



- How does Ecodesign work and how can it deal with refrigerants?

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ATMOsphere Europe 2011, 12 October 2011

● Part of an integrated approach

Integrated product policy:

- The **production phase** is addressed by the RoHS Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment*
- The **use phase** is addressed by the **Ecodesign Directive** and by the **Energy Labelling Directive**
- The **end-of-life phase** is addressed in the Waste Electrical and Electronic Equipment Directive 2002/96/EC (the WEEE Directive)*

Life cycle analysis performed on a number of energy using products show that most environmental impact occurs during **the use phase.**



- Energy efficiency of products - main instruments

- **Ecodesign Directive 2009/125/EC**

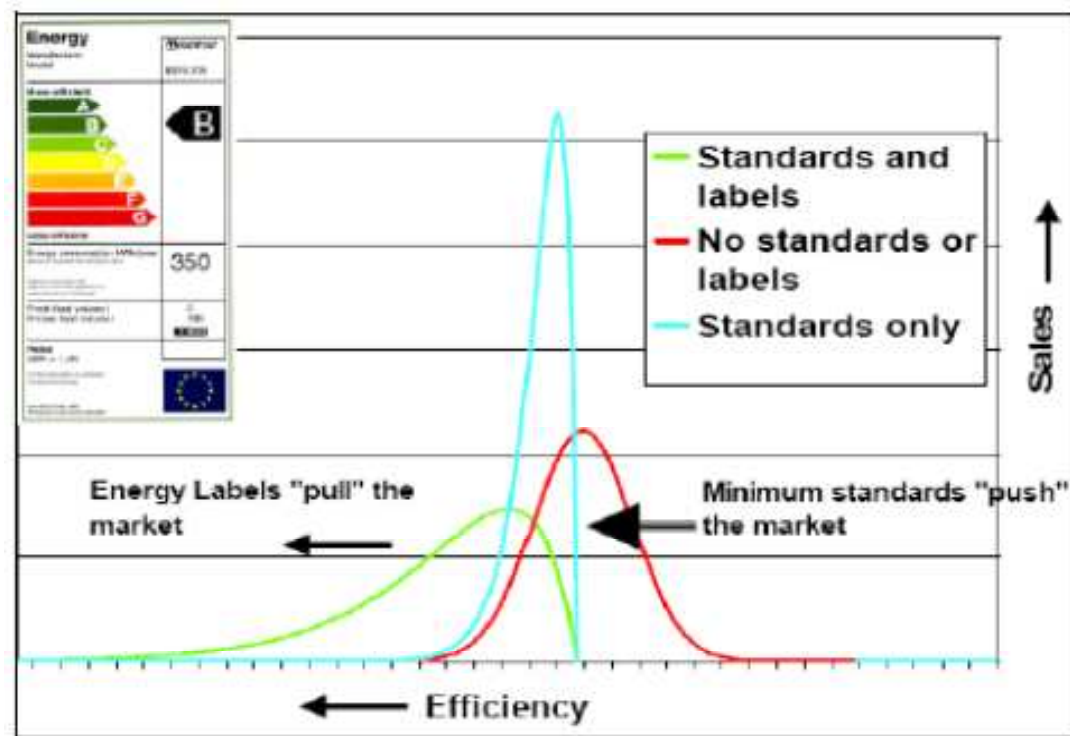
- » «framework» defining the «rules» for setting product-specific requirements/legislation on energy efficiency and further parameters

- **Energy Labelling Directive 2010/30/EU**

- » «framework» defining the «rules» for setting product-specific requirements/legislation on standard information of the consumption of energy and other resources

