Brussels, 8 July 2019

Circulators:
Position on the draft proposal to revise Ecodesign regulation 641/2009

Following the Consultation Forum meeting which took place on 13 June 2019 to discuss the revision of the Ecodesign regulation on Circulators, we regret the lack of ambition in the proposal presented in the working document. We call upon the European Commission to take into consideration the following remarks:

Set more ambitious EEI through a two-tier approach

The current proposal maintains the efficiency levels unchanged, as they have been decided in 2009 and enforced since 2015, meaning that no improvement will be implemented. However, as already presented to the Consultation Forum, public data from sources in Switzerland – topten.ch[1] - and the EU – topten.eu[2] - clearly show that more ambitious energy efficiency indexes (EEI), closer to EEI < 0.18, are achievable and already in the market (see Figure1 in Annex I). In addition, the review preparatory study from 2018 estimated annual saving of 3.06 TWh implemented in 2022 and resulting in 2030 by lowering the EEI to 0.18. These savings would mean 10% of the energy consumption by this product category which is certainly not negligible.

We urge the European Commission to set two tiers for the implementation of the ecodesign requirements on the energy performance of circulators, as follows:

- Tier 1 in 2020: EEI ≤ 0.20
- Tier 2 in 2022: EEI ≤ 0.18

Furthermore, the analysis of a sample of the most efficient standalone circulators from the main five EU manufacturers all with EEI below 0.20 shows that 41% of the 107 products in the survey from 2018 have an EEI in the range of 0.15-0.18 (see Figure 2 in Annex II). This is a clear indication that the efficiency leaders in the market are positioning themselves in the more efficient levels and that other manufacturers will have no other choice but to join soon. We therefore suggest that the indicative benchmark that defines the best available technology on the market at the time of the adoption of the regulation is set at EEI ≤ 0.15 instead of the proposed 0.17.

The more ambitious ecodesign requirements and the indicative benchmark will certainly help drive the market towards better efficiencies, as it has been the case with the successful implementation of the current Regulation (EC) No 641/2009 so far.

▷ Set Tier 1 at EEI ≤ 0.20 level in 2020 and Tier 2 at EEI ≤ 0.18 level in 2022.

▷ Set the indicative benchmark at EEI ≤ 0.15 level, at least for smaller circulators.

[1] topten.ch www.topten.ch/private/products/circulation_pumps and www.topten.ch/business/products/b_circulation_pumps, and the Swiss subsidy Program *ProKilowatt*
[2] www.topten.eu/english/building_components/circulation_pumps/10-m-h.html

Limit the exemptions from the scope for drinking water and replacement circulators

Include drinking water circulators in the scope for performance requirements

While the current proposal perpetuates the exclusion of drinking water circulators from the performance requirements, we believe that it is a missed opportunity that the revision does not further analyse these products. We therefore call on the European Commission to stop postponing and finally move forward with expanding the applicability of the performance requirements to drinking water circulators as well.

Concerning the lack of a measurement method specific for this products that have operating modes mostly with constant flow, we recommend that the Commission benefits from the calculation method for circulators integrated in thermal solar systems and heat pumps that has been included in the new proposal, as it may serve as a good starting point. At the same time, we do also support the idea for the Commission to issue an early standardisation request to develop the test method and metrics as needed without necessarily waiting for the revised regulation to be adopted.

▷ Include new EEI for drinking water circulators in the scope of the regulation and develop the necessary test method.

Limit the exemption for the circulators for replacement

The current proposal extends the exclusion of circulators for replacement until 2022 taking into account disputed economic arguments relevant to a small minority of situations which could open loopholes and undermine energy savings.

▷ Limit the exclusion for the replacement circulators to the specific cases identified to avoid any loopholes.

Set more precise information requirements

Request information on the hydraulic power and the power at the different loads

In addition to the proposed product information requirements we recommend to include more precise product information requirements specifically for P_{hyd} and P_L (i.e. $P_{L100\%}$, $P_{L75\%}$, $P_{L50\%}$ and $P_{L25\%}$). While the information on the hydraulic power, P_{hyd} is key to help ensure that excluded products meet the required criteria to be out of the scope of the regulation, the power at partial load P_L (i.e. $P_{L100\%}$, $P_{L75\%}$, $P_{L50\%}$ and $P_{L25\%}$) will provide more transparency and allow the verification of the calculation of the EEI through a simple check of the technical documentation.

