



European
Commission



EU Energy Efficiency Product Policy Eco-design and Labelling Directives Expansion to energy relevant building component

**ACREX Conference
Mumbai, 08 March 2013**

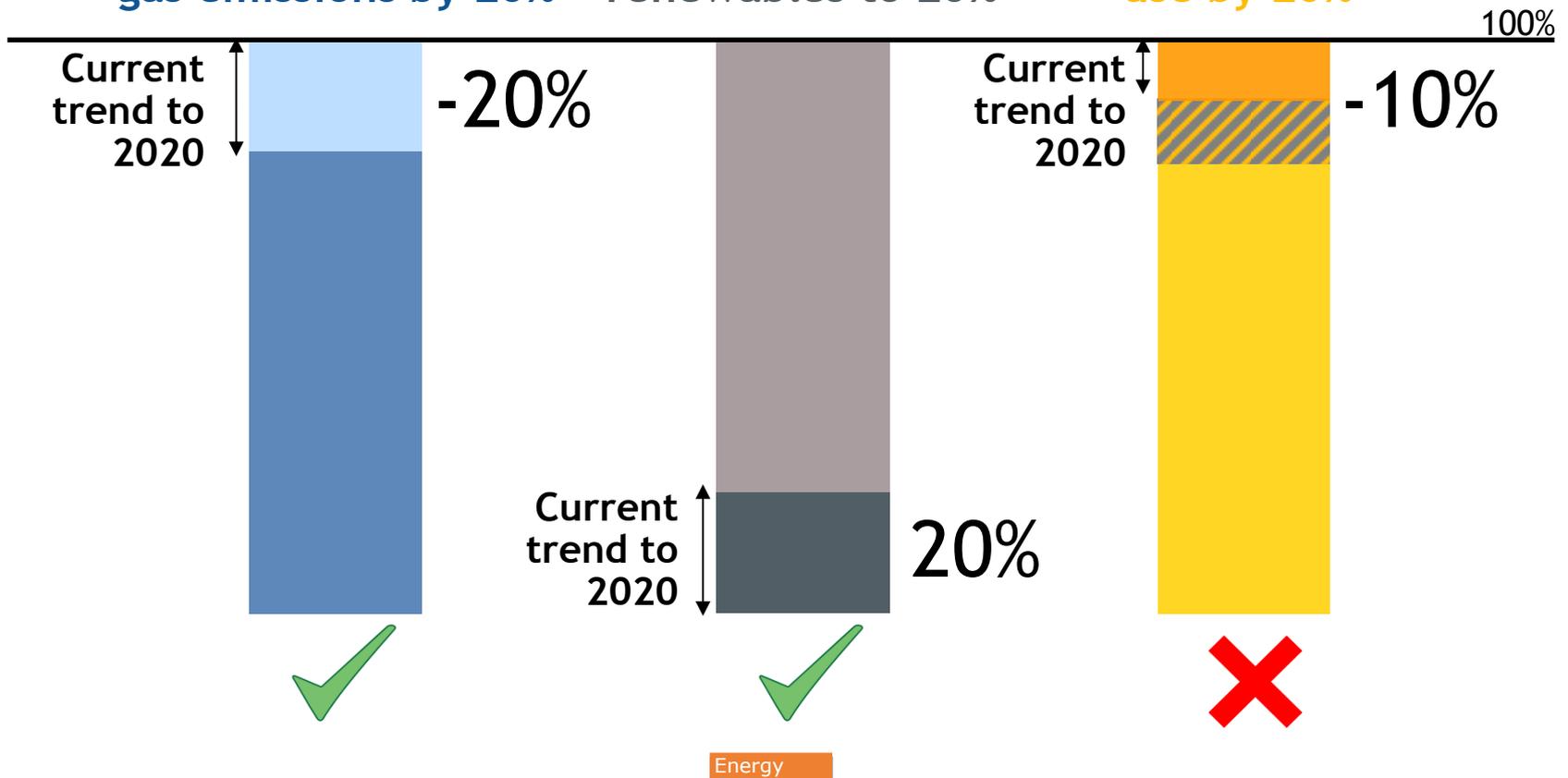
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Context : the EU 20-20-20 targets by 2020

