



## Revision of EU Energy Labelling - Discussion paper: Analysis of the criteria to trigger label rescales

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This paper outlines the key aspects to be considered in setting appropriate criteria for triggering a rescale. These aspects are summarised as:

- Setting the criteria on one class or more
- Consequences for existing labels – timeframe for removal of ‘+’s
- Criteria based on minimum number of populated classes
- Sales versus number of models on the market

### Introduction

One of the core principles of the EU proposal to revise energy labels on household products is the reinstatement of simple A-G labels that will be rescaled regularly when the scales become too obsolete.

The European Commission’s proposal of 15 July 2015 is relatively vague on the topic. It states that:

- The label scales should last at least ten years before a majority of models falls into the top two classes
- Labels shall be rescaled periodically
- (in recital 9) Labels will be rescaled once a majority of product models falls into the top two classes
- The current labels with A+, A++, A+++ shall all be rescaled within five years.

The Council’s proposal of 6 November 2015 intends to set more precise criteria to trigger the label rescale, but also to apply it evenly to all labels, even current ones with plusses. It states that any label shall be rescaled:

- (a) when 30% of the products sold in the EU fall into the top class
- Or (b) if it is demonstrated that 8 years after the label has been introduced, it is unlikely that the 30% in top class threshold will be met in the following 7 years.

*How will each proposal work in practice?*

### 1. Setting the criteria on one class or more

Past data on EU energy labels shows wide variations between the time taken to fill up the top class to a certain level.

The time for reaching 30% of sales in the top class went from just a few years in some cases (e.g. one year for vacuum cleaners; two years for washing machines), up to longer periods (9 years for the original fridge label), and sometimes the threshold would only be reached after a very long period of time (e.g. 17 years for the original tumble drier label). This can be partly explained by the pace of

technological progress in the various product groups, but also very much by the way the top class bar has been set.

The level of the top class is probably the most difficult to set when designing a label scale, as it is based on estimates about the penetration of best yet or non-yet available technologies, and there are many uncertainties. **As such, it may not be the most reliable basis to set a robust universal trigger for label reviews.**

A threshold covering more than the top class should be considered, e.g. the top two classes as proposed by the European Commission (and also in first drafts of the Council), or even the top three classes.

Below is a table showing the time it took to reach three different thresholds for existing or old EU energy labels.

Product group	Time to reach the threshold of 30% sales in single top class	Time to reach 50% sales in top two classes	Time to reach 80% sales in top three classes
Cold appliances: original label introduced in 1994	9 years (2002)	6 years (1999)	6 years (1999)
Washing machines: original label introduced in 1995	6 years (2001)	5 years (2000)	1 year (1996)
Dishwashers: original label introduced in 1997 <sup>1</sup>	~ 5 years (2001)	~ 5 years (2001)	~ 5 years (2001)
Tumble driers: original label introduced in 1996	17 years (2013)	14 years (2010)	6 years (2002)
Lamps: original label introduced in 1998	16 years (2014)	Never reached	~ 14 years (2012)
Air-conditioners: original label introduced in 2002 <sup>2</sup>	4 years (2006)	3 years (2005)	5 years (2007)
Ovens: original label introduced in 2002	2 years (2004)	1 or 2 years (2003 or 2004)	2 years (2004)
Vacuum cleaners: label introduced in 2014	1 year (2015)	1 year (2015)	Probably 2 years (2016)
<b>Average</b>	<b>7.5 years</b>	<b>5.2 years</b>	<b>5.1 years</b>
<b>Standard deviation</b>	<b>6 years</b>	<b>4.3 years</b>	<b>4 years</b>

*Historical data on time to reach different threshold values for EU labels*

The threshold based on the single top class appears to have the highest standard deviation, meaning that it is the least homogeneous across product groups.

If we exclude tumble driers and lamps (which have been two extreme cases in terms of populating the top class), we still end up with a higher standard variation for the threshold based on the single top class.

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<sup>1</sup> As market data on dishwashers is scarce before 2002, the estimations are mostly based on model distributions on the market rather than sales figures. The figures should be considered with caution.

<sup>2</sup> Based on data in five large EU Member States.

*Conclusion: a criteria only looking at the top class population may not be very reliable, and lead to very heterogeneous situations across product groups.*

## 2. Consequences for existing labels – timeframe for removal of ‘+’s’

The current labels with plusses are planned for removal, since one of the objectives of the policy revision is to increase label effectiveness and homogeneity across product groups.

**Yet, with the criteria as proposed by the Council, several of these labels may remain in place for many years to come.**

Below is an estimate of the time it would take to reach the aforementioned thresholds for current labels with plusses, based on present market dynamics.

(Note: this is a simplified forecasting only taking into account current market share trends, so it should be seen as mostly indicative).

