

# Energy Using Products Directive

## Frequently Asked Questions

### Q1: What is the Energy Using Products (EuP) Directive?

A: The EuP Directive aims to improve the environmental performance of products throughout their life-cycle. Mini directives known as “implementing measures” will follow a series of studies led by the European Commission. Products will have to meet power consumption guidelines and most manufacturers will have to carry out life-cycle assessments on their products so as to determine the potential environmental impact.

This will include the energy used to extract the raw material, produce, transport, sell, use and disposal of its products.

### Q2: What is eco-design?

A: Incorporating environmental considerations at the design stage of a product with a view to improving environmental performance throughout a products life-cycle. Longer term this secures energy supply and helps to achieve sustainable development.

### Q3: What is the meaning of a Framework Directive?

A: As a framework directive, it does not impose requirements directly, but defines conditions and criteria that energy using products must fulfil in order to be put on the market. The framework does not create an immediate burden on manufacturers, but allows the European Commission (EC) to do so through implementing measures which define eco-design requirements, compliance assessment procedures as well as implementation dates.

### Q4: What criteria has to be met?

A: Before an implementing measure can be put in place a product must:

- ▶ Sell more than 200,000 units per year in the EU (total across all manufacturers)
- ▶ Have a significant environmental impact
- ▶ Present significant potential for improvement

### Q5: What type of products are the EC looking at?

A: The categories to be reviewed, on-going or complete are as follows:

- ▶ Public street lighting
- ▶ Battery chargers and external power supplies
- ▶ Personal computers (desktops & laptops) and monitors
- ▶ Consumer electronics: televisions
- ▶ Standby and off-mode losses of EuPs
- ▶ Office lighting
- ▶ Domestic refrigerators and freezers
- ▶ Domestic dishwashers and washing machines
- ▶ Boilers and combi-boilers (gas/oil/electric)
- ▶ Water heaters (gas/oil/electric)
- ▶ Imaging equipment: copiers, faxes, printers, scanners, multifunctional devices
- ▶ Commercial refrigerators and freezers: chillers, display cabinets and vending machines
- ▶ Residential air conditioning and ventilation appliances
- ▶ Electric motors, water pumps (in commercial buildings, drinking water, food, agriculture) circulators in buildings and ventilation fans (non-residential)
- ▶ Domestic lighting (phase 1)

Further studies planned:

- ▶ Solid fuel small combustion installations (in particular heating)
- ▶ Laundry dryers
- ▶ Vacuum cleaners
- ▶ Set top boxes (possible split into “simple converter boxes” for free-to-air broadcast / TV and “complex boxes” for pay content)
- ▶ Domestic lighting (phase 2)

### Q5: What are the timescales?

A: Adopted in July 2005 and transposed into national law by Member States on 11/8/2007 (note – only 6 States hit the deadline). Studies undertaken between 2005 and 2008, with implementing measures coming into force during 2008 / 2009.

### Q6: Which Member States were on time?

A: Austria, Belgium, Ireland, Slovakia, Sweden and UK.

### Q7: Is the interpretation of the EuP Directive the same across all EU Member States?

A: Yes, it is an “Article 95” Directive (like RoHS).

### Q8: Are price increases likely because of the EuP Directive?

A: Possibly in the short term due to the costs of research, environmental impact assessment and energy consumption testing.

However, in the medium to long term, environmental impact will be built into business strategies and costs will be saved by optimising design, controlling materials during manufacture and reducing disposal costs

### Q9: What kind of things can the design engineer do to reduce energy consumption?

A: Typical examples:

- ▶ Use lower voltage components. Power consumption is directly proportional to voltage and so halving voltage halves power consumption.
- ▶ Use switch-mode power supplies instead of linear power supplies (these are lower power and work off a wider voltage range)
- ▶ Use LCD rather than CRT displays. LCD's also use less power than LED indicators or filament lamps.
- ▶ Design equipment with good ventilation and lower power dissipation to avoid the need for power hungry fans

### Q10: Why is the impact on the design engineer?

A: The EU estimates that over 80% of all product related impact is determined at the design stage.

### Q11: What are the implications for manufacturers?

A: Environmental aspects that need to be considered include:

- ▶ Selection of raw material
- ▶ Costs of product design and energy efficiency
- ▶ Manufacturing
- ▶ Packaging, distribution and transport

Wherever possible, the following environmental aspects should be assessed / estimated where appropriate:

- ▶ Consumption of materials, energy and other resources such as water
- ▶ Emissions to air, water or soil
- ▶ Generation of waste material
- ▶ Reuse, recycling and recovery of materials in line with the WEEE Directive
- ▶ Other pollution such as noise, vibration and radiation

### Q12: What kind of energy does the EuP Directive encompass?

A: A product that, once on the market, is dependent on energy input (electricity, fossil fuels and renewable energy sources) to work as intended. Also, parts dependent on energy that are intended to form part of an EuP covered by the directive.

### Q13: Will any marking be required?

A: The CE conformity mark should be placed on all affected products and a declaration of conformity be issued stating that the product complies with the relevant provisions of the implementing measure (for example, meeting energy consumption targets).

### Q14: What about when a product is not in use?

A: Designs will need to have low power consumption when not under load. Nokia, for example, are to develop a battery charger that tells the user to unplug it when not in use.

### Q15: Does the EC have to introduce an implementing measure?

A: The EC may decide not to introduce an implementing measure against a particular product category. This could happen if it believes that the industry is already progressing at a satisfactory speed (e.g. by voluntary agreements or targets to reduce energy consumption).