Request information on rare earth elements

We invite the European Commission to take a further look at the specific case of Rare Earth material used in Permanent Magnet motors. Permanent Magnet motors can contain rare earth elements which have been identified as critical materials in the medium term based on supply risk, demand growth and recycling restrictions[3]. Devices with rare earth magnets are quite hard to identify as such without having very specific technical know-how or without conducting quite intensive testing/dismantling of devices[4] . Thus, a mandatory and standardised marking of products containing rare earth magnets

[3] Aalborg University, Addressing resource efficiency through the Ecodesign Directive, March 2014 (p. 226)
[4] Source: Preparatory Study to establish the Ecodesign Working Plan 2015- 2017 implementing Directive 2009/125/EC, Task 2: Supplementary Report "Identification or resource-relevant product groups and horizontal issues", Andreas Manhart, Kathrin Graulich (Oeko-Institut), 15th September 2014 (Chapter 7.1)

above a certain minimum weight (e.g. > 10 g) can significantly facilitate reuse and future recycling practices. It is believed that a marking giving information on the presence of rare earth magnets as well as information on the applied type (e.g. SmCo, FeNdB) can positively influence the establishment of a European circular economy for rare earth elements.

▷ To introduce an information requirement on the presence of rare earth material in magnets, their localisation, as well as their extraction process allowing safe and cost-effective reuse or recycling.

▷ To consider specific requirements for how these permanent magnets can be integrated in the motor to maximise cost effectiveness of reuse and recovery process (e.g. no glue and no welding hampering the extraction/recovery of rare earths elements; or maximum amount of non- destructive disassembly time to foster the reuse of the magnets rather than the mere recovery of rare earths).

Include resource efficiency aspects

The absence of resource efficiency aspects in the revised proposal is absolutely regrettable, particularly considering the current framework of the circular economy under which such parameters have already been included into all other Ecodesign regulations voted upon this year.
Moreover, the revised text even weakens the current Regulation (EC) No 641/2009 by leaving out the provision on information concerning disassembly, recycling, or disposal. The preparatory study clearly stated that such information is currently not provided by manufacturers and that it is key at the same time, to build the baseline needed to develop specific material efficiency requirements. Similarly, the study concluded that 80% of the larger circulators are repaired and thus, there is a big potential for repairability aspects to be looked into.
Hence we urgently call on the European Commission to include resource efficiency aspects, such as the following:

- Information on the disassembly, repair, recycling, or disposal of circulators;
- Policy options for the availability of spare parts, maximum delivery time and access to spare parts, at least for larger circulators;
- Marking of the presence of rare earth metals, etc.

▷ To urgently include resource efficiency aspects for circulators.

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Annex I. Standalone circulator data analysis: EEI values in Switzerland and in the EU.

