



*Brussels, 11 September, 2012
PP 12-12*

CECED and EUnited Cleaning comments on the Commission Interservice Consultation Documents on possible Ecodeisgn and Energy Labeling Requirements for Vacuum Cleaners

1. Ambitious Dust-pick-up requirements to enter top Energy Label classes

CECED and EUnited welcome the introduction of criteria that ensure the good performance of Vacuum Cleaners.

Following this principle, our stance has been, and continues to be, that requirements on and performance should be introduced for cleaners aiming at reaching the top Energy Label classes (from B upwards).

Currently, consumers' most important decision criterion for the purchase of a Vacuum Cleaner is performance. Market research tests prove that consumers expect from a high energy efficiency class rating also a good cleaning result. Therefore, we consider it as crucial that the best energy efficiency classes should only be achieved by products with a good dust pick up (dpu) level.

In order to avoid this mismatch of consumer expectation and the suggested energy efficiency calculation formula, additional performance requirements should be settled for top energy efficiency classes:

- For reaching a class B rating:
 - The dust pick up level on carpet must be at least 65% and
 - The dust pick up level on hard floor with crevice must be at least 85%
- For reaching a class A rating:
 - The dust pick up level on carpet must be at least 75% and
 - The dust pick up level on hard floor with crevice must be at least 95%
- For reaching a class A+ rating:
 - The dust pick up level on carpet must be at least 80% and
 - The dust pick up level on hard floor with crevice must be at least 100%

Tests prove that a higher dust pick up ability leads to significantly faster cleaning cycles. This aspect is not reflected in the energy efficiency calculation using the formula proposed in the draft Regulation. The following example shows that higher dust pick up values are not reflected in the energy efficiency calculation:

	Vacuum Cleaner I	Vacuum Cleaner II
Wattage	520 W	520 W
Dust removal ability on carpet	65%	85%
Dust removal ability on hard floor	100%	100%
energy efficiency Class	A+	A+

Both machines reach the same energy efficiency class despite the fact that Vacuum Cleaner II has a 20% higher dust pick up level on carpet and allows up to 30% faster cleaning times. It shows that the input power is the key defining element for good energy efficiency rating. A good dust pick up ability has only minor impact in the calculation despite the fact that it has a major impact in the realistic use of the consumer at home (and consequently in the final energy consumption of the appliance).

2. Horizontal Ecodesign requirements on Dust pick up

As mentioned above, we propose some dust pick up limits associated with higher energy efficiency classes. On the other hand the Ecodesign working document simply defines minimum dust pick requirements that apply to all Vacuum Cleaners covered by the scope of the regulation. As a consequence all products currently below performance class B will be removed from the market.

This is a potentially severe restriction on consumer choice possibly having an important impact on purchase price. Our approach described in the paragraphs above maintains choice and transparency for the consumer, together with high motivation for the manufacturer, without forced restriction for either of them.

3. Hard Floor and Carpet Vacuum Cleaner definitions

The working document has introduced the following new wording in the hard floor and carpet Vacuum Cleaners:

“...and without an option for mounting said nozzle”

This addition will limit the scope of both definitions to a great extent since the new wording only covers Vacuum Cleaners equipped with a fixed floor-specific nozzle.

Whilst such appliances can be found on the market today, Vacuum Cleaners supplied with detachable floor-specific nozzle are also widely available. With the new definition, such Vacuum Cleaners, despite being designed as one single floor appliances, will now fall under “general purpose Vacuum Cleaner”.

This is problematic for the following reasons:

- It is not possible to make a meaningful and accurate measurement of the energy consumption and dust pick-up of any Vacuum Cleaner on a floor-type for which it has not been designed. There is clearly a huge risk that where a Vacuum Cleaner is tested on a floor type for which it has not been designed, it will not achieve the Ecodesign requirements (maximum annual energy consumption and minimum dust pick-up) and will therefore be banned from the EU market. We cannot see how this could be the intention of the European Commission.
- Appliances supplied with a single floor-specific nozzle that are not banned from the market will have to be labelled in such a way (i.e. as a general purpose Vacuum Cleaner) that leads the consumer to believe that they have a functionality (cleaning either carpet OR hard floor) that they do not have at the moment of supply to the consumer.
- The Commission has acknowledged the existence of various designs of Vacuum Cleaners on the market and has gone to great lengths to ensure a consistent and differentiated

approach is taken with all designs. However, under the current proposal, due to the fact that most Vacuum Cleaners will fall within the “general purpose Vacuum Cleaner” definition, a “one size fits all” approach will unfortunately prevail.

- From an environmental perspective the priority must be on the promotion of the most energy efficient Vacuum Cleaners, not on limiting the way in which they are designed.

