

CFLs won't save much energy if they stay in the kitchen drawer

Contributed by Andrew Warren
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The Big Six Energy companies have given away 262m CFLs. But how many of them have been condemned to landfill or still remain in their original packaging? And how many of us have actually received one?

I cannot think of any everyday technology which would be just as familiar to our great-great-grandparents as it is to us, apart from the incandescent light-bulb. All other 1890s technologies have long since been confined to history. But the tungsten light bulb rides on, producing just about as much heat as light.

Not for much longer. Already the largest bulbs (150W) have disappeared from our stores. Within three years, both government and the lighting industry are determined that these familiar artefacts will be consigned to the dustbins of history.

In their place will be the compact fluorescent light bulb (CFL). Although they have been around for 30 years, they have been a relative scarcity until this decade. Originally, such bulbs were marketed in a simple way.

Initial capital costs were substantially higher: we used to see £12 an item, as opposed to the 40p of the incandescent bulb it replaced. The benefit was that the bulbs provided the same illumination, but using one-quarter of the electricity. And they lasted many years, rather than many weeks.

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Regularly popping incandescents

This last benefit was frequently why they were first adopted in many non-residential buildings. There were reasons why that old joke: "How many people does it take to change a light bulb?" became common currency. Finding somebody to go around and replace those regularly popping incandescents — particularly if they were a bit inaccessible — was always a pain. How much easier it became when the bulbs could be guaranteed to last for years.

And then of course there was the ecological driver. Providing the same level of service but using far less fuel, so with far lower revenue costs: the quintessential energy efficiency message.

Whatever the ostensible logic, most households were deterred from installing CFLs because they were frequently large and ugly. And didn't fit into conventional light sockets without sticking out a mile. But mostly because of the initial higher capital costs.

The mass breakthrough came only when the Big Six energy companies were given tri-annual targets to deliver kilowatt hour savings, now metamorphosed into carbon savings, in British homes. Each energy-saving option was deemed to provide a certain level of such savings. Whichever option provided the cheapest return under the government scoring system, that was the one that was preferred.

During the first phase of the Energy Efficiency Commitment (2002/5), a total of 40m CFLs were distributed. Between 2005/8, the figure increased to 102m more. All this was surpassed under the scheme started a year ago. During just the first nine months of the Carbon Emission Reduction Target, no less than 120m CFLs were distributed. Almost without exception free of charge. And often, unsolicited.

The regulators at OFGEM stepped in to ensure that a maximum of four such bulbs could be sent out at any time. Their reason for introducing such a restriction must have been simple. It would not have been that they did not want to see too many such lightbulbs installed. Rather, it will have been from underlying fears that some, possibly all, were not being put into actual light sockets: the sole objective.

Instead they might be sitting in their boxes in the kitchen drawer, saving no electricity at all. Or worst of all, just thrown away into the dustbin, not even recycled properly (which, given the — albeit tiny — quantities of mercury each bulb contains, is advisable).

Eleven CFLs for every household

Since 2002, the energy companies have distributed 262m light bulbs. That amounts to an average of over eleven CFLs for every single household in Britain. Nonetheless I keep meeting people who have never received any such largess. Bearing in mind the large number of studio and single-bedroom flats around, with far fewer than eleven light sources, that ought to mean that some households must have got at least a couple of dozen.

Are they all installed? Amazingly, nobody seems to know. There is no requirement for anybody to keep tally on which addresses these 262m bulbs have gone to, let alone to establish whether they are being put to use. If ever there was a need for a sample survey of existing homes, this must surely be it.

Anecdotally, it seems most of the bulbs distributed are still the original long, ugly 60W-equivalent variety, which newspaper columns suggest are deeply unloved. Sadly, no differentiation in reward is available to an energy company which might offer one of the genuinely attractive, well-designed, 100W equivalents which could, for instance, operate on a dimmer system.

They do exist. It is just they seem crowded out of this market by the clunky old beasts. If these are perceived as the only future for lighting, no wonder there is such a media backlash against the removal of all incandescents.

According to the 2003 Energy White Paper, adding 200m CFLs to the then existing 60m would deliver an additional 1m tonnes of carbon savings {then, the regular measure} by 2010. Even after 262m CFLs have been distributed by the energy companies, I don't think we can have any confidence that this is what is happening. A light bulb still in its original packaging saves no electricity at all.

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