

## Legislation Update

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# Agenda

Developments with the WEEE and RoHS Directives

Review of the EuP Directive

Status of the Implementing Measures for the EuP Directive

The Energy related Products (ErP) Directive

Energy Labelling

Energy Star

Eco Label

# Developments with the WEEE and RoHS Directives

# Key Issues in the RoHS recast

- ⑩ The scope of RoHS is specified in Annex I and is no longer linked to the scope of the Waste Electrical and Electronic Equipment (WEEE) Directive.
- ⑩ includes Category 8 (Medical Devices) and category 9 (Monitoring and Control Instruments) (except for in vitro diagnostic medical devices from January 1, 2016) and industrial monitoring and control instruments from January 1, 2017. The Commission will review whether to include active implantable medical devices by January 1<sup>st</sup> 2020
- ⑩ Military equipment and equipment that is part of out-of-scope equipment now specifically excluded.
- ⑩ New Annex II is a binding amendable list of products covered,
- ⑩ No new additions to substances proposed but hexabromocyclododecane (HBCDD), diethylhexyl phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP) will be assessed as a priority under the REACH process.
- ⑩ Definitions of responsible persons, manufacturer etc.
- ⑩ Enforcement of the RoHS Directive – CE marking
- ⑩ Change to mechanism for exemptions- substitution plan (REACH)

# Key Issues in the WEEE recast

## Scope

- Scope of the WEEE Directive to be defined in RoHS
- 'Open' scope?
- 'Streamlining' of categories – Cooling Equipment; Screens & Monitors; Lighting; Large and Small appliances

## New Member State collection target

- Move from 4kg per capita to 65% POTM basis
- New target to be achieved by 2016, (review in 2012)
- Recovery, reuse and recycling targets to be increased by 5% by 2011 (inc reuse)
- Target set for Medical Devices for first time

## Extension of Producer Responsibility

- Extension of producer responsibility for collection from households

## Harmonised registration

- Harmonisation of the registration and reporting obligations for producers between the national producer registers is proposed including making the registers inter operational

## WEEE shipments requirements

- Introduction of minimum monitoring requirements for the shipment of WEEE/used EEE
- New Annex to address concerns of illegal exports and 'dumping'
- Interface with Trans-frontier Waste Shipment Regulations

# WEEE and RoHS Recasts - Timetable

Publication of EC proposals – December 2008

First meeting of Environment Working Group – 9  
March 2009

First meeting of EP Environment Committee – 3 to  
5 November 2009/ plenary June 2010 (tbc)

Conclusion of co-decision negotiations – end of  
2010?

New requirements coming into force – mid 2012 or  
later?

## Further Information

### EC website

[http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm)

### BIS website

[www.berr.gov.uk/whatwedo/sectors/sustainability](http://www.berr.gov.uk/whatwedo/sectors/sustainability)

### EP website

[www.europarl.europa.eu/news/public/default\\_en.htm](http://www.europarl.europa.eu/news/public/default_en.htm)

# Review of the EuP Directive



## Main Features of EuP Directive

- ⑩ Framework with separate Implementing Measures (IMs) for products or groups of products, that are binding on manufacturers
- ⑩ Includes all electrical/electronic products but design requirements only applicable to those covered by an implementing measure
- ⑩ Design requirements can be a mixture of energy reduction and other environmental aspects
- ⑩ Life Cycle approach
- ⑩ CE Marking directive - requires documentary evidence of compliance

### Where do WEEE/RoHS and fit into EuP?

WEEE (and RoHS) directives address product “end of life” environmental impacts and issues in order to reduce environmental damage and risk to health at disposal

The EuP directive addresses environmental impacts across the whole product life cycle in order to reduce environmental damage and conserve resources

It references both WEEE and RoHS in Annex 1 Requirements

## Status of the Implementing Measures for the EuP Directive

# The EuP Directive Implementation

**DIRECTIVE 2005/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council

Link to the Directive

- ⑩ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:191:0029:0058:EN:PDF>

Adopted 6<sup>th</sup> July 2005

Effective 11<sup>th</sup> August 2007

Transposing UK Regulations are the “Ecodesign for Energy-Using Products Regulations 2007” SI 2007 No. 2037 that came into force on 11th August 2007 (replacing existing directives for boilers, refrigerators and ballasts for fluorescent lighting).

