Ecodesign Your Future

How Ecodesign can help the environment by making products smarter





HOW ECODESIGN CAN HELP THE ENVIRONMENT BY MAKING PRODUCTS SMARTER

All products have an impact on the environment during their life-cycle spanning all phases from cradle to grave, such as the use of raw materials and natural resources, manufacturing, packaging, transport, disposal and recycling. More than 80% of the environmental impact of a product is determined at the design stage. **Ecodesign** implies taking into account all the environmental impacts of a product right from the earliest stage of design. This especially avoids uncoordinated product planning (for example, eliminating a toxic substance should not lead to increased energy consumption, which on balance could have a negative impact on the environment).

The Ecodesign Directive provides a **coherent and integrated framework** which allows for setting compulsory ecodesign requirements for some products. For instance, the Ecodesign measure on standby requires that much domestic electrical and electronic equipment such as washing machines, televisions or personal computers do not consume more than 1W in off mode as of 2010, and not more than 0.5W as of 2013. However, such ecodesign requirements shall not lower the functionality of a product, its safety, or have a negative impact on its affordability or consumer's health. A medical device, for example, should not be designed to consume less energy at the cost of quality or patient safety.

The European Commission has developed a methodology to assess whether ecodesign requirements should apply to a given product, and if yes, to identify which ecodesign requirements are appropriate (see also point 4). For more information on this Methodology for the Ecodesign of Energy-Using Products (MEEUP), please see website of DG Enterprise and Industry:

http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/methodology/index_en.htm



WHAT ARE THE BENEFITS FOR EUROPEAN CITIZENS AND INDUSTRY?

If, for instance, ecodesign requirements for household refrigerators have been set under the Ecodesign Directive, any refrigerator which does not comply with these requirements will not qualify for the CE-marking, and therefore cannot be sold in the European Union. In particular, the energy consumption standards set under the Directive lead to considerable **energy savings:** by 2020, the first ecodesign measures on 9 product groups (see table 1) will allow energy savings equivalent to **12% of the electricity consumption of the EU in 2007** (compared to a 'business as usual' scenario).

Measures include various improvements such as the maximum legal limit of energy consumption allowed for standby and off-mode of electric and electronic appliances or equipping electric motors with variable speed drives.

Ecodesign requirements address only the main environmental parameters of products which have significant sales and trade in the EU (indicatively more than 200,000 units), a significant environmental impact and potential for improvement. Ecodesign requirements shall remain cost-effective. Excessive administrative burden for manufacturers has to be avoided, as well as negative impacts on affordability for consumers and on industry's competitiveness. Manufacturers can even have a competitive edge with the improved performance of their products. The EU-level rules ensure that no diverging national or regional measures on ecodesign hinder the **free movement of goods**, oblige manufacturers to comply with many disparate regulations and prevent **economies of scale** (efficient implementation of ecodesign requirements allowing for **EU-wide energy savings**).

Table 1

The first nine measures (more are planned) = savings equivalent to 12% of the electricity consumption of the EU in 2007

Ecodesign Measure	Adoption	Estimated savings (annual by 2020)
Standby	December 2008	35 TWh
Simple set top boxes	February 2009	6 TWh
Street & Office Lighting	March 2009	38 TWh
Domestic Lighting	March 2009	37 TWh
External power supplies	April 2009	9 TWh
Electric motors	July 2009	140 TWh
Circulators	July 2009	27 TWh
Domestic refrigeration	July 2009	6 TWh
Televisions	July 2009	43 TWh
Total		341 TWh

WHICH PRODUCTS DOES THE ECODESIGN DIRECTIVE COVER?

The Ecodesign Directive has been extended in 2009 to **all energy-related products** (the use of which has an impact on energy consumption), including:

• **energy-using products (EUPs):** products which use, generate, transfer or measure energy (e.g. electricity, gas, fossil fuel), including consumer goods such as boilers, computers, TVs, washing machines, light bulbs and industrial products such as transformers, industrial fans, industrial furnaces.

