

LED Lighting



The Light Emitting Diode (LED) is fast becoming the lamp of choice. LEDs are now available to replace most forms of conventional lighting and the much lower running costs and high carbon savings make them a natural choice for businesses wishing to reduce their carbon footprint and save money.



Benefits

- More energy efficient than incandescent lamps or Compact Fluorescent Lamps.
- Able to replace almost all older lamp types and in some instances can be retrofitted into existing fixtures.
- Light output is very directional.
- Longer lamp lifetime reduces maintenance costs, which is especially useful for areas with access issues.
- Less heat production, particularly relevant for applications in cold storage and refrigeration.
- Colour: Lamps can be designed to a set colour or have the capability to change colour. Colours can be selected to enhance the presentation of products, such as food stuffs in refrigerated display cabinets.
- LEDs designed to operate in the visible light range may help mitigate the risk of UV or IR problems associated with other forms of lighting.

Downsides

- Interfacing with existing lighting systems, such as ballasts, dimmers, low voltage systems or analogue control systems may cause issues.
- If ambient temperatures are very high, this can negatively impact performance and lifespan of the LED.
- Lack of harmonised Standards and Regulations has resulted in varying quality and overstated performance claims from some manufacturers.
- May be more expensive to install than older technologies (e.g. fluorescent, halogen lamps, etc) - though often lower running costs will mean this investment is quickly paid back.

Further information is available on...

www.carbontrust.com
www.cibse.org
www.thelia.org.uk

