

F-GAS AND ECODESIGN: INFLUENCES OF EU LEGISLATION ON ITALIAN INDUSTRY











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Introduzione all'Ecodesign ed all'Energy Label

D. Polverini DG GROW Unit C1- Clean technologies and products

Energy efficiency of products

European Commission

Main instruments

Ecodesign Directive 2009/125/EC mework" defining the "rules" for setting provide the setting provide the

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 identifeed ducts and services that have a reduced impact on the environment of the solution of raw material three to solution, use and disposal.

Green Public Procurem. 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.











Ecodesign and Energy Labelling: a combined effort



Ecodesign addresses the supply side; it pushes the market Energy Labelling addresses the demand side; it pulls the market The combined effect of both Directives ensures dynamic improvement of the market



Ecodesign (Directive 2009/125/EC)

Setting of mandatory requirements for energy-related products to improve their environmental performance

- Products not meeting these requirements cannot be placed on the market (applies also to imports)
- Establishes the framework (conditions, criteria, procedures, etc.)
- Legal Basis Article 114 (TFEU): free movement of products within the internal market
- Products to be addressed are stipulated in the Ecodesign Working Plan
- Basis for any measure is a technical preparatory study (MEErP methodology)



Criteria for action

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
- No (significant) negative impact on:
 - Functionality
 - Health and safety
 - Affordability
 - Industry's Competitiveness



Energy Label (Directive 2010/30/EU)

Sets mandatory labelling requirements for energy-related products to enable consumers to make informed choices

- Ranks products according to their energy efficiency on an A to G scale
- Once the majority of products in a certain category reach class A, up to three classes (A+/A++/A+++) may be added on top of class A
- Displays annual energy consumption or energy consumption per cycle, as well as other impacts: e.g. water consumption, volume of the appliance, etc.
- Ecodesign measures are often accompanied by an Energy Label (regulation) mainly for consumer products



Energy Labelling – examples

Ovens



Vacuum cleaners



28

kWh/annum

4)) 66dB

ABCDEFG

3.

Prof. Refr. Stor. Cab.



ENERGIA · EHEPГИЯ · ENEPГEIA

ABCDEFG

ABCDEFG

XYZ/2013 - I

ENERGIJA · ENERGY · ENERGIE · ENERGI



Energy efficiency index (EEI) classes – Prof Refr Stor Cab

EEI class	EEI	
A+++ (only in label 2)	EEI<5	
A++ (only in label 2)	5≤ <i>EEI</i> <10	Dept in slove and
A+ (only in label 2)	10≤EEI<15	Best in class
A	15≤EEI<25	
В	25≤EEI<35	
С	35≤EEI<50	
D	50≤EEI<75	Bulk
E	75≤EEI<85	3 rd ED Tier (01/07/2019)
F	85≤ <i>EEI</i> <95	2 nd ED Tier (01/01/2018)
G (least efficient)	95≤EEI<115	1 st ED Tier (01/07/2016)





Energy



Measures in place

28 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
- 548/2014 Power transformers
- 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
- 1253/2014 Ventilation units
- 2015/1095 Professional refrigeration
- 2015/1185 Solid fuel local space heaters
- 2015/1188 Local space heaters
- 2015/1189 Solid fuel boilers

16 Energy labelling Regulations

- 1059/2010Household dishwashers1060/2010Household 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
- 518/2014 Internet energy labelling
- 1254/2014 Residential ventilation units
- 2015/1094 Professional refrigeration
- 2015/1186 Local space heaters
- 2015/1187 Solid fuel boilers

3 voluntary agreements

COM (2012) 684 Complex set top boxes COM (2013) 23 Imaging equipment COM (2015) 178 Game consoles

1 tyre labelling regulation

1222/2009/EC Labelling of tyres with respect to fuel efficiency and other essential parameters



Ongoing work

Measures under development

- Electronic displays
- Air heating products (close to adoption)
- Professional wet appliances
- Commercial refrigeration
- Compressors
- Uninterruptible power supplies

New measures under study

- Windows
- Water-related products
- Heating and lighting controls
- Smart appliances
- Entreprise servers

Measures under review

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

Voluntary agreements under development

Machine tools



Ecodesign and Energy labelling -Results Achieved

- Delivers close to half of the 20% energy efficiency target for 2020
- 175 Mtoe primary energy savings per year by 2020, i.e. the annual primary **energy consumption of Italy**
- 320 Mt CO₂ equiv. greenhouse gas emission reduction; i.e. around 25% of EU 2020 reduction target
- Savings of **€ 490 per household per year**
- **€ 55 billion extra revenue** for industry, wholesale and retail sector



Market transformation





Manufacturers' obligations

- Design and construct in compliance with eco-design requirements
- Possibly use harmonised standards to test their products and declare their performance
- Carry out conformity assessment (self-assessment is the general rule)
- Affix the CE marking

Only manufacturers affected?

