The Circular Economy Action Plan: promoting circular design

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**Sustainable Production, Products and Consumption
DG Environment**

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From a limited Linear Economy ...

unstable supply of raw materials
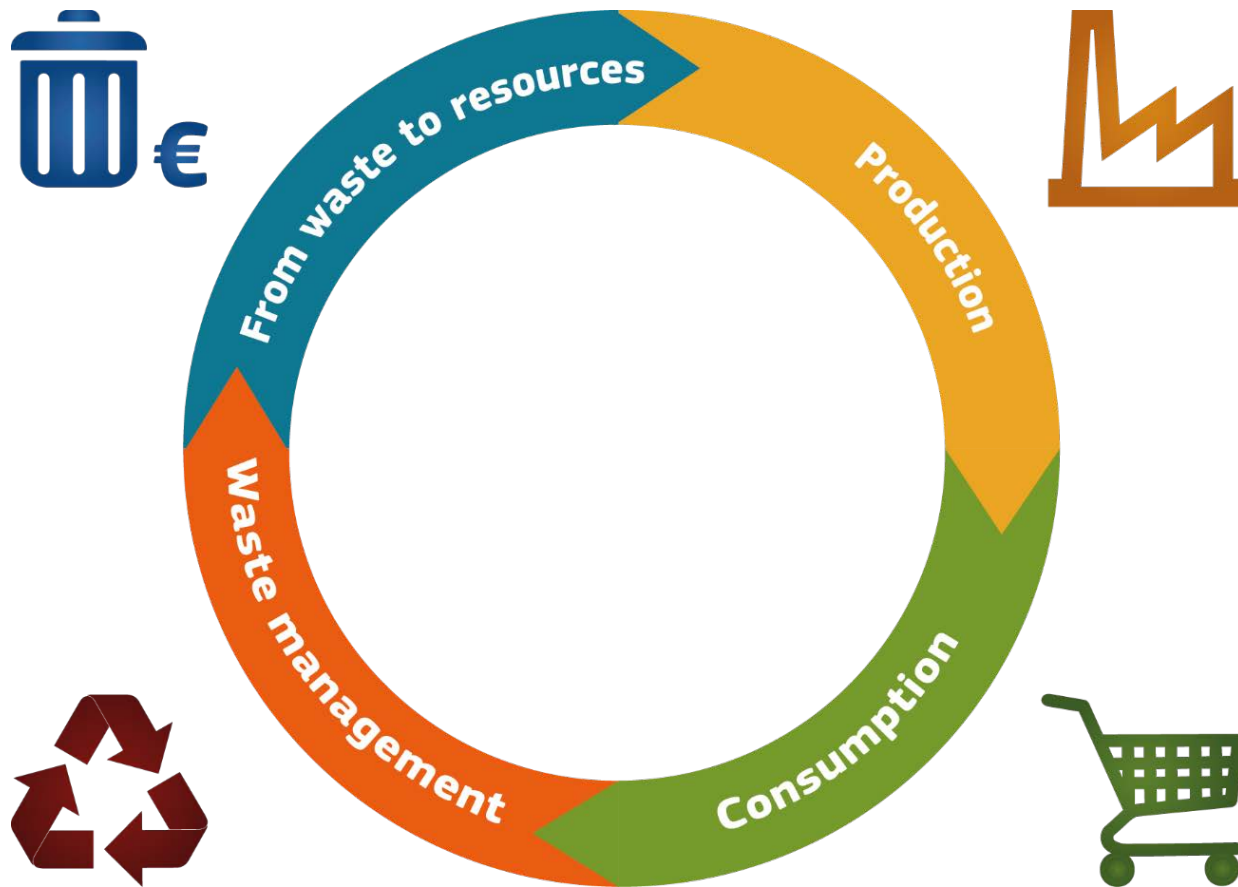
scarcity of resources

