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**The Consumer Voice in Europe**

# ANEC/BEUC comments on the updated proposal for Ecodesign and Energy Labelling requirements for televisions and electronic displays

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## Summary

Televisions are covered by Ecodesign requirements since 2009<sup>1</sup> and by Energy Labelling requirements since 2010<sup>2</sup>. In August 2012, the European Commission published a "Discussion paper on the review of the Ecodesign and Energy Labelling Regulations for televisions and on the draft Regulation on electronic displays, including computer monitors" which was presented and discussed at a Consultation Forum meeting on 8 October 2012.

Due to rapid technological developments and their impact on the market the 2012 proposal was abandoned and a new proposal for Ecodesign and Energy Labelling requirements was brought forward in November 2014 based on recent market data.

Through this paper, we make recommendations on the proposed Ecodesign requirements and we propose a full rescaling of the current Energy Label with A "plus" classes to a simpler and more comprehensible Energy Label that comprises of a scale from A to G.

With regards to the proposed Ecodesign requirements we make the following remarks:

- Plasma televisions should not be exempted from Tier 1;
- We consider the provisions for a visible and accessible on/off switch a positive step;
- Enhanced reactivation functions should not receive power allowances;
- Standby mode for networked displays shall be mandatory;
- We welcome the provisions on consumer information and we make comments on how to strengthen them;
- The provision on peak luminance ratio for measurement purposes must be further elaborated;
- Tolerances for off/standby mode should be proportionate;
- We welcome requirements on design for recovery and plastics marking and we make proposals on how to improve them.

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<sup>1</sup> [COMMISSION REGULATION \(EC\) No 642/2009](#)

<sup>2</sup> [COMMISSION DELEGATED REGULATION \(EU\) No 1062/2010](#)

## **Ecodesign requirements**

### **Exemption of plasma televisions from Tier 1 is unjustified**

According to Annex II paragraph 1.5 of the proposed text on Ecodesign requirements, **plasma televisions** (PDP) are exempted from Tier 1 requirements and are only covered by Tier 2 and 3. This means that for 3 years after the publication of the regulation no on-mode power requirements will apply to this technology.

A market research study by Öko-Institut on display technologies in the context of the EU Ecolabel revision for televisions and displays revealed that already in 2012, the share of PDP sales in EU24 was only 5% (Source: GfK), limited to the niche extra-large screen market. Additionally, plasma TVs are expected to decline towards zero within the next few years (Source: DisplaySearch).<sup>3</sup> **We favour the inclusion of plasma TVs to the requirements of Tier 1** as we fear that their exclusion could prolong the lifetime of a declining technology and could create a loophole where inefficient models will be escaping efficiency requirements for 3 years after the entry into force of the regulation.

### **We welcome the provisions for an “easily visible and accessible” on/off switch**

Annex VII of the proposed legal text contains detailed technical parameters with an aim of ensuring that the on/off switch is not only easily visible but also accessible.

**We welcome these detailed provisions** aiming to facilitate the use of the on/off switch by consumers and hence help them save energy when they are not using the device. We also advocate in favour of **a mandatory on/off switch** for all televisions.

### **Enhanced reactivation functions should not be subject to power allowances**

Compared to regulation 642/2009, paragraph 2.2.3 of Annex II introduces the following new power demand allowances for enhanced reactivation functions:

- voice recognition and activation sensor: 1.0 W;
- room presence / gesture detection and activation sensor: 0.5 W;
- both voice recognition and room presence / gesture recognition: 1.2 W.

**We do not support the extra allowances** foreseen for enhanced reactivation functions. These functions should comply with the thresholds set out in the standby regulation and off mode (1275/2008). Such allowances should also be withdrawn from paragraph 2.6.3, which at the moment stipulates that the power limits for networked standby do not include the power allowances for enhanced reactivation functions under networked standby condition. Additionally, fast start mode, if available, should not be set as default setting as this mode is more energy consuming and we believe it is important to nudge consumers into the right direction by making the most sustainable option also the easiest option.