## Development of Implementing Measures as Regulations

- ⑩ Directive 96/57/EC of the European Parliament and of the Council on energy efficiency requirements for household electric refrigerators, freezers and combinations thereof – has been repealed by
  - COMMISSION REGULATION (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco design requirements for household refrigerating appliances
  - Example of new implementing measure in the form of an EU regulation replacing old directive enacted within a Statutory Instrument
- ⑩ The transposing regulations for the EuP directive only list implementing measures for three products in Schedule 2.
- ⑩ Further implementing measures are being enacted as EU Regulations (presumably the schedule will be updated as Regs come on stream )
- ⑩ Implementing measures in process of development for 20 product groups of which 9 are now in force as EU Regulations. <http://efficient-products.defra.gov.uk/cms/eup-implementing-measures/>
- ⑩ Working plan prepared by Commission listing 11 priority product groups for implementing measures over the next three years. These are now out for study <http://efficient-products.defra.gov.uk/cms/eup-the-working-plan/>

## Status of the Implementing Measures for the EuP Directive

- ⑩ Currently there are 9 regulations in force covering
  - Standby and Off Mode Consumption for Household and Office Equipment
  - External Power Supplies
  - Simple Set Top Boxes
  - TVs
  - Domestic Lighting
  - Tertiary Lighting
  - Domestic Cold Appliances
  - Electric Motors 1-150kW
  - Circulators

The regulation for domestic dishwashers and washing machines has passed the Regulatory Committee stage but is under scrutiny by the European Parliament.

This has been extracted from the UK's Market Transformation Programme website which you can access at

<http://efficient-products.defra.gov.uk/eup-implementing-measures/>

# Status of Implementing Measures

| Lot | EuP product groups  | Status   |
|-----|---|--|
| 1   | Boilers and combi-boilers (gas/oil/electric)  | CF June 2009   |
| 2   | Water heaters (gas/oil/electric)  | Second CF June 2008 Revision Sept 2008                       |
| 3   | Personal Computers (desktops & laptops) and computer monitors   | CF Oct 2009  |
| 4   | Imaging equipment (copiers, faxes, printers, scanners, multifunctional devices)   | CF Oct 2009 VA   |
| 5   | Consumer electronics (televisions)  | Regulation in force (Aug 2009)                               |
| 6   | Standby and off-mode losses of all electrically powered devices   | Regulation in force (Jan 2009)                               |
| 7   | Battery chargers and external power supplies  | Regulation in force (April 2009)                             |
| 8/9 | Tertiary lighting combining Office and street lighting  | Regulation in force (Mar 2009) CF on amendments Sep 2009     |
| 10  | Residential room conditioning appliances (air conditioning and ventilation)   | CF June 2009   |
| 11  | Electric motors 0.75kW to 375kW Induction   | Regulations in force July 2009                               |
| 12  | water pumps (commercial buildings, drinking water, food, agriculture), circulators in buildings, ventilation fans (non-residential) | Reg circulators in force July 2009. Pumps and fans RC 2010   |
| 13  | Commercial refrigerators and freezers, including chillers, display cabinets and vending machines                                    | Awaiting Commission working doc.                             |
| 14  | Domestic refrigerators and freezers   | Reg in force Aug 2009, Label May 2009                        |
| 15  | Domestic dishwashers and washing machines.  | RC agreed IM for WM March 2009 , DWs awaiting RC             |
| 16  | Laundry dryers  | Prep study complete Jun 2009 Awaiting Commission working doc |
| 17  | Vacuum cleaners   | Prep study complete Mar 2009 Awaiting Commission working doc |
| 18  | Complex set top boxes (with conditional access and/or functions that are always on)   | CF Sep 2009/ RC Feb 2010                                     |
| 19a | Simple converter boxes for digital televisions  | Reg in force Feb 2009  |
| 20  | Domestic lighting   | Reg in force Apr 2009  |

## Phase 2 Tenders Issued for IMs in 2009-2011

Room Heating Products

Hot Air Central Heating

Domestic and Commercial Ovens

Domestic and Commercial Hobs

Professional Washing Machines

Non Tertiary Coffee Makers

Networked stand-by losses

Domestic Uninterruptible Power Supplies

Refrigerating and freezing equipment

Transformers

Sound and video imaging equipment

<http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/product-groups/>

Study lengths 20-24 months from date of award



## Energy Reduction

- Limits for standby and off mode consumption of household and office equipment
- Mandatory efficiency levels for external power supplies
- Auto transitioning to low standby or off modes
- Power management in PCs and laptops
- Reduce “on” mode consumption (TVs, SSTBs, monitors)

## Other requirements that were considered

- Eliminate mercury in backlit LCD screens
- Optimize choice of plastics for recycling (ABS/PC) or energy recovery (PE) of housings (TVs)
- Reduce or avoid coatings of plastics
- Miniaturization at the component and board level of electronic assemblies
- New PCB technology – High Temperature Thermoplastic (HTT) – no BFRs
- Prolong product lifetime