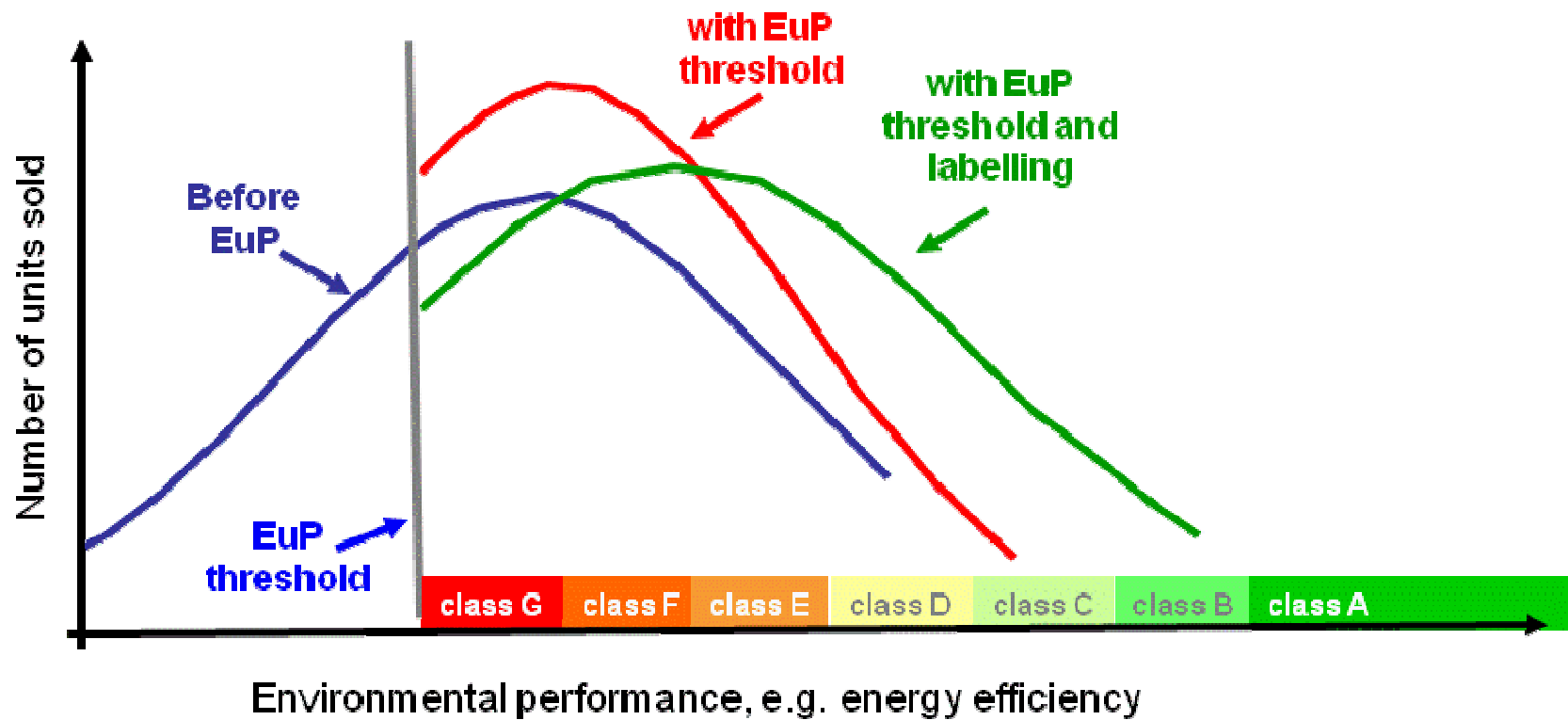
● The use phase: Interaction between the Ecodesign and the Energy Labelling Directives

The Ecodesign Directive addresses the **supply side** while the Energy Labelling Directive addresses the **demand side**. It is the **combined** effect of both measures which ensures a dynamic improvement of the market.



Source: IEA, P. Waide, International use of policy instruments, Copenhagen, 05 April 2006

Market transformation



● Ecodesign Directive 2009/125/EC

- The EU's main instrument
 - » to improve the environmental performance of energy-related products
 - » to harmonise “ecodesign requirements” across EU Member States/internal market
- Criteria for “eligible” products:
 - » significant environmental impact
 - » significant potential for improvement
 - » significant trade and sales volume
(indicative: above 200 000 units per year)
- Based on **Life-cycle approach**