Product group	Estimated time to reach the threshold of 30% sales in top class	Estimated time to reach 50% sales in top two classes	Estimated time to reach 80% sales in top three classes
Refrigerators: current label up to A+++	15 years after label introduction, i.e. 2027	7 years after label introduction, i.e. 2019	Already reached
Freezers: current label up to A+++	14 years after label introduction, i.e. 2026	5 years after label introduction, i.e. 2017	Already reached
Washing machines: current label up to A+++	Already reached	Already reached	Already reached
Dishwashers: current label up to A+++	10 years after label introduction, i.e. 2022	4 years after label introduction, i.e. 2016	Already reached
Tumble driers: current label up to A+++ <sup>3</sup>	16 years after label introduction, i.e. 2028	8 years after label introduction, i.e. 2020	7 years after label introduction, i.e. 2019
TVs: current label up to A+++	Probably very long (top class not populated yet)	23 years after label introduction, i.e. 2035	6 years after label introduction, i.e. 2018
Lamps: current label up to A++	9 years after label introduction, i.e. 2022	~ 7 years after label introduction, i.e. 2020	~ 6 years after label introduction, i.e. 2019

*Estimates for reaching different thresholds for EU labels in place based on current market dynamics*

The only label that would soon meet the 30% in top class criteria is for washing machines. For the rest, it is possible that the threshold is not reached before ten years from now or even more.

Criteria (b) in the Council’s proposal (acting as a sort of ‘safety net’), is supposed to precisely avoid that existing labels with plusses remain for too long in place. Applied to the product groups in the previous table, it would mean estimating by 2020 whether it is unlikely that the 30% threshold can be reached by 2027 (as these labels were all introduced to the market in 2012, except for lamps in 2013).

The table shows that for several product groups it might prove difficult to be conclusive about this point, and that there might be no consensus about the applicability of the safety-net criteria.

**It means that several existing labels with plusses may not be revised before another 7, 10, or even 12 years**, e.g. for refrigerators, freezers, dishwashers, tumble driers, lamps. (And this does not take

<sup>3</sup> Based on an average of France and Portugal in the absence of wider EU data

into account the potential additional delay for revised labels to effectively enter into force afterwards). This would jeopardise the principle of discarding the labels with plusses as soon as possible, and ensuring more homogeneity between label layouts. There would also be a risk that, following further stages of Ecodesign requirements, these labels end up with only two populated classes among seven long before they are revised.

#### **EU Energy Labelling revision: Commission's proposal**



#### **EU Energy Labelling revision: Council's proposal**



Conclusion: there is a significant risk that the Council's version of the trigger criteria leads to maintaining current labels with plusses for too many years.

### 3. Criteria based on minimum number of populated classes

The Council proposal stipulates that up to 4 bottom classes of an energy label shall be hidden once that are devoid of products (through Ecodesign requirements), yet this is not a criteria to revise and rescale the label.

We have seen before that it is possible that some labels may even end up with only two populated classes, and still not be revised. This would be an unacceptable situation, fully contradictory with the spirit of the A-G scale.

In this context, a criteria related to a minimum number of populated classes should be considered. It could be added to the list of criteria to trigger a rescale (in Article 7, 1a.).

This would ensure that labels always have at least 4 populated classes. This would also be another guarantee that most of the current labels with pluses are revised soon (as they usually already have four empty bottom classes).

*Conclusion: a criteria on the number of populated classes deserves to be considered.*

### 4. Sales versus number of models on the market

Any criteria based on sales levels requires to have an effective market monitoring system in place. Both Commission and Council proposals foresee the establishment of a mandatory product database to '*provide the Commission with up-to-date energy efficiency information of products for reviews of energy labels.*'

However, it is nowhere stipulated that this database should record not only characteristics of models on the market, but also sale data. Then, how does the Commission plan to identify or estimate when a threshold criteria based on sales is met? It may be that decision-makers consider that the distribution of models on the market is a good proxy for market shares. Is it correct?

Energy class	Washing machines		Dishwashers	
	Models on the market	Sales	Models on the market	Sales
A+++	49%	31%	10%	3%
A++	20%	22%	32%	23%
A+	26%	36%	39%	35%
A	5%	11%	19%	39%

*Model and sales distributions for 2013 for two product groups<sup>4</sup>*

These two examples show significant variations between sales and model distributions. Especially for the top class, it would not seem justifiable to use model distributions as proxy for sales. Available data for other product groups and years lead to the same result.

*Conclusion: A market monitoring system tracking not only product models but also sales can provide the Commission with useful and up-to-date information for reviews of labels<sup>5</sup>. Alternatively, the criteria for label rescale could be based on model distribution rather than sales.*

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<sup>4</sup> Model distributions are based on CECED databases, found in Ecodesign preparatory studies.

<sup>5</sup> More on this in: [http://www.topten.eu/uploads/File/Topten-recommendations-product-registration-database\\_Nov\\_15.pdf](http://www.topten.eu/uploads/File/Topten-recommendations-product-registration-database_Nov_15.pdf)

## Contacts

**Stephane Arditi**, [stephane.arditi@eeb.org](mailto:stephane.arditi@eeb.org)  
**Alun Jones**, [alun.jones@ecostandard.org](mailto:alun.jones@ecostandard.org)

## Consulting expert

**Edouard Toulouse**

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