

BNXS03: Framework Directive for the Eco-design of Energy related Products (ErP Directive)

Version 3.8

This Briefing Note and referenced information is a public consultation document and will be used to inform Government decisions. The information and analysis forms part of the Evidence Base created by Defra's Market Transformation Programme.

1 Summary

The Framework Directive for the Eco design of Energy Related Products (ErP) provides a framework for establishing minimum eco design requirements for energy using and energy related products. The Directive was updated from the Framework Directive for the Eco design of Energy Using Products (EuP) on the 31/10/2009¹ to widen the scope of the Directive 2005/32/EC to include energy related products. Until now the directive was limited to products that consume energy during use such as boilers, computers, and light bulbs.

However, many products have an indirect impact on the energy in use such as water using devices, or double glazing windows. Under the EuP Directive studies had to set requirements for individual products where, in fact, it is the performance of the whole system that often needs to be optimised not just a single component or products.

The new directive will repeal the existing 2005/32/EC.

The Directive is intended to help deliver European Union (EU) objectives to reduce greenhouse gas emissions, to reduce the adverse environmental impacts of products, and to ensure free-trade in energy using and energy related products. This policy responds to calls to develop effective regulation whilst avoiding the risk of Member States developing their own legislation and compliance requirements, which could create barriers to trade. It is a Single Market Directive under Article 95 of the EU Treaty.

As most energy flows through products at some point, energy policy and, indeed, broader policy on sustainable development, depends on gearing up an innovation process which will ensure that such products become more resource efficient over time. One aspect of that is to remove the worst performers from the market. ErP will provide a framework for achieving this via a series of individual implementing measures which are

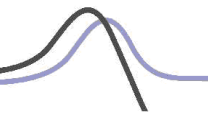
¹ http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/index_en.htm

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targeted at individual energy using and energy related product groups, excluding transport, or (as in the case of stand-by) a specific function of those products.

Implementing measures will be established by the European Commission (EC), advised by a Consultation Forum and Regulatory Committee. These measures will require equipment suppliers to take account of environmental aspects in the design and development stages and to achieve certain standards in the performance (e.g. energy efficiency) of products placed on the EU market. The Commission estimates that this measure alone could reduce EU energy consumption by around 10%.

A methodology has been established by the EU for the development of implementing measures to ensure that they focus on individual products, product groups or functions of products (e.g. standby) that have a significant environmental impact and also have the potential to improve their environmental performance. This includes comprehensive preparatory studies that provide evidence that allows an assessment of whether a product is suitable for an implementing measure.

Eco-design requirements established in implementing measures form part of the mandatory criteria that need to be met before a product can display the CE mark **CE**.

The Directive was transposed in the UK on 11 August 2007 through the Ecodesign for Energy-Using Products Regulations 2007 – see Defra guidance notes on this statutory instrument:

<http://www.defra.gov.uk/environment/consumerprod/pdf/energy-products-regs-guide.pdf>

While the Framework Directive does not contain any immediate obligations for manufacturers, obligations arise via a series of implementing measures. These are being developed for individual product groups or in cross cutting measures such as that for stand-by power consumption.

2 The Scope of the Directive

The Directive covers all energy using products, except transport and will now start to include energy related products. However, for a product to be considered for an implementing measure it should:

- have a significant volume of sales and trade, indicatively more than 200,000 units a year within the Community.
- have a significant environmental impact within the EU.
- present significant potential for improvement in terms of it's environmental impact without entailing excessive costs, taking into account:
 - the absence of other Community legislation or failure of market forces to address the issue properly;
 - a wide disparity in the environmental performance of the energy using products available on the market with equivalent functionality.

The Directive is closely related to the Energy Labelling Framework Directive and its implementing directives, which introduce compulsory energy labelling for a range of

household appliances². That directive is currently also being revised, to expand its scope to match that of the ErP Directive, address new sales channels such as Internet sales, and other aspects. Energy labels are usually discussed and agreed in parallel to ErP requirements, and use the same test methods and energy efficiency metrics. Ecodesign requirements and energy labels are intended to work together, to create a transformation of the market for energy using and energy-related products.

3 The ErP Process

The approach being taken by the EU is to identify the most significant environmental impacts of products over their life cycle and to seek to reduce these by establishing eco-design standards which could improve the product's environmental performance, in balance with any constraints imposed by technical factors or economics.