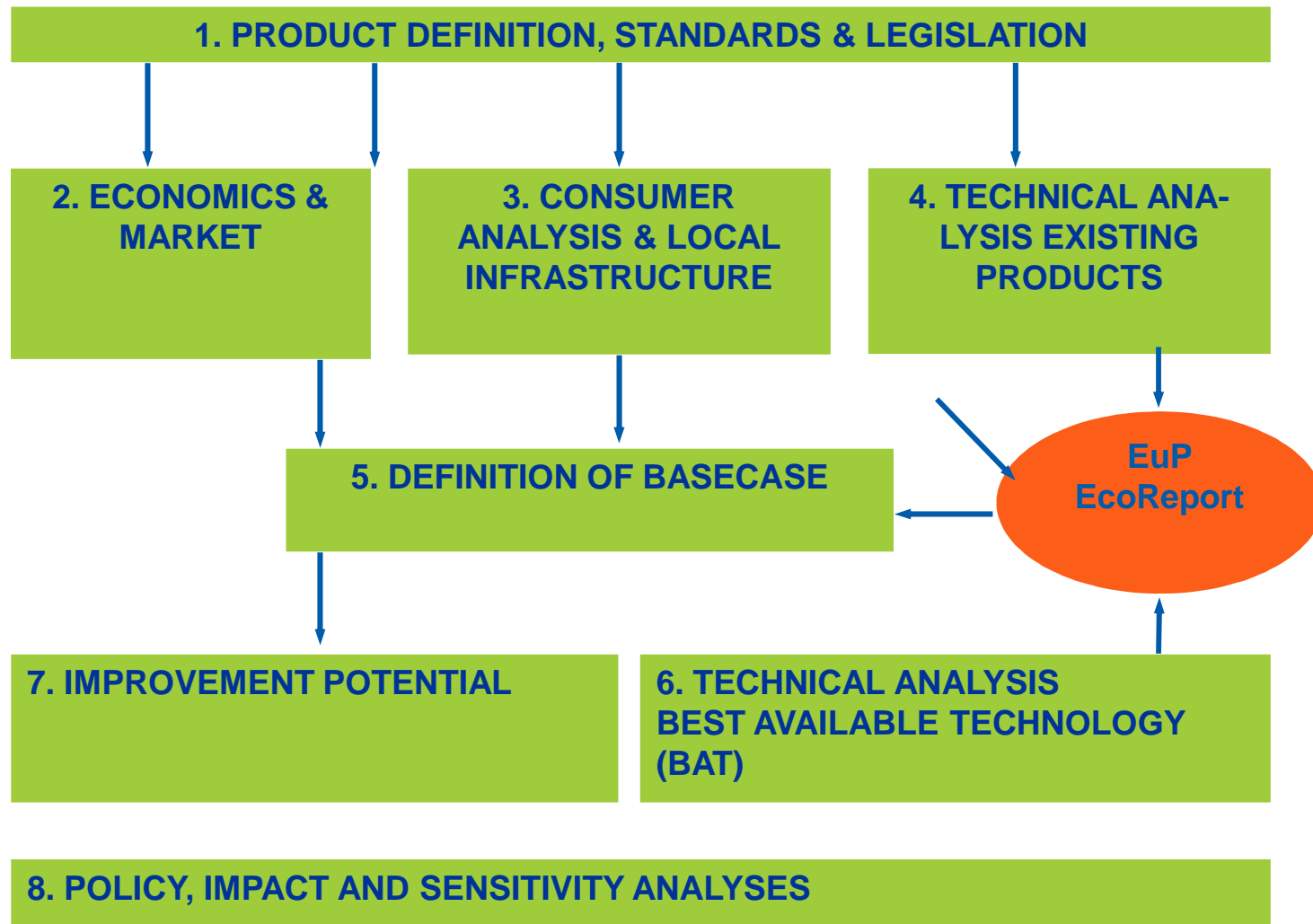
● Energy Labelling Directive 2010/30/EU

- main aims: market transparency for consumers, incentives for innovation for manufacturers, market transformation towards highly efficient products/energy savings
- complementary to “minimum” ecodesign requirements
- new « framework » Directive provides that the energy label
 - » uses a classification «A» to «G» as basis
 - » A+, A++ and A+++ can be used
 - » only seven classes are shown
 - » colours are dark green to red
- review of classification when A+++ and A++ are significantly «populated» and further room for improvements exists
- Seldom relevant for ‘industrial’ products

● Process - Ecodesign

- **technical, environmental and economic analysis** of the product, open to participation of stakeholders worldwide
- **“Consultation Forum”**: discuss ecodesign requirements with Stakeholders (industry, NGOs, retailers...) and Member States
- **impact assessment**
- **WTO/TBT notification**
- **vote** on draft by EU Member States (“Regulatory Committee”)
- **Scrutiny/right of objection** by European Parliament and Council
- **adoption** by Commission/publication in the Official Journal of the EU
- **transition period** for manufacturers for complying with requirements usually not less than one year

Methodology of Preparatory studies (“MEEuP”)



● Status: Work Programme

- 1st phase – Art. 16 - addressing mainly household energy consumption
- 2nd phase – 2008 WP - moving to industrial and tertiary sectors in 2009-2011
- 3rd phase – 2011 WP - strengthening existing requirements and possibly filling the gaps

● Regulations in force

- «savings» are savings compared to «no ecodesign/energy labelling» scenario
- savings correspond approx. to the electricity consumption of the UK
- details are in the impact assessments

| Product | Estimated savings (annual by 2020) |
|--------------------------|------------------------------------|
| Standby | 35 TWh |
| Simple set-top boxes | 6 TWh |
| Street & Office lighting | 38 TWh |
| External power supplies | 9 TWh |
| Domestic lighting | 37 TWh |
| Electric motors | 135 TWh |
| Circulators | 23 TWh |
| Freezers/refrigerators | 6 TWh |
| Televisions | 43 TWh |
| Total | 333 TWh |

● Status: measures under preparation

washing machines, dish washers, boilers and water heaters, commercial refrigerators, computers/monitors, copiers/printers (possibly self regulation), pumps, air-conditioners, complex set-top boxes (self regulation), vacuum cleaners, reflector lamps and luminaires, solid fuel small combustion installations, air based central heating, transformers, sound and imaging equipment, other refrigerating & freezing equipment, furnaces, machine tools

● Relation with standardisation

Roles of EU and ESO:

- EU legislation sets out *requirements*
- CEN/CENELEC set *standards*

Conclusions

- In general about a 3 year process
- Now a Horizontal Mandate for Ecodesign
- Close involvement of industry and Member States

● Developments in Ecodesign

- New Work Programme
- Review of ERP methodology
- Revision/evaluation of Ecodesign 2012 and EL 2014 – questions: timing, all products, systems, integration of instruments...
- In a few years start of reviews and possible revisions of existing measures

● More info

- Website of DG ENER

http://ec.europa.eu/energy/efficiency/ecodesign/eco_design_en.htm

- Website of DG ENTR

http://ec.europa.eu/enterprise/policies/sustainablebusiness/ecodesign/index_en.htm

Thank you for your attention.