

Environmental Tip Of The Month - Save money with LED Lights. May 2022

Last year we circulated a leaflet to all residents pointing out the advantages of switching to LED lighting, from either Halogen Bulbs or Fluorescent Tubes. Recently, due to huge rises in the cost of electricity, (and more to come in October) the financial advantage has become even greater. In the leaflet we presented some calculations which showed the potential savings. Here's how it looks **now**:

- The average cost of a unit of electricity (1 kwh) in England is now around **£0.28**.
- A 60watt Halogen bulb on for one hour will use .06kw, if it were on for 1 hour a day, for 365 days, it would use about 22kw which would cost **£6.13**. ($.06 \times 1 \times 365 \times £0.28$)
- A basic equivalent LED bulb, (rated at 9watts) which gives the same amount of light, uses 0.009kwh. if it were on for one hour a day for 365 days, it would cost **£0.92** ($.009 \times 1 \times 365 \times £0.28$)
- This is about one sixth of the cost and would save you **£5.21** over a year
- However, this is only one bulb, on for one hour per day, bulbs are on longer than that. Consider six bulbs, on for an average of only four hours per day:
 - Halogen bulbs would cost **£147.17** ($.06 \times 6 \times 4 \times 365 \times £0.28$)
 - LED bulbs would cost **£22.08** ($.009 \times 6 \times 4 \times 365 \times £0.28$)
 - This is a saving of **£125.09** over a year
- Some people have said, "***Oh, I'll replace my bulbs when the old one blows***" This is a false economy, you can buy a six pack of good quality Phillips 60w LED bulbs, (rated for 15,000 hours) from Amazon for **£15.58**. This would still make your saving, in the example above, **£109.51**
- There are two other things you may wish to consider

LED bulbs, besides coming in a range of light outputs, measured in Lumens, (60w is equivalent to about 806 Lumens) also come in various shades, Warm White, Cold White, Daylight, etc. You can also get bulbs or LED strips for greenhouses that mimic actual sunlight. We are preparing a demonstration unit showing the various shades of bulbs for people to look at. We hope that this will be available at near the end of April. Although you can get LED bulbs that will fit most traditional light sockets, you may also wish to consider a lamp that is designed around a LED light source. There are some innovative designs available, they are not limited to the shape or size of a traditional bulb. LED light sources can be bespoke and practically any shape.

- **One Last point** Electricity prices are set to double in October (only 5 months away and if you consider the 6 bulbs on for 4 hour a day for a year, the Halogens would cost **£294.34** while the LED's would cost **£44.16**, now a saving of **£250.18**.

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