

Ecodesign and Energy Labelling - State of Play

and some notions of (expected) technological impacts

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Energy

Table of Content

1. How do we achieve energy efficiency in product design?
2. Results of legislation
3. Ecodesign Working Plan 2012-2014 and Ecodesign Review
4. Energy Labelling – past, present, and future
5. Impacts of our legislation on technology

How Do We Achieve Energy Efficiency in Product Design?



Ecodesign Directive 2009/125/EC

Energy Labelling Directive 2010/30/EU
Energy Star
Ecolabel
GPP

Both directives are «frameworks» defining the «rules» for setting product-specific requirements and legislation.

It is the **combined** effect of both measures which ensures a dynamic improvement of the market.

Ecodesign and Labelling - Results Achieved

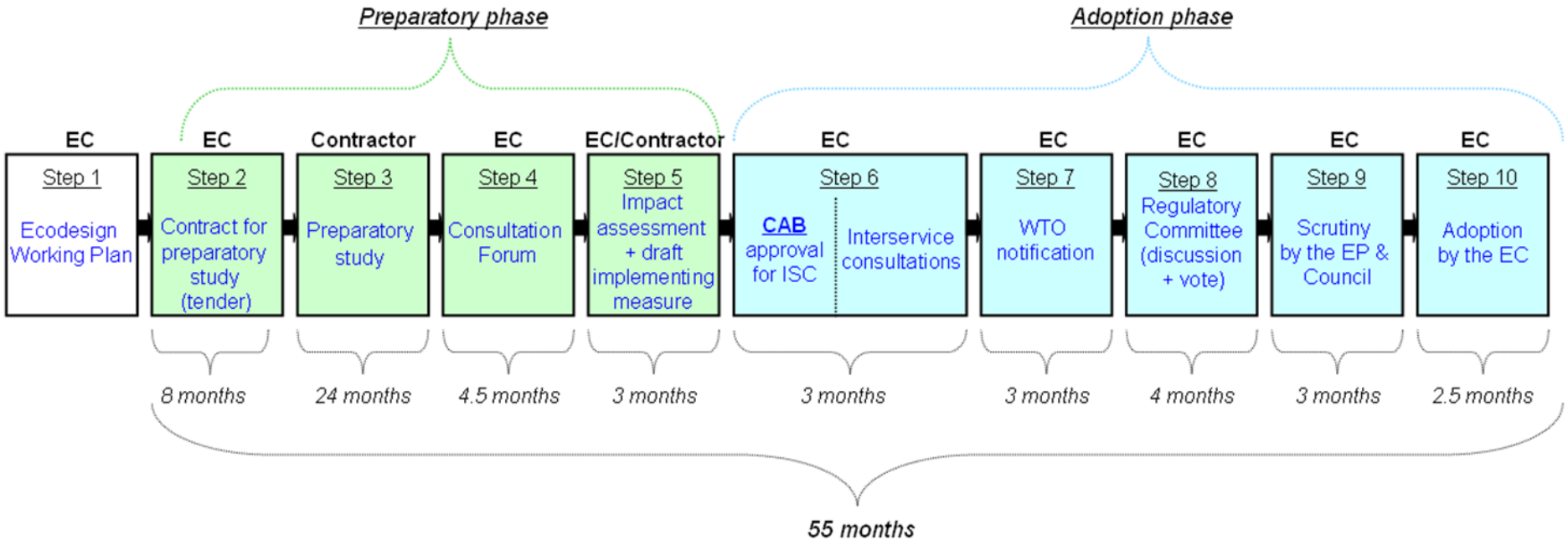
17 Ecodesign Regulations, 3 amending Regulations, 7 Energy Labelling Regulations, and 1 Voluntary Agreement have been adopted so far.

19 measures under preparation for adoption in 2013.

11 review studies and possible revisions of existing Regulations to be carried out in 2013.