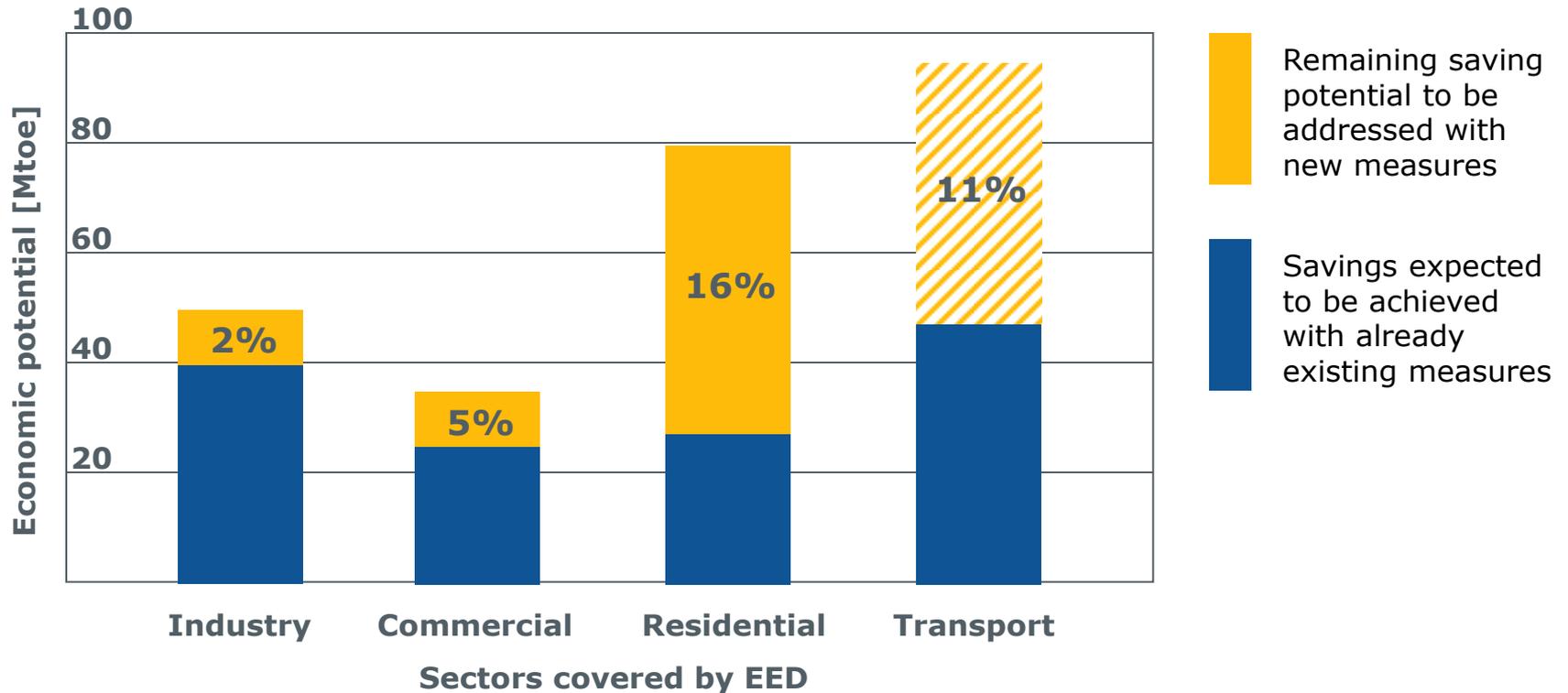
Reduce greenhouse
gas emissions by 20%

Increase share of
renewables to 20%

Reduce energy
use by 20%



Context : Despite untapped savings potentials across all major sectors



ENERGY EFFICIENCY HAS A VALUE

Meeting
the 20%
Energy
efficiency
target

==

2.6 billion

==

193 billion EUR

==

1 000
less coal
power plants

or

==

500 000
less wind
turbines

or

==

GDP of
Portugal

Barrels of
oil imports
saved

Money saved
73 EUR/barrel
per year