volatile prices of resources

lost value of materials and products

waste generated

environmental degradation & climate change

...to a Circular Economy

Circular Economy Package

Adopted by the Commission 2 December 2015
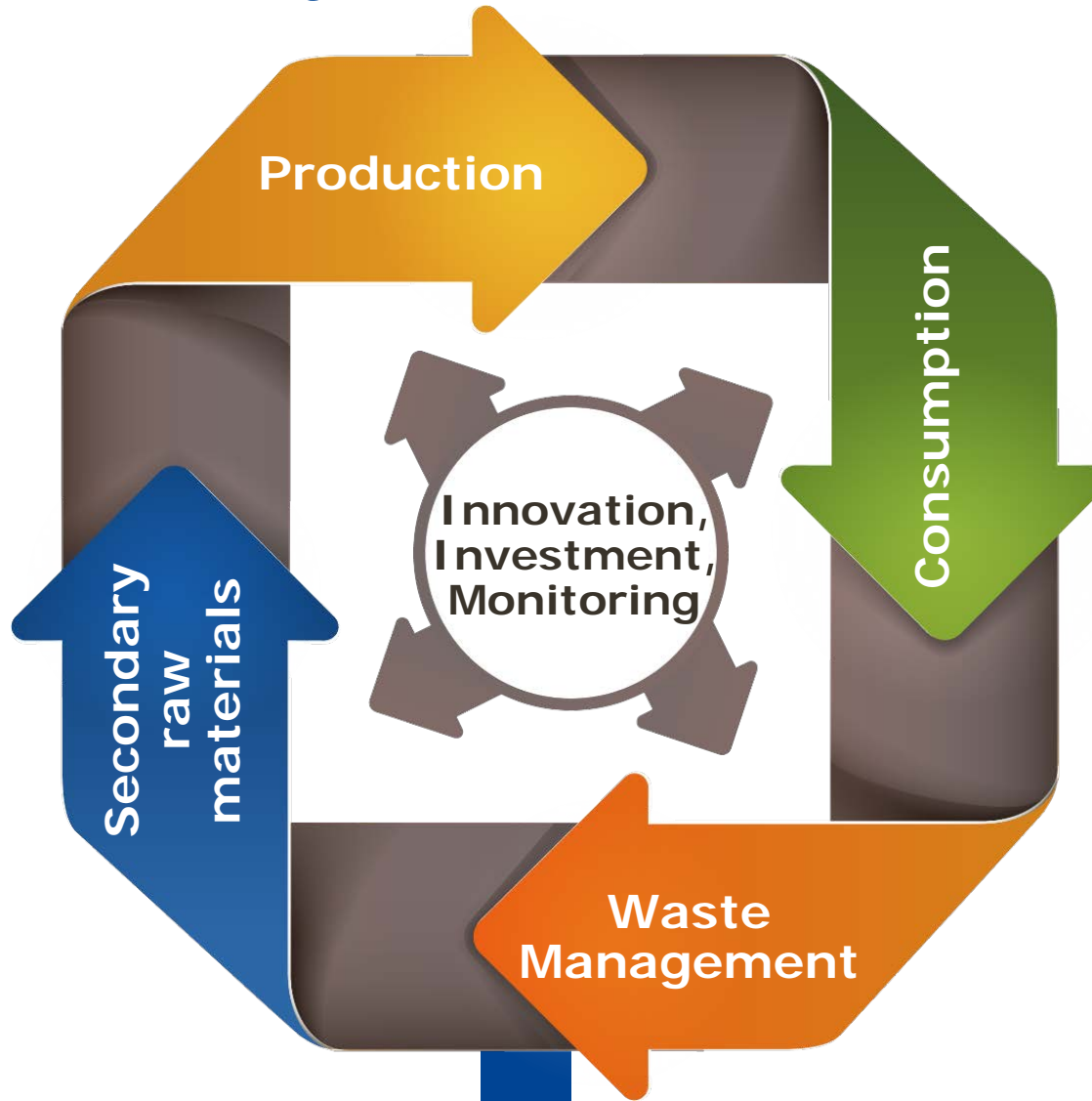

