European Commission

Ecodesign Directive 2009/125/EC & Energy Labelling Directive 2010/30/EU State of Play

ATMOsphere Europe 2012,

6 November 2012

ATMOsphere EU Solutions for Europe natural refrigerants

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B1 Sustainable Industrial Policy and Construction

Enterprise and Industry

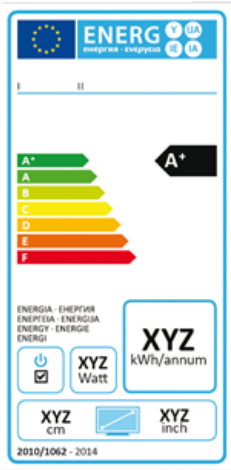
Energy efficiency of products

European Commission

Main instruments

Ecodesign Directive 2009/125/EC: "Framework" defining the "rules" for setting product-specific requirements/legislation on energy efficiency and further parameters. Compliant products receive "CE Mark"

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



Other related instruments

Ecolabel: The EU Ecolabel helps identify products and services that have a reduced impact on the environment throughout their life cycle, from the extraction of raw material through to production, use and disposal.

EU Ecolabel
www.ecolabel.eu

Green Public Procurement: Voluntary instrument. GPP can help stimulate a critical mass of demand for more sustainable goods and services which otherwise would be difficult to get onto the market.

Green Public Procurement GPP

Energy efficiency of products

European Commission

Main instruments

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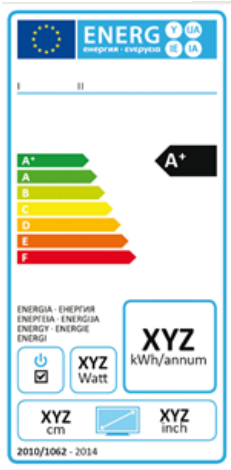
Compulsory

Energy Labelling Directive 201[illegible]2U: "Framework" defining the "rules" for setting product-specific requirements/legislation on standard information of the consumption of energy and other resources



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Voluntary

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Green Public Procurement GPP