Example list of product	Estimated annual savings by our Regulations 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
…	…
Total [TWh]	**414.5**

Ecodesign – Timetable of Legislative Process



Ecodesign Working Plan 2012-2014

Priority product groups:

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

Optional product groups:

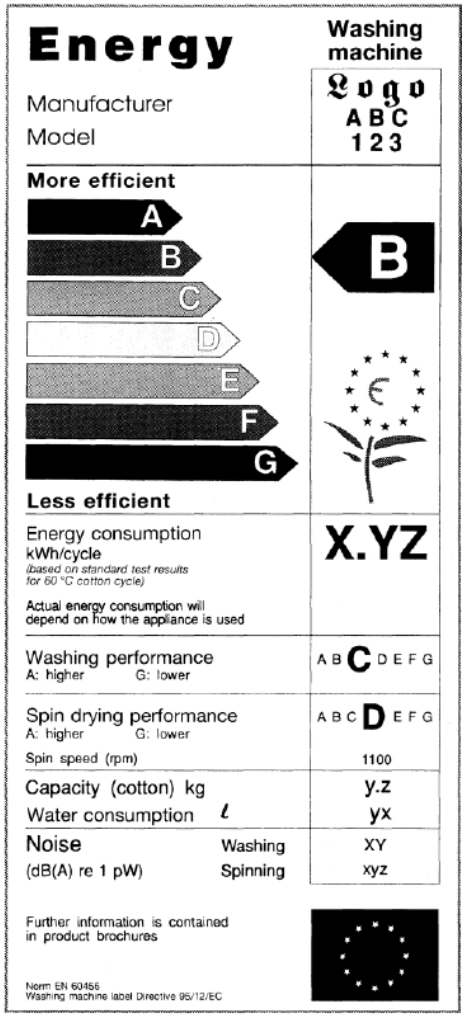
Positive displacement pumps
Fractional horse power motors under 200W
Heating controls
Lighting controls/systems
Thermal insulation products for buildings
Power generating equipment (<50MW) (study estimating savings potential)

Combined energy savings potential would amount to around **555 TWh per year by 2030**.

Ecodesign Directive Review 2012

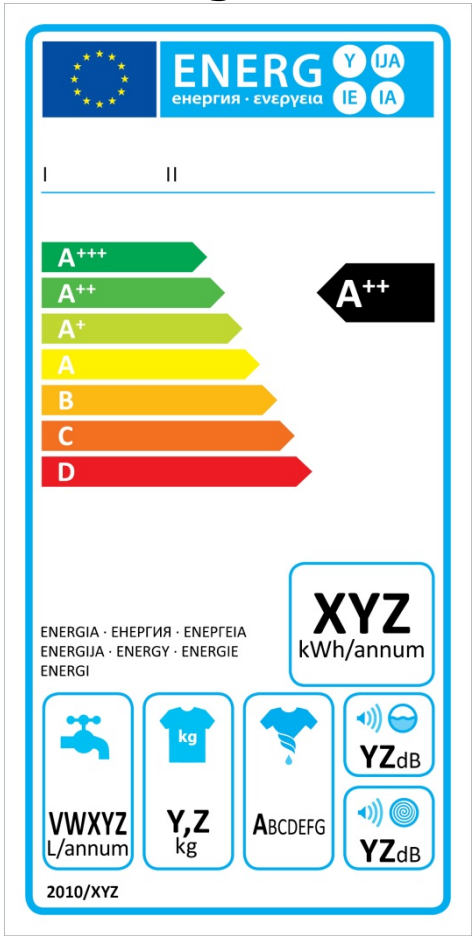
- **Evaluation Study:** http://www.cses.co.uk/ecodesign_evaluation/documents/
- No immediate revision of the Directive is deemed necessary to increase the effectiveness of the implementing measures
- It seems premature to consider extending the scope of the Directive to non-energy related products within the current review process
- Ecodesign and Energy Labelling review in 2014
- Future of Ecodesign and Energy Labelling and beyond – integrated product policy

