Artemide

Notes on ErP directive (Energy related Products) n.2009/125/CE

What's the ErP Directive?

The production, packaging, transport, use and disposal of a product all impact on the environment in different ways and forms: energy consumption, CO2 emissions, consumption of materials and natural resources, waste production and release of toxic substances. 80% of the environmental impacts of a product are determined at the time of its design.
Eco-design means taking into account all aspects involving the environment since the creation of the product itself; in this way one can monitor the effects of the product on the environment and improve its eco performance and sustainability throughout its life cycle. Based on these considerations it has been created the 2009/125/CE ErP Directive (Energy related Products). This Directive aims in establishing "a framework for the setting of eco-design requirements for energy-using products ."
The Directive does not introduce directly binding requirements for specific products, but does define conditions and criteria for setting requirements regarding environmentally relevant product characteristics and allows them to be improved quickly and efficiently, through subsequent implementing measures. developed by a Regulatory Committee.
The Directive forecasted the implementation by member states by 2007. According to the Directive it has also drawn up a Working Plan which establishes an indicative list of energy-using product groups which will be considered priorities for the adoption of implementing measures.
The groups covered in this work plan include:

- Tertiary sector lighting products
- Stand-by and off-mode losses
- Domestic lighting products

The implementation of measures related to these categories have the form of Regulation and, therefore, are applicable by member states after the formal adoption and deployment of scrutiny by the European Parliament and the Council; phase that ended in March 2009.

How is the ErP Directive applied?

"Commission Regulation of implementing Directive 2009/125/CE of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps" defines:

1. eco-design requirements for the placing on the market of nondirectional household lamps ("directional lamp" means a lamp having at least 80% light output within a cone with angle of 120°; this directive excludes all the lamps with reflector and/or parabola)
2. product information requirements
3. the implementation stages

Sources that do not meet these requirements will be progressively phased out of the market. In this Regulation are exempt non-white light sources, but not sodium lamps (colour coordinates are provided); are also exempt UVA, UVB and IR radiation sources, some incandescent lights with special caps that do not currently have an equivalent high-efficiency; high intensity discharge lamps and fluorescent lamps without integrated ballast that fall within the regulation on the tertiary sector.

1.
The eco-design requirements concern the efficiency and functionality of sources. To assess the lamp efficiency (defined as the ratio between the power absorbed and the luminous flux emitted) the maximum rated power for
a given rated luminous flux is provided; To assess the lamp functionality, parameters are established and the minimum values to be respected. Among the functionality parameters are taken into account rated lamp lifetime, lumen maintenance, starting time, lamp warm-up time (to 60% of the flux) and colour rendering only for compact fluorescents lamps. The sources with opal bulb (non clear lamps) must have a Class A performance from the first stage of implementation of the legislation. Most of the current incandescent and halogen sources with opal bulb and some compact fluorescent with an opal second envelope have a low efficiency class and will be the first to be eliminated from the market. The regulation sets minimum efficiency and functionality requirements for each phase regarding transparent bulb lamps (clear lamps): it establishes, therefore, the gradual elimination of sources that do not meet the requirements.

2.
The regulation requires manufacturers to affix to the packaging information regarding lamp lifetime, colour temperature, lamp warm-up time, dimmability (some lamp types cannot be dimmed on conventional dimmers), dimensions, mercury content expressed in mg, etc.; any further relevant information (for example power, luminous flux, colour rendering, starting time, etc) must be found on the company's website.

3.
There are six (6) implementation stages for this regulation: the first five are on annual basis starting in September 2009; after the fifth year (2014) there is a period of verification and review; the deadline for the conclusion of the process of phasing out inefficient sources will be in September 2016.

What are the effect of the Directive?
In the belief that design plays a key role in limiting the negative environmental effects that a product can have in its lifetime, Artemide has always applied constant attention to sustainability in terms of ecodesign in the design and product development. For this reason, Artemide has referred to guidelines for an eco-friendly design, suggested by the "Green paper on integrated product policy" drafted by the European Commission.
According to the implementation of the Directive, in September 2009 all the sources with incandescent and halogen opal bulb will no longer be placed on the market as well as some compact fluorescent with second envelope (depending on Efficiency class). From this date, Artemide will suggest alternatives to the consumer with most efficient sources for all the products that still use the traditional sources. Artemide is already ahead on time, in the development of new products and enrichment of its range of existing products, contemplating the use of alternative sources to traditional incandescent, specifically in the domestic sector: just take as an example, the pioneering use of LED sources for task light applications.