

Energy saving lamps (CFLs)

Guidelines for Frontrunner Public Procurers



Photo courtesy of smud.org

What is Topten?

- Topten.eu is a European web portal helping buyers to find **the most energy efficient products available in Europe**. Links to national Topten websites from a number of European countries are also available.
- All energy saving lamps displayed on www.topten.eu meet the criteria contained in these guidelines. Procurers can therefore use the website to check the availability of products currently on the market, which meet the **Topten selection criteria**.
- **Sample tender documents** are provided on www.topten.eu/professional to demonstrate how the criteria can be applied in practice.
- The European Commission's **GPP website** also contains valuable legal and practical guidance and procurement criteria for a range of commonly procured products and services.

Product group covered:	Compact fluorescent lamps (CFLs, Energy saving lamps) with integrated control gear (ballast) operated on main voltage.
Product availability:	All products listed on www.topten.eu meet the criteria listed below
Potential energy savings:¹	<p>Topten E27 stick CFLs use as little as 14 kWh per year compared to the 52 kWh used by eco halogen lamps annually. This means savings of 570 kWh electricity over 15 years.</p> <p>The Luminous efficacy (lm/W) of the best Topten E27 standard bulb is 75% higher than a comparable commensurate Eco halogen bulb i.e. the Topten model has a luminous efficacy of 65 lm/W while the inefficient model is only 16 lm/W.</p> <p>Luminous efficacy is 73% higher for Topten E14 standard bulbs, 76% higher for Topten E14 sticks and 75% higher for Topten E27 and E14 candles than comparable Eco halogen candles.</p>
Potential cost savings:¹	<p>Using stick and standard E27 Topten models saves around €85 per bulb² and E14 Topten models saves around €70 per bulb over the lifetime compared to relatively inefficient models.</p> <p>Additional costs are saved through the longer durability of Topten models. Topten E27 and E14 sticks and E14 standards last 8 times longer than an inefficient eco halogen bulb available on the market.</p>

¹ These represent rough figures comparing the best product currently available, with an inefficient model – see www.topten.eu for more details.

² Based on an electricity price of €0.15/kWh and assuming product lifetime to be 15 years.

Procurement criteria – Updated: June 2013

The following criteria can be inserted directly into tendering documents. The Topten specifications are updated continuously. The newest versions are always available at www.topten.eu.

Subject matter:	Purchase of compact fluorescent lamps ('Energy saving lamps')
<p>Technical specifications:</p> <ol style="list-style-type: none"> 1. Luminous efficacy: <ol style="list-style-type: none"> a. Energy efficiency label class: A b. Sticks E27/E14 and Bulbs E27 minimum 50 lm/W, if length > 105 mm* c. Sticks E27/E14 and Bulbs E27 minimum 34 lm/W, if length < 105 mm* d. Bulbs E14 and Candles E27/E14 minimum 40 lm/W 2. Average lamp life: minimum 12 000 hours 3. Minimum number of switching cycles: 50 000 4. Start-up-time (60%): maximum 60 seconds 5. Complete declaration, including: wattage, luminous flux, energy efficiency in accordance with , average lamp life, switching cycles, colour temperature, length and diameter and compliance with the RoHS Directive (2002/95/EC) and REACH Regulation (1907/2006). <p>Verification: Bidders must supply a declaration regarding their product's compliance with the above requirements, supported by technical data and results from tests carried out in accordance with EN 50285 or equivalent, or a relevant third-party certification/Type I eco-label attesting to compliance. Where compliance with these criteria is dependent upon defined usage patterns or other factors these must be clearly identified in the declaration.</p> <p><i>*105 mm is the length of a typical incandescent bulb</i></p>	

Notes on implementation

- The above technical specifications relate to CFLs only, and do not cover light emitting diodes (LEDs).
- To maximise savings and minimise environmental impact, contracting authorities should assess whole-life cost when purchasing lighting. This should take account of the usage pattern expected, average lamp life and disposal costs.
- Many design types which are suitable for replacing incandescent lights and which meet the above criteria are currently available, see www.topten.eu for details.
- Different types of energy efficient lighting may be suitable for outdoor use, areas with a high number of switching cycles or fixed luminaires. Public authorities who wish to develop tailored criteria for these situations are invited to contact the Procura+ team.

Advice and support

If you would like further assistance in using the information presented here in your own procurement actions or more information on Topten Pro please contact the Procura+ team at: procurement@iclei.org +49 761 368 9248

An expression of interest form is also available on www.topten.eu/pro for public authorities who would like support to apply these criteria in an upcoming procurement process.



What is Procura+?

Procura+ is an initiative designed to help support public authorities in implementing Sustainable Procurement. The campaign is run by ICLEI – Local Governments for Sustainability, the Topten partner for public authorities. www.procuraplus.org