Comments on Tasks 1-4
Ecodesign & Labelling review study on household refrigeration

August 2015

We welcome the interim report by VHK and Armines, especially since we consider that the current household refrigeration measures need a serious revamping, with new energy label classes, Ecodesign thresholds, a comprehensive scope as well as more transparent, adequate metrics and reference lines. We also welcome the recent decision of organising a second stakeholder meeting by the end of the year.

1- Scope: risks of oversimplification

The report suggests to restrict the scope by simplifying the wording in Article 1, but does not provide a comprehensive analysis of the consequences.

First of all, we believe that reducing the scope of a regulation is sending a wrong signal, unless there is a very strong argument for it.

We foresee the risk of some currently-labelled products not being labelled in the future. This could be the case for wine coolers, minibars, and all household refrigerators that are sold for non-domestic uses, like for office kitchens, hotels, aparthotels, student residences, etc. There is no justification for this.

We consider it essential that the scope of the domestic refrigeration regulations is well-coordinated with the ones of the professional and commercial refrigeration regulations (Lots 1 and 12). The current proposal to reduce the scope contradicts the statement made by the Commission during the Lot 12 Consultation Forum meeting in July 2014: '*Concerning wine coolers and minibars, […] both types should be under the scope of the household cold appliances regulation regardless of whether the intended use is domestic or commercial.'*

We therefore suggest that the study team presents a clearer, more explicit scope description, clarifying that all household refrigerators and freezers, wine coolers, and minibars are included in the scope, regardless of being sold for household, professional, or commercial purposes. Additionally, we suggest that the report investigates if other loopholes could be eliminated, such as static-air cabinets sold for professional/commercial purposes. Most of these products are excluded from the commercial and professional refrigeration regulations, but technically they resemble household refrigerators (no fan forced convection).

2- No favours for non-primary features

The report includes the industry suggestion that wine storage cellars should be a separate category and treated more leniently than other refrigerating appliances, as many models have glass doors, making them less energy efficient. As far as we know, glass doors have nothing to do with the primary

function of the appliance, and cannot be used as a justification for hampering the setting of energy requirements. We call for wine storage appliances to be treated fairly; through metrics and levels equal to other refrigeration appliances irrespective of the glass door argument.

For similar reasons, we do not see any reason to introduce additional 'correction' or 'compensation' factors for inefficient features such as multi-doors. The justification given is that a compensation is needed to correct door leakages, because warmer pantry compartments can avoid food waste. However, in the EEI formula, the volume of all compartments is already adapted to their temperature and therefore no additional correction is needed.

The same applies to the existing correction factors for chill compartments, frost-free functions, and inbuilt models: we suggest deleting all correction factors to improve the transparency of the Energy Label. We also strongly support the proposal to delete the correction factors for tropical and sub-tropical models.

We call on the study team to bring transparency to the EEI formula and explain the impact of the different factors. It seems biased that extra features leading to a higher energy consumption should need a correction (e.g. according to the RegenT report being inbuilt increases the energy consumption by 2%-16% for all models), but also that the label remains based on different reference lines according to the categories, which create even larger differences.

3- More consideration for increasing capacities

We believe that the trend for increasing volumes (mentioned on p. 46) is not sufficiently discussed. The consequences are not assessed in terms of energy use increase. This could be an even more pressing issue if large models with multiple doors and features are further encouraged through compensations as requested by the industry (p.42).

According to a recent NGO analysis on white goods[1], if current capacity growth trends of domestic cold appliances continue at the same rate, they could be responsible for about 5TWh extra electricity consumption by 2030. That is a level potentially comparable to the savings expected from the review of the Regulations. The policy impact of the latter would then be seriously undermined.

For this reason, we consider that this important topic should be addressed and taken into account in scenarios and policy recommendation sections of the study. We would like to see solutions considered and discussed, such as:

- Greater emphasis on absolute energy consumption;
- Flatter or curved reference lines, for all categories;
- Less overlapping energy class thresholds, etc.

4- More thorough questioning of categories and their reference lines

After a relatively short preliminary analysis, the report centres its recommendation for a reform of categories/correction factors around a proposal from the industry. While it is fair to introduce this detailed proposal from a major stakeholder, we find it disappointing; it does not simplify the categorisation (still 9 categories!), does not make it any clearer or more transparent (even more complex metrics equations, and still many 'compensations' requested), and suggests that tailored treatment would still be granted to built-in appliances (through specific reference lines), upright freezers, frost free functions, chill compartments, multi-doors, etc. In our view, this proposal brings very little added-value to the current problems at stake.

