



Position on the Commission proposals to revise the Ecodesign & Energy Labelling measures on Washing Machines

January 2018

Energy efficiency aspects

Support to non-deceptive programme names

We fully support restricting the use of the term 'cotton programme' to the programmes that are actually used to test the performance of machines. We firmly believe that expressions such as 'normal', 'standard', 'regular', 'daily', or any other wording suggesting a programme is for default usage should only be used for programmes covered by the energy label test.

Re-inclusion of 60°C

We are concerned with the proposal to assess the performance of machines only on 40°C programmes, and no longer based on a mix of 40°C and 60°C ones.

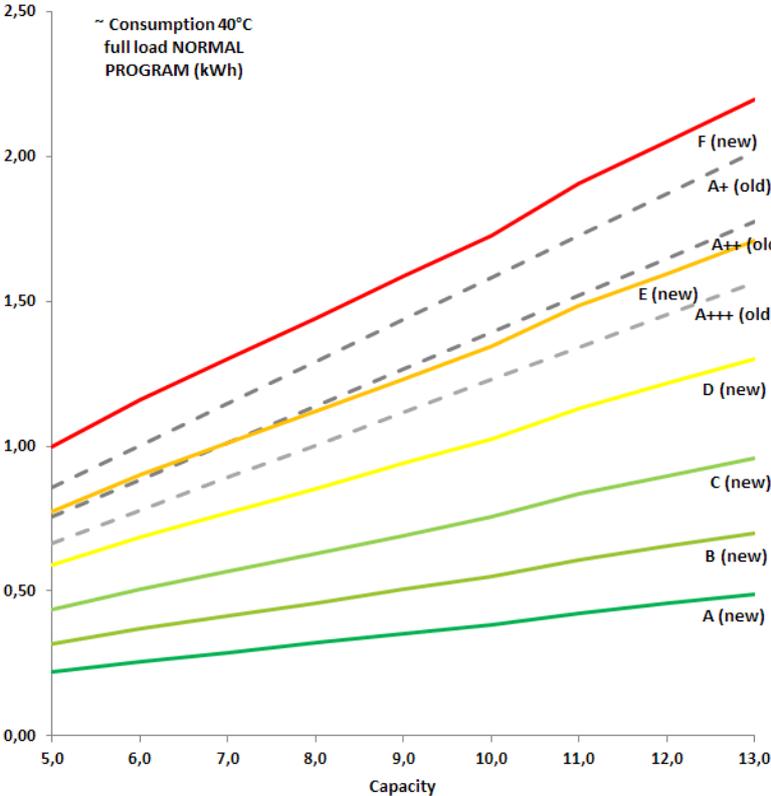
Although 60°C cotton programmes are used 30% less often than 40°C ones on average, they consume 30% more energy. All in all, they remain just as important for the annual energy consumption. There is a risk that by excluding them from the assessment of machines, they are not optimised as before and ultimately trigger an increase in energy consumption.

Therefore, we call for reintegrating 60°C cotton programmes in the formulas assessing washing machine performance.

Ecodesign energy requirements: insufficient level of stringency and risk of backsliding

It is obviously difficult to compare the levels of current and future requirements as the metrics will substantially change and be based on different washing programmes. Yet, according to our calculations and assessment, Tier 1 energy efficiency requirements appear to be more lenient than current requirements applying since 2013, and Tier 2 is not at the level of the least life cycle-cost as calculated in the preparatory study of this review. This is illustrated in the graph below, in which we have represented the label class limits for the 40°C full load programme for a machine with load sensor (consuming 20% less at half load and 30% less at quarter load). We have taken into account that the 40°C cotton programme that will be tested in the future may consume more than the

arrowed programme with the current Regulation, by multiplying it by a 1.25 factor. This factor accounts for the fact that future programmes may be less exaggerated in terms of stretched durations and low internal temperatures.