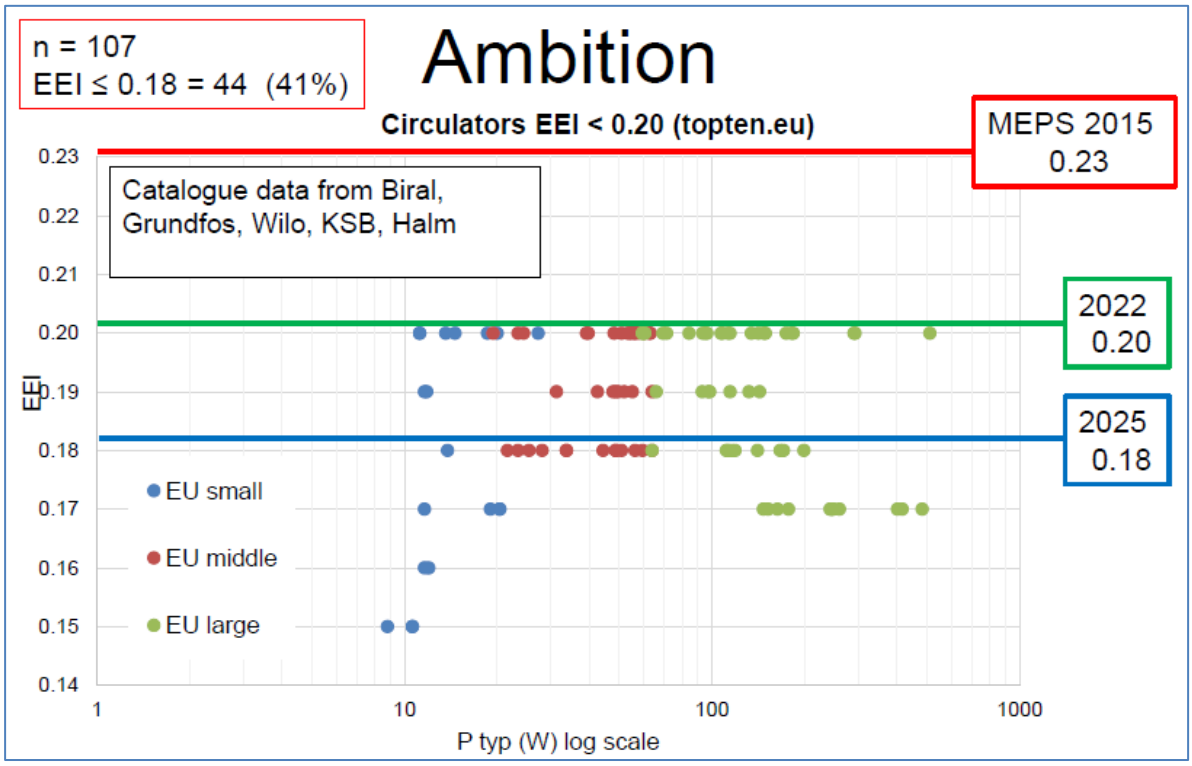
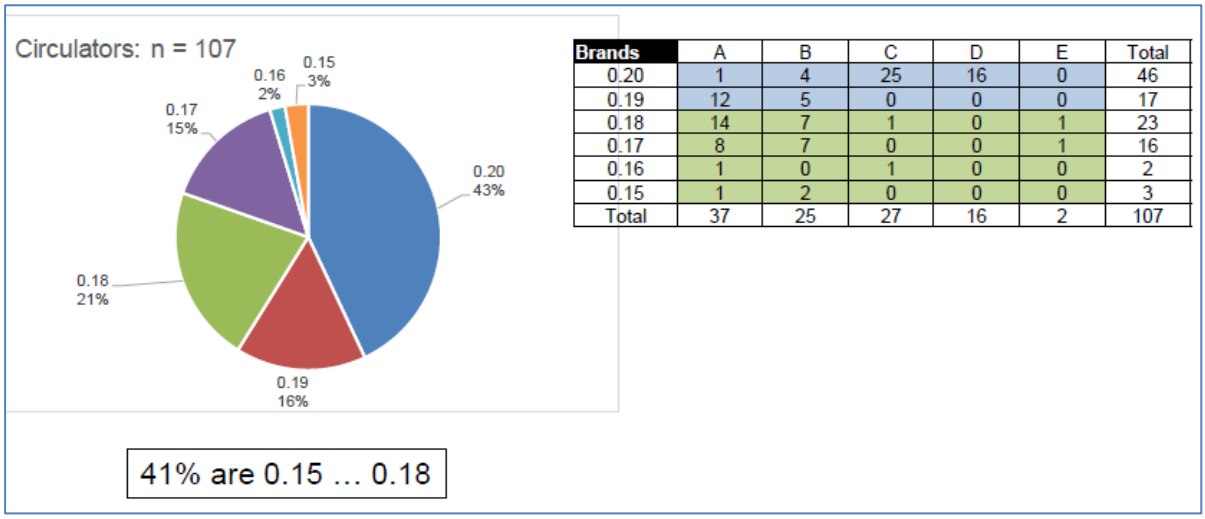


Figure 1. Standalone circulators' EEI by Topten, June 2019. Source: www.topten.eu

Annex II. Standalone circulator data analysis: EEI values for the main five brands in the EU market.



Brands	A	B	C	D	E	Total
0.20	1	4	25	16	0	46
0.19	12	5	0	0	0	17
0.18	14	7	1	0	1	23
0.17	8	7	0	0	1	16
0.16	1	0	1	0	0	2
0.15	1	2	0	0	0	3
Total	37	25	27	16	2	107

Figure 2. Main five EU brands' circulators EEI by Impact Energy, June 2019. Source: www.topten.eu