The main activities involved for each product are:

Preparatory Studies³: These studies are intended to provide the Commission and Consultation Forum with the evidence available to allow them to assess whether a product should be considered for an implementing measure. The studies take between 10 to 24 months, depending on their complexity and are intended to set out the available evidence rather than making policy recommendations.

Once complete the preparatory studies are used by the Commission to produce an initial proposal for discussion by the Consultation Forum.

Drafting of Implementing Measures: Following discussion by the Consultation Forum the Commission will proceed, if appropriate, to produce a formal proposal for an implementing measure. This process includes the preparation of an **Impact Assessment**. Implementing measures can take the form of directives, voluntary agreements, decisions, or regulations.

All implementing measures are subject to the approval of the Regulatory Committee, which consists of the Commission and the 27 Member States.

4 How products are assessed

4.1 Preparatory Studies

The **preparatory studies** are broken down into eight stages:

1 Define the Product

As far as possible determine a clear scope for the measure being considered. Ideally this should include an unambiguous definition of the product being considered.

² Please refer to MTP BNXS37 for more information about the Framework Directive for the energy labelling of household appliances.

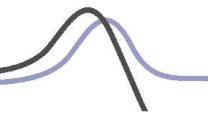
³ If industry presents a voluntary agreement with sufficient evidence the Commission may decide that a preparatory study is not necessary.

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2. Economic and Market Analysis

The first criterion for inclusion is that sufficient units of the product must be sold each year. If sales don't exceed 200,000 units/year the study stops here. Otherwise the study assesses market trends.

3. Consumer Behaviour and Local Infrastructure

This seeks to identify how consumers use the product, and what happens at the end of its life. Local infrastructure may influence this, for example, prolonging the life through repairs etc.

4. Technical Analysis of Existing Products

This analyses the materials and processes employed during production, distribution, and use of the product and at the end of its life.

5. Assessment of 'the Base Case'

The second criterion for product inclusion in ErP is that the product has a significant environmental impact within the EU. To assess this, a base case is calculated, estimating the current environmental impacts of an average product. This uses the EuP EcoReport spreadsheet tool, as described in

http://ec.europa.eu/enterprise/eco_design/finalreport1.pdf

6. Technical Analysis of Best Available Technology

Identifying the Best Available Technology (BAT) and Best Next Available Technology (BNAT) to inform possible design options.

7. Improvement Potential

The EcoReport tool is used to identify potential design options that could lead to improvements in environmental performance, along with the cost implications of this. The options can be ranked, including cost implications, to assess the Least Life Cycle Cost (LLCC) which presents a minimum target for meeting the third criterion for inclusion: that there is significant potential to reduce the product's environmental impact without entailing excessive costs.

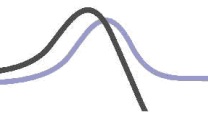
8. Scenario, Policy, Impact and Sensitivity Analysis

This considers policy options to achieve the potential product improvements. Options could include setting BAT as a promotional target, and LLCC as a minimum performance target, using legislative or voluntary agreements, or product labelling. A range of scenarios will be considered for 1990 to 2020, comparing and quantifying potential improvements compared to business as usual, or other EU environmental targets.

5 Implementing Measures

Once the EU has issued an initial proposal for an implementing measure, the Government will aim to consult stakeholders on their views ahead of any discussion at the Consultation Forum in order to inform the UK Government's thinking. The Market Transformation Programme will assist the UK Government in managing this consultation process.

The Government will also aim to hold a consultation meeting to discuss any formal proposals for implementing measures in advance of the EU Regulatory Committee meeting at which the proposal is to be discussed.



Implementing measures will specify:

- The products covered
- Application dates
- Generic and specific design requirements, which can include:
 - the consumption of resources by the product during its lifetime
 - the emissions to air, water and soil arising from the product,
 - the durability of the product.
- Measurement standards/methods
- Conformity assessment procedures
- Information requirements (labels and other types of information)

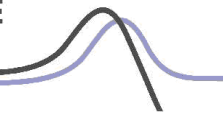
Manufacturers' obligations under the implementing measures will include:

- Assessing the environmental aspects and impacts of the product
- Designing the product in compliance with eco-design requirements
- Carrying out conformity assessment - generally by self assessment
- Affixing the **CE** mark

6 The Consultation Forum

The Consultation Forum meets to discuss the Commission's initial proposals for implementing measures with stakeholders. For any given product, the forum may meet on more than one occasion to consider the implementing measures. The Consultation Forum reports to the Regulatory Committee, which has the final vote and the Commission then takes a final decision on implementing measures.