Energy Labelling – Past

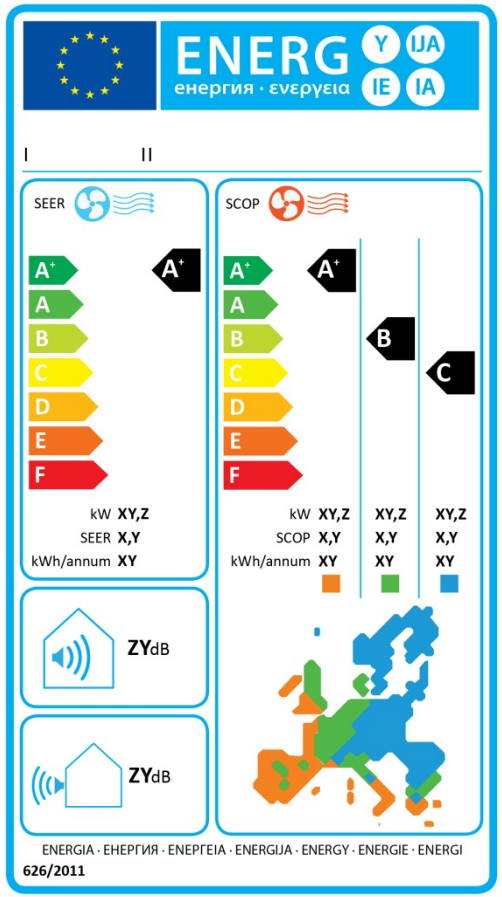


Energy Labelling – Present

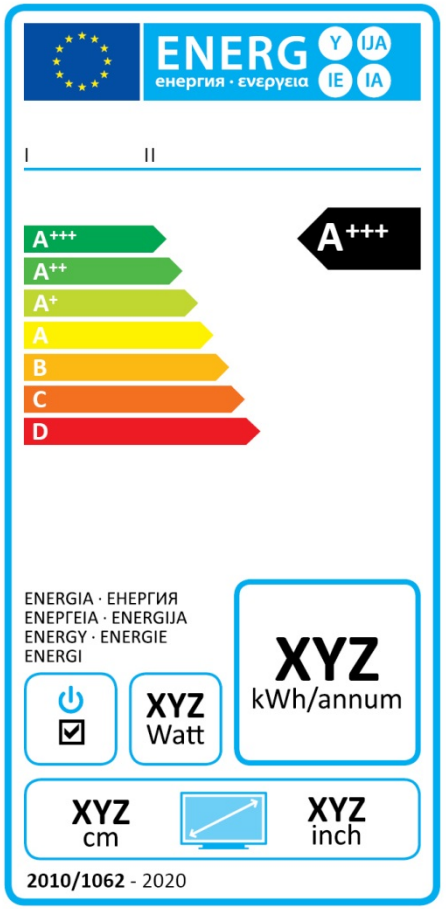
Washing machine



