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## Position Paper

### In a nutshell

**With this paper, Eurovent provides its feedback following the second online Stakeholder meeting for the revision of the Ecodesign Regulation on professional refrigeration products held by DG GROW on 13 January 2022.**

### Background

Eurovent has attended the second online Stakeholder meeting for the revision of the Ecodesign Regulation on professional refrigeration products held by DG GROW on 13 January 2022 and would like to thank the European Commission for the opportunity to provide feedback to the ongoing review.

### Refrigerants

Eurovent holds that the most recent approach used toward refrigerants in the Ecodesign measures must be kept.

Specifically, Eurovent holds that the current review of the Ecodesign regulation on professional refrigeration shall be neutral toward refrigerants and not consider any longer any bonus for products making use of low-GWP refrigerants. This provided that, based on the EC Consultant current/future assessment (to be shared with the stakeholders), it would not result in a significant reduction of the products currently available on the market.

### Walk-In Cold rooms (WICRs)

Eurovent holds that it is difficult to consider WICR as a product that would qualify for any Ecodesign measure.

The reasons are presented in the following.

### Legislative framework: Construction Product Regulation (CPR)

WICRs are a kind of construction product, in particular products treated as kits under the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011, CPR (previously CPD - Council Directive 89/106/EEC).

A WICR in a sense, is a building consisting of one or more rooms, integrated permanently into a building.

Performances of WICRs are not negligible and do play a very important effect on the physics and performances of buildings they are installed within (e.g. infiltrations/exfiltrations, heat transmission, one common refrigeration system used for both the HVACR systems and WICRs, only one electrical system, etc).

Furthermore, it is also to be noted that energy economy and heat retention are among the 7 essential requirements under the CPR.

**Thus, Eurovent holds that WICRs might qualify for being covered by CPR and not by Ecodesign measures.**

### Testing methods/energy efficiency calculation

WICRs are covered by a set of EN standards assessing only the thermal performance of the insulated envelope, nothing is currently present in terms of testing methods/energy efficiency calculation of WICR as a whole.

Specifically, the standards currently in place are:

- EN 16855-1:2017 Walk-in cold rooms - Definition, thermal insulation performance and test methods, Part 1: Prefabricated cold room kits.
- EN 16855-2:2018 Walk-in cold rooms - Definition, thermal insulation performance and test methods, Part 2: Customized cold rooms.
- EN 17432:2021 Packaged refrigerating units for walk-in cold rooms - Classification, performance and energy consumption testing.

It must be stressed that the EN 17432:2021 addresses only the efficiency of the refrigeration system used in the so-called monoblock units (representing a market with a limited energy consumption and limited improvement potential). And, vice versa, it does not assess the thermal performances of the WICR supposed to be connected to the addressed refrigerating system.

One has also to consider that the application of the EN 17432:2021 to the calculation of the efficiency of any other kind of WICRs might be extremely misleading and wrong. This because:

- It might result in an overlap of the requirements applying to the condensing units used for the monoblock units.
- It does not consider the performances of the whole refrigeration system made of several WICRs connected to only one system (what about condensing temperature? What about evaporating temperature? What about floating evaporation? What about the efficiency of the system including the other refrigerating appliances with a direct sales function installed in the same supermarket?).
- It does not consider at all the thermal performances of the WICRs.
- It does not consider the airflow temperature as well as humidity.

One might also want to look at the AIRAH Manual DA12. The suggested point system approach cannot be replicated as it is to the EU market; before being considered as applicable to a European Ecodesign measure it needs to be tested and fine-tuned with the European products' peculiarities/conditions. Currently, this is not the case.

### Proposed point rating index elements

The Consultant has proposed an approach based on a point rating index (see table below).

Eurovent holds that the proposed approach does not reflect the status of the art, does allocate a score to parameters that do not relate to WICRs characteristics, gives value to parameters not having a measurable score, does not consider the real-life usage of WICRs. **Furthermore, it is to be stressed that the proposed approach does not properly correlate the WICRs energy consumption with any of the proposed point rating index elements.**

