

BNXS03: Framework Directive for the Eco-design of Energy Using Products (EuP Directive)

Version 3.7

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.

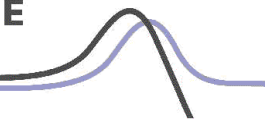
1 Summary

The Framework Directive for the Eco-design of Energy Using Products (EuP) provides a framework for establishing minimum eco-design requirements for energy using products. It 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 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. EuP will provide a framework for achieving this via a series of individual implementing measures which are targeted at individual energy using 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 will 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. 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.

3 The EuP 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 Studies: 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. 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'

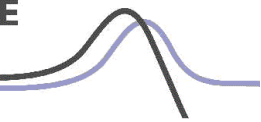
The second criterion for product inclusion in EuP is that the product has a significant environmental impact within the EU. To assess this, a base case is calculated, estimating the current environmental impacts of an average product. This uses the EuP EcoReport spreadsheet tool, as described in http://ec.europa.eu/enterprise/eco_design/finalreport1.pdf

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, including the consumption of resources by the product during its lifetime and the emissions to air, water and soil arising from the product, together with the durability of the product.
- Measurement standards/methods
- Conformity assessment procedures
- Information requirements

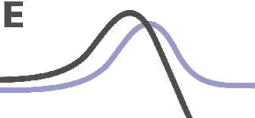
Manufacturers' obligations under the implementing measures will include:

- 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 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

The following preparatory studies have completed:

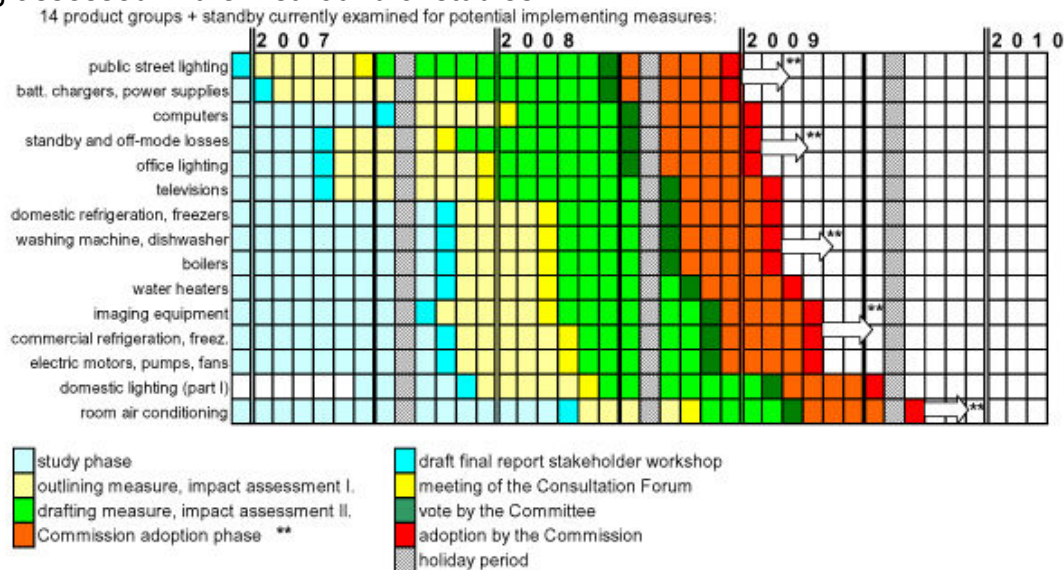
Battery chargers and external power supplies	http://www.ecocharger.org/
(Public) street lighting	http://www.eup4light.net
Office lighting	http://www.eup4light.net
Standby losses	http://www.ecostandby.org/
Boilers and combi-boilers	http://www.ecoboiler.org/
Water heaters	http://www.ecohotwater.org/
Personal computers	http://www.ecocomputer.org/
Televisions	http://www.ecotelevision.org/
Commercial refrigeration	http://www.ecofreezercom.org
Simple set top boxes	http://www.ecostb.com
Electric motors, pumps, circulators and fans	http://www.ecomotors.org
Imaging equipment: copiers, faxes, printers, scanners, multifunctional devices	http://www.ecoimaging.org/
Domestic lighting Part 1	http://www.eup4light.net

A further 8 studies are underway:

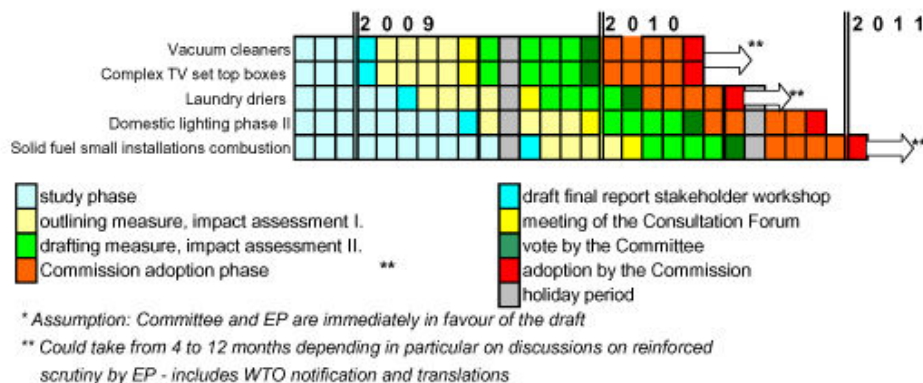
Product	Web link to study
Residential air conditioners	http://www.ecoaircon.eu/
Domestic refrigeration	http://www.ecocold-domestic.org/
Dishwashers and washing machines.	http://www.ecowet-domestic.org/
Domestic lighting Part 2	http://www.eup4light.net
Solid fuel boilers	http://www.ecosolidfuel.org/
Laundry dryers	http://www.ecodryers.org
Complex set top boxes	http://www.ecocomplexstb.org/
Vacuum cleaners	http://www.ecovacuum.org/