Membership of the Consultation Forum is limited, but includes one representative of each EU Member State and acceding country (i.e. 27 + 3 members), together with 30 qualified organisations selected by the Commission, made up of industry, consumer and environmental representative organisations.

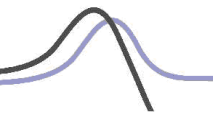


7 Products currently being Assessed

At the time of writing, the following Implementing Measures had already come into force

		Updated 26 Mar 2010
List of Implementing Measures already in force		
Lot Number	Date Entered into force	Implementing Measure
6	6th January, 2009	Standby and Off-mode electrical power consumption
18a	25th February 2009	Simple Set Top Boxes
19	13th April 2009	Non-Directional Lighting (Domestic Lighting)
8&9	13th April 2009	Tertiary Lighting (Street & Office Lighting)
7	27th April 2009	External Power Supplies
5	12th August 2009	Televisions
13	12th August 2009	Household refrigerating equipment
11	12th August 2009	Electric motors
11	12th August 2009	Glandless circulators
5	7th January 2010	Televisions
Other useful dates		Implementing Measure
1st Sep 2009 (Stage 1)		Non-Directional Lighting (Domestic Lighting)
6th Jan 2010 (1 yr after entry into force)		Standby and Off-mode electrical power consumption
25th Feb 2010 (1 yr after entry into force)		Simple Set Top Boxes

For a more detailed schedule of Preparatory Studies, Consultation Forums and Regulatory committee's please refer to the MTP website at <http://efficient-products.defra.gov.uk/cms/eup/>



9 Frequently Asked Questions

How does ErP fit in with other environmental legislation?

The ErP directive is aligned with existing and new EU measures which relate to the energy performance of energy using equipment, including the mandatory energy labelling of household appliances (currently being updated). It covers existing directives which set energy efficiency requirements for boilers, industry self commitments, is related to the WEEE Directive and the EU Ecolabel. Information collected through the ErP product studies will be used to underpin and update policies such as mandatory Energy Labelling and the Energy Star Scheme.

Why can the UK not simply introduce its own mandatory standards?

In general, EU Member States cannot introduce mandatory requirements for traded goods where that would create a barrier to trade. Such action must be taken by the EU acting as a whole.

Why not just agree voluntary standards?

ErP does specifically allow for voluntary action by manufacturers to improve the eco-design of their products, which would make regulatory action unnecessary. However at present no new voluntary proposals have been made.

As a manufacturer, how do I find out what the implications of ErP could be for me?

If the products you manufacture are being considered under one of the preparatory studies, each study has a website which gives information about progress of the preparatory study and details of how to contribute. If the study is in progress, you should contact the study leader, otherwise if the study has completed, please contact the UK Government at efficient.products@defra.gsi.gov.uk or the EC at tren-ecodesign@ec.europa.eu.

What is the Market Transformation Programme's role?

The Government's Market Transformation Programme (MTP) is engaged with the project teams carrying out the preparatory studies to provide detailed information and advice from the UK's perspective to ensure that the studies are robust and comprehensive.

The EC issues draft implementing measures after the preparatory studies have reported. MTP assists the Government in consulting with stakeholders on their views on what the UK position should be on these measures.

10 Links

More information is available:

Market Transformation Programme (MTP) Website	http://efficient-products.defra.gov.uk/cms/eup/
EC DG Enterprise and Industry website	http://ec.europa.eu/enterprise/eco_design/index_en.htm
EC DG energy and transport website	http://ec.europa.eu/energy/demand/legislation/eco_design_en.htm

11 How to Register to Obtain Further Information

To keep up to date, join the ErP interest group on the MTP programme, either by

- emailing info@mtprog.com, with Interest Group ErP as your email title, and include your contact details, or
- registering on <http://efficient-products.defra.gov.uk/cms/join-interest-group/> , selecting the EU Policies option.

Changes from version 3.7

- Update of regulation from Energy using Products to Energy related Products
- Update of Products where the regulations have already entered into force
- Update to the timetable of events

Consultation and further information

Stakeholders are encouraged to review this document and provide suggestions that may improve the quality of information provided, email info@mtprog.com quoting the document reference, or call the MTP enquiry line on +44 (0) 845 600 8951.

For further information on related issues visit www.mtprog.com