We would like to propose the following definition to be used in exchange for general and specific Vacuum Cleaners:

p) “hard floor Vacuum Cleaner” means a Vacuum Cleaner ~~supplied with a fixed~~ ***supplied with a fixed*** ~~supplied without any nozzle which is designed specifically or suitable for cleaning hard floors, or a Vacuum Cleaner supplied solely with one or more detachable nozzles designed specifically for cleaning hard floors~~ ***supplied solely with one or more detachable nozzles designed specifically for cleaning hard floors*** ~~use on carpets and without an option for mounting said nozzle;~~

q) “carpet Vacuum Cleaner” means a Vacuum Cleaner ~~supplied with a fixed~~ ***supplied with a fixed*** ~~supplied without any nozzle which is designed specifically or suitable for cleaning carpets, or a Vacuum Cleaner supplied solely with one or more detachable nozzles designed specifically for cleaning carpets~~ ***supplied solely with one or more detachable nozzles designed specifically for cleaning carpets*** ~~use on hard floors and without an option for mounting said nozzle;~~

r) “general purpose Vacuum Cleaner” means a Vacuum Cleaner ~~suitable~~ ***supplied with at least one fixed or detachable nozzle designed*** ~~for cleaning both carpets and hard floors, or a Vacuum Cleaner supplied with at least one or more detachable nozzles designed specifically for cleaning carpets and one detachable nozzle designed specifically for cleaning hard floors.~~

We would like to highlight that European sales of specific Vacuum Cleaners are much reduced in comparison to general Vacuum Cleaners. We believe that these new definitions would suit well to this typology of products, not cause any major market distortions and not open any unwanted loophole.

4. Battery operated cleaners

The functionality, product definitions, and test standards for battery products are all insufficiently mature to be meaningfully defined in the context of Energy Labelling designed for mains power battery products. Industry believes that they should be excluded from the present scope of the Energy Labelling regulation. The situation should be reviewed once the products are more mature and better understood. Attempts to include them in the currently discussed Energy Label regulation will result in confusion and anomaly.

Ecodeisgn minimum requirements are already established for external power supplies where restrictions on the efficiency of charging are addressed. Therefore battery operated Vacuum Cleaners are already partially covered. This is the case for example of other battery operated products, for which no minimum energy performance standard or Energy Label has been developed due to the consideration that their energy efficiency had been already covered within the regulation on External Power Supplies.

As stated in the section on Ecodeisgn requirements Industry believes it is highly relevant to define certain dust-pick-up threshold as a condition to access to the top Energy Label classes (B, A and A+).

Nevertheless, in the case the conditions were met (e.g. Standard availability, testing harmonization, etc.) that battery operated cleaners were to be considered for future Energy Labelling, dust pick up thresholds for the top Energy Label classes mentioned in section 1 should not be applied for battery VC.

Hybrid vacuum cleaners

In addition, vacuum cleaners that comply with both the definitions of mains connected “vacuum cleaner” and “full size battery operated vacuum cleaner” would need to be measured within both operation modes (mains and battery supplied) and also would need to bear two Energy Labels, one for each mode. The consumer is probably not in a position to understand such a confusing situation. To exclude the “full size battery operated vacuum cleaners” out of the scope would also clarify this situation.

5. Ecodesign requirements on Noise

The inclusion of a noise limit in the Ecodesign regulation cannot be substantiated if the aim of the Ecodesign Regulation is to reduce energy consumption of Vacuum Cleaners. Many of the design improvements required to increase energy efficiency and increase cleaning performance cannot be achieved whilst lowering the noise levels. As already pointed out by the authors of the Ecodesign Study Lot 17 on Vacuum Cleaners, *“Given that energy savings are unlikely with reduced noise levels and significant on costs or additional weights (sound proofing materials) may be involved, we believe that no further elaboration is needed.”*¹

We also note with interest that the benchmark domestic product listed in the Ecodesign document for best energy consumption is an upright Vacuum Cleaner at 83 dB(A), and which the proposed noise limits would seek to be banned from the market. In addition, the sound power level of 77 dB(A) would remove nearly 100% of all upright Vacuum Cleaners in the EU market. In essence, we believe that a noise level limit contravenes point (8) of the “whereas” section of the Working Document where *‘requirements should not affect the functionality from the end-users perspective’*. Imposing such noise limits could seriously impair the cleaning ability and energy efficiency of the very products cited ‘as benchmark for energy consumption’.

6. Change of Regulation 327/2011 on Ecodesign requirements for fans

Commission Regulation No 327/2011 excludes suction units (“fans which are designed to operate with an optimum energy efficiency at 8 000 rotations per minute or more”) from the Ecodesign requirements (Article 3) of Regulation 327/2011, but not from scope in general. Therefore, manufacturers of suction units have to fulfill the “Product information requirements on fans” (Annex I, clause 3). This would lead to additional administrative burden for the manufacturers without any additional outcome, when the Ecodesign measure on Vacuum Cleaners comes into effect. Therefore, we recommend changing Regulation 327/2011 by amending the intended Ecodesign measure on Vacuum Cleaners accordingly (as done, for instance, in 278/2009 ‘external power supplies’).

Proposal:

Amendments to Regulation (EC) No 327/2011

Regulation (EC) No 327/2011 is amended as follows:

1. The following point iv is added to Article 1 (2) “The Regulation shall not apply to fans integrated in Vacuum Cleaners.

