

# Did you know...

## ... why Europe should promote energy efficient Street Lighting?

Street Lighting is of key importance to all European citizens. It can reduce traffic accidents by 30 to 50%, it is an effective means of fighting crime and promoting public security and it is essential for tourism, trade and business. But how many of us have considered the environmental impact of Europe's existing Street Lighting systems? Street Lighting can also adversely affect the environment by wasting large amounts of energy and producing unnecessary quantities of CO<sub>2</sub>.

### Why make the switch?

ELC members believe that by changing purchasing behavior in the European Street Lighting sector, significant reductions in CO<sub>2</sub> emissions can be achieved. The energy saving potential from making the switch from Blended & High Pressure Mercury lamps (b/hpm) to High Pressure Sodium or Metal Halide lamps in Europe could approach up to 50% of the total energy consumed over the use phase. This could amount to a saving of 4.5 Mtons of CO<sub>2</sub> per annum – enough to fill 12 million double decker buses!



As well as making energy savings and protecting the environment, significant capital and maintenance cost savings can also be achieved by making the switch. Local authorities who generally have responsibility for purchasing the majority of Europe's Street Lighting systems, spend between 14 and 16 % of EU GDP on public procurement<sup>(1)</sup> each year (a sum equivalent to half the GDP of Germany). By opting for energy efficient lighting they can:

- Significantly save on electricity costs
- Ensure a longer lamp life time (energy efficient lamps can last up to 15 times longer than their less energy efficient equivalents)
- Choose more efficient options for recycling and reuse...

In turn, savings made can also be directed elsewhere (into public works, into the health service or into the education system), to the benefit of the general public at large.

And by making the switch, local authorities can also set an example to the market place and in turn encourage other sectors of industry to develop energy efficient technologies.

A 500W street lamp, if lit for 7 hours a day (during the hours of darkness) can single-handedly produce up to 2 tonnes of CO<sub>2</sub> a year – enough to fill two hot air balloons 10 metres in diameter, or fill 5 double decker buses!

### What needs to be done?

A wide range of energy efficient street lamps are already being marketed in Europe. Products such as High Pressure Sodium & Metal Halide are available, affordable and appropriate for the majority of Europe's Street Lighting needs but many of Europe's local authorities are not aware of or do not act upon the available choices of energy-efficient alternatives - market forces are not enough to convince public purchasers to make the switch.

As most street lighting is selected on the basis of light output and initial cost requirements, the only way to convince and encourage contracting authorities to examine how they can minimize the energy use of Street Lighting is through 'top down' mandatory measures which directly influence their purchasing behavior and complement the efforts already made by the lamp industry. Given the small number of purchasers involved compared to those in private homes, offices and the retail sector, ELC believes that real achievements are possible in a relatively short time scale.

## Making it happen

End use energy efficient Street Lighting can be achieved by developing the market for efficient Street Lighting services. By providing some of the following fiscal incentives to public purchasers European governments can in turn make energy efficiency an integral part of the internal market through:

- Tax rebate programmes for all municipalities and authorities who make the switch to energy efficient outdoor and street lighting
- Incentives for upgrades for outdoor and street lighting systems that are more than 15 years old
- Leasing programmes for the latest energy efficient outdoor and street lights
- (Interest free) loans for energy efficient outdoor and street lighting projects
- Financial incentives for the promotion of local energy efficient outdoor and street lighting projects
- Provisions for private sector initiation of public private partnerships (PPPs) for outdoor and street lighting services

Legislation including mandatory requirements for Street Lighting in Europe is key to ensuring better environmental performance and energy efficiency in the Street Lighting sector. ELC members are currently looking into options for European legislation which will include a phase out legal ban on Blended & High Pressure Mercury lamps (b/hpm) and mandatory Street Lighting renovation in all EU member states.

The City of Lille recently set up an office to train its purchasers to look for substitute products that limit environmental impact. One of their six initial priority products is street lighting.

National benchmarking systems will also encourage outdoor and street lighting providers to make the switch. Instruments such as a comparison of performance measures for energy efficient purchasing and the creation of scorecards for CO<sub>2</sub> savings in the Street Lighting sector can significantly influence purchasing behaviour.

“Green” procurement is currently a key priority for the European Commission<sup>(1)</sup>. **A Code of Conduct for Buying Energy Efficient Outdoor and Street Lighting** would complement existing European and International Public Procurement rules by establishing guidelines for maximising energy efficiency e.g. the promotion of an energy efficient Street Lighting purchasing strategy, devised to ensure that all European contracting authorities tender Street Lighting supplies. The aim would be to ensure that award procedures on Street Lighting are also based on energy efficiency as well as value for money.

(1) <http://europa.eu.int/comm/environment/gpp/pdf/gpphandbook.pdf>



**We are committed to finding energy efficient solutions for the lighting sector  
Help us to make it happen...**

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