Energy Efficiency Policy – Main Instruments

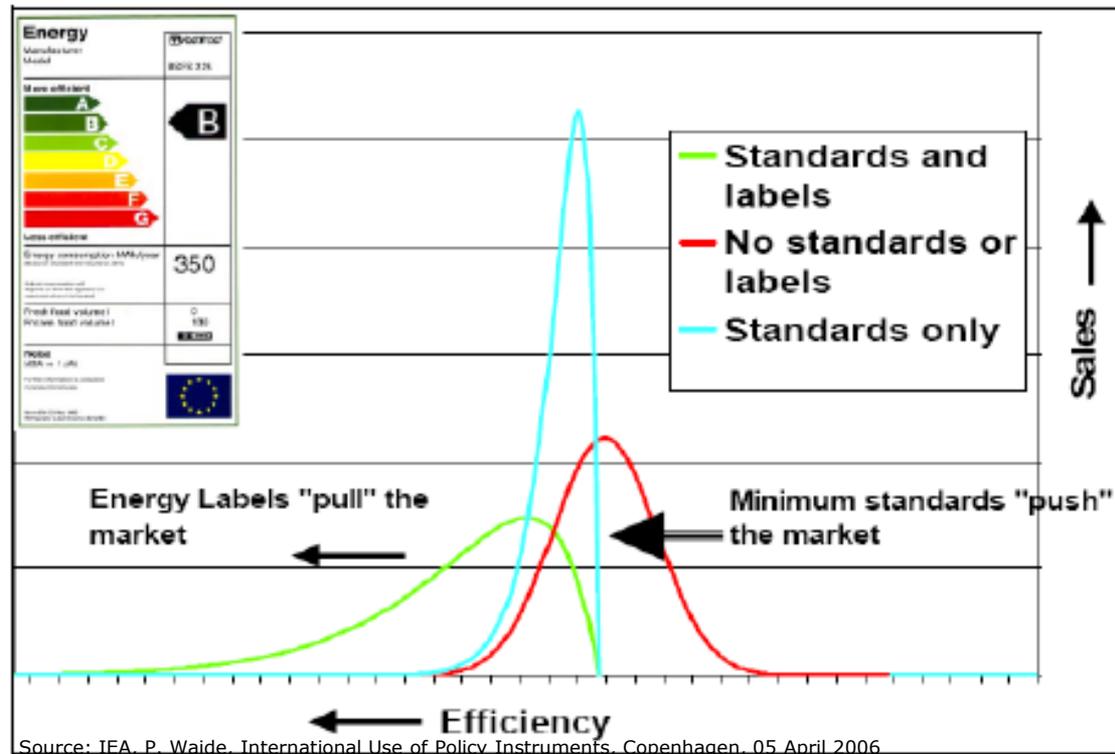
- **Draft Energy Efficiency Directive** (integrating end use energy efficiency and energy services directive 2006/32/EC and cogeneration Directive 2004/8/EC)
- **Ecodesign Directive** 2009/125/EC
- **Energy Labelling Directive** 2010/30/EU
- Energy performance of **Buildings Directive** recast 2010/31/EU
- **Energy Star** programme for office equipment
- **Ecolabel Regulation** (EC) No 2009/888 (voluntary endorsement label for top performers)