8 The Timetable of Events

The diagram below shows the most recent published detailed timetable for projects being assessed in the first round of studies:



and the second:



Last update: 17/10/2007

The above timetables give useful detail regarding the different stages of the process. However the EU has recently published a new timetable which supersedes this showing the timescales under which the Commissions aims to adopt measures:

Planning of ecodesign and labelling implementing measures under the Eco-design (2005/32/EC) and Energy Labelling (92/75/EEC) Directives
Measures planned to be adopted by the Commission in 2008
<ul style="list-style-type: none"> ▪ Street lighting products ▪ Office lighting products ▪ Stand-by and off-mode losses ▪ External power supplies ▪ Simple set top boxes
Measures planned to be adopted by the Commission in spring 2009
<ul style="list-style-type: none"> ▪ Domestic lighting products I (including incandescent bulbs)* ▪ Televisions*
Measures to be submitted for vote in the Committee in 2008 and 2009
<ul style="list-style-type: none"> ▪ Boilers* ▪ Water heaters* ▪ Washing machines, dishwashers* ▪ Domestic refrigeration, freezers* ▪ Commercial refrigeration (*) ▪ Electric motors (*) ▪ Circulators (originally under electric motors) (*) ▪ Computers (**) ▪ Imaging equipment (**) ▪ Electric pumps (originally under electric motors) ▪ Industrial fans (originally under electric motors) ▪ Room Air Conditioners * ▪ Domestic fans (originally under room air conditioners)
Other measures (preparatory studies finishing in 2009)
<ul style="list-style-type: none"> ▪ Complex set top boxes ▪ Laundry Driers* ▪ Vacuum Cleaners * ▪ Domestic lighting products II (reflector lamps and luminaires) * ▪ Solid Fuel Boilers *

Ecodesign measures possibly complemented with measures under

* energy labelling of household appliances under Directive (92/75/EC)

(*) energy labelling under Directive 92/75/EC if extended beyond household appliances

(**) Energy Star

Last update 28/01/2008

As this shows, it is not expected that the first mandatory implementation measures under EuP will arise before late 2008 and so the Government is also actively pursuing other measures, both in the UK and internationally, to raise product standards. These include industry voluntary agreements, embedding product

standards into Building Regulations, product endorsement, procurement policy - via the Government's action plan on sustainable procurement and the UK-led International Task Force on Sustainable Products¹, which is encouraging international benchmarking.

9 What Comes Next?

The Commission is currently developing a work plan for EuP for the next three years. When complete this will set out which product (groups) should be included among the EuP priorities for the future, and to give the opportunity for an early input from, and awareness raising of, all relevant stakeholders. The study commissioned on the work plan is completed and the contractors report was published in November². The Work Plan was discussed at a Consultation Forum in Brussels on 28th May 2008. The minutes from this meeting are due to be published here [http://ec.europa.eu/energy/demand/legislation/eco_design_en.htm].

10 Frequently Asked Questions

How does EuP fit in with other environmental legislation?

The EuP will integrate with existing EU measures which relate to the energy performance of energy using equipment. These include the mandatory energy labelling of household appliances, existing directives which set energy efficiency requirements for boilers, household refrigeration and lighting components, industry self commitments, the WEEE Directive and a range of environmental product information. Information collected through the EuP 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?

EuP 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 voluntary proposals have been made.

Does EuP cover any products now?

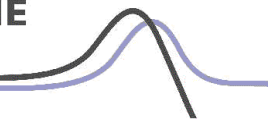
There are no new minimum standards under EuP yet, but three existing EU Directives on minimum energy efficiency requirements have been brought within the EuP Directive (i.e. Directives for hot water boilers (92/42/EEC), domestic refrigeration appliances (96/57/EC) and ballasts for fluorescent lighting (2000/55/EC)).

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

If the products you manufacture are being considered under one of the preparatory studies, the 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

¹ <http://www.itfsp.org/>

² http://ec.europa.eu/enterprise/eco_design/workingplan.htm



should contact the study leader, otherwise if the study has completed, please contact the UK Government at martyn.webb@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 studies to provide detailed information and advice from the UK's perspective to ensure that the studies are robust and comprehensive. As a result of pressure from the UK and other Member States, the Commission has agreed to 'fast-track' a study on simple set top boxes, while respecting the terms of the Directive.

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

11 Links

More information is available:

On the MTP website <http://www.mtprog.com/Eup.aspx>

On the EC DG Enterprise and Industry website:

http://ec.europa.eu/enterprise/eco_design/index_en.htm

On the EC DG energy and transport website:

http://ec.europa.eu/energy/demand/legislation/eco_design_en.htm

12 How to Register to Obtain Further Information

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

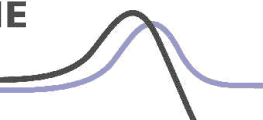
- emailing info@mtprog.com, with Interest Group EuP as your email title, and include your contact details, or
- registering on <http://www.mtprog.com/JoinInterestGroup.aspx>, selecting the EU Policies option.

Related MTP information

- BNXS34 EU Directive on Energy End Use Efficiency and Energy Services
- BNXS35 EC Green Paper on Energy Efficiency - Doing More with Less

Changes from version 3.6

- Updating of information on preparatory study progress



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**