¹ Final Report EuP (II) Lot 17 Vacuum Cleaners - Paragraph 8.2.51

7. Timing for application of Ecodesign Measures

We believe that the proposed timing for the entry into force of the first tier of the Ecodesign Regulation; 1st January 2014, will not provide enough time for the adaptation of the Vacuum Cleaners production to the proposed requirements. We suggest that the timing for the entry into force of the measures should be settled at least 1 year after entry into force of the Regulation. We request not fixing the date of the entry into force of the requirements until the Commission has a clear date for the publication of the document.

8. Timing for application of the Energy Label Measures

We understand from the Working Documents that the date from which manufacturers has to mandatorily use the Energy Label is 1st January 2013. We believe that this cannot be the intention of the Commission.

As mentioned in the paragraph above, mandatory use of the label should not be imposed earlier than one year after the entry into force of the Energy Label Regulation.

9. Period for use of Label 1

Regarding the different labels available for use in Annex I, we deem that the one year transitory period for the use of Energy Label 1 (A-G) to the Energy Label 2 (A++ - E) is too short. Other new Energy Labels such as those for TVs allowed manufacturers to use the first layout of the Energy Label (from A-G) for 3 years. We believe that a similar timing should be applied for Vacuum Cleaners as this would ensure a longer life for the label and avoiding early revisions of the regulation.

10. Size of the label

Considering the size of a Vacuum Cleaner, we deem that the size of the label proposed in the Draft of the Regulation for the Energy Label (220mm x 110 mm, page 36) could be disproportionate for the aim of its display at the point of sale. We suggest that the size is reduced proportionately to the dimensions of an average Vacuum Cleaner. A good starting point would be the size values given for the Energy Label of TV sets, as described in Commission Delegated Regulation (EU) No 1062/2010 of 28 September 2010, with values of 120 mm x 60 mm.

11. Positioning of the Label

Most Vacuum Cleaners present round or edgy surfaces. The draft of the Energy Label Regulation (page 12) requests dealers displaying the label *on the outside of the front or top of the Vacuum Cleaner*

We believe that a flat Energy Label would difficultly be legible if attached to the appliance due to its morphology. The Energy Label Framework Directive states in its article 6(a) that: “*Member States shall ensure that dealers display labels properly, in a visible and legible manner*”. Therefore, we would like to request that dealers are allowed to display such label nearby the appliance or attached to it, but not mandatorily on the surface of the product. We are available to discuss an appropriate wording.

ANNEX I – Technical Remarks

Calculations

We believe that in order to be technically accurate, the documents should undergo the following modifications in the formulas proposed:

Corrected Dust pick up

In order to provide a correct result the formula should be modified both in the Ecodesign (page 12) and the Energy Labelling (page 65) as follows:

$$DPU_c = DPU_c' \times (K_{ref}/K_c)$$

should be

$$DPU_c = DPU_c' / (K_{ref}/K_c)$$

Correction for Dust Pick Up on hard floor and carpet

On page 60 the dpu for carpet ration should be normalized following the calculation below. We believe it is important to make clear that only dust pick up values can be used that are corrected with the prescribed reference system:

DPU_c =corrected dust removal for carpet

$$DPU_c = DP_{measured} / (K_{ref} / K_c) \text{ (\%)}$$

K_{ref} : Measured dust removal ability of the reference Vacuum Cleaner system on the test carpet used for the determination of energy efficiency

K_c : Calibrated dust removal ability of the reference Vacuum Cleaner system used for the test. This value, expressed in percent, is communicated by the manufacturer

As described in prEN 60312-1, draft, 11 September 2011

Modification of the Formula for SE calculation

We believe the formula for the Standard Energy Consumption Calculation (SE) following the standard IEC650312-1 as follows:

$$SE = \frac{(P + NP) \times t}{A} = (P + NP)/(HW \times v)$$

Where:

- P is the average power consumption
- v is the speed of the nozzle : 0.5 m/s
- HW is the cleaning head width (m)

This formula simplifies the measurement and calculations of this parameter as:

- It does not require a reference to any standard
- No tolerances are derived from the variation of the speed and the length of the test area
- No tolerances are derived from measuring the speed

Declaration of Dust Re-emission

The Energy Label requires declaring the value of dust re-emission for a whole range of particle sizes (and not-fractional values for multiple particle size classes). It should be clarified how to calculate this value.

We would like therefore to propose the following wording for its definition:

dust re-emission” is the ratio of the number of all dust particles of the stated range of size emitted by the Vacuum Cleaner to the number of all dust particles of the same particle size range entering the suction inlet when fed with dust of a specific amount and particle size while the Vacuum Cleaner is operating at its maximum power setting”

Reference to measurement procedures is made in Annex VII (Label) and Annex II

Ecodesign “MEASUREMENT AND CALCULATION METHODS”. Industry suggests EU Commission to publish in OJEU respective references including noise test procedure. We would like to mention that noise EN-standards exist (EN 60704 series). WE would appreciate very much, if especially these standards are referenced in OJEU soon.