The graph shows that a part of the proposed F class is above the current A+ class, meaning that **products that were banned since 2013 could re-enter the market at Tier 1.**

This is also true for products without load sensors. Take a 7kg machine which consumes:

- 0.85 kWh/cycle at 'standard' 40°C full load (arrowed programme)
- 1.09 kWh/cycle at 'standard' 60°C full load (arrowed programme)
- 1.04 kWh/cycle at 'normal' 40°C full load (non-arrowed programme)
- same values at half/quarter loads than full load
- 4 kWh/year in standby/left-on mode.

Under the current Regulation, it would have a declared annual consumption of 228.7 kWh/year and an EEI of 60, meaning that it would fall in the A class and would not be allowed on the market (as the A class has been forbidden since 2013).

Under the Commission’s proposal, its new weighted consumption would be 1.04 kWh/cycle and its new EEI 130, meaning a future class F. This product would be allowed to re-enter the market.

The graph also shows that Tier 2 is roughly at the level of the current A++ class, while the preparatory study calculations suggest that the least life cycle cost level (that the Regulation should aim at) is somewhere within the current A+++ class. Under the assumptions that we have made, Tier 2 is not ambitious enough.

These levels would be unacceptable, in particular the backsliding risk. We urge the European Commission to reassess the proposal and fix this potential issue by setting more adequate levels and limiting the backsliding risk.

Ecodesign water requirements: additional risk of backsliding

The proposal mentions that water consumption requirements are unchanged compared to today, and so keeps the same level of requirement for water consumption.

However, in the current regulation the level applies to the 60°C full load program, while in the proposed new text it would apply to an average of cycles at full and partial loads, thus requiring less water. It can be estimated that it would in fact lead to **a relaxation of the water consumption requirement by more than 30%**, hence a major backsliding.

As an illustration, a 7-kg machine that consumes 32% less water at half load and 46% less at quarter load than at full load (realistic figures taken from the preparatory study) is today allowed to consume at most 52.5L for a full load program and would in the future be allowed to consume 71.8L for a full load program.

We urge the Commission to fix this mistake, by adequately adjusting the requirements. In addition, we consider that the stated objective to leave the water consumption requirements unchanged is ignoring technological progress. Benchmarks on water consumption have improved on average by 12% between 2010 and 2017. This clearly demonstrates that there is room to set stricter requirements.

We propose to change the level of requirements **from '5 * c_{1/2} + 35' to '4.5 * c_{1/2} + 30'**.

Provisions to tackle the artificial growth in capacities

The trend towards increasingly larger capacities has been identified in the preparatory study as a major drawback to the impact of the Ecodesign and Energy Labelling Regulations. It has eaten up a large part of the expected energy and water savings, and the current EEI formula is one of the causes of this unfortunate situation.

An analysis by Topten Europe has shown that currently, good efficiency levels are mainly reached by adding capacity and not reducing energy consumption¹. This is because the capacity is often more significant for determining a machine's energy consumption than the energy efficiency class.

The explanatory memorandum acknowledges this issue but proposes very little to counter this trend. The steepness of the EEI reference lines is similar to previous levels (see previous graph), meaning it will still be easier for big machines to reach better ratings.

We call for introducing **a less linear reference value**, as in the current regulation for domestic tumble driers. The preparatory study specifies that it would be highly effective in reversing the current trend of producing larger capacity washing machines. The equation could be for instance:

$$SCEc = 0.15 * c^{0.8} + 0.05$$

¹ Anette Michel, Sophie Attali, Eric Bush. Topten 2016. [Energy efficiency of White Goods in Europe: monitoring the market with sales data](#) – Final report. ADEME, 72 pages.

In addition, we call for the metrics and testing standard to **include a measurement at a fixed small load (e.g. 2 kg)**, instead of considering proportional half/quarter loads. This would better reflect the consumer's actual behaviour since the average load is not necessarily relative to the capacity of the machine. As explained in the preparatory study: *'Advantages of a fixed partial load testing are simplified testing, and counteracting the possible rebound effect for unnecessary larger machines.'*

Simpler weighting factors for the energy consumption formula

The calculation of the weighted cycle energy consumption is based on a complex approach where the weighting factors between the cycle types are differentiated based on the rated capacity of the machine. We believe this adds too much unnecessary complexity to the approach. It also further encourages big capacity machines, which should be avoided.