Feature	Outline of criteria	Min. rating	Max. rating
<b>1. Equipment, controls and defrost assessment</b>			
Efficiency of refrigeration system	Based on Energy Efficiency Ratio (EER) of the refrigeration system (see 1 a)	0	3.5
Floating head pressure capability	Presence (or not) of floating head pressure control and its temperature scope (see 1 b)	0	1
Defrost controls	Type of defrost used (see 1 c)	0	0.5
<b>2. Insulated envelope assessment</b>			
Wall and ceiling thermal insulation	Minimum R-value (see 2)	0	1
Floor insulation	Minimum R-value (see 2)	Chilled: -0.5; Frozen: -1.5	0
Transparent windows and doors	Glazing type (see 2)	-0.5	(0.5)
<b>3. Air infiltration assessment</b>			
Measures to minimise air infiltration load	E.g., doors, curtains, alarms (see 3)	0	1.5
<b>4. [Refrigerant type assessment]</b>			
Refrigerant GWP	GWP and measures to minimise charge (see 4)	0	1.5
<b>5. Collective best practice measures assessment</b>			
List of eligible measures	Includes: lighting efficiency, vapour sealing, heat load calculation, commissioning, documentation (see 5)	0	1
		<b>Maximum score:</b>	<b>10</b>
		<b>Minimum score:</b>	<b>-2.0</b>

### Efficiency of refrigeration system

As presented above, there is no standard defining how to measure the efficiency of the refrigeration system used for WICRs. The EN 17432 does have in its scope the efficiency of a refrigerating system used for monoblock units only.

How to calculate the efficiency of the system made of several WICRs connected to only one refrigeration system is not known nor presented. One has also to consider that other commercial refrigeration products are usually included in the same system and influence the final performances. Finally, how to assess the real-life efficiency is unrepresented.

So, Eurovent holds that this section is to be dropped out.

### Floating head pressure

The same comments as above apply.

### Defrost type

The same comments as above apply.

### Air infiltration assessment

The prevention measures considered do not really reflect the status of the art (plastic strips have the same score of air curtains(?)) and we hold that are not applicable.

So, Eurovent holds that this section is to be dropped out.

### Refrigerant type assessment

Eurovent holds that the current review of the Ecodesign regulation on professional refrigeration shall be neutral toward refrigerants and not include refrigerants in any scoring matrix.

So, Eurovent holds that this section is to be dropped out.

### Collective best practise assessment

The impact of the proposed best practises is to be considered as negligible, and, so, also this section is to be dropped out.

### Place on the market/put into service and possible market surveillance

WICRs are part of a very complex technological system which involves several different contractors. The last contractor is the one who connects the evaporators to the refrigerating system, but it does not mean that it should be finally responsible for the compliance of the products. Moreover, the last contractor owns only a minor part of the parameters at the proposed scoring matrix, it is not clear how it should be able to self-declare data which is not at its disposal.

Furthermore, the Commissioning of WICR is more than often out of the control of the WICRs manufacturers. How can they be liable for self-declaring parameters (according to the proposed scoring matrix) which are not measurable nor in their disposal?

### Conclusions

Based on all the different above-presented arguments, Eurovent holds that WICRs are not eligible for any Ecodesign measures.

So, Eurovent asks to exclude WICRs from the scope of the current review as well as from any future revision clause.

### Condensing Units (CUs)

#### Seasonal Approach

Eurovent has carefully assessed the Commission proposal of assessing the performances of Condensing Units throughout the SEPR approach.

Eurovent holds that the energy consumption in the use phase is to be carefully assessed and thus supports the proposed introduction of the SEPR for the units in the scope of the review.

#### MEPS

Concerning the performance parameters presented at the table 19 of the stakeholder meeting presentation, one has to consider that they have to be properly presented in the light of the proposed SEPR approach and furthermore it is to be stressed that the rounding to one digit does not allow for a proper assessment/evaluation of the proposed MEPS.

Thus, before providing the Consultants with its position, **Eurovent asks for a further proper assessment.**

#### Scope

Larger LT condensing units (above 20 KW) and for MT above 50 KW are very rare on the market and compete with other kind of products not covered by any Ecodesign measure nor included in any ED/EL WP. The possible inclusion of larger units would result in a more complicated market or, maybe, in a distorted market.

Thus, Eurovent does not support increasing the regulation's scope for LT condensing units to above 20 KW and for MT to above 50 KW.

On the contrary, Eurovent supports that CUs having an evaporator on board are not to be covered by the scope of the current review.

## Energy Label

Eurovent carefully assessed the proposal of introducing an energy labelling system for condensing units.

One has to preliminary consider that CUs are typically B2B products, and so the possible introduction of an energy label would not result in a more educated nor efficient market.