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<sup>3</sup> [Development of European Ecolabel and Green Public Procurement Criteria for Televisions- TECHNICAL REPORT, TASK 2 - August 2013.](#)

### **Availability of standby mode for networked standby of electronic displays shall be mandatory**

According to paragraph 2.3.3 "*Networked electronic display with the networked connectivity activated and with at least one wired networked access port connected and/or at least one wireless networked access port activated **may** provide a function allowing it to enter the standby mode.*"

Networked electronic displays can consume a considerable amount of energy at networked standby status. We therefore advocate in favour of **changing the formulation** as follows: "*Networked electronic display with the networked connectivity activated and with at least one wired networked access port connected and/or at least one wireless networked access port activated **shall** provide a function allowing it to enter the standby mode or off-mode or another condition which does not exceed the applicable power demand requirements for off-mode or standby mode.*"

### **Consumers must be made aware that not switching off the device comes at a cost**

**We advocate in favour of clear consumer information that make the user well aware of the increased energy consumption of networked functions.** To ensure consumer awareness and adjustment of the appliance to his needs we propose the following points to be added:

- Information and guidance on how to deactivate networking functions;
- Visual indication about the current mode (e.g. illumination diode is ON if the display is in networked standby);
- Information on the possibility to completely switch off the display (e.g. information on data storage and losses);
- Requiring that during the first installation of the display the user is asked by the set-up menu to specify his "home mode" (e.g. activation or deactivation of network ports).

### **We welcome consumer information on the implications of extending or disabling the automatic power down (APD) and we recommend extending requirements to other modes**

We appreciate the provisions under paragraph 3 aiming to ensure that the user will be sufficiently warned that his decision to extend the automatic power down time or to disable it completely will affect the appliance's energy use.

However, the provisions refer only to switching to APD from on-mode status. There is no requirement on power down from other operational modes (such as a "fast start" standby mode). Therefore once a product is in such a mode, the regulation does not require it to leave this mode to a lower power consuming mode. We advocate in favour of **precise requirements for televisions to exit fast start mode after a definite time** and enter standby or off-mode.

### **Warning on extending/disabling automatic power down (APD) should be verified**

Annex V paragraph 3(vii) should explicitly require verifying whether there is a warning on the cost and environmental implications that extending or disabling the automatic power down (APD) function has on energy use.

### **Measurement loopholes due to peak luminance ratio shall be avoided**

According to paragraphs 5.1 and 5.2, as well as section 6.1(c) the measurement of the peak luminance ratio of the home mode/ standard mode compared to the brightest on mode condition of the display is based on pre-settings or declarations by the manufacturer.

According to regulations 642/2009 and 1062/2010 the luminance level of the appliance, as delivered by the manufacturer to the end-user, shall be at least 65% of the maximum brightness.

These provisions require further elaboration in order to avoid loopholes. More specifically, a television with lower maximum brightness could have a darker picture at the moment it is delivered to the consumer and hence, have lower energy consumption. If a consumer then optimizes the settings to get a better picture, energy consumption will increase due to the brightness increase and the energy use of the display could no longer reflect the energy classification the television received initially. ICRT (International Consumer Research & Testing), an organization with 37 consumer associations as members, regularly conducts product testing, including the testing of televisions. BEUC's Portuguese member, DECO Proteste, is one of the associations participating in the testing of televisions under ICRT. Based on this participation, DECO Proteste published an article about the considerable differences in the energy consumption of televisions from the state in which they are delivered to consumers to the energy consumption after calibration of the display. The article also reported that the initial display settings of certain televisions were not adequate, leading for instance to dark picture. More information on these findings is available in annex.

To address this issue **we recommend conducting on-mode measurements under a fixed screen luminance level.**

### **Information on annual energy consumption shall be differentiated according to modes and displays**

According to paragraph 6.4(f):

*"...the annual energy consumption (AE) in kWh per year [...] shall be described as: 'Energy consumption XYZ kWh per year, based on the power demand of the electronic display operating 4 hours per day for 365 days. The actual energy consumption will depend on how the display is used'..."*

This approach does not make any differentiation between different displays and their respective usage. **These parameters should be included in the calculation of the annual energy consumption of displays** as power consumption in networked standby is considerably higher than in standby mode and for televisions standby/networked standby is assumed to be activated for a longer period of the day.

### **Tolerance for off-mode/standby mode measurements is too high**

According to paragraph 1(b) of annex V, the measured display model complies with the requirements if the results for off-mode/standby conditions are not exceeded by more than 0.10 Watt. Taking into account that the maximum standby and off-modes are between 0.3 and 1.0 watt, we recommend setting the limit of exceeding the requirements during verification processes at a maximum of 10%. Otherwise setting a tolerance of 0.1 watt on a requirement of 0.3 watt would mean a 30% tolerance.

## **We welcome the requirements on design for recovery and marking of plastic parts**

**We strongly support the requirements on design for recovery and on marking of plastic parts.** Marking of plastic parts has been for long a criterion under the Ecolabel. Feedback from recyclers shows that marking is still a valuable source of information about the type of plastic and whether the component contains flame retardants and fillers, thus requiring a separate treatment.