As an illustration, a 11-kg machine consuming 1.2 kWh/cycle at 40°C full load, and 0.9 at 40°C half and quarter load gets an EEI of 84.5 with the current proposal, while it would be 87.4 should weighting factors be the same as for a 6 kg machine. Therefore, its rating is improved. This is not appropriate, since a 6 kg machine of the same EEI only consumes 0.6 kWh/cycle (twice less).

We propose **dropping the differentiation of weighting factors per capacity**.

Rinsing and spinning

Rinsing being part of the primary function of a washing machine, we recommend introducing minimum requirements on the rinsing performance.

Besides, clothes that are not properly dried through the mechanical spinning process indirectly lead to additional energy consumption when drying because of their higher humidity content. We urge the Commission to set a requirement on the spinning efficiency (class A as a minimum).

Off, standby and networked standby modes

We disagree with the decision made to tackle the off, standby and networked standby consumption in this regulation and not in the horizontal standby and network standby regulation. Going for the vertical approach increases difficulties for regulation updates and undermines the level playing field. It would be more beneficial to keep these definitions and requirements for the off, standby and networked standby modes in the horizontal regulation. The vertical regulation could instead potentially include a more precise/strict rule for the power management (e.g. 'after the completion of a cycle, a machine shall go to an off mode (as defined in Regulation 801/2013) after a maximum of 10 minutes'). This would significantly limit the energy impact of the left-on mode.

Repeatability, reproducibility and representativeness of measurement methods

When the documents make reference to repeatability and reproducibility of the measurement methods, they should also mention **representativeness** or reflection of real-life conditions/usage as it is already the case in the revised Energy Labelling regulation.

Circumvention beyond power consumption

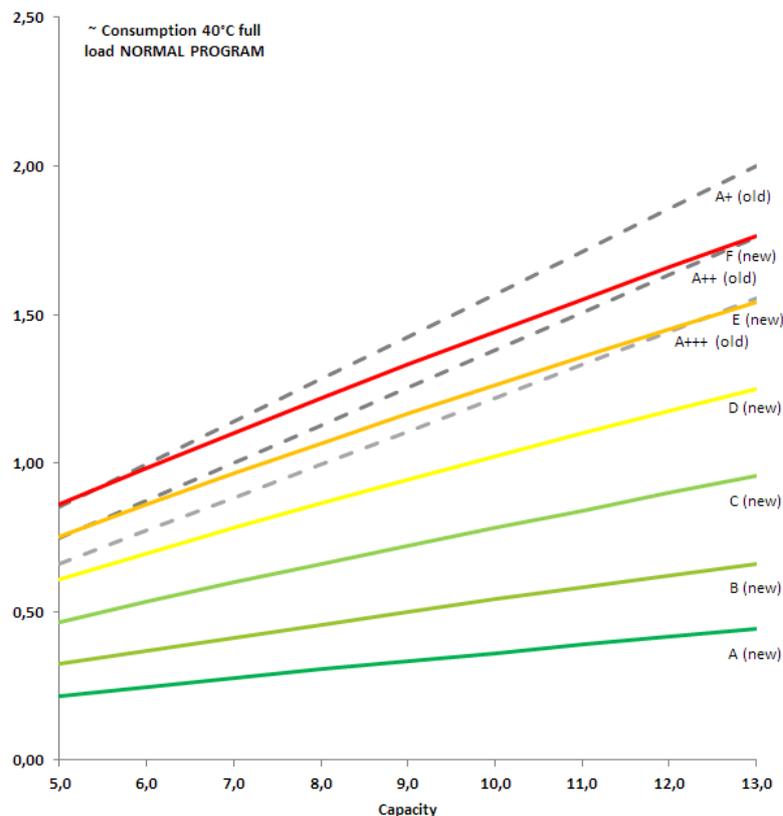
We support the introduction of an anti-circumvention clause in Article 5 of the Ecodesign proposal, since this has been explicitly mentioned in the 2017 Energy Labelling Regulation and is not present in the 2009 Ecodesign Directive. While Article 5 refers only to power consumption in terms of circumvention, the scenario of altering other performance parameters (such as the water consumption) for the purpose of demonstrating better power consumption results in a test should also be covered.