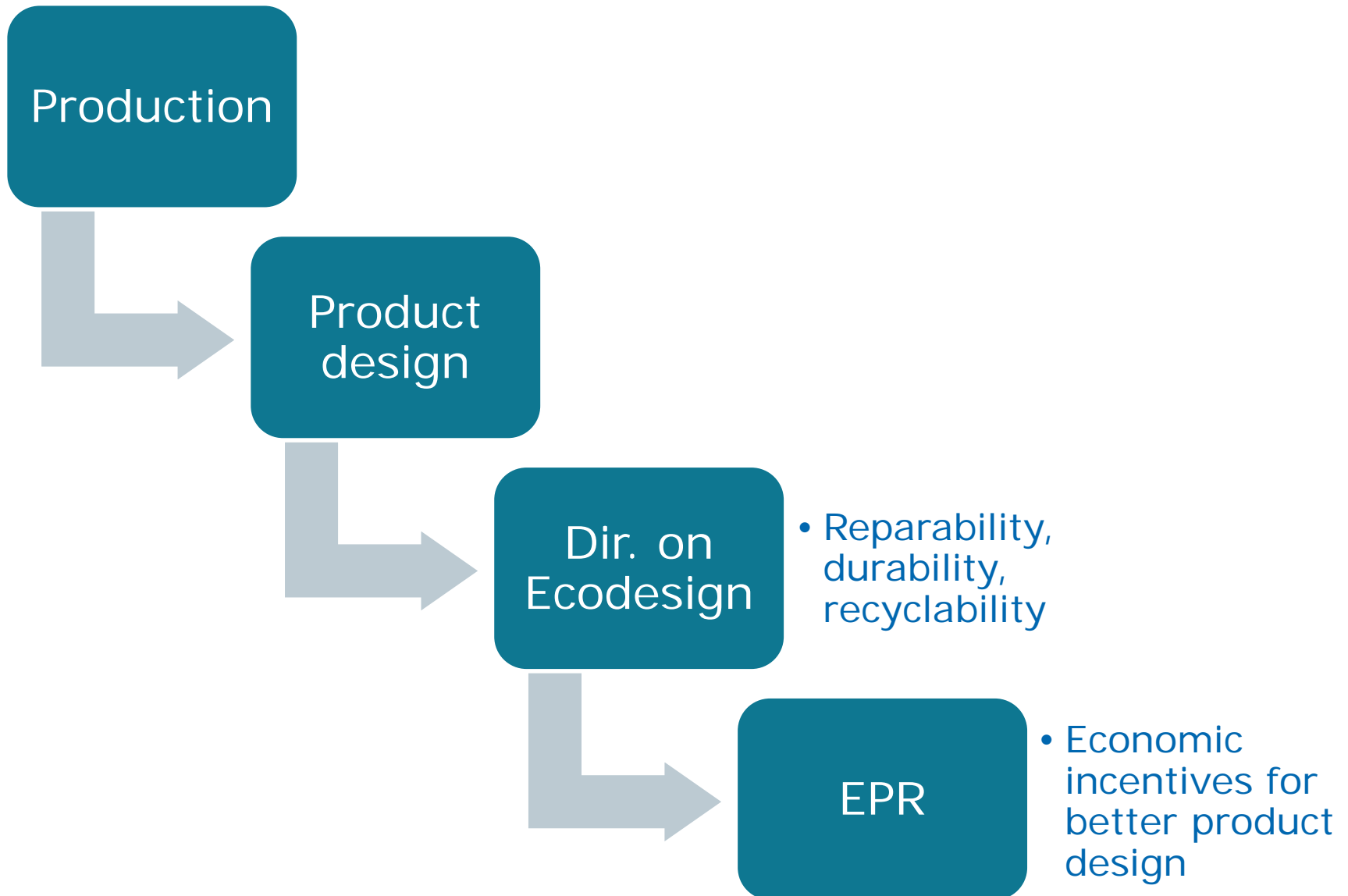**Action Plan Communication** + **List of Follow-up Initiatives (Annex)** + **4 Legislative proposals on waste**
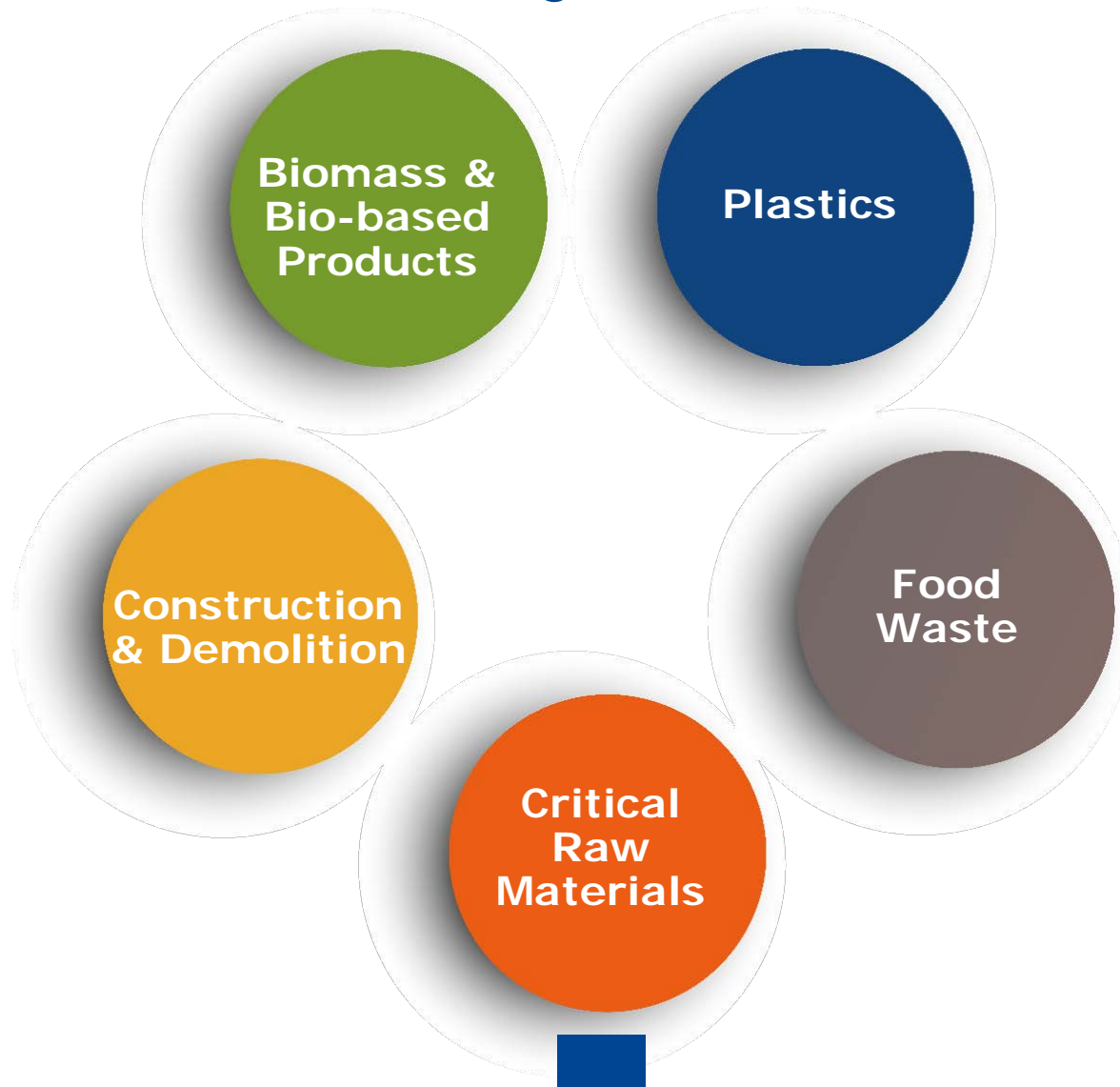
Key action areas