Labelling – Ecodesign Directives

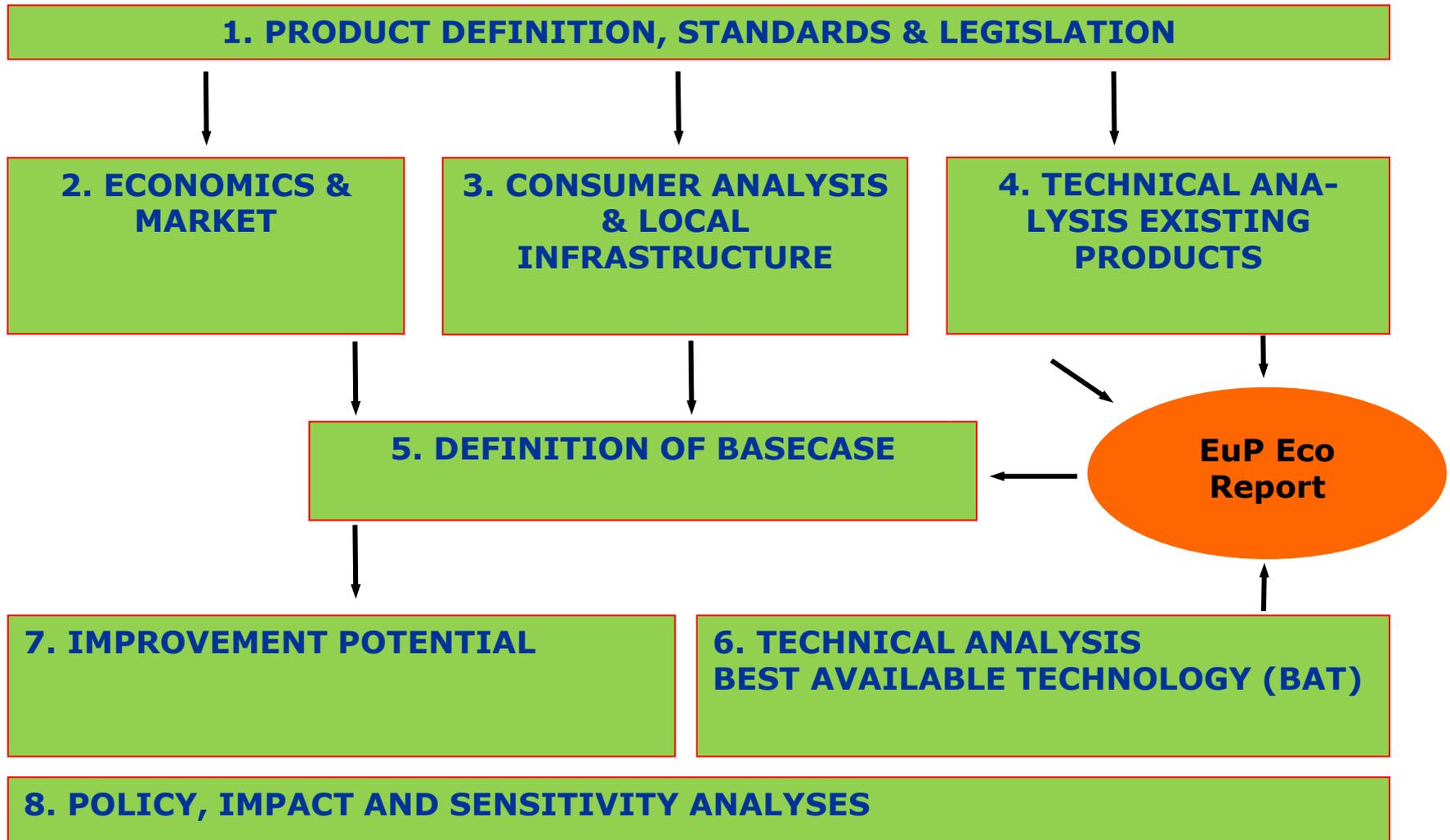
The Energy Labelling Directive addresses the supply side (**pull**) while the Ecodesign Directive addresses the demand side (**push**)

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

They are one of most effective policy tool for energy efficiency



Methodology of Preparatory studies (“MEEuP”)



Methodology of Preparatory Studies – Revision

- State of play: MEErP study preparing review ongoing. New methodology to be applied in preparatory studies for which calls for tenders will be published after the adoption of the final report of the MEErP study.
- Expected results of the review:
 - No significant changes in the methodology, as it has served well in developing the adopted and draft ecodesign regulations
 - Extension of the methodology to energy-related products
 - Integration of the extended product approach applied in recent ecodesign measures (electric motors, boilers)
 - Bringing the LCA analysis in the methodology up-to-date with the European Life Cycle Database developed by JRC
 - Enhanced consideration of Article 15 criteria for ecodesign implementing measures (functionality, affordability, health etc.)
 - Better complementarity with waste and hazardous substances legislation in the improvement options for the end of life