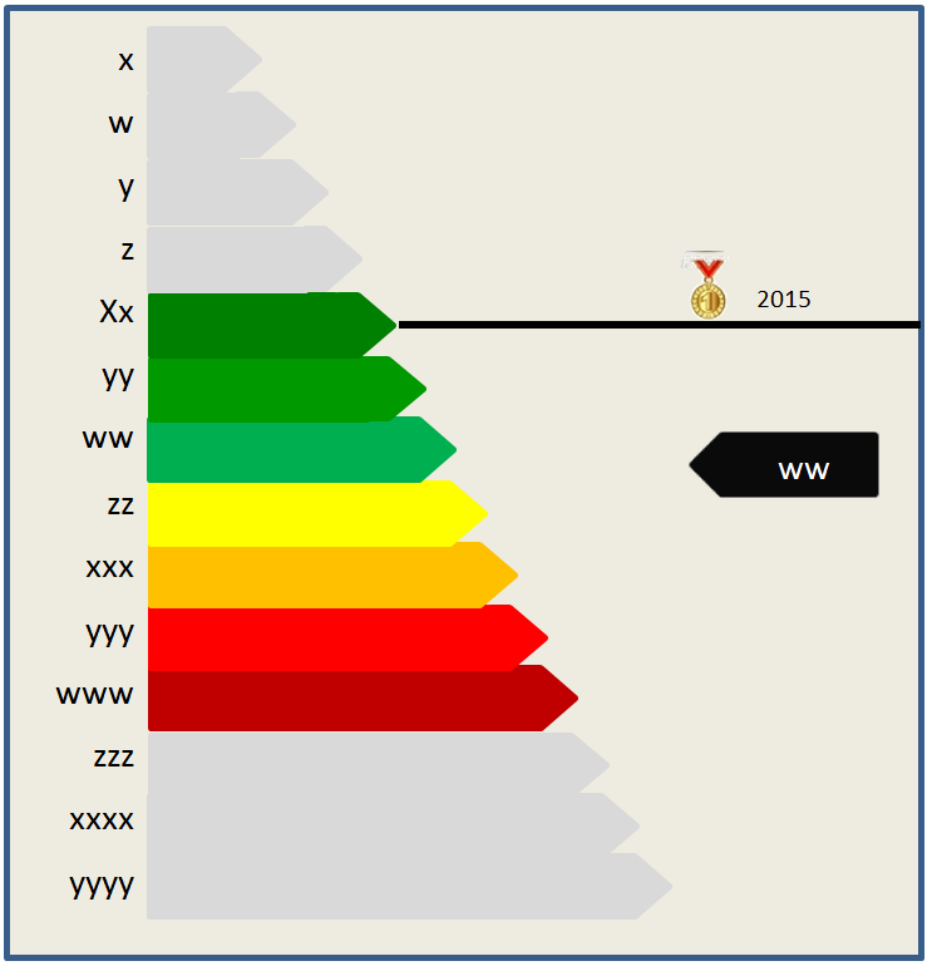
Air conditioning

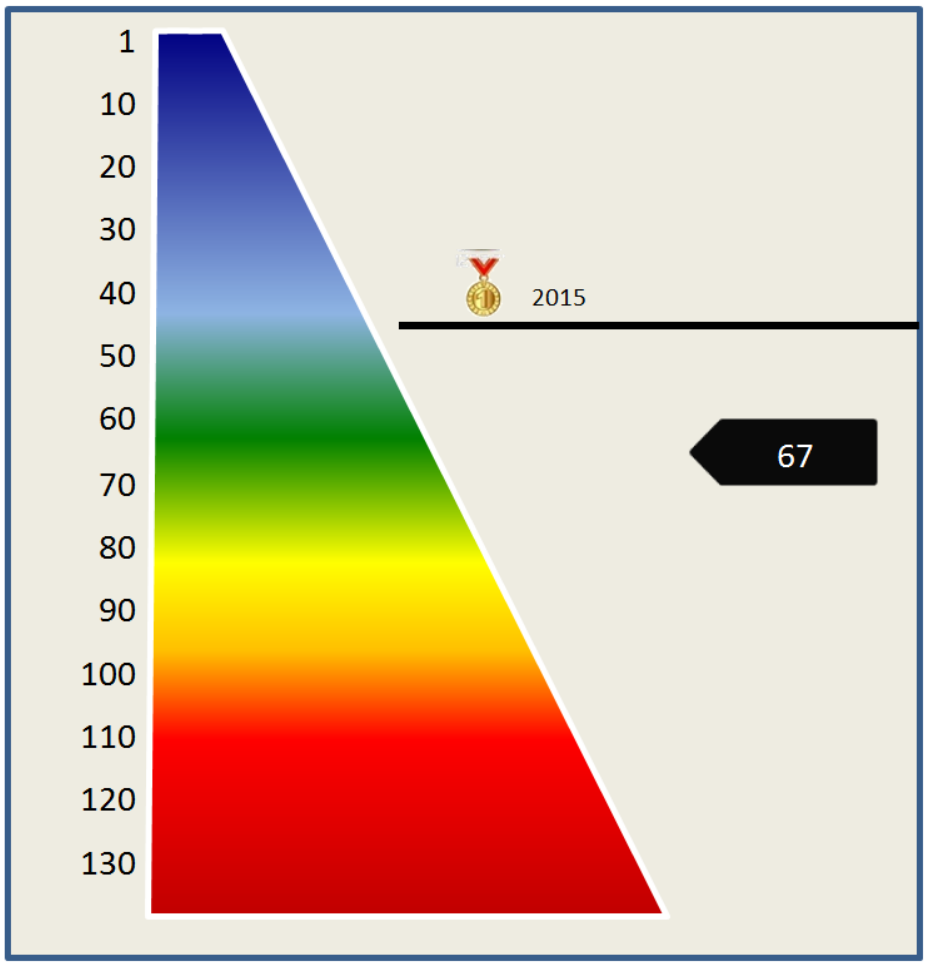


Television



Energy Labelling – Future?





