



Energy Efficiency in Products

29 April 2014

DG ENER.C.3 - Energy Efficiency
Unit

How do we achieve energy efficiency in product design?



Ecodesign Directive 2009/125/EC

Energy Labelling Directive 2010/30/EU

+ Labelling of Tyres (Regulation 1222/2009)
+ Energy Star (Regulation 106/2008)

Both directives are «frameworks» defining the «rules» for setting product-specific requirements and legislation.

It is the **combined** effect of both measures which ensures a dynamic improvement of the market.



Ecodesign sets (mandatory) requirements for Energy related Products ("ErP") to improve their environmental performance.

- ⇒ **(New) Products that do not meet these requirements are not allowed to be placed on the market from a certain date** (applies also to imports)
- Ecodesign Directive 2009/125/EC establishes the framework (conditions, criteria, procedures etc.)
 - Legal basis Article 114 TFEU: free movement of products within the internal market
 - Presumption of conformity-principle (CE-marking of compliant products, Member States responsible for market surveillance)
 - Product requirements can cover also other environmental impacts other than energy use
 - The product requirements are specified in product-specific "Implementing Regulations"



What products?

- Significant volume of sales and trade, indicatively 200.000 units p.a.
- Significant environmental impact
- Significant potential for improvement in terms of its environmental impact without entailing excessive costs

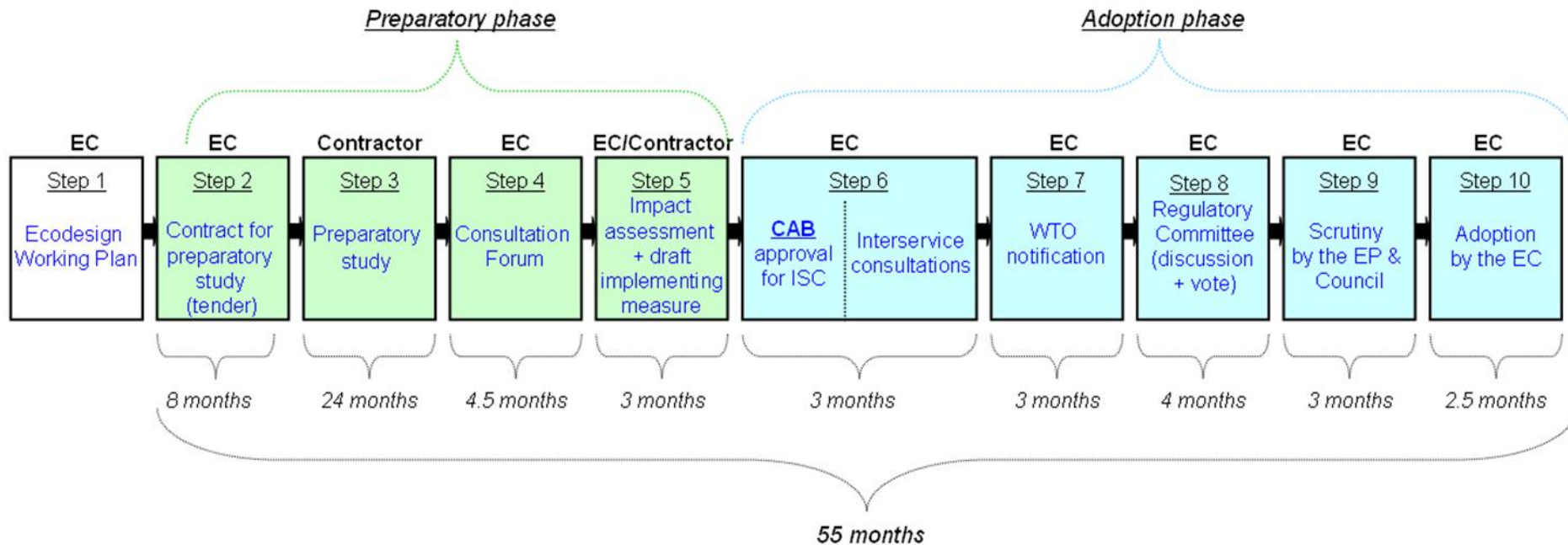
Criteria

- No (significant) negative impact on:
 - Functionality
 - Health and safety
 - Affordability
 - Industry's Competitiveness
- Not imposing proprietary technology on manufacturers
- No excessive administrative burden for manufacturers



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Ecodesign Implementing Regulations Legislative Process





Energy Labelling specifies a (mandatory) label for Energy related Products to allow consumers to choose more efficient products.