[1] http://www.coolproducts.eu/resources/documents/2015-ALL/White-Goods-in-a-Dangerous-Spin.pdf

In order to ensure a balanced analysis, we call for the authors to introduce, with a similar level of detail, alternative proposals, such as:

- The proposal supported by ECOS and Topten Europe for a genuine reduction of the number of categories and streamlining of reference lines (for real transparency), as well as putting a stop to the flawed principle that any additional feature should systematically get a bonus to consume more (for consistency with the spirit and goals of the Directives).
- The findings of the 2012 Intertek study on correction factors, which recommends that most factors should be discarded

We then invite the study team discuss more thoroughly the pros and cons of each option with sufficient (counter)expertise so that decision-makers can make an informed choice.

Please also note that we consider discussing the categorisation and compensations without addressing the reference lines somehow incoherent. These topics cannot be decoupled, as through their combination, the basis for energy efficiency metrics underpinning the Regulations is formed.

5- Resource efficiency aspects cannot be disregarded in such a way

It is important to recall that resource efficiency is now high on the EU policy agenda, and decision-makers repeatedly call for resource efficiency requirements to be introduced in all product regulations, notably through the Ecodesign Directive. The forthcoming EU action plan on the circular economy will probably reinforce adequate criteria to be taken into account for product design.

Therefore, the topic deserves to be fairly and seriously analysed. At the moment, the report just discards it in a blunt and simplistic way.

- The argument put forward on p.38 seems to suggest that resource efficiency requirements would apply to existing, so-called, 'old energy-guzzlers' currently found in homes. This is not true. If requirements are adopted, they would only apply to new models placed on the market in the future, in other words, already quite energy efficient ones.
- The argument that some old fridges are illegally shipped to Africa instead of being recycled is not necessarily relevant for the discussion here. This is an issue for the enforcement of other policies such as on waste shipments. There is also no evidence that prolonging the lifetime of refrigerating appliances in European homes would have any impact on this problem.
- The only quantified argument provided in the report (p. 62) is a CO_2 life cycle comparison based on a 1999 Japanese fridge model in a one-to-one replacement. There are several ways in which this calculation can be challenged. First, the energy consumption of a future 2017 or 2018 model is far from a 1999 one. Second, the gap with a model ten years later will be smaller. Third, consumers do not necessarily do one-to-one replacements (they buy e.g. larger models with new features). Fourth, the question of the CO_2 content of the energy mix is not raised.

We do hope the authors will be able to provide valuable expertise on this topic, make more meaningful quantifications, and discuss possible resource efficiency requirements including:

- A procedure to prove non-destructive disassembly and reassembly to facilitate repair;
- Availability of repair manuals (and tools) and spare parts for independent repair services;
- Easier separation of electronic components, such as displays and PCB for recycling;
- Possible design requirements avoiding early failures of most critical components;
- Possible information requirements on commercial guarantees and/or indication of average technical lifetimes on the energy label

6- Expectations for next steps

We take the opportunity to insist here on the foremost topics that we expect to see covered in the remaining sections of the report.

- Proposal and discussion of a scope formulation that removes existing unclarities and loopholes.
- Revision of reference lines, correcting mistakes from the past and streamlining the lines to avoid unjustifiable differences between appliances that deliver similar services. In particular, the steepness of the curves should be designed so that large appliances are not favoured.
- Life-cycle cost calculations using learning curves: learning curves are referred to in the MEErP, and household refrigerating appliances are a well-documented product group for which this approach is perfectly relevant.
- Discussion of policy options for resource efficiency aspects: a consistent/joint approach with review studies currently led by the JRC for household washing machines and dishwashers would have merit.
  Please refer to our design and policy options proposals for the dishwashers and washing machines review studies:
  http://www.coolproducts.eu/resources/documents/washingmachines/DW-WM---Material-efficiency--end-of-life-aspects---Design-and-policy-op.pdf

7- Specific comments

- Page 36: A+ threshold: the text says that the A+ EEI was increased in 2014 from 44 to 42. It should also be mentioned that the A+ EEI had been lowered from 42 to 44 two years earlier, when the measurement tolerances were tightened.

- Page 78: BAT values: there is a better refrigerator (inbuilt) on Topten.eu: EEI = 19.5%, 57 kWh/year

END

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