Impacts on Technology? - Lighting



16 lm/W

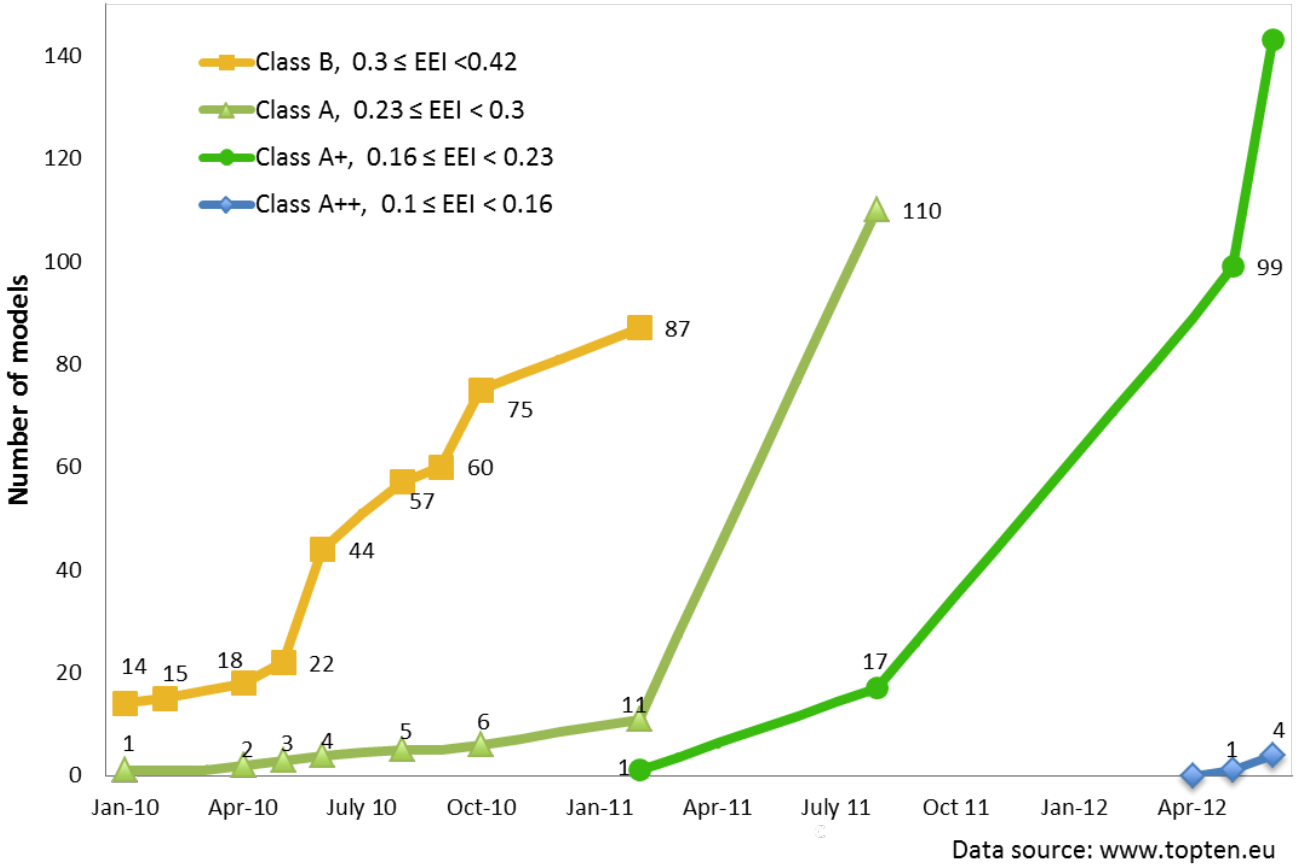


60 lm/W

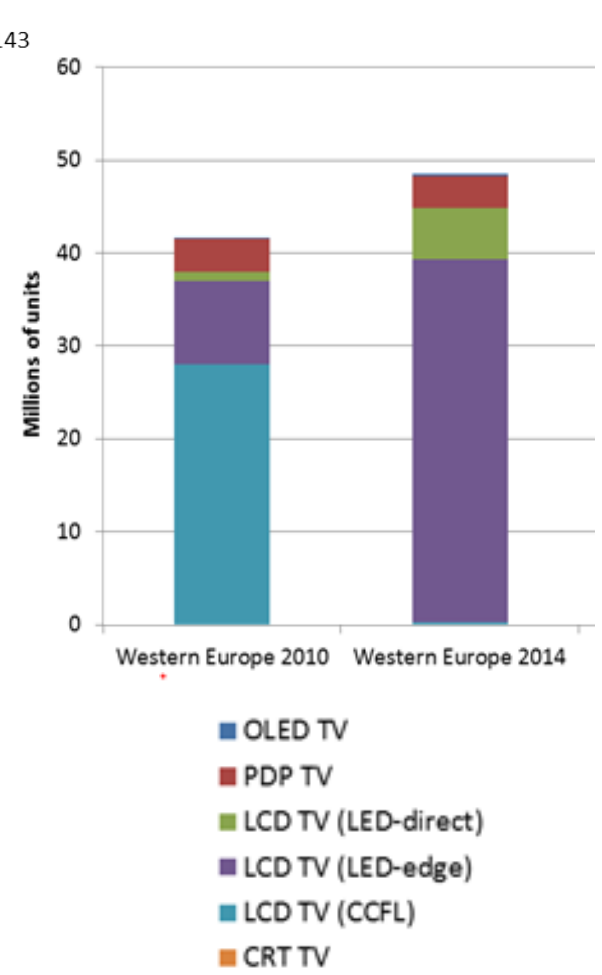


+90 lm/W

Impacts on Technology? - Televisions



Data source: www.topten.eu



Impacts on Technology? – Much more…

Cold appliances:

Europe was leader in banning ODP refrigerants and refrigerator labelling → average refrigerator moved from D-Class to A+-Class over last 20 years

Washing machines:

Stringent Ecodesign and Energy Labelling requirements forced manufacturers to use less energy and water → increased mechanical action and other innovations moved average washing machine from D-Class to A++-Class over last 20 years and reduced water use by 50%

Laundry driers:

Our preparatory study already foresaw heat pumps as feasible technology option at a time of prototyping and against protest from industry → today, heat pumps are 'standard' and helped reduced energy consumption by over 50%

Impacts on Technology? – Lighting II

Ecodesign Regulation (EC) No 244/2009:
Mains-voltage halogens need to be B-Class after 1 September 2016



Technology is there – but no B-Class replacement halogens currently on the market!
Why? …



Thank you for your attention…

… and I am looking forward to your expertise!