Ecodesign Directive 2009/125/EC

- Recast of the Directive 2005/32/EC (Energy-using Products – EuP)
- Scope of Directive 2009/125/EC covers a wider range of products defined as **Energy-related Products (ErP)**
- **ErP**: *means any good that has an impact on energy consumption during use which is placed on the market and/or put into service, and includes parts intended to be incorporated into energy-related products covered by this Directive which are placed on the market and/or put into service as individual parts for end-users and of which the environmental performances can be assessed independently*

PUSH Instrument

Ecodesign Directive 2009/125/EC

- EU's main legal instrument to improve the environmental performance of **energy-related products**
 - >> Review in 2012 (study conclusions -> 2014)
 - >> Exemption for the automotive sector regulated in the type-approval legislation
- **Framework Directive** → requirements on product-by-product basis via:
 - >> Implementing measures, **or**
 - >> Voluntary agreements
- **Implementing measures only for products with:**
 - >> Significant environmental aspects
 - >> Significant potential for improvement
 - >> Significant trade and sales volume
(indicative threshold: 200 000 units per year)
- **Based on Life-cycle approach**

Ecodesign Implementing Measures

State of play on the identification of priority products

- **List of product groups following Article of 2005 Ecodesign Directive**
- **1st Ecodesign Working Plan 2009-2011 (adopted in 2008)**
- **2nd Ecodesign Working Plan 2012-2014 (under preparation)**

Ecodesign Implementing Measures

List of product groups following Article of 2005 Ecodesign Directive

8 product groups identified for the adoption of implementing measures in the transitional period between the entry into force of the 2005 Directive and the adoption of the first working plan (2009-2011)

- Heating and water-heating equipment
- Electric motor systems
- Lighting (domestic & tertiary sectors)
- Domestic appliances
- Office equipment (domestic & tertiary)
- Consumer electronics
- HVAC (heating/ventilating/air conditioning) systems (domestic)
- Electronics and electrical products operating in stand-by modes

What is an ecodesign implementing measure?

Regulation that includes 4 annexes:

1. requirements
2. Calculation methodology
3. Indication for market monitoring
4. Benchmarks on best available technologies

Ecodesign Implementing Measures

List of product groups following Article of 2005 Ecodesign Directive

These 8 product groups resulted into 26 different **preparatory studies** (to prepare implementing measures).

Adoption of 17 ecodesign (12) and energy (5) labelling implementing measures

Measures adopted (Regulations) on circulators, electric motors, household refrigerating appliances, freezers, dish- and washing machines, televisions, fans, lighting products, external power supplies, standby and off mode of household equipment

Other 18 measures are under preparation and planned to be adopted in 2014 + 2 voluntary agreements

Ecodesign Implementing Measures

1st Ecodesign Working Plan 2009-2011 (under 2005 Ecodesign Directive)

Working plan required by Ecodesign Directive to list priority product groups

Following a Commission study and after consultation of stakeholders, an indicative list of 10 product groups was adopted in 2008 for the undertaking of preparatory studies

- air-conditioning and ventilation systems (commercial & industrial)
- electric and fossil-fuelled heating equipment
- food-preparing equipment
- industrial and laboratory furnaces and ovens
- machine tools
- network, data processing and data storing equipment
- refrigerating and freezing
- sound and imaging equipment
- transformers
- water-using equipment

Ecodesign Implementing Measures

2nd Ecodesign Working Plan 2012-2014 (under 2009 Ecodesign Directive)

This plan has direct implications on labelling as well given the complementary nature of the two Directives.

Study (finalised on 16 December 2011) to support the new Working Plan and to identify energy-related products (with significant savings potential, not covered earlier and according to criteria in the Ecodesign Directive).

