'ECOmise it': EBV Elektronik Presents Latest Update on EuP-Regulation Regarding 'Non-directional Household Lamps'

More than just Light Bulbs and Energy Efficiency

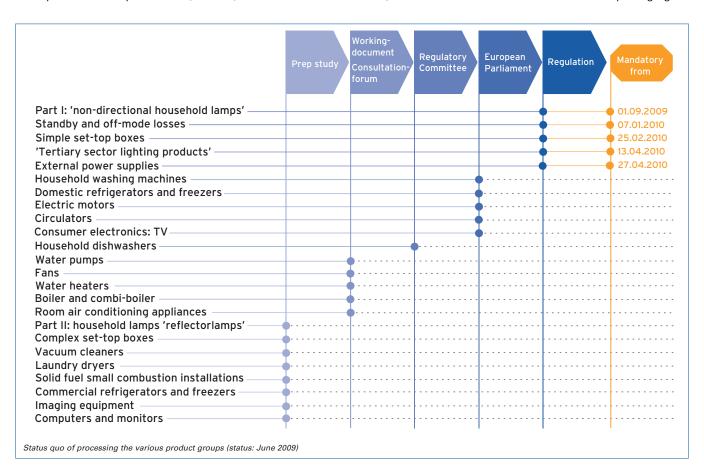
by Dr. Norbert Reintjes, Ökopol GmbH/EuP Consultant EBV Elektronik | June 2009

The most prominent implementation of the ecodesign Directive to date, concerns domestic lamps. EU Commission regulation no. 244/2009/EC, which was published on 24th March 2009 in the Official Journal of the European Union, does not prohibit light bulbs. Nevertheless, the minimum requirements specified therein with regard to lamp energy efficiency, do mark the virtual end of this type of technology – with few exceptions. Less attention has been focussed on the equally-binding requirements with regard to the performance parameters of such light bulbs and the definition of the term 'energy-efficient lamps' specified in the regulation.

The level of requirements applied to the energy efficiency of the household lamps will gradually be increased from September 2009 onwards. The requirements set out maximum power consumption limits (in watts) as a function of the

luminous flux of the lamp (in lumens). As efficiency varies not only between, but also within, light technologies, it is not only the power consumption, e.g. 60 W, which determines whether a light bulb satisfies a particular requirement but also the light output generated. The regulation will lead to both conventional light bulbs, in particular, as well as less efficient halogen lamps being banned from the EU market by 2012. Medium-efficiency halogen lamps will also be gradually removed from the whole EU market by 2016 (see table next page).

On the basis of today's technology, higher-efficiency halogen lamps, compact fluorescent lamps and, later, LEDs will be the main beneficiaries of this ban. Compact fluorescent lamps are currently often referred to as 'energy-efficient lamps'. However, the same term can also be found on some packaging for





halogen lamps. The term, which is currently not copyrighted, was defined by the regulation and from 1st September 2010 onwards it may only be used to describe lamps that meet the efficiency requirements set out in regulation phase 1 for frosted lamps applicable from September 2009. This means that the lamp's power consumption must be at least 75% lower than that of a standard light bulb while generating the same light output. This excludes halogen lamps as well as some of the compact fluorescent lamps now often described as energy-efficient lamps.

The binding requirements related to the operating characteristics of the electronics used in lamps may be of relevance. These concern parameters such as the number of cycles of operation until failure, the start-up time and the warm-up time before achieving 60% light output. The regulation also specifies maximum values for the UV radiation emitted. However, the requirement on UV emisions is expected to be partly eliminated soon by means of a supplement to the regulation. The requirements regarding the operating characteristics will apply from September 2009 onwards and are to become stricter from 2013 onwards.

Starting in September 2010, consumers must be provided with comprehensive information both on the lamp packaging as well as via freely accessible internet sites. This information should enable the user to identify the lamp most suited to the purpose in mind and that corresponds to his/her personal preferences. Estimates claim that without these measures, annual power consumption for the lamps addressed by the Regulation would rise to 135 TWh in 2020. The regulation aims to reduce consumption by 39 TWh.

In addition to this regulation, which targets non-directional household lamps, Commission regulation no. 245/2009/EC, which was passed at the same time, deals with commercial lighting products such as fluorescent lamps, high-pressure discharge lamps, ballast and lights. The European Commission is also working on specifications for directional household lamps, e.g. spotlights.

In addition to the regulations already mentioned for lighting products, legally-binding minimum requirements have also been enforced throughout the EU as implementation measures under the ecodesign or EuP Directive regarding stand-by and off mode consumption of electrical household and office devices, for simple set-top boxes and for external power supply units. Further regulations will follow in 2009. This article, together with a comprehensive description of the ecodesign Directive, forms part of a series of articles supported by EBV Elektronik. (Date of article: 1st June 2009)

Datum	Withdrawal of
1 st September 2009	Frosted light bulbs; lamps with particularly low efficiency; >75-watt standard lamps and low-efficiency halogen lamps
1st September 2010	>60-watt standard lamps and low-efficiency halogen lamps
1st September 2011	>40-watt standard lamps and low-efficiency halogen lamps
1st September 2012	Standard lamps and low-efficiency halogen lamps
1st September 2016	Medium-efficiency halogen lamps

The binding energy-efficiency requirements are to increase gradually between 2009 and 2016. Of the range currently on the market, conventional light bulbs and less efficient halogen lamps, in particular, do not meet these requirements.

Regulation	244/2009/EC
Date of publication	24 th March 2009
Came into force on	13 th April 2009
Valid	1st September 2009
Scope	Household lamps with unfocussed light
Area of applicability	Light efficiency, operating characteristics, product information

Schedule, scope and area of applicability of Commission regulation no. 244/2009/EC

Author: Dr. Norbert Reinties

Ökopol – Institut für Ökologie und Politik GmbH

Nernstweg 32-34, 22765 Hamburg

Phone: +49 40 39 100 2-0

E-Mail: EuP-netzwerk@oekopol.de

www.eup-netzwerk.de www.oekopol.de

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