Energy label: more even bandwidths

The proposed energy classes have very varying bandwidths, from 30 for class F to 13 for class B. For consistency and transparency reasons, we recommend a more balanced scale, such as:

Energy class	EC proposal	Class bandwidth	Alternative proposal	Class bandwidth
A	EEI < 30		EEI < 30	
B	30 ≤ EEI < 43	13	30 ≤ EEI < 45	15
C	43 ≤ EEI < 59	16	45 ≤ EEI < 65	20
D	59 ≤ EEI < 80	21	65 ≤ EEI < 85	20
E	80 ≤ EEI < 105	25	85 ≤ EEI < 105	20
F	105 ≤ EEI < 135	30	105 ≤ EEI < 120	15
G	EEI ≥ 135		EEI ≥ 120	

The combination of these new class boundaries with the less linear SCEc equation that we propose, and removal of the differentiated weighting factors would lead to the result as shown in the following graph.



Label icons

We recommend adding a pictogram on the energy label to identify products that can be used with **hot fill / heat fed**. As these options can substantially reduce the electricity consumption of washing machines, it is important they are promoted.

Indications on the **noise level** of the washing and spinning cycle have been removed from the label. With the rapid deployment of smart/connected products that can schedule a cycle when the electricity price is lower (e.g. at night), the information regarding noise levels becomes even more important to include.

Display of the range of available efficiency classes: interpretation issue



The new Energy Labelling Regulation stipulates that in commercials and advertisements, the energy class shall be shown together with *'the range of the efficiency classes available on the label.'* The purpose of this provision is for consumers to better understand how the energy mark displayed compares to the state of the market. In other words, for consumers to easily understand if this class currently corresponds to the best or worst performers.

We believe this provision should be interpreted as showing the range of efficiency classes that are populated by products, and not just that are written on the label. This means the range should not always be A to G, which provides little added-value to the consumer, but instead the range of classes that are not greyed on the label. Therefore, the range displayed for washing machines should be:

- A to F at tier 1,
- A to E at tier 2.

Miscellaneous

We have identified several mistakes in the draft Regulations, such as:

- The label description and layout **miss the grey classes** that are to be displayed once a bottom class has been emptied by Ecodesign
- The link of the QR code on the label is not specified. It should be clarified that it has to link to official data, such as the one provided in the official EU product database, and not a manufacturer/supplier website.
- There are confusions between the main part and annexes of the Ecodesign proposal as regards the definitions and abbreviations of networked standby modes, and it is unclear how networked standby is considered in the requirements specified in the annex.
- Some parameters are spelled differently from one page to another (e.g. 'SCEc' / 'SECC', etc.)

Material efficiency aspects

We strongly support the measures that address material efficiency considerations (dismantling, spare part availability and repairability) under Annex I. We support the proposal for the additional generic Ecodesign requirements on repair and end-of-life aspects. In particular for washing machines, where there is a trend toward reduction in product lifetimes, lifetime extension via improved repair has

proven benefits, and Ecodesign regulation is the key legislative tool to address this. The opportunity should be seized to strengthen certain aspects even further:

Spare part availability (Annex I, 3.3)

One of the major factors causing unsuccessful repair of products is the availability of spare parts in terms of:

- being able to find spare parts for purchase (17% of those trying in a recent survey² could not find suppliers for the necessary parts) and/or
- the prohibitive cost of spare parts (18% of those trying to carry out repair found the parts too expensive).

Therefore, the availability of spare parts is a key material efficiency consideration that requires policy attention.

We welcome the proposal from the Commission to set a minimum period for the availability of spare parts. However, we call for an **extension of the minimum period to a fixed number of years that is representative of the expected lifetime of the product** (e.g. 12 years, as assumed in the preparatory studies).

- The Austrian standard ONR 192102 specifies that the availability of replacement parts for large household appliances must be guaranteed for a period of at least 10 years.
- A fixed timeframe is necessary to avoid a situation where the spare part is only available at the time of placement on the market: this is the period where a spare part is highly unlikely to be necessary yet.
- Market surveillance actions requires a time limit: without a specified time duration for availability, regulatory requirements cannot be verified.