Draft indicative list of 11 product groups based on qualitative assessment:

Windows products, steam boilers, power cables, enterprises' servers, storage and ancillary equipment, smart appliances/meters, wine storage appliances, positive displacement pumps, fractional horse power motors under 200W, heating controls, lighting controls, **thermal insulation products for buildings**.

Ecodesign Implementing Measures

2nd Ecodesign Working Plan 2012-2014 (under 2009 Ecodesign Directive)

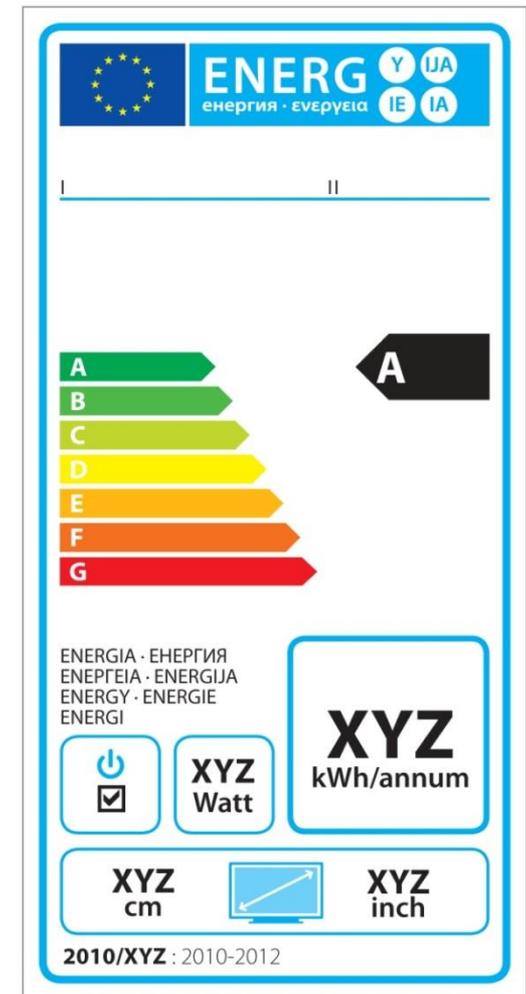
Adopted in December 2012

Implementing measures to be started by end 2014 (all in all need of three years)

Energy Labelling Directive 2010/30/EU

- **Information requirements** on the consumption of energy and essential resources
- **Target: end-users**, public and private demand (installers)
- Energy-related products (as in the revised Ecodesign Directive)
- Fiscal incentives and public procurement
- Role for manufacturers, retailers, installers
- A to G and A+++ to D scales

