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## Position on Energy Labelling for Residential Ventilation Commission Regulation (EU) 1254/2014 revision:

Dear Mr. Polverini,

EVIA welcomes the revision of EU 1254/2014 and the introduction of new labelling scheme for residential ventilation units. However, after analysing the new proposal in the Final Task 6 Report, EVIA is concerned about the possible unintended consequences of the proposed labelling calculation and the classes for the different products.

First of all, we have to understand that the regulation covers both Unidirectional Ventilation Units (UVUs) and Bidirectional Ventilation Units (BVUs). **UVUs and BVUs are not interchangeable in the meaning, that a customer in an existing building does not have a choice to change the product and in consequence the system without the need for deep renovations at significant cost.** Such a change is entirely different from changing a heat generator, a refrigerator, room air conditioner or a dishwasher, for example. In addition, national building regulations can add to this non-substitutability. For example, in France and Germany a decentralised system is in general not an option in multifamily dwellings with internal wet rooms due to the national building regulations and fire restrictions.

Furthermore, it is accepted that the energy performance of ventilation systems is accounted for within the harmonised or national EPBD calculations. In these calculations the energy demand is calculated based on a typical user scenario with the known parameters of the given building and interacting parameters within the ventilation system. The Energy labelling is not useful for these calculations but only the individual parameters like electrical power of fans SPI, heat recovery, leakage rates etc. The parameters (declaration according to EU 1253/2014) are typical input parameters for the energy performance calculations of the buildings and thus its Energy Performance Certificate (EPC) class, **not the labelling class**.

Initiatives to promote the installation of new and the retro-fitting existing ventilation units (for both UVU and BVU) must be based on a visible improvement on the product labelling.

The EU's energy related products (ErP) legislative framework, comprising the Ecodesign Directive and the Energy Labelling Regulation, are effective tools for improving energy efficiency. They **help eliminate the least performing products from an energy efficiency perspective** from the market and support industrial competitiveness and innovation by **promoting the better environmental** performance of products throughout the internal market.

## This is not the case with the current proposal outlined in the Final Task 6 Report on the review of Regulation (EU) 1254/2014.

Looking into the currently proposed labelling scheme, we find that for a given control factor CTRL the label class does not change if a best-in-class fan or a very inefficient fan system (SPI) is implemented, even if the electrical power is Factor 4. Most of the UVUs on the market perform in class F. In consequence, even the worst performing UVU will have the same label as the best on the market. As such there is no incentive for industry or the consumer to invest in improvements in UVU efficiency.

Airflow control												
RVU with central airflow control			SPI									
UVU	0,05	0,08	0,11	0,14	0,17	0,2						
1,00	-9,99	-8,91	-7,82	-6,73	-5,64	-4,56	G	G	G	G	G	G
0,95	-12,36	-11,38	-10,40	-9,42	-8,44	-7,46	F	F	F	G	G	G
0,90	-14,73	-13,85	-12,96	-12,08	-11,20	-10,32	F	F	F	F	F	F
0,85	-17,08	-16,29	-15,51	-14,72	-13,94	-13,15	F	F	F	F	F	F
0,80	-19,42	-18,73	-18,03	-17,33	-16,64	-15,94	F	F	F	F	F	F

Looking further into the minimum requirements of Regulation (EU) 1253/2014, SEC shall be < 20. UVUs perform in class E or D, independent of the fan performance, only dependent on the CTRL class.

RVU with local airflow control												
UVU	0,05	0,08	0,11	0,14	0,17	0,2						
0,95	-12,36	-11,38	-10,40	-9,42	-8,44	-7,46	F	F	F	G	G	G
0,85	-17,08	-16,29	-15,51	-14,72	-13,94	-13,15	F	F	F	F	F	F
0,70	-24,08	-23,55	-23,02	-22,48	-21,95	-21,42	E	E	E	E	E	E
0,45	-35,57	-35,35	-35,13	-34,91	-34,69	-34,47	D	D	D	D	D	D

## As a summary, the current label does not provide useful information to assist/motivate a consumer to purchase a better performing UVU and it is therefore not helpful as a basis for public and private financing conditionality.

The situation is actually similar for BVUs. Independent from the fan and heat recovery efficiency, most of the units perform in class C while some fall in D. The controls performance (from top runner to manual control) changes this slightly + or - one class. Again, this is not a qualified basis to guide customer to a good performing product within the range of its application.

In new build houses, the national or regional building performance and classification will indeed steer to better performing building with systems, but again, the customer has only the choice of the product that fits into this system.

However, as said in the statements above, it is rarely the case, that a customer has a choice to shift from a UVU to BVU based on labelling information when undertaking a renovation. In the existing building stock the construction framework defines the system, and the consumer has only the choice of the product that fits into this system.

UVUs are widely considered to be easier to install in building retrofits and renovations, incur lower investment costs, do represent real added value in reducing energy consumption and in maintaining good indoor air quality, when compared to buildings with no mechanical ventilation. Disqualification of UVUs on the basis of energy label performance would disincentivise their use in retrofit or renovation projects with technical or tighter budgetary constraints, thus potentially preventing the use of a very energy efficient and health effective technology.



In both cases the proposed labelling scaling does not provide an effaceable incentive for the decision-making process nor as a basis for conditionality for public or private financing initiatives. **Therefore, EVIA requests a fundamental change of the labelling for residential ventilation**. It is not understandable why it is proposed to split the label between unducted and ducted units, which perform similarly, but a split label for UVUs and BVUs is not being considered.

There might be options for some adaptions in the calculation procedure including the parameters of the defined volume flows  $q_{ref}$  or  $q_{net}$ , or the step size of the classes, but this might hardly solve the fundamental problem.

Labelling for residential units must remain based on a common SEC calculation for all types of ducted and nonducted BVUs and UVUs. On that basis a split labelling scaling is a possibility. SEC calculations for ducted and nonducted need to be made comparable. The SEC value itself must be available on the label to better facilitate comparison, sub-labelling could be introduced similar to the sub-labelling for humidity and acoustic performance.

EVIA would be grateful to support the European Commission to elaborate a more product specific and targeted approach.

We look forward to your response and please do let us know if you have any questions ahead of a possible meeting.

Kind regards,

Mr. Russell Pattern EVIA Secretary General

