

Dear Customer

I am writing to introduce and inform you of the benefits of LED lighting. As I am sure you are all aware energy prices are rising to an all-time high, so anything that can be done to help cut energy costs has got to be a good thing.

First and foremost the money savings, one of the biggest benefits of LED lighting is the money it can save you on your electricity bill. An example of this money saving can be seen when looking at an example standard 2-3 bed house, which with standard lighting costs **33.1p per hour** to run, the same house with LED lighting costs just **3.2p per hour** to run (see example breakdown below).

#### Standard Example House Breakdown.

Standard Small 3 Bed House	Standard Lighting	LED Lighting Equivalent
Bedroom 1 and 2	2 x 60W lamps	2 x 7.5W
Bedroom 3	5 x 50W Recessed lamps	5 x 6.5W
Landing	1 x 60W lamp	1 x 7.5W
Living Room	5 x 60W lamps	5 x 7.5W
Hall	4 x 50W Recessed lamps	4 x 6.5W
Bathroom	4 x 50W Recessed lamps	4 x 6.5w
Kitchen	8 x 50W Recessed lamps	8 x 6.5W
Under Cupboard Lights	2 x 13W, 1 x 8W Fluorescent lamps	2 x 4W, 1 x 3W
External Flood Light	1 X 500W Halogen lamp	1 x 30W
External Front Light	1 x 60W lamp	1 x 7.5W
<b>Total</b>	<b>2124W or 2.12kW</b>	<b>245W or 0.24kW</b>
<b>Based on an Npower price list for December 1<sup>st</sup> 2013, with all lights on in the property the cost would be as follows:</b>		
<b>Electricity @ 15.57p Per kWh</b>	<b>33.1p Per Hour to Run</b>	<b>3.7p Per Hour to Run</b>

The installation of LED lighting is an investment, that may not be practical to make all in one go but the gradual change of lighting can still have a big impact on your energy bills. In this instance we suggest the initial change in rooms that get the most usage for example the kitchen and living room areas. If you are unsure about making an investment in LED lighting it is worth noting that most lamps can be taken to new properties in case of a move, or leaving the lamps will add value to your property improving the score of your EPC. The other benefits of LED lighting can be seen below.

The benefits of LED lighting:

1. Long Life – One of the major benefits of LED lighting is their longevity, Some LED lamps (Light Emitting Diodes) have an outstanding life expectation of up to 100,000 hours that is 11 YEARS of continuous operation or 22 YEARS of 50% operation.
2. Energy Efficiency – With an estimated efficiency of 80-90% compared to traditional lighting it is the most efficient form of lighting. Traditional incandescent light bulbs operate at around 20% efficiency,

meaning that around 80% of the electricity is lost and converted into other forms of energy, such as heat.

3. Ecologically Friendly – LED lights are free of toxic chemicals, unlike most conventional fluorescent light bulbs that contain a number of materials that are bad for the environment, including Mercury. LED lights contain no toxic materials and are 100% recyclable, helping you to reduce your carbon footprint by up to a third.
4. Durability – LEDs are extremely durable and built with sturdy components that are highly rugged and can withstand even the roughest conditions. LED lights are resistant to shock, vibrations, and external impacts, they make great outdoor lighting systems for rough conditions and exposure to weather including wind and rain. LEDs also operate in both hot and cold temperatures making them perfect for outdoor settings or freezer rooms.
5. Design Flexibility – LEDs can be combined in any shape to produce highly efficient illumination. Individual LEDs can be dimmed, resulting in a dynamic control of light and colour distribution.
6. Instant Light - Unlike other energy saving lights that take time to warm up LEDs provide instant light
7. Frequent switching – LED lights can be switched off and on frequently without affecting their lifespan or emissions, this is in contrast to traditional lighting with which on/off switching drastically reduces the operational life expectancy.
8. Low Voltage – A low voltage power supply is sufficient for LED illumination.

We are offering free surveys on whole properties or individual rooms to convert to LED lighting.

If you would like any more information on LED lighting and the benefits please feel free to contact me.

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