Pull instrument

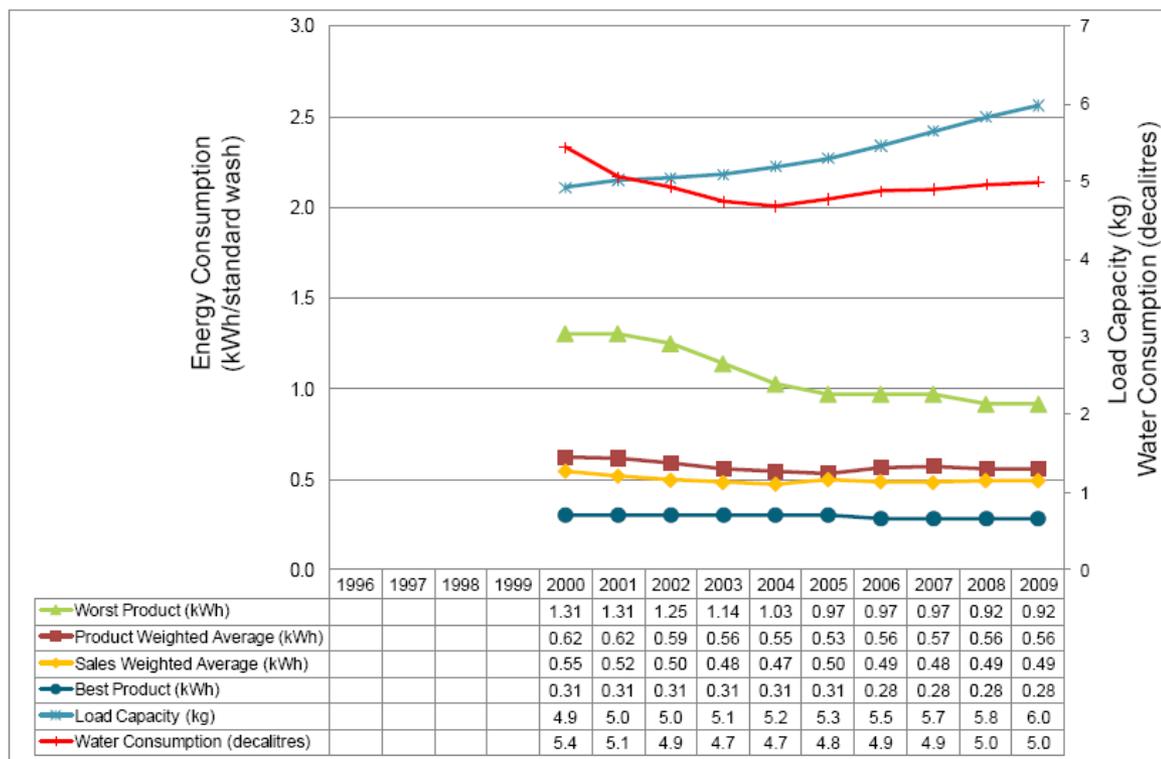


Case: Energy using products



Labelling - Information requirements on energy and water consumption

Ecodesign requirements on energy and water consumption phasing-out least efficient appliances



Energy Performance of buildings

- **Directive 2002/91/EC was revised in 2010**
- **Directive 2010/31/EU on the energy performance of buildings (recast) entered into force: July 2010**
- **Key transposition deadline for Member States: 9 July 2012**
- **24 Member States missed this deadline and infringement procedures have started**

Energy performance requirements

- Energy performance to be calculated in accordance with Annex I
- Minimum energy performance requirements to be set with a view to achieving cost optimal levels
- Certain categories of buildings may be excluded
- Minimum energy performance requirements apply to all **new buildings and buildings undergoing major renovation**
- Minimum energy performance requirements to be set for **certain building elements**

Technical building systems

Member States to set system requirements for new, replacement and upgrading of technical building systems, including at least:

- **Heating systems**
 - **Hot water systems**
 - **Air-conditioning systems**
 - **Large ventilation systems**
- (or combinations of such systems)**

Energy performance certificates (EPC)

EPCs to include:

- **Energy performance of the building**
- **Reference values**
- **Recommendations for improvement and indications for where to find additional information**

EPCs to be issued for:

- **Building or building units which are constructed, sold or rented out to a new tenant**
- **Frequently visited buildings occupied by public authorities > 500m² (> 250m² after 9 July 2015)**

Energy performance certificates (EPC)

Member States have to put in place an independent control system for EPCs

- **Random selection of at least a statistically significant percentage of all EPCs issues annually**
- **Checks of the input data, EPC and recommendations**
- **By 9 January 2013 at the latest**

Member States have to establish and implement effective, proportionate and dissuasive penalties

Inspections of heating and air-conditioning systems

- **MS must lay down the necessary measures to establish a regular inspection of the accessible parts of systems used for heating buildings and air-conditioning systems of an effective rated output of more than 12 kW**
- **As an alternative [...] MS may opt to take measures to ensure the provision of advice to users concerning the replacement of boilers and air-conditioning systems, other modifications to these systems and alternative solutions to assess the efficiency and appropriate size of the systems**

More information available on:

DG Energy

- http://ec.europa.eu/energy/efficiency/ecodesign/eco_design_en.htm
 - <http://www.ecomotors.org>
- Email: tren-ecodesign@ec.europa.eu

DG Enterprise and Industry

- http://ec.europa.eu/enterprise/eco_design/index_en.htm
- Email: entr-ecodesign@ec.europa.eu

Energy Star

- <http://www.eu-energystar.org/>