

Easy way to cut up to 5% of national energy consumption by replacing street lights with low energy fittings.

What they are

New technology lamps which pay for themselves in four years, and save 60% of usual annual electricity bills thereafter.

How they work

Low energy street lights burn five times as long (10 years) and use less than half the energy (50-60 watts each). However energy is used in manufacture and in installation, including lamp stands.

Case study: Ann Arbor Michigan has converted 100% of downtown streetlights to LED technology. They will save \$100,000 per year and cut carbon dioxide emissions by 294 tons. Use of LEDs across the whole city will cut their energy bill in

Why they matter

Street lighting improvements are a rapid way for [governments](#) and municipal authorities to meet carbon reduction targets without spending any money. Street lighting uses up to 5% of national energy in some nations – 38% of total energy used in lighting. This can be cut easily to less than 2% with new lamps. That's a huge amount of energy – without any real cost since the whole operation is paid for rapidly out of energy savings.

The cost of replacing all EU street lights will be £300 billion, but at 2008 prices that will save more than £50 billion in energy costs every year.

Challenges

Converting millions of lights is a huge operation but only needs to be done once.

Business Potential

120 million street lights need replacing in the EU alone, plus another 500 million outside lights, at a unit cost of £250 each and £250 labour. If we assume that 75% of public lights will be replaced within 20 years, then the market in the EU alone will be £15bn a year - potential market in EU alone. Since all the costs are recovered from reduced electricity bills in just four years, there are no financial barriers to carrying out the work.

Economies of scale will be important in awarding government contracts, as well as track record in delivering large low cost programmes. Expect many opportunities for regional and national operators.

Many more [Global Warming Videos by Futurist](#) Dr Patrick Dixon and [Sustainability](#) book.

Articles and Videos on Global Warming

Here are more resources on this site that you may find helpful.

[True Cost of Global Warming](#)

[How business will help solve global warming with green technology](#)

[CARBON DIET to save the World](#)

[Global Warming - Science Summary](#)

[Future of Oil Prices: Middle East, global economy](#)

[Roof Gardens Impact on Energy Saving](#)

[Biofuels Controversy and Climate Change](#)

[Iceland Volcano Eruption - Geothermal Power Potential](#)

[Energy Use Consulting - Boom Industry](#)

[Smart Power Regulation - Energy Saving](#)

[Green Technology Innovation Awards Chaired by Patrick Dixon](#)

[Product Exchanges and Climate Change](#)

[Wind Turbines and Global Warming](#)

[Solar Cell Roofing and Climate Change](#)

[Low Energy Streetlights and Global Warming](#)

[Polymer Cement - to save 2% global CO2](#)

[Carbon Capture - Climate Change Business](#)

[Future of Oil Industry when will oil run out? Kuwait and region](#)

[Heat Pumps - to prevent global warming](#)

[Cost of global warming - practical answers](#)

[The \\$40 trillion climate change business](#)

[Impact of Global Warming on Human Life](#)

[The Future of the Environment](#)

[Green Technologies innovation will help with climate change](#)

[Sustainability, climate change and crazy biofuels policy](#)

[Sustainability: innovation will help save world. Sustainable business future](#)

[Sustainable business: \\$40 trillion green tech boom will help save world](#)

[How Green IT saves money and energy, improves image and environment - keynote](#)

[Water Wars Risk? Futurist Q&A with Patrick Dixon](#)

[Global Warming: green technology will help world](#)

[Economic Growth Limits? Sustainability. FUTURIST Q&A](#)