Production

Consumption

Secondary raw materials

Innovation, Investment, Monitoring

Waste Management

Priority sectors

Ecodesign
&
the circular economy

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)

- Allows access to single market (CE-marking based)

- Establishes the framework (conditions, criteria, procedures …)

- Legal Basis Article 114 (TFEU): free movement of products within the internal market

- Products to be addressed in Ecodesign Working Plans

- Basis for any measure is a technical preparatory study

Which products?

- Significant volume of sales and trade (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

Which environmental impacts?

- **All significant environmental impacts** of products **over the life-cycle**

- 80% of a product's environm. impact determined by design phase

- So far mostly on **energy efficiency** of products in the **use phase**

- <u>**Exceptions**</u>**: durability** requirements for some product groups (hose & electric motor of vacuum cleaners; info on notebook batteries), **water use, recyclability info requirements**

- Potential to go beyond energy efficiency

Material efficiency of products

- Durability, reparability, modularity, easy recycling, etc.

- Several projects/initiatives to develop verifiable criteria:

  - **Socio-economic impacts of increased reparability**

  - **Product durability:** methodology for fridges and domestic electric ovens **http://www.productdurability.eu**

  - **Material efficiency in product policies** (JRC)

- Request to CEN/CENELEC to develop standards on material efficiency – *adopted in Dec. 2015*

- Analysis of possible horizontal requirements on repair information provision – *by 2018*

Example: extended product lifetime

1. Hypothetical best option: removing the need for a product or even the service

2. Maintaining life use: best for less environmental impacts

3. Remanufacture, refurbishment, reprocessing or recycling:

   - **require injection of additional resources**

   - **often degrade product functionality or material value**

Limitations: practical issues, innovation rates, consumer habits and expectations, availability of standards
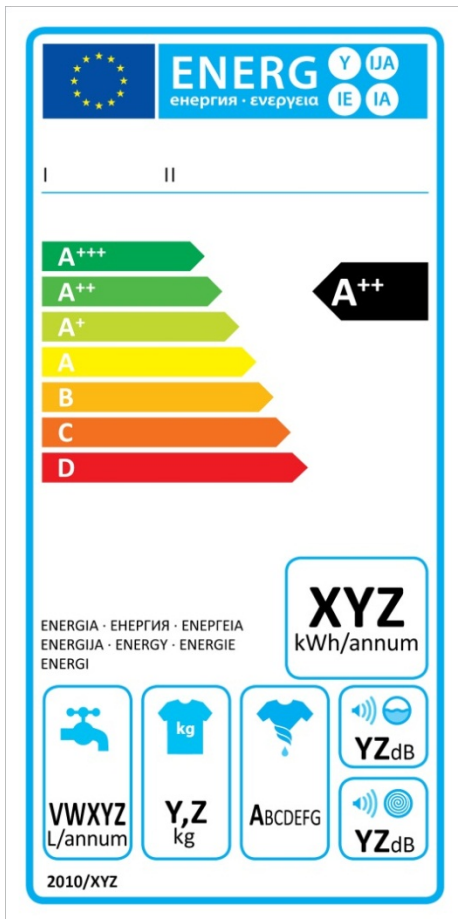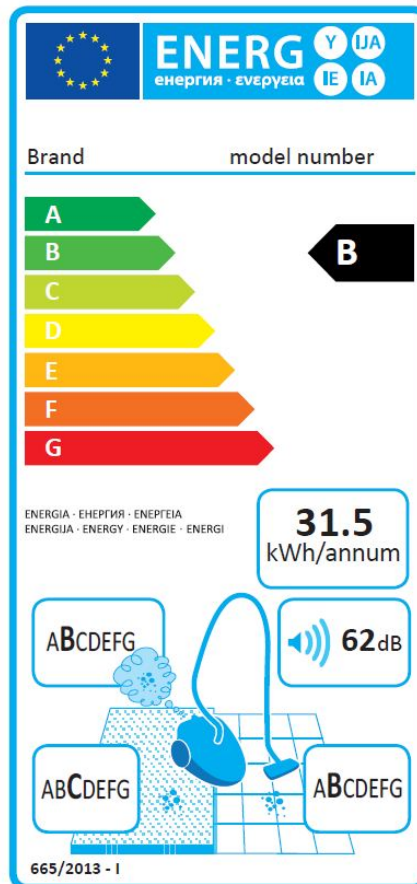
Process