## **“Brominated Fire Retardants free” logo must tackle the whole product not only components**

According to paragraph E of Annex III “Electronic displays with plastic parts larger than 25g (other than PMMA board and display optical plastics) not containing Brominated Fire Retardants (BFR) shall be labelled with the “BFR-free plastics” logo”. This could be misleading as the “BFR-free plastics” logo could be affixed to products containing such substances in parts below 25 g weight. Although the label is targeted to recyclers, it will be open to interpretation by anyone who does not know the details and could also mislead consumers, who could consider that the product is free of hazardous substances. We propose affixing the “BFR free” logo only if BFRs are not present above a concentration of 0,1% - 1000 ppm (RoHS limits) **regardless of the weight of the component.**

## **Energy labelling requirements**

The current proposal foresees a partial rescaling of the existing Energy Label aiming at reducing the number of products at A++ class and avoiding overpopulation of the 3 top classes. We do not support an approach that aims at just extending the life of the current label.

According to the justification provided at the explanatory note accompanying the proposed regulations, this should be seen as an interim solution until the Energy Labelling Framework Directive is revised. However, there is neither an indication nor a reassurance that the proposal for the revision of the Energy Labelling Framework Directive will foresee a rescaling of product specific labels. In case it does not foresee an adjustment of existing labels, the reclassification of televisions and electronic displays would take place together with the next revision of the proposed measures. Taking also into account that the ongoing revision of these measures is delayed by two years, we find the justification for postponing a full revision of the Energy Label for televisions and electronic displays unacceptable.

**We advocate in favour of aligning the calculation of the Energy Efficiency Index (EEI) of the proposed Energy Labelling Regulation for electronic displays with the Ecodesign requirements and rescaling the Energy Label to an A-G scale** as a number of studies as well as academic research have shown that that the introduction of “A plus” classes to the Energy Label compromises the power of the label to motivate consumers to buy products classified beyond A.

## ANNEX

ICRT (International Consumer Research & Testing) tests regularly televisions. Over the last years these tests revealed that in certain cases televisions are distributed to consumers with display settings offering a dark picture or a picture of weak contrast. In a publication of June 2014, Deco Proteste presented the differences that it observed on the energy consumption of televisions when tested with the image settings at the time of delivery to the consumer and the energy consumption after calibration of the picture. DECO Proteste observed the following energy consumption increases:

- On 32" televisions an increase from 34,6 W to 44,9 W (30% increase based on 63 models).
- On televisions from 40" to 43" an increase from 54,3 W to 74,2 W (37% increase based on 115 models).
- On televisions from 46" to 47" an increase from 59,4 W to 78,5 W (32% increase based on (based on 85 models).
- On televisions from 50" to 51" televisions an increase from 78,8 W to 119 W (51% increase based on 46 models).

The energy consumption difference on televisions from 50" to 51" is bigger due to the higher number of plasma devices tested at this screen size (13 out of 46 models). DECO Proteste found that for plasma televisions the changes due to different image parameters are of an average difference of 75 W. For LCD LED the average difference is of 26 W.

More information can be found in the DECO Proteste publication below (in Portuguese) or via the [link](#). If you wish to acquire more information on the conditions under which the testing is conducted and to what the image optimization consists of please do not hesitate to contact us so we can direct you to the DECO Proteste team responsible for testing.

Notícias

## Televisores: fabricantes sacrificam a imagem para ficar bem na etiqueta

30 Junho 2014



Os televisores lançados desde janeiro exibem uma nova classe de eficiência na etiqueta energética. Esta integra agora a classe “A+” e extingue a “G”.

Nas lojas, continua a encontrar televisores menos recentes com a etiqueta energética anterior. A etiqueta é obrigatória em todos os televisores lançados no mercado europeu desde janeiro de 2011. A informação é clara e trata-se de uma excelente iniciativa que pressiona os fabricantes a otimizarem a eficiência dos aparelhos. Este indicador tem em conta, sobretudo, o consumo em funcionamento, ao usarem os parâmetros de origem. Até aqui tudo bem, porque, em teoria, é o modo mais adotado pelos consumidores.

