

Policy for lighting products in the European Union – Ecodesign and Energy labelling

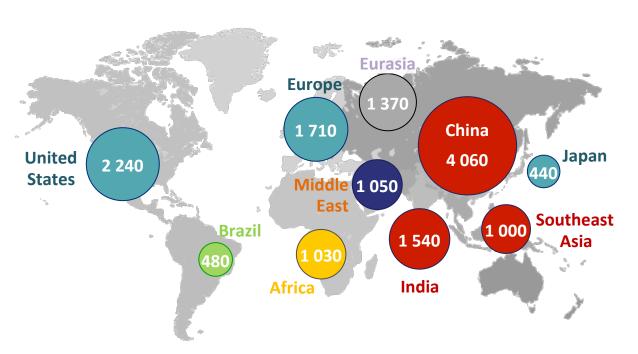
Orsola Irene MAUTONE
Energy Efficient Products
Directorate General for Energy
EUROPEAN COMMISSION

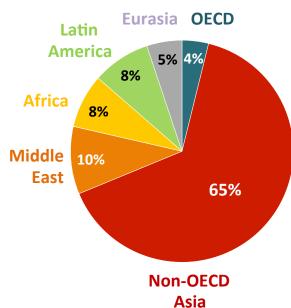


A Global View on Energy Demand

Primary energy demand, 2035 (Mtoe)

Share of global growth 2012-2035







Energy Consumption of Lighting

Transport fuel

oil 386

Feedstock⁷

nuc 206

oil 106

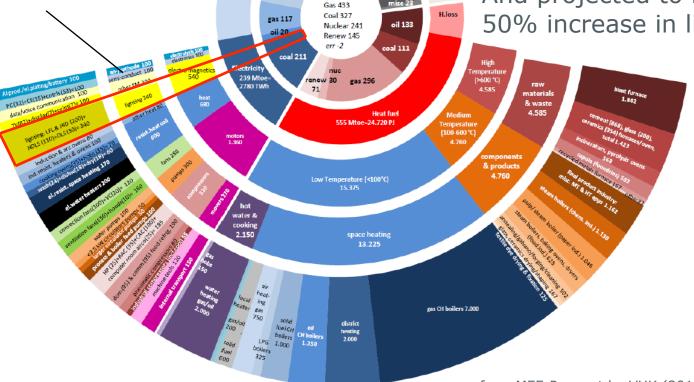
gas

16

Total 1792 Oil 646

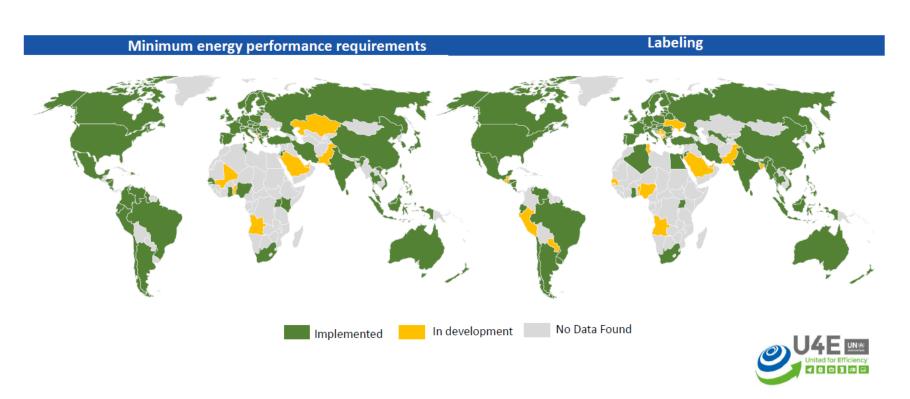
Lighting represents a significant share of **Europe**'s energy consumption and offers a large savings potential

Lighting constitutes 15% of **global** electricity consumption And projected to have 50% increase in lighting





Who does what: minimum energy performance requirements and labelling status





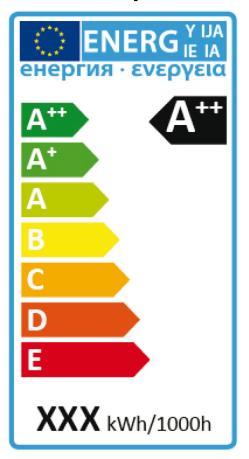
Ecodesign Regulations on Lighting

- Regulation (EC) No 244/2009
 - for non-directional household lamps
 - phased-out incandescent lamps
- Regulation (EC) No 245/2009
 - for technologies usually used in street lighting and office lighting
- Regulation (EU) No 1194/2012
 - for directional lamps, LEDs and related equipment