Voluntary Agreements procedure

Notify Voluntary Agreement & report to European Parliament & Council (no right of scrutiny)	Adoption by European Commission of Report & Agreement (written procedure)	Publication Report & Agreement & Letter to signatories
2 months	*2 months*	*1 month*

Ecodesign (implementing acts) procedure

Regulatory Committee (discussion and vote)	Scrutiny by European Parliament & Council	Adoption by European Commission	Publication in the Official Journal
2 months	*3 months*	*1 month*	*1 month*

Energy Labelling (delegated acts) procedure

Expert Group Member States (discussion)	Adoption by European Commission	Objection European Parliament & Council	Publication in the Official Journal
2 months	*1 month*	*2 (+2) months*	*1 month*

Ecodesign Working Plan	Preparatory study	Consultation Forum on draft measures/ proposed voluntary agreement	Impact assessment on draft measures/ proposed voluntary agreement	Inter-Service Consultation	Notification to World Trade Organisation
	24 months	*3 months*	*3 months*	*3 months*	*2 months*

40 – 42 months

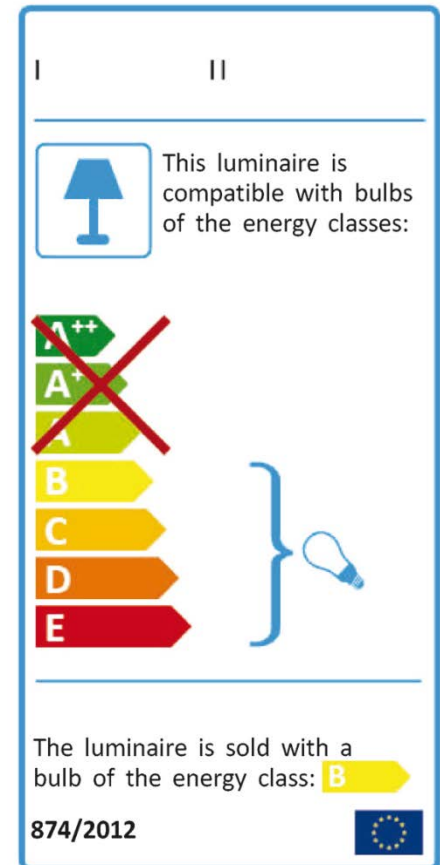# Energy Label (Directive 2010/30/EU)

Washing machines

Vacuum cleaners

Luminaires

Energy Label:
EC proposal for a new Regulation

- **Currently discussed in European Parliament and Council**

- **Back to: A to G**

- **Consumption of energy and other resources** by energy-related products **during use**

-   **+ supplementary information** concerning energy-related products on *functional and environmental performance* such as *durability*

   "based on data that are measurable by market surveillance authorities, is unambiguous and has no significant negative impact on the clear intelligibility and effectiveness of the label"

Ecodesign and Energy labelling: Results

- 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 CO_2 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

Next Ecodesign Working Plan

- To be adopted in Autumn 2016

- **Circular economy related** criteria in a **more systematic** way

- **Ongoing work** (e.g. compressors, electronic displays)

- **Revision** of existing measures (e.g. lighting, wet appliances)

- **New product groups**: energy and resource saving potential

- **Product specific and/or horizontal measures**

Thank you for your attention!

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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

1059/2010	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
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
- Power cables
- Entreprise servers
- Steam boilers

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