Increased Energy Efficiency & Sustainability of Products

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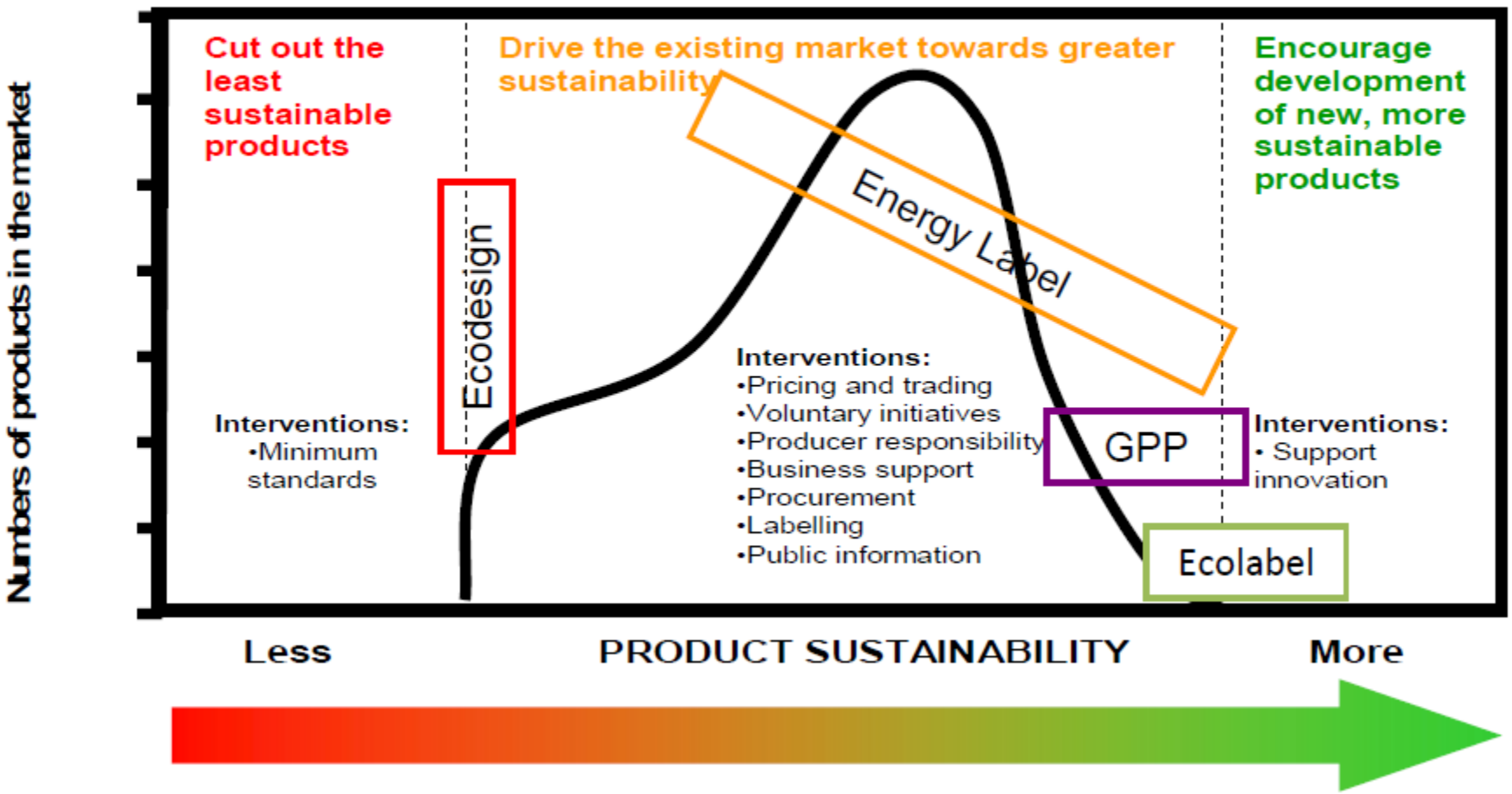
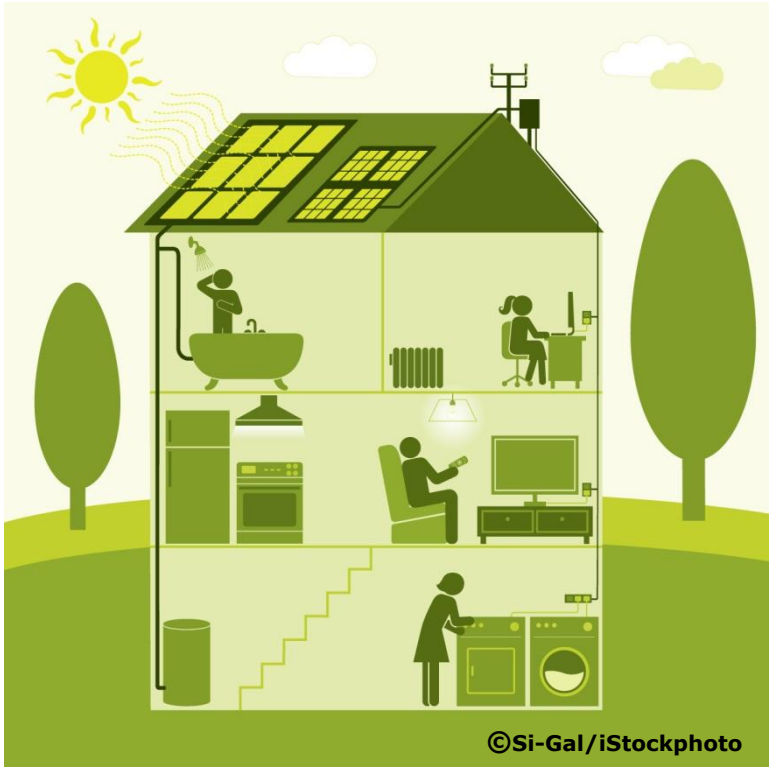
PRODUCT INTERVENTIONS – Overall approach



Ecodesign and Labelling - results achieved

Story so far.....



39 'Lots' with some 50 product groups

14 Ecodesign Regulations and 5 Energy Labelling Regulations adopted

Product	Example Estimated savings by a set of Regulations (annual by 2020) [TWh]
Standby	35
Simple set-top boxes	6
Street & Office lighting	38
External power supplies	9
Domestic lighting	37
Electric motors	135
Circulators	23
Freezers/refrigerators	6
Televisions	43
Fans	34
Air conditioning and comfort fans	11
Total [TWh]	**377**

Ongoing Product Groups

As a general rule, this is the repartition of ecodesign products groups within the Commission:

B2C: DG ENER

B2B: DG ENTR

DG ENV could be involved in the near future (depending on the Ecodesign Working Plan)

Ongoing Product Groups – DG ENTR 'B2B'

