



# Eco-Design Directive Compliance (ErP Directive)

October 2011

Up-to-date status of the studies carried out and regulations arising from the EuP and the new extended ErP Directive

## The Eco-Design Directive

### History of EuP and ErP

The Eco-Design of Energy using Products (EuP) Directive (2005/32/EC) became law in the European Union (EU) on the 11th of August 2005, and was transposed by Member States into national law by 11th August 2007. In 2009 the European Parliament adopted the European Commission's (EC) proposal to widen the scope of the directive to include Energy related Products (ErP). This new directive, 2009/125/EC superseded 2005/32/EC in November 2009. The directive is a framework defining the legal context for so called "implementing measures" but does not itself impose any obligations on industry. However, these implementing measures, developed and targeted at particular product groups, are now coming through in the form of EU regulations affecting a wide range of products – the first of these entered force in January 2009 and now over ten electrical product groups are covered. As a result, this eco-design driven legislation is having a major impact on the design phase of a wide variety of products.

### Objectives and scope

The main objective of the Eco-Design Directive is to bring about improvements in the environmental performance of products throughout their life cycle from mining of the raw material through to recycling at end-of-life. Up to now the focus has been on increasing energy efficiency particular during the use phase of a product's life. Obligations which arise focus on the design phase since it is considered that this is the determining stage affecting the resources used in a product.

The directive does not apply to means of transport (planes, cars etc.) but, apart from this, the scope was deliberately broad covering, in principle, any product which when in use depends on, generates, transfers or measures energy (electricity, fossil fuel or renewable) - boilers, computers, televisions, industrial fans, light bulbs etc. However, many products have an indirect impact on the energy in use such as water using devices, taps and showerheads for example, and double glazing windows or insulating material.

Improvement in design could clearly result in the significant saving of energy and other resources. The extension of scope to energy-related products in November 2009 enables these types of product to be regulated in principle.

### How Implementing Measures arise?

Before an implementing measure can be put in place for a particular product sector (e.g. boilers) certain criteria must be taken into account and determine whether there really is a need and a benefit for doing so. These criteria are as follows:



A product sector must:

- Represent a significant volume of sales and trade – indicatively more than 200,000 units per year in the EU
- Have a significant environmental impact present significant potential for improvement. Also, Implementing Measures must not have a “significant negative impact” on
  - a product’s price or performance, or on the
  - competitiveness of EU industry.

Having taken all this into account the EC may decide not to introduce an Implementing Measure. This could happen if it believes that the industry is already progressing at a satisfactory speed (e.g. by voluntary self regulatory agreements or targets to reduce energy consumption).

### What obligations arise from Implementing Measures?

A typical regulation arising under the Eco-design Directive comprises three elements:

- Specific requirements – numerical targets which must be met before the product can be placed on

the market. Targets such as a maximum power consumption when off-load or minimum efficiency when on-load are common. These targets generally tighten with time and are often linked to the requirement to label under the Energy Labelling Directive to enable consumers to make an informed choice

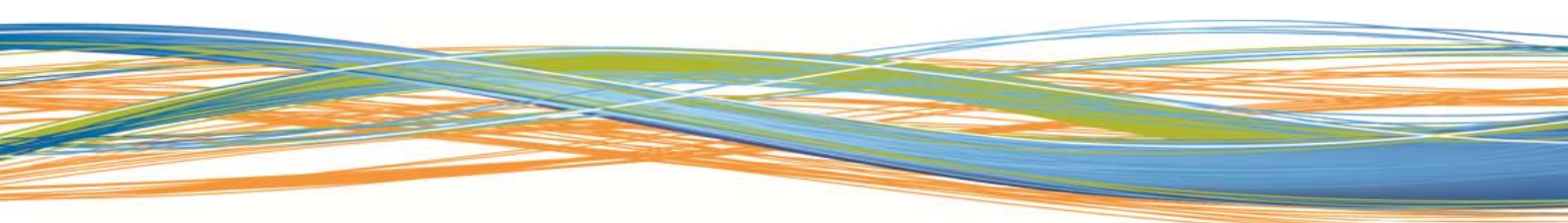
- Generic requirements – non quantitative requirements such as providing information to the end user on parameters relevant to the environmental performance (e.g. noise, rating)
- Conformity assessment – the requirement to assess the product for compliance with the given requirements in a formal way and application of the CE mark

In practice, a voluntary agreement would include the first two of these elements and manufacturers would generally need to provide evidence of conformance to an independent third party to demonstrate to the Commission that the scheme is effective.