⇒ **Suppliers need to supply this label from a certain date (applies also to imports) and dealers have to display the label provided by suppliers**

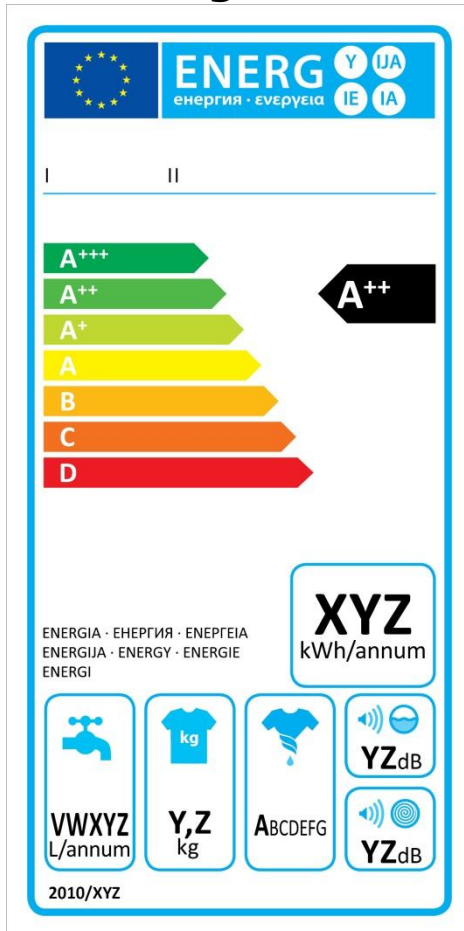
- Energy Labelling Directive 2010/30/EU establishes the framework (conditions, criteria, procedures etc.)
- Legal basis Article 194(2) TFEU: energy
- Member States responsible for market surveillance
- Label can display also other relevant information for the use phase
- Also applies to distance selling; labels will be shown on the internet from 2015
- The product labels are specified in product-specific "Delegated Regulations"



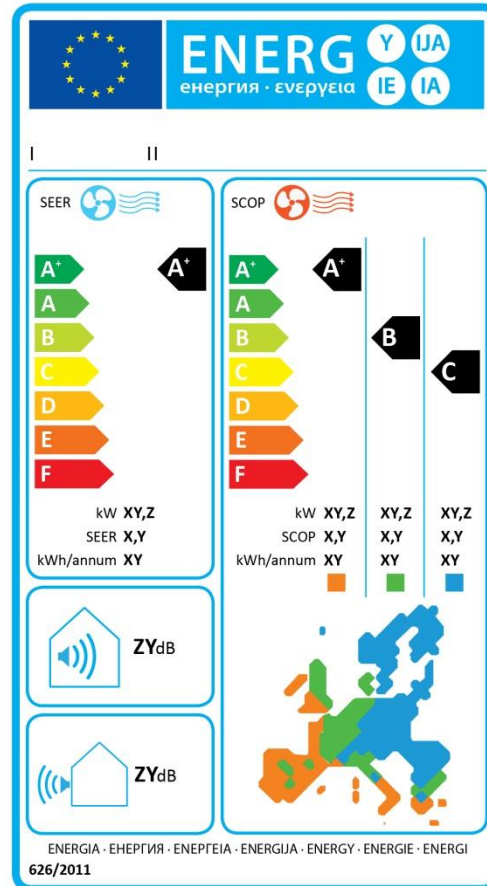
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Energy Labelling – examples