Spare part maximum delivery time (Annex I, 3.4)

We strongly support requirements for spare part maximum delivery time. We consider that the timeframe of three weeks could be further reduced to avoid this time-lapse to become a reason for consumers to replace their product. Existing suppliers and manufacturers usually dispatch between 1 to 3 days, or 1 to 2 weeks for some less common parts. The requirement could be finetuned to only account for the time in the hand of the manufacturers (e.g. 2 weeks for sending out the spare part, excluding shipping time).

Unrestricted independent operator access to information on repair (Annex I, 3.5)

In a recent study, the most commonly cited reason for an unsuccessful repair was the lack of information and is the cause for one out of three failed repairs (32%)³. As such, references to “unrestricted access to appliance repair and maintenance information to independent operators” should be retained and refined:

- The current wording does not require that access to information is completely open to the public but can be somewhat ambiguous. For this reason, **we propose to add an explanatory section to**

² <https://www.ellenmacarthurfoundation.org/assets/downloads/ce100/Empowering-Repair-Final-Public.pdf>

³ <https://www.ellenmacarthurfoundation.org/assets/downloads/ce100/Empowering-Repair-Final-Public.pdf>

the definition of “independent operator” as in Regulation EC715/2007 on the availability of vehicle repair and maintenance information. We propose to adapt the sentence as follows: *“independent operator’ means an undertaking other than authorised retailer and repairer which is directly or indirectly involved in the repair and maintenance of household washing machines, in particular repairers, manufacturers or distributors of repair equipment, tools or spare parts, publishers of technical information, not-for-profit repair initiatives, operators offering training for repairers”*.

- The ability to apply fees already add a significant layer of restricted access: the regulation allows for “reasonable or proportionate” fees to be charged, which would sufficiently restrict the audience of the documents to avoid non-qualified / unskilled repairers undertaking repairs.

Requirements for dismantling (Annex I, 3.2)

We call on the Commission to replace the term “dismantling” with **“disassembly” to go beyond material recovery and recycling, and to also facilitate repair** of household washing machines. This would also support the in-situ repair of appliances.

The **size limitation of LCD is unreasonably large** and means that a large number of displays will not be addressed by the requirement. The size limitation should be reduced or removed in order for the requirements to apply to the majority of washing machines. In addition, we would like to reinforce here that with regards to the proposed dismantlability of LCD screens, this issue is better tackled through horizontal requirements under the display regulation. However, since the latter is not yet acted upon, we call on the Commission to keep the dismantability requirements here, with no conditions of size, and go even further by adopting disassemblability requirements.

In clause (2), **motors, shock absorbers, drum/ball bearings, heaters, door hinges, drum spiders and seals** should be added to the list of components that must be easily accessible without the need of proprietary tools as these may contribute to the most common faults in washing machines.

The provision of information in itself is insufficient to improve the disassemblability of washing machine parts. Building upon current drafts of standard prEN 45555 in response to mandate M/543, recyclability requirements should include the following:

- **Maximum time for dismantling for PCBs and LCDs of 300 seconds** performed by a professional, in line with the JRC report⁴.
- **The concept of “proprietary and not commonly available tools” is insufficiently defined.** Pending the provisions in the final standard under mandate M/543, we propose to specify that *“(removal) must be possible without the use of any tool that is not readily available for purchase by any individual or business without restrictions”*.
- Restrictions should be placed on the **use of plastics/polymers that impede adequate recycling**, such as non-compatible for recycling polymer blends, incompatible coatings, very dark plastics that have no recycling routes, etc.

Furthermore, the information measures under Annex I, 2 should be listed in line with the waste hierarchy, hence any clauses referring to end-of-life treatment should be placed last (e.g. disassembly clauses such as (1) and (2) to be listed last).

⁴ <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC95187/lb-na-27200-en-n.pdf>

Free warranty

In addition, we call on the Commission to include the **free warranty periods on the Energy Label** as this will emphasize best practices on the market, promote longer lasting products and guide consumers in their purchasing decisions.

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