Mas através dos [nossos testes](#) verificámos que os fabricantes oferecem menos qualidade de imagem com os parâmetros de origem para alcançarem uma boa etiqueta. Em muitos televisores, as imagens são mais escuras e apresentam menos contraste do que o desejável. As alterações aos parâmetros, como o brilho, o contraste ou os ajustes da fluidez, têm um enorme peso no consumo final do televisor. Ou seja, o consumidor ao procurar uma imagem de melhor qualidade acaba por influenciar o consumo do televisor. Por isso, o nosso teste não se limita a avaliar o consumo com os parâmetros de origem. Também medimos o consumo depois de regular a imagem. Aplicámos aos televisores definições de imagem otimizadas para avaliar o efeito no consumo. Os resultados são flagrantes.

Para acertar na escolha sem derrapar no orçamento, siga [o nosso teste](#).

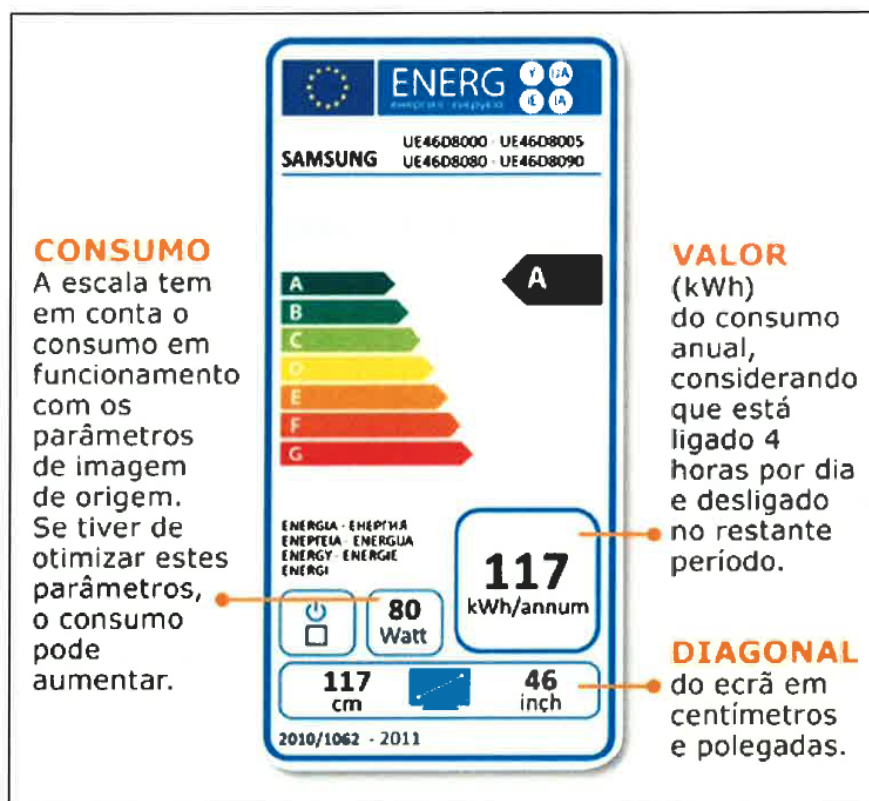
### **Depois de otimizar a imagem, consumo aumenta mais de 30%**

Para todas as diagonais de ecrã, o aumento de consumo, em média, nunca fica abaixo dos 30 por cento. É um aumento significativo e que deveria implicar uma mudança na etiqueta energética dos televisores. A nossa amostra inclui os 309 modelos que analisámos em 2013.

Nos televisores de 50 a 51 polegadas, a diferença salta à vista. Este aumento deve-se à maior percentagem de ecrãs plasma na amostra. Dos 46 aparelhos desta categoria, 13 são do tipo plasma. E para o consumo o efeito das alterações na imagem é mais significativo nos plasmas. Detetámos



uma diferença média de 75 W entre os parâmetros de origem (etiqueta energética) e os relativos à imagem otimizada. Nos LCD LED a diferença média fica-se pelos 26 W.



### Imagem de origem versus otimizada: descubra as diferenças

Para saber até que ponto a imagem é melhorada ao mudar as definições de origem, pedimos um teste decisivo ao nosso painel de utilizadores.

Em laboratório, com as definições de origem, este painel atribuiu, em termos médios, avaliações entre os 50 e 58% (qualidade mediana). Depois da calibração, o valor médio das notas disparou para quase 70% (boa qualidade de

imagem). Ou seja, os fabricantes, para conseguirem ostentar uma etiqueta energética mais otimista, estão de facto a introduzir configurações de imagem pouco recomendáveis e muito longe da solução ideal.

Resultado prático: em casa, os consumidores têm de realizar vários ajustes para garantir que visualizam uma boa imagem e estes não são nada simples de efetuar.

ENDS.