# Impact of first EuP Implementing Measures

| Product  | Net Benefit<br>(£m; pa; UK) | CO2 savings<br>(MtCO2; pa av; UK) |
|--|-----------------------------|-----------------------------------|
| Stand-by   | 176-235                     | 1.0 – 1.5                         |
| Domestic Lighting  | 150                         | 1.0                               |
| Simple Set top boxes   | 58.5                        | 0.59                              |
| Tertiary Lighting  | 132                         | 1.0                               |
| External power supplies  | 3.3                         | 0.11                              |
| <i>Motors, Circulators, Water Heaters,<br/>Cold &amp; Wet appliances; Television</i> | 100+                        | 2.30                              |
| <b>Total (c.)</b>  | <b>620 - 678</b>            | <b>6 - 6.51</b>                   |
| <b>UK Total 2006</b>   |                             | <b>532</b>                        |
| <b>Global Total 2008</b>   |                             | <b>31000</b>                      |

## Recast EuP

The scope has been widened to include “energy related” products that have an impact on energy consumption (e.g. double glazed window units, insulation products etc).

[http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sustainable-business/sustainable-product-policy/ecodesign/index_en.htm)

Called “Ecodesign Directive” by Commission

Came into force 20<sup>th</sup> Nov 2009

One year to transpose

Working plan by 21<sup>st</sup> Oct 2011

Does not interfere with implementation of measures for energy using products

# Energy Labelling

## Energy Labelling Directives

Council Directive [92/75/EEC](#) of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances

2003/66/EC - Household electric refrigerators, freezers and their combinations

98/11/EC - Household Lamps

96/60/EC - Household combined washer –driers

2002/40/EC - Household Electric Ovens

95/12/EC - washing machines Amended by 96/89/EC

95/13/EC - electric tumble dryers

97/17/EC - dishwashers

2002/31/EC - air conditioners

## UK Energy Labelling Regulations

[The Energy Information \(Refrigerators and Freezers\) Regulations 1994](#)

[The Energy Information \(Washing Machines\) Regulations 1996](#)

[The Energy Information \(Tumble Driers\) Regulations 1996](#)

[The Energy Information \(Washing Machines\) \(Amendment\) Regulations 1997](#)

[The Energy Information \(Combined Washer-driers\) Regulations 1997](#)

[The Energy Information \(Lamps\) Regulations 1999](#)

[The Energy Information \(Dishwashers\) Regulations 1999](#)

[The Energy Information \(Household Air Conditioners\) Regulations 2003](#)

[The Energy Information \(Household Electric Ovens\) Regulations 2003](#)

[The Energy Information \(Household Refrigerators and Freezers\) Regulations 2004](#)

[The Energy Information \(Household Air Conditioners\) \(No. 2\) Regulations 2005](#)

## The Energy Labelling Directive Recast Proposal

- ⑩ Objective is to extend scope, providing for the labelling of all energy-related products including for the household, commercial and industrial sectors such as windows.
- ⑩ The basis of labelling will continue to be the scale A–G.
- ⑩ For products that are already subject to labelling requirements and where a majority of the products on the market are in the highest energy classes, up to three more energy classes can be added to the label ( A+, A++ and A+++).
- ⑩ Advertising should also indicate, as appropriate, the energy class, where energy-related or price information is disclosed.

## Proposal status

Had 1<sup>st</sup> EU Parliament reading, accepted with amendments May 2009

Commission position on EP amendments on 1st reading - partial agreement June 2009

Discussions in the TRANSPORT,  
TELECOMMUNICATIONS AND ENERGY Council  
Dec. 2009

In force 2010?



## Other Legislation that may Impact in Future

Energy Star

# Energy Star

## European Community ENERGY STAR Programme for energy efficient office equipment

ENERGY STAR is a voluntary appliance specific label, identifying to consumers appliances that meet certain standards regarding energy efficiency.

It was originally set up by the US EPA in co-operation with EREN DOE (Department of Energy, US government) in 1992.

In 2001 the European Union signed an Agreement with US EPA to introduce the ENERGY STAR in Europe (only for office equipment)

**(REGULATION (EC) No 106/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2008 on a Community energy-efficiency labelling programme for office equipment,)**

This allows potential partners in the European Union to sign up through the European Commission, that is responsible for the EU ENERGY STAR Programme.

Manufacturers must register as partners

Compliant products must be registered to carry the logo

Other Legislation that may Impact in Future

The Eco Label

# The EU Eco label

The scheme is voluntary but regulated

Products must comply with ecological criteria defined in associated regulations to be awarded the label

Criteria are similar to but much broader than EuP

Take up is low



# Standards for Eco design Compliance

## EuP/ErP – Design and Measurement Standards

### Called up in UK EuP Regs (Mandatory?)

- EN 153:2006 - Methods of measuring the energy consumption of electric mains operated household refrigerators, frozen food storage cabinets, food freezers and their combinations
- EN50294 –Measurement method of total input power of ballast-lamp circuits

### Not published so far in OJ?

- IEC 62087 (2<sup>nd</sup> Ed.) – Methods of measurement for the power consumption of audio, video and related equipment
- IEC 62301 (1<sup>st</sup> Ed.) BS EN 62301:2005 – Household electrical appliances –Measurement of Standby Power
- IEC 62430:2009, BS EN 62430:2009 – Environmentally Conscious design for electrical and electronic products

Keeping track of standards is a major issue!