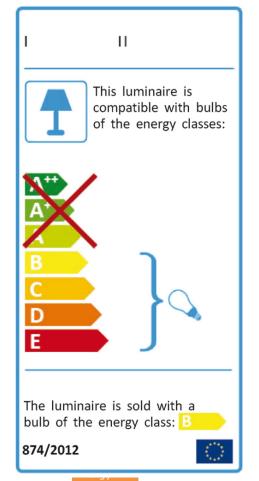


Energy Labelling Regulation 874/2012

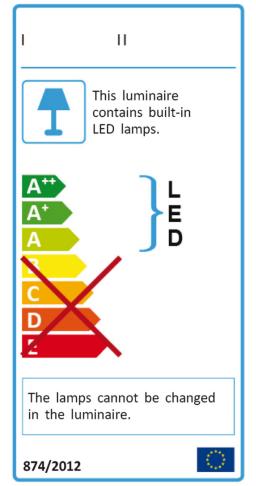
Lamps



Luminaire with replaceable lamps

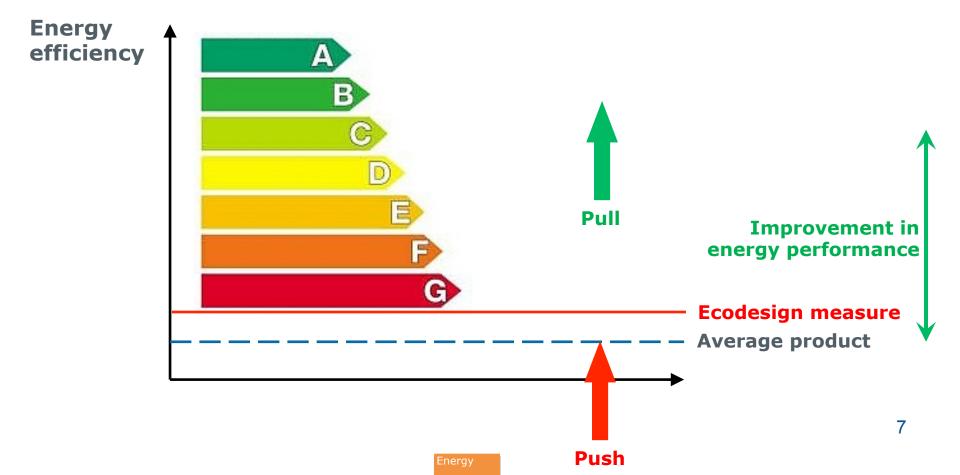


Luminaire with LED module



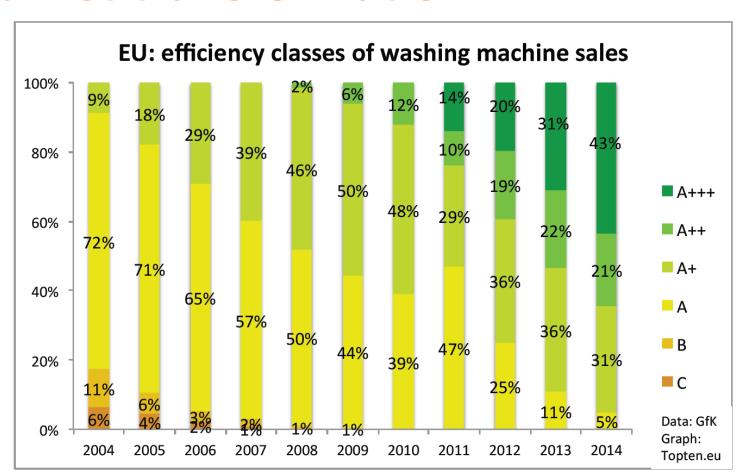


The combined effect of Ecodesign & Energy labelling





Market transformation





EU Ecodesign Working Plan 2016-2019: what potential for lighting products?