• other energy related products (ERPs): products which do not necessarily use energy, but have an impact on energy consumption (direct or indirect) and can therefore contribute to saving energy, such as windows, insulation material or bathroom devices (e.g. shower heads, taps).

The Ecodesign Directive does not create binding requirements on products by itself: product requirements are set in Commission Regulations (see also next page)





machine tools



computers



water heaters

refrigerating equipment

air conditioning

WHAT TYPE OF PRODUCT REQUIREMENTS CAN BE SET AT EU LEVEL?

The Ecodesign Directive foresees 2 types of mandatory product requirements:

specific requirements:

• Set **limit values**, such as maximum energy consumption or minimum quantities of recycled material.

generic requirements:

• Do not set limit values

• May require, for example, that the energy consumption of the product be *as low as possible* (compliance with the relevant harmonised European standard, if available, gives presumption of conformity with the requirement).

• May entail **information requirements**, such as material provided by the manufacturer about best practices to use and maintain the product in order to minimise its environmental impact.

• May require that the manufacturer perform a lifecycle analysis of the product in order to identify alternative design options and solutions for improvement Under the Ecodesign Directive, **voluntary agreements** by industry are considered as a valid alternative to mandatory requirements under certain conditions. The voluntary agreement must achieve the same objectives as binding legislation in a more rapid and cost-effective manner. The voluntary agreement must deliver added value compared to the 'business as usual' scenario, through **quantified and staged objectives**. It must foresee **credible monitoring** and reporting (including independent inspections) and represent a majority of the industrial sector under consideration. Additional conditions are detailed in Annex VIII of the Ecodesign Directive.



HOW ARE MANDATORY PRODUCT REQUIREMENTS DECIDED?

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- The European Commission adopts a Working Plan, which sets out an indicative list of priority products to be explored for their Ecodesign potential over the next 3 years.
- 2 Each product group mentioned in the Working Plan is analysed in a preparatory study, in order to assess whether and which ecodesign requirements are appropriate (according to the Methodology for the Ecodesign of Energy-using products -MEEUP). A thorough impact assessment follows, which lays down essential figures such as energy saving potential or costs for industry.
 - A draft Commission Regulation is submitted to the **Consultation Forum** (representatives of EU and EEA Member States and of 30 stakeholders such as business federations, NGOs and consumer organisations) for comments.

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- The draft is submitted to the vote of the **Regulatory Committee** (representatives of EU Member States).
- The draft Commission Regulation remains under the scrutiny of the **European Parliament** for 3 months.

The Commission ensures a common understanding of the framework Directive and its implementing measures through meetings of representatives of Member States and all interested stakeholders, in the *Ecodesign Working Group*. All issues relating to the implementation of the Directive, including market surveillance, are discussed there.



WHAT ARE THE NEXT STEPS?

The current Working Plan contains an indicative list of products to be investigated in priority by October 2011 including products like commercial refrigerating equipment, sound and imaginge quipment (such as DVD players and game consoles), food preparing equipment (such as ovens, hobs and grills, coffee machines) and machine tools. A new Working Plan for the period of 2011-2014 will be drawn up in 2011.

The effectiveness of the Ecodesign Directive and its implementing measures has to be reviewed by the European Commission no later than 2012. Based on this review, the Commission shall assess the appropriateness of extending the scope of the Directive beyond energy related products. The Commission will also review the *Methodology for the Ecodesign of Energy-Using Products* (MEEUP), taking into consideration the experience gained with the first implementing measures.

Which department is responsible for the Ecodesign Directive in the Commission?

The Ecodesign Directive is under the common responsibility of DG Enterprise & Industry and DG Energy.

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Sustainable product policy

As presented in the Action Plan on a Sustainable Industrial Policy / Sustainable Consumption and Production (COM 2008 397/3), the Ecodesign Directive is meant to be used in consistency with other tools such as labelling (Energy Label and Ecolabel), public procurement (Green Public Procurement) and financial incentives, to deliver its full potential.





Directorate-General for Enterprise and Industry WE MEAN BUSINESS

To find out more: http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign

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