NO!

Importers too, if the manufacturers are not established in the EU and have no representative

Conformity with minimum requirements in the EU



- The use of EN harmonized standards provides presumption of conformity with legal requirements
- Economic operators may use other methods to provide conformity
- Where possible, EN standards are in line with ISO/IEC international standards



Member States' obligations

- Most important: Market Surveillance (Art. 3).
- MSs have to make sure that products covered by a regulation comply with it.
- This means that they will have to designate authorities to carry out conformity assessment market surveillance, including products checks.
- Depending on the gravity of the non-compliance, measures have to be adopted; they can go range from an order to comply or a small fine up to a prohibition.
- The Commission has to be informed of the results.



Main ongoing activities

Review Energy Labelling Directive

- Improve effectiveness of the label (e.g. back to A to G, including rescaling)
- Strengthen compliance (e.g. through better market surveillance and product registration)

Review of several implementing measures



Circular Economy Package (Dec.2015)

"A circular economy starts at the very beginning of a product's life. Both the design phase and production processes have an impact on sourcing, resource use and waste generation throughout a product's life."

• Comprehensive <u>commitments on ecodesign</u>:

"The Commission will promote the reparability, upgradability, durability, and recyclability of products by developing product requirements relevant to the circular economy in its future work under the Ecodesign Directive, as appropriate and taking into account the specificities of different product groups. The Ecodesign working plan for 2015-2017 will elaborate on how this will be implemented."



Lot 1 – professional refrigeration

- Ecodesign Regulation 2015/1095 and Energy Labelling Delegated Regulation 2015/1094 were published on the Official Journal of the European Union (Gazzetta ufficiale dell'Unione europea) on 08/07/2015

- After publication, ongoing activities:
 - Commission communication on standards and draft transitional methods (~june 2016), but info already available on GROW website¹
 - follow up of the standardization process
 - when necessary, Q&A and implementing guide

1http://ec.europa.eu/growth/industry/sustainability/ecodesign/product-groups/index_en.htm



Lot 1 – products in scope and tiers

	Tier 1	Tier 2	Tier 3
Psc -	MEPS -	MEPS -	MEPS -
Ecodesign	01/07/2016	01/01/2018	01/07/2019
Psc -	01/07/2016		01/07/2019
Labelling			
Blast	Info req – $01/07/2016$	-	-
Process	MEPS -	MEPS -	_
Chillers	01/07/2016	01/07/2018	
Condensing			
units	NIEPS -	NIEPS - 01/07/2018	-
		Energy	

Smart appliances under Ecodesign



Smart appliances/smart meters" → Priority action in Work Programme 2012-2014.

"Lot 33"

Preparatory Studies analyse the technical, economic, environmental, market and societal aspects of a product group.

Basic structure is the "MEErP" (Methodology for Energy related products). Ecodesign Prep. Study (10/2014 -09/2016):

- has a horizontal approach
- will focus on demand response
- includes household appliances, HVAC, chargers, battery storage, lighting
- assesses possible (pos/neg) impacts of functionalities on environment, consumers, industry etc.
- identifies policy options to implement and promote functionalities (and interoperability)
- Interoperability seems to be a major challenge
- New development and achievements will be presented at third stakeholder meeting of the prep study on 30/05/2016 Energy



What could an Ecodesign/Energy Labelling measure **possibly** address/include?

- Define essential features of "smart" appliances
- Create the basis for incentives for smartness and/or interoperability through the Energy Label
- Support interoperability
- Create the basis for a measurement standard
- Make sure that consumers can identify smart appliances and have access to relevant and standardised information
- Make sure that "smartness" does not bring about unreasonable energy consumption



Grazie per l'attenzione!

Per ogni chiarimento, trovate di seguito i miei contatti:

Davide Polverini Ecodesign Team, DG GROW C.1 <u>davide.polverini@ec.europa.eu</u> <i>Tel. +32 229 93279