# Standards for Eco design Compliance

## Environmental Management System Standards

These standards will help you implement and manage your eco design process and activities

### ISO 14001 :2004

- Management system aimed at identifying, managing and reducing environmental impacts of activities, products and/or services

### ISO TR14062

- Integrating environmental aspects into product design and development

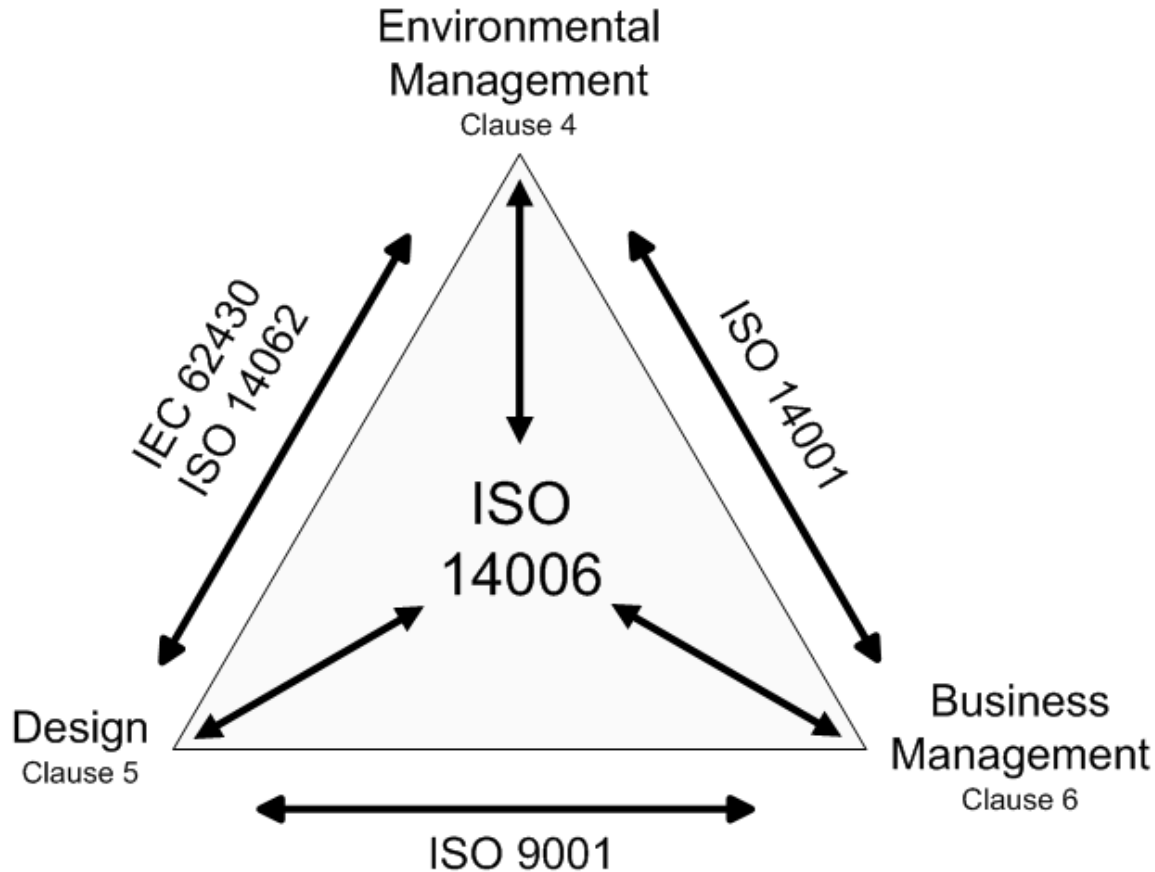
### IEC 62430:2009, BS EN 62430:2009

- Environmentally conscious design for electrical and electronic products

### Draft ISO 14006 (Publish 2010)

- Guidance for implementing environmentally conscious design into environmental management systems
- Links ISO 14001, ISO TR14062, IEC 62430 and ISO 9001

# Draft ISO 14006



Inside the triangle is ISO 14006, which links the all three functions and the three ISO standards.

Outside the triangle we can only link two functions/standards but we cannot link all three.



## The Future for Ecodesign Legislation

New WEEE and RoHS Regulations 2012/2014

Energy labelling extended to non-energy using products

The range of electrically powered equipment and other energy related products covered by measures will continue to be extended

Consideration is being given to the inclusion of life cycle impacts other than energy in use

For the moment our only regulatory concerns appear to be energy in use and hazardous substances – but this will change!