longer available.

If you have recessed halogen ceiling lights fitted, there are also similar Energy Saving ranges available for the mains GU10 lamps and the low voltage 12V dichroic lamps.

A common misconception is that low voltage is low energy, this is not correct, a 50 watt GU10 lamp will use a similar amount of electricity as a 50 watt low voltage lamp, the main difference between them is that the low voltage light, which needs a transformer, is slightly brighter and whiter than the 50 watt GU10 mains voltage lamp.

### **LED lighting**

Led lighting is really still in it's development stages as far as domestic general lighting is concerned, it is very popular with garden and feature lighting, and looks great with the colour changing technology, but for functional lighting it is still very expensive, but that said, extremely efficient. Technology is moving fast with this type of lighting and we expect there to be some great products on the market in the next few years, but like all new products they will initially be expensive.

### **Environmental Issues**

Fluorescent tubes and CFL bulbs do contain "Mercury", but according to the Energy Saving Trust this is a tiny amount, and taking the big picture into consideration, the less energy the country consumes by changing to low energy lighting will mean that the coal fired power stations, (which are the biggest source of mercury in the air) will not have to work so hard to keep up with demand thus reducing their pollution.

Another point raised is the production costs, "surely it costs more to produce an energy saving bulbs compared to the traditional ones", this may be the case but they say that the saving in energy over it's life time out weighs the energy costs for producing it.

Fluorescent and CFL bulbs should be recycled and not throw in with the general rubbish. All shops or stores who sell any type of these energy saving bulbs should be able to provide you with information about how they can be recycled, one of the large supermarket chains will have their own recycling facility available, or you can contact you local authority to find out where to recycle them locally.

### **Helpful websites**

Our website,

The Energy saving Trust,

Recycling,

Local energy saving lighting manufacturer,

Lamp manufacturer,

[www.cambridge-electrical.co.uk](http://www.cambridge-electrical.co.uk)

[www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

[www.recolight.co.uk](http://www.recolight.co.uk)

[www.tp24.com](http://www.tp24.com)

[www.asimpleswitch.com](http://www.asimpleswitch.com)

Please give us a call if you have any other questions or queries and we will try and help.

Free phone; **0800 610 2288**