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B2B Ecodesign "Lot"	B2B Product Group	(TWh) Estimated energy savings *per year* in 2020	Possible Implementing Measure & Date	Measure Should Apply From
ENTR Lot 1	Professional refrigeration	6 TWh	Regulation + Labelling: 2014	2015-16
ENTR Lot 2	Transformers	12 TWh	Regulation: 2014	2015-16
ENTR Lot 3	Sound & Imaging Equipment	4 TWh	Voluntary Agreement: 2014	2015-16
ENTR Lot 4	Industrial ovens & furnaces	35 TWh	Regulation + Labelling (small-medium products): 2015	2016-17
ENTR Lot 5	Machine Tools	4 TWh	Voluntary Agreement: 2014-15	2015-16
ENTR Lot 6	Air-conditioning & ventilation systems	100 TWh	Regulation: 2015	2016-17
PROJECTED B2B FINAL ENERGY SAVINGS PER YEAR, IN THE YEAR 2020		**c. 160 TWh**	**Equivalent to c. 80 million tonnes of CO2 saved annually**	

B2B & Overall Ecodesign Projections to 2020: Annual Savings Year on Year

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- **B2B savings p.a. by 2020 = 16 small new nuclear power stations**
- **TOTAL (Consumer Goods + B2B) Ecodesign energy savings per year by 2020 = 800 TWh, more than all present EU-wide Renewable Electricity used**
- **TOTAL CO2 savings: c. 400 million tonnes per year (2020)**
- **THIS IS THE SAME AS THE EU ETS by 2020!**

Ecodesign Working program 2012-2014 (provisional)

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Priority product groups:

Window products
Steam boilers (< 50MW)
Power cables
Enterprises' servers, storage and ancillary equipment
Smart appliances/meters
Wine storage appliances

Optional product groups:

Positive displacement pumps
Fractional horse power motors under 200W
Heating controls
Lighting controls/systems
Thermal insulation products for buildings

Additional combined energy savings potential: over 500 TWh per year by 2030.

Power generating equipment: Inclusion of this product group was requested by stakeholders. Specific study assessing the potential of power generating equipment <50MW will be launched.

Complementary Actions....

Other new actions

Helpdesk: support in informing e.g. consumers, companies and compliance authorities on ecodesign and energy labelling matters. Launch of tender being planned.

Standardisation: Call for proposals for support to NGOs and for Commission services in standardisation. Launch of tender being planned.

Market surveillance: Annual market surveillance collections exercise launched in 2012. Better understanding on how Member States carry out market surveillance, identify common problems, help deciding on possible further actions.

Review of Ecodesign and Energy Labelling Directive

Ecodesign review in 2012: Provisional conclusions: the Directive achieves its main policy objectives. It is too early to evaluate the full effects of the Directive (implementing measures not yet in place sufficiently long time).

Energy Labelling review in 2014: Launch of studies on the impact of implementing measures, support actions, standardisation, market surveillance in 2012-2013 etc to support the review in 2014. First behavioural study concerning Energy Labelling, in collaboration with DG SANCO, to be finished on Autumn 2012.

Ecodesign and Refrigerant gases

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The link is clear

DG ENERGY (lot)
1 Boilers (heat pumps)
2 Water heaters
10 Room air conditioners
12 Commercial refrigeration (display cabinets, cold vending machines)
13 Domestic refrigeration
17 Laundry dryers (heat pump dryers)
20 Local room heaters
21 Hot air central heating systems

DG ENTERPRISE (lot)
1 Commercial refrigerating equipment
6 Air conditioning and ventilation systems

All these product groups use refrigerants!

They represent the majority of F-Gas Global Warming emission

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How to act on it?

Ecodesign is based on a Life-cycle approach to improve environmental performance.

The focus is energy-efficiency, but also other aspects can and have to be considered.

One should consider the overall impact on the atmosphere, then choose the best solution.

Case by case.

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An Example: ENTR Lot 1 Professional Refrigeration

There are five products in this Lot:

Storage Cabinets
Blast Cabinets
Condensing Units
Industrial Process Chillers
Walk-in Cold Rooms

The Impact Assessment studies by our contractor are, or will be soon, available at

http://www.taitconsulting.co.uk/Ecodesign_Consultation.html

Comments and data are still welcome (To the speaker, please)

We are now writing the Impact Assessment.

Two products (Storage Cabinets and Blast Cabinets) are set to be presented to the IA Board on December the 18th.