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# REACH Policy Reform

## Frequently Asked Questions

### Q1: What does REACH stand for?

A: REACH Policy Reform is a European Union regulation relating to the Registration, Evaluation, Authorisation and restriction of CHemicals.

### Q2: How many chemicals does REACH cover?

A: Around 30,000 currently in use in volumes of 1 tonne or more per year, per legal entity. It also includes new chemicals.

### Q3: What is affected by REACH?

A: "Substances" (chemicals), "preparations" (mixtures or solutions of substances) and "articles" (equipment, products, sub assemblies, components, parts – items which have a "special shape, surface or design which dictates its function to a greater degree than does its chemical composition" – for example clay is a preparation, but a pottery mug is an article).

### Q4: What is the aim of REACH?

A: REACH will help protect human health and the environment. The number of allergies, asthma, certain types of cancer and reproductive disorders are on the increase throughout Europe. Chemicals may well be one of the causes.

REACH also aims to enhance the competitiveness of the EU chemicals industry by encouraging innovation and seeking improved safety standards for its products.

### Q5: Does REACH replace any existing legislation?

A: REACH has replaced 40 existing pieces of legislation.

### Q6: What does REACH mean?

A: **Registration** – the necessity to submit a (technical) dossier on the properties of a substance or preparation under certain conditions

**Evaluation** – of the dossier by the authorities

**Authorisation and restriction** – on the use of a substance or preparation Of CHemicals

### Q7: What does REACH mean for your company?

A: You are affected if you:

- ▶ Manufacture or import chemical substances or mixtures of chemical substances (preparations such as paint, adhesives etc)
- ▶ Produce or import articles such as electronic components, sub-assemblies, toys etc, which contain substances to be included in a list of "substances of very high concern" (notification required if >0.1% by weight and >1 tonne per annum) or which are intentionally released or release is reasonably foreseeable (eg ink or perfume) during their use, or during recycling (registration required if >1 tonne per annum).
- ▶ Process chemicals or you formulate preparations for end use (for example cleaning products, paints or motor oils) or you use these formulated products professionally. In this case you are a "downstream user"

### Q8: How will you be affected?

A: If you are a:

- ▶ Manufacturer / Importer – you manufacture or import a substance on its own or in a preparation of more than 1 tonne per year
- ▶ Producer / Importer or Supplier of articles – you manufacture / import articles or place them on the market
- ▶ Distributor (including retailers) – you store and place on the market a substance, on its own or in a preparation
- ▶ Downstream User – you use a substance, either on its own or in a preparation, in the course of industrial or professional activities, (for example: formulation, dilution, repackaging, spraying, painting)
- ▶ Note: companies outside the EU cannot register chemicals themselves but can appoint an EU based "only representative" to act on their behalf

### Q9: Who co-ordinates all of this?

A: The European Chemicals Agency (ECHA) based in Finland provides central guidance, hosts the registration process, operates committee processes as well as the authorisation process

### Q10: How does REACH actually work?

A: Substances that fall into scope will need to be registered according to a specific timetable. Any not registered become illegal to supply or import into the EU unless they are outside the scope of REACH.

Substances to be registered under REACH require a technical dossier for quantities of 1 tonne per year or more and a chemical safety report (CSR) for quantities of 10 tonnes per year or more.

REACH defines what is required in the technical dossier and will contain, for example, information on the properties, uses, the classification of a substance (toxic etc), specified test data as well as guidance on safe use.

The CSR documents the hazards and classifications of a substance and if it is found to meet the specified criteria (ie it is hazardous), then the registrant will need to provide an exposure scenario and carry out a risk assessment.

### Q11: What are "exposure scenarios"?

A: A set of conditions that describe how substances are manufactured or used during their life-cycle and how the manufacturer or importer controls, or recommends to control, exposure to humans and the environment. They must also include the appropriate risk management measures and operational conditions that, when implemented correctly, ensure that the risk from the substances are adequately controlled. They should cover the entire manufacturers' or importers' own uses made known to the manufacturer or importer by their downstream users.

### Q12: What if there is no data?

A: There is a requirement for manufacturers or importers of substances to register them with the European Chemicals Agency, ECHA. In order for a substance to be registered, the registrant will need to submit data that is specified by the REACH regulations. It is not possible to register a substance without the required data and unregistered chemicals cannot be used. This will not only affect chemical manufacturers and users but also downstream users.

### Q13: What does "evaluation" mean?

A: Registration packages (dossiers) submitted under REACH can be evaluated for:

- ▶ Compliance Check – automated check to ensure that all of the information has been submitted by industry
- ▶ Dossier Evaluation – to check the quality of the data and a check that a suitable testing plan has been proposed for substances registered at the higher tonnage levels (over 100 tonnes per annum) where the data is not yet available and this is permitted by REACH
- ▶ Substance Evaluation – An evaluation of all the available data on a substance, from all registration dossiers. This is done by national Competent Authorities (see Q14) on substances that have been prioritised for potential regulatory action because of concerns about their properties or uses

### Q14: What is a Competent Authority?

A: The authorities established by Member States to carry out the obligations arising from the REACH regulation, for example, the Health and Safety Executive in the UK.

### Q15: Where can I find details of the European Chemicals Agency – ECHA?

A: Web address is <http://echa.europa.eu>

Sources of information: Health & Safety Executive, European Chemicals Agency – ECHA, ERA Technology, European Commission

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