Furthermore, it is to be considered that CUs are usually in competition with other kinds of products not covered by any Ecodesign/energy labelling measure nor included in any ED/EL WP. So, the possible introduction of CUs' energy labels would not be reflected in the customers' choice and so the market would not benefit from it.

This would only result in an additional burden for the industry which should also take care of the related EPREL compliance without any additional benefit for the market/community.

**Thus, Eurovent does not support the introduction of any energy labelling measure for CUs.**

Just for the aim of providing additional indications, it is to be stressed that according to our preliminary analysis, the proposed energy classes seem to be very narrow and not allowing the usual verification tolerances (10%).

## Heat Recovery

Heat recovery of condensing units, in which the extracted heat from refrigeration showcases can be re-used for comfort heating, plays a significant role in energy savings and reducing annual energy consumption. As heat recovery contributes to the decarbonisation as well as to the energy efficiency first principle, the inclusion within this Ecodesign regulation or standardisation can contribute to the current and future decarbonisation efforts.

Within the current ENTR Lot 1 review, heat recovery is not considered yet, making a standardised efficiency comparisons between heat recovery systems more difficult as they are unavailable. Linked to that, efficiency data of such heat recovery of refrigeration products are unharmonized and apply different approaches. By introducing heat recovery within the regulation or as an item for future regulation, it will also contribute to raise awareness towards customers on innovative technologies on the market.

## Eurovent and transparency

### When assessing position papers, are you aware of whom you are dealing with?

Eurovent's structure rests upon democratic decision-making procedures between its members and their representatives. The more than 1.000 organisations within the Eurovent network count on us to represent their needs in a fair and transparent manner. Accordingly, we can answer policy makers' questions regarding our representativeness and decisions-making processes as follows:

<p><b>1. Who receives which number of votes?</b></p> <p>At Eurovent, the number of votes is never determined by organisation sizes, country sizes, or membership fee levels. SMEs and large multinationals receive the same number of votes within our technical working groups: 2 votes if belonging to a national Member Association, 1 vote if not. In our General Assembly and Eurovent Commission ('steering committee'), our national Member Associations receive two votes per country.</p>	<p><b>2. Who has the final decision-making power?</b></p> <p>The Eurovent Commission acts as the association's 'steering committee.' It defines the overall association roadmap, makes decisions on horizontal topics, and mediates in case manufacturers cannot agree within technical working groups. The Commission consists of national Member Associations, receiving two votes per country independent from its size or economic weight.</p>
<p><b>3. How European is the association?</b></p> <p>More than 90 per cent of manufacturers within Eurovent manufacture in and come from Europe. They employ around 150.000 people in Europe largely within the secondary sector. Our structure as an umbrella enables us to consolidate manufacturers' positions across the industry, ensuring a broad and credible representation.</p>	<p><b>4. How representative is the organisation?</b></p> <p>Eurovent represents more than 1.000 companies of all sizes spread widely across 20+ European countries, which are treated equally. As each country receives the same number of votes, there is no 'leading' country. Our national Member Associations ensure a wide-ranging national outreach also to remote locations.</p>

Check on us in the [European Union Transparency Register](#) under identification no. 89424237848-89.

### We are Europe's Industry Association for Indoor Climate (HVAC), Process Cooling, and Food Cold Chain Technologies – thinking 'Beyond HVACR'

Eurovent is Europe's Industry Association for Indoor Climate (HVAC), Process Cooling, and Food Cold Chain Technologies. Its members from throughout Europe represent more than 1.000 companies, the majority small and medium-sized manufacturers. Based on objective and verifiable data, these account for a combined annual turnover of more than 30bn EUR, employing around 150.000 people within the association's geographic area. This makes Eurovent one of the largest cross-regional industry committees of its kind. The organisation's activities are based on highly valued democratic decision-making principles, ensuring a level playing field for the entire industry independent from organisation sizes or membership fees.

Eurovent's roots date back to 1958. Over the years, the Brussels-based organisation has become a well-respected and known stakeholder that builds bridges between the manufacturers it represents, associations, legislators and standardisation bodies on a national, regional and international level. While Eurovent strongly supports energy efficient and sustainable technologies, it advocates a holistic approach that also integrates health, life and work quality as well as safety aspects. Eurovent holds in-depth relations with partner associations around the globe. It is a founding member of the ICARHMA network, supporter of REHVA, and contributor to various EU and UN initiatives.