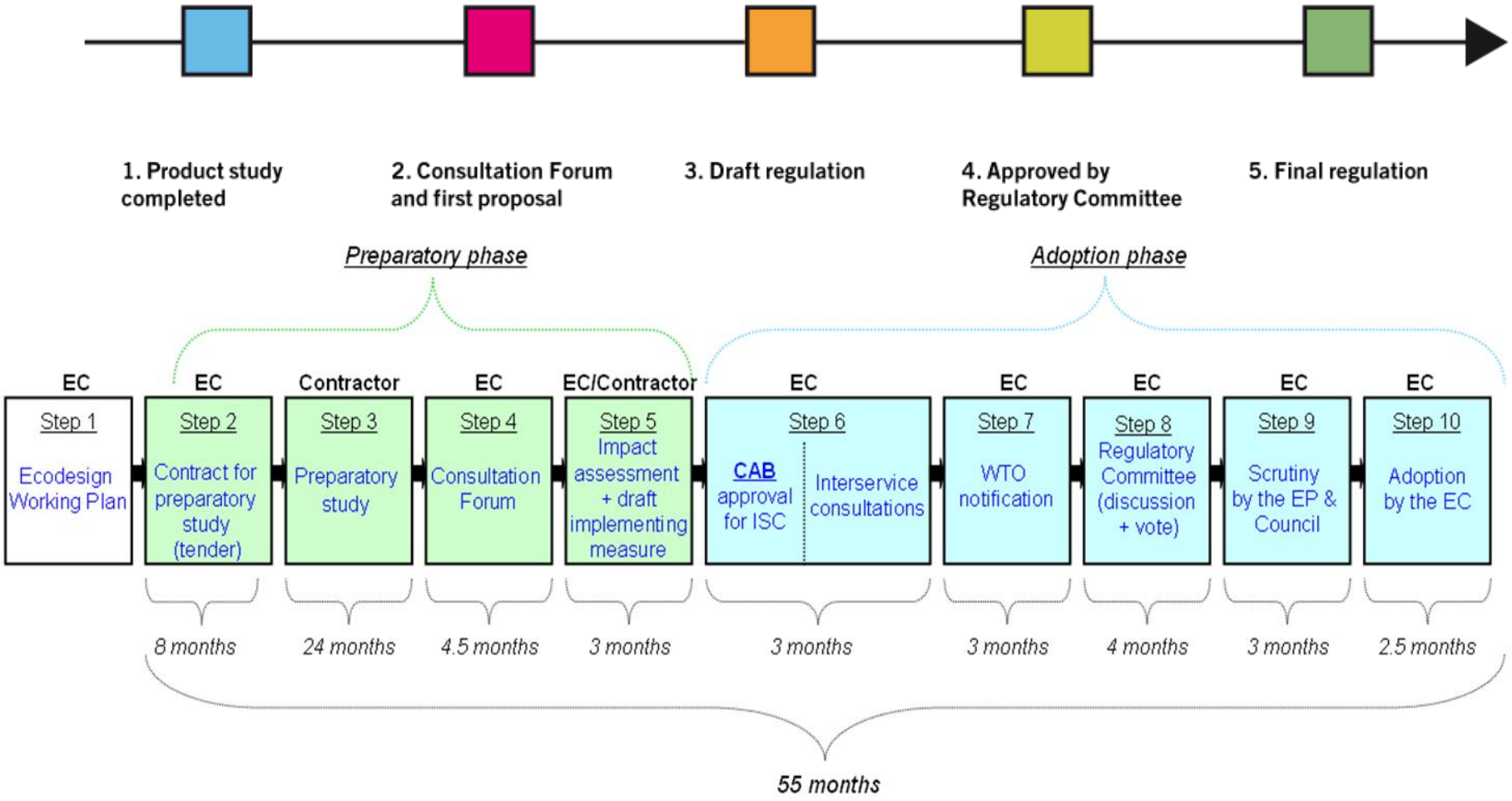
The others will follow soon.

Afterwards, a draft regulation will go through the Inter-Service Consultation (ISC).

(For your information, the following slide illustrates the procedure)

Close attention to and coordination with the coming F-gases regulation are required.

(Preparatory and adoption procedure)



Ecodesign and Refrigerant gases

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An Example: Two ENTR Lot 1 Products

Storage Cabinets

Condensing Units

Ecodesign and Refrigerant gases

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An Example: Two ENTR Lot 1 Products

Storage Cabinets	Condensing Units
Total Warming Impact: 95% Energy Consumption 5% Direct Emissions	Total Warming Impact: 80% Energy Consumption 20% Direct Emissions
Technology: alternative and very efficient gases available (Hydrocarbons)	Technology: alternatives available, sometimes not very energy efficient
Ecodesign and Energy Labelling will push the market in the right direction (away from high GWP refrigerants)	Ecodesign has to be applied carefully to push market in the right direction (away from high GWP refrigerants)
Issue: some safety regulations	Issue: often loaded on site with refrigerant gas

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Thanks for your attention!

More information at:

http://ec.europa.eu/enterprise/policies/sustainable-business/ecodesign/index_en.htm

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