### Products covered and status of implementation

When the EuP Directive entered into force a number of largely volume consumer electrical products had already been identified as meriting implementing measures. Many of these are already regulated or very close to regulation:

Studies in phase one: ** Note: each implementing measure includes a precise definition of what products are covered. Please refer to the regulations**	Status
Boilers and combi-boilers (gas/oil/electric)	P
Water heaters (gas/oil/electric)	P
Personal Computers (desktops & laptops), computer monitors + “small scale” servers	P
Imaging equipment: copiers, faxes, printers, scanners, multifunctional devices	V/P?
Consumer electronics: televisions	R
Standby and off-mode losses of EuPs	R
External power supplies (and battery chargers - studied but omitted)	R
Office lighting (combined as tertiary lighting)	R
(Public) street lighting (combined as tertiary lighting)	R
Residential room conditioning appliances (aircon and ventilation)	P
Residential room conditioning appliances (comfort fans)	P
Electric motors 1-150 kW	R
Water pumps (commercial buildings, drinking water, food, agriculture)	R
Circulators in buildings	R
Fans (non-residential).(Note scope now widened beyond ventilation)	P
Commercial refrigerators and freezers, including chillers, display cabinets and vending machines	C



Domestic refrigerators and freezers	R
Domestic washing machines	R
Domestic dishwashers	R
Solid fuel small combustion installations (in particular for heating)	S
Simple Converter Boxes for digital television	R
Laundry dryers	P
Vacuum cleaners	P
Complex set top boxes (with conditional access and/or functions that are always on)	V
Domestic lighting products I - including incandescent bulbs (non directional)	R
Domestic lighting products II - reflector lamps and luminaries (directional)	P
<b>Key</b>	
N	Not yet started
S	Study underway
C	Study completed
P	Legislation proposed
V	Voluntary agreement possible
R	EU regulation in force

<b>Studies in phases two and three:</b> ** Note: each implementing measure includes a precise definition of what products are covered. Please refer to the regulations**	<b>Status</b>
Refrigerating and freezing equipment: service cabinets, walk-in cold rooms, chillers, ice makers, ice cream and milk-shake machines, minibars	S
Transformers: distribution transformers, power transformers	C
Sound and imaging equipment: DVD/video players and recorders, video projectors, video game consoles	C
Local room heating products	S
Central heating products using hot air to distribute heat (other than CHP)	S
Domestic and commercial ovens (electric, gas, microwave), including when incorporated in cookers	S
Domestic and commercial hobs and grills, including when incorporated in cookers	S
Professional washing machines, dryers and dishwashers	S
Non-tertiary coffee machines	S
Networked standby losses of EuPs	S
Air-conditioning and ventilation systems	S
Industrial and laboratory furnaces and ovens	S
Machine tools	S
Water-using equipment	S
Medical imaging equipment (Proposed by industry not by the EC)	V

These studies are scheduled to complete from early 2011 onwards.

<b>Studies in phase four:</b> ** Note: each implementing measure includes a precise definition of what products are covered. Please refer to the regulations**	<b>Status</b>
Uninterruptible power supplies (UPS)	N
Pumps (extended product approach including motors, VSD & controls, where appropriate) for private and public waste water (all stages including buildings, networks and treatment facilities) and for fluids with high solids content	N
Pumps (extended product approach including motors, VSD and controls, where appropriate) for private and public swimming pools, ponds, fountains and aquariums, as well as clean water pumps larger than those regulated under lot 11	N
Products in motor systems outside the scope of the Regulation 640/2009, such as special purpose inverter	N

<p>duty motors (asynchronous servo motors), permanent magnet motors, motors cooled by their load (fans), including motors and products under Article 1, points 2(b), (c) and (d) and including drives, such as soft starters, torque or variable speed drives (VSD) from 200W–1000kW. Also motors in scope of 640/2009 from 750kW–1000kW.                  Products in motor systems outside the scope of lot 30 and Regulation 640/2009 on electric motors, in particular compressors, including small compressors, and their possible drives</p>	<p>N</p>
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**Where next for the Eco-Design Directive**

A clear trend starting from volume consumer towards commercial products and now industrial infrastructure equipment can be seen as well as consideration of the wider system (eg motor plus drive/controls). A new working plan identifying other product groups for study will emerge in 2011. New studies on energy using and energy related products will follow. In parallel, the provisions of existing regulations will continue to enter into force also be subject to revision or scrutiny in the light of technological progress.

**Please note**

The information contained in this guide is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

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