(In comparison to a BAU scenario)

- Up to 125 TWh primary energy savings per year in 2030
- ~20 megatonnes CO₂ equiv. per year greenhouse gas emission reduction;
- ~ 10-15 billion € savings per year on electricity bills in the EU

World-wide:



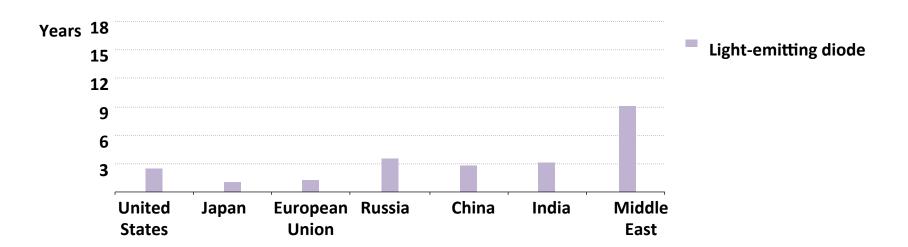




Future of Lighting: LEDs, LEDs...

Quality products can cut power use up to 90% And make 40% – 60% savings for countries

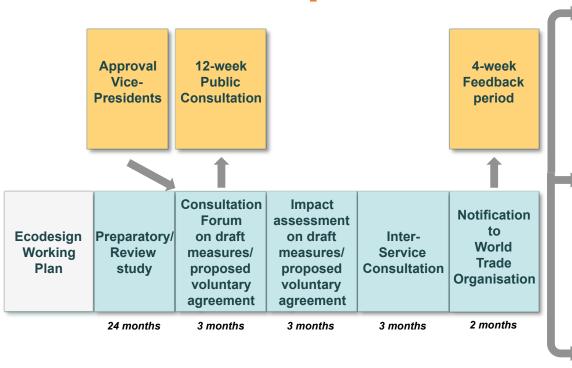
Rapid evolution in technology and prices in past 15 years



Payback periods for selected technologies and regions in 2013



It is a detailed, transparent and shared process



Voluntary Agreements procedure

Notify Voluntary Agreement & report to European Parliament & Council Report & Agreement (no right of scrutiny) (written procedure)

Adoption by European **Commission of**

Publication Report & **Agreement &** Letter to signatories

2 months

2 months

1 month

Ecodesign (implementing acts) procedure

Regulatory Committee (discussion and vote) Council

Scrutiny by European **Parliament**

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

European **Parliament**

Objection

Official Council

2 months

1 month

2 (+2) months

Journal 1 month

Publication

in the



Further information

Products on Europa (including products pages)

http://ec.europa.eu/energy/en/topics/energy-efficient-products

energy-efficient-products

Web-page for lighting products

https://ec.europa.eu/energy/en/topics/energy-efficient-products/lighting

energy-efficient-products/lighting

Ecodeisgn working plan 2016-2019
https://ec.europa.eu/energy/sites/ener/files/documents/com_2016_773.en_.pdf



Measures in place

29 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	Air-conditioning products 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
2016/2281	Air heating and cooling products, process chillers

16 Energy labelling Regulations

1059/2010	Household dishwashers
1060/2010 1061/2010	Household refrigerating appliances 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



Ecodesign Working Plan 2016-2019

New measures under development

- Electronic displays (review of televisions)
- Commercial refrigeration
- Compressors
- Windows
- Welding equipment
- Professional washing machines, dryers and dishwashers
- Enterprise servers
- Water-related products (taps and showers)

Products under study

- Smart appliances
- Lighting controls/systems
- Uninterruptible power supplies

New products to be studied

- Building Automation and Control Systems
- Electric kettles
- Hand dryers
- Lifts
- Solar panels and inverters
- Refrigerated containers
- High-pressure cleaners

Measures under review/to be reviewed

- External power supplies
- Electric motors
- Fans
- Lighting products
- Household refrigerating appliances
- Household dishwashers
- Household washing machines
- Standby and off mode electric power consumption of electrical and electronic household and office equipment
- Water pumps
- Computers and computer servers
- Circulators
- Air conditioners and comfort fans
- Transformers
- Household tumble driers
- Vacuum cleaners
- Space and water heaters
- Local space heaters
- Ventilation units

Voluntary agreements under development

Machine tools



Thank you for your attention!



Orsola Mautone

Email: orsola.mautone@ec.europa.eu

Website: http://ec.europa.eu/energy/efficiency/index_en.htm