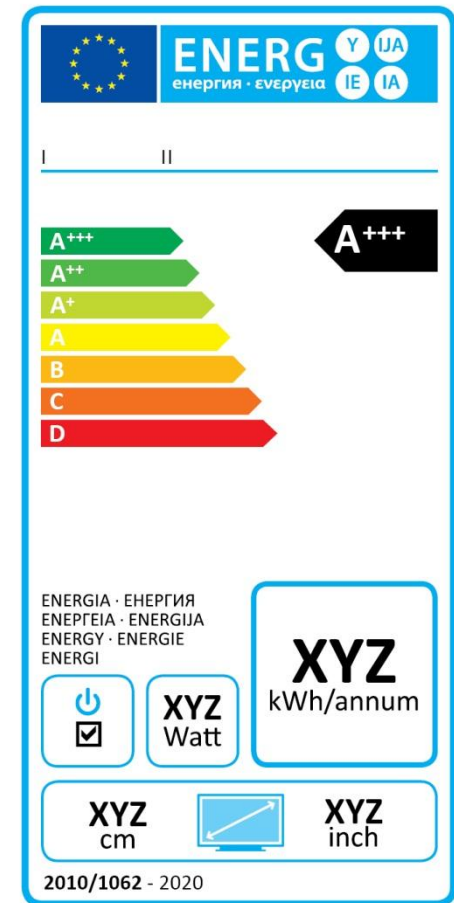
Washing machine



Air conditioning



Television



Product-specific measures



25 ecodesign regulations

1275/2008	Electric power consumption standby and off mode
107/2009	Simple set-top boxes
244/2009	Non-directional household lamps
245/2009	Fluorescent lamps for high intensity discharge lamps
278/2009	External power supplies
640/2009	Electric motors
641/2009	Circulators
642/2009	Televisions
643/2009	Household refrigerating appliances
1015/2010	Household washing machines
1016/2010	Household dishwashers
327/2011	Industrial fans
206/2012	Airco and comfort fans
547/2012	Water pumps
932/2012	Household tumble driers
1194/2012	Directional lamps
859/2009	Lamps regulation amending regulation 245/2009
347/2010	Lamps regulation amending regulation 245/2009
622/2012	Circulators (amending regulation 641/2009)
617/2013	Computers and servers
666/2013	Vacuum cleaners
801/2013	Networked standby
813/2013	Space heaters
814/2013	Water heaters & storage tanks
66/2014	Domestic ovens, hobs and range hoods

11 energy labelling Regulations

1059/2010	Household dishwashers
1060/2010	Household refrigerating appliances
1061/2010	Household washing machines
1062/2010	Televisions
626/2011	Air conditioners
392/2012	Household tumble driers
874/2012	Electrical lamps and luminaires
665/2013	Vacuum cleaners
811/2013	Space heaters
812/2013	Water heaters & storage tanks
65/2014	Domestic ovens, hobs and range hoods

3 tyre labelling regulations

1222/2009	Fuel efficiency and other essential parameters
228/2011	Wet grip testing method for C1 tyres
1235/2011	Wet grip grading of C2, C3 tyres, measurement of tyres rolling resistance and verification procedure

2 voluntary ecodesign agreements

COM (2012) 684	Complex set top boxes
COM (2013) 23	Imaging equipment

On-going work



Regulations under development

Electronic displays (ecodesign and labelling)
Solid fuel boilers (ecodesign and labelling)
Local space heaters (ecodesign and labelling)
Air heating products
Ventilation products (ecodesign and labelling)
Power transformers
Professional wet appliances
Professional refrigeration (ecodesign and labelling)
Commercial refrigeration
Waste water pumps
Other pumps
Compressors
Other motors

Voluntary agreements under development

Game consoles
Machine tools

Regulations under review

Household dishwashers
Household refrigerating appliances
Household washing machines
Household tumble driers
Pumps
Set-top Boxes
Electrical lamps and luminaires (stage 6)
External power supplies
Lighting (non-directional and tertiary, and special purpose)

Products under study

Window products
Thermal insulation
Water related products
Power generation equipment
Heating and lighting controls
Smart appliances/meters
Wine storage appliances
Power cables
Enterprise servers
Steam boilers
Positive displacement pumps
Fractional horse power motors < 200W

Role of national authorities: market surveillance

Market surveillance includes:

- Inspection of technical documentation
- Product testing
- Inspection of labels in shops and on the internet
- Random and/or risk based sampling
- Cooperation with other market surveillance authorities

Cf. Market surveillance regulation 765/2008

- Applies to all Union harmonisation legislation on products
- Applies to Ecodesign, Energy Labelling and Tyre Labelling
- Responsibility of DG Enterprise and Industry
- New proposal under negotiation in Council and Parliament

ENERGY STAR

- Regulation 106/2008 amended by Regulation 174/2013
- Based on an Agreement with the United States
- A specific label for energy efficient office equipment
- Voluntary label: can be applied to products meeting the specifications, product registration in a database required
- Dynamic enhancement of specifications (\approx every three years)
- Important role in public procurement: Regulation (EC) No 106/2008 requires EU institutions and central Member State government authorities to use energy efficiency criteria no less demanding than those defined in the EU ENERGY STAR programme when purchasing office equipment.
- Market surveillance is a common responsibility of the Commission and the Member States. The Commission has a contractor verifying the registrations.





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**Thank you for your
attention!**

