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Position of ECOS, EEB, Friends of the Earth Europe, WWF EPO, CAN Europe and INFORSE Europe on the EC Working Documents on the Ecodesign and Energy Labelling of professional cold appliances

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Overall comments

We welcome the Working Documents on professional cold appliances (service cabinets, blast cabinets, walk in cold rooms, process chillers and remote condensing units) and **call for swift adoption of Ecodesign and some Energy Labelling regulations**. The very significant energy consumption and saving potential of this product category make a speedy adoption even more necessary.

We are however, deeply concerned with the fact that **data was put forward by industry after the preparatory study was concluded** and the repeated statements during the meeting that it is impossible to come up with new datasets. In some cases (blast cabinets and walk in cold rooms) very limited data has actually been provided. This should not set a precedent for other products.

Finally, we **strongly support the introduction of a Tier III for all the products covered**. This would send a long term signal to manufacturers for ambitious minimum energy performance standards as well as the use of greener refrigerants, allowing sufficient time for production cycles to meet these requirements. This Tier could be based on the BNAT values identified in the preparatory study. Setting a revision date before this Tier would ensure consistency between the technological advancements and the regulatory requirements.

Insufficient promotion of alternative refrigerants

Whereas refrigerants have been identified as a significant aspect in the preparatory study, we are disappointed there is no requirement to promote low Global Warming Potential (GWP) fluids based on the argument that product design is not the best way to address this. We fundamentally disagree and consider that promoting low-GWP refrigerants would be an environmental benefit, without a systematic trade-off with energy efficiency. To achieve this, a redesign of products and varied incentives can be used. We consider that the current F-gas regulation is insufficient to drive this market transformation and although the revision of this is not concluded, additional requirements within Ecodesign product regulations will only support it and will not be contrary to it.

One option would be to **set progressive requirements on the GWP performance, with a limit at GWP of 150 in 2014 (Tier I) and a total ban by 2017 (Tier II)** where components and parts are

available and the safety risk is not critical. The setting of a maximum limit is in line with the preparatory study.

In the Ecodesign regulation for room air-conditioners (ENER 10), provisions to promote low-GWP refrigerants have been included. A similar approach could be used here, based on the 'polluter pays' principle: for appliances using refrigerants of GWP > 150 the application of a **malus could be applied on the energy efficiency requirements**.

Alternatively, an approach based on limiting the absolute GWP impact, i.e. refrigerant charge x GWP, could be applied with a stepped reduction from 2014 to 2017. This would encourage simultaneously the use of smaller charge sizes and the use of low(er) GWP refrigerants (whether natural refrigerants or low-GWP synthetics).

Finally, regarding **product information requirements**, information related to the refrigerants used should be clearly indicated. Name and GWP of the refrigerant as well as the refrigerant charge should be mentioned in the technical documentation for **all** product groups. We also suggest adding the R-number designation(s) (ISO 817), the chemical name(s) and, if it is a mixture, the composition. These information requirements should be better harmonised across all the product groups.

Architecture of the future regulation

During the consultation forum the possibility of regulating only some of the products falling under the scope of ENTR Lot1 was raised due to lack of data etc. If this is indeed the case, and although we would like to see MEPS for all parts, it has to be highlighted that amending regulation is easier than producing a new one. We therefore propose that at least the following are taken into account:

- Part 1 (professional cabinets): Ecodesign regulation and energy labelling
- Part 2 (blast cabinets): Ecodesign regulation: no minimum requirements, but information requirements (refrigerants and energy consumption) as well as data collection in preparation for the revision.
- Part 3 (walk in cold rooms): Split into two regulations: one for prefabricated kids and one for specific building elements (insulation material, etc.)
- Part 4 (chillers): Ecodesign regulation and energy labelling
- Part 5 (RCUs): Ecodesign regulation and energy labelling

Remote Condensing Units: highest potential and very unsatisfactory ambition

The energy consumption for this product group is the highest in comparison to the others, which coupled with the noted growing numbers of these units, makes the need for regulatory action even more pressing. We strongly urge the **Commission to go for more aggressive policies concerning remote condensing units to contain and reverse the exploding growth of energy consumption and environmental impact in this sector**.

Based on the current minimum values, RCUs would be constructed with very inefficient compressors and/or undersized condensers. Taking into account very effective heat exchangers, compressor and motors, as well as high efficiency fans on the condenser, which are all technically feasible, the savings can be much higher. **We therefore urge the Commission to increase all the minimum requirement values in Tier I and II by at least 25% as well as setting a Tier III.** The motors and circulators' regulations should be taken as an example, due to which a big percentage of the products were cut off from the beginning.

We also propose the introduction of an **energy label** for this product group, which could greatly increase transparency for end users. Tier I should set the minimum level, with an A-G to scheme building on top of this. A class should be empty whereas B only populated with the very best products (i.e. the benchmark).

In the working document, water-cooled units are excluded, however, this seems inconsistent and there appears to be no obvious reason for this. It is proposed that this exclusion is removed.

Concerning refrigerants, the end of life phase contributes significantly to the GWP over the product lifetime and thus regulatory action should be taken. The safety/legal argument (compliance with EN 378 and other political debates - F Gas review - respectively) does not justify the contrary. Even though a bonus or malus may not be the key solution to remove the barriers concerning the use of green refrigerants, there has to be a **thorough and open debate on other options (page 1) to speed up the adoption of measures related to these fluids.**

Chillers: substantial increase in ambition is required to deliver savings

We strongly regret that the proposed Tier I is unacceptably low, resulting in marginal energy savings (2-5%), especially taking into account the potential measurement variation in these figures (potentially up to 10%). Available technologies exist (especially those related to compressor, fan and motor efficiency) that can easily lead to a higher improvement potential. **We suggest at least a 25% increase for all the minimum requirements in Tier I and II as well as setting a Tier III.** Harmonisation should be sought with the respective motors regulation. As aforementioned, the circulators and motors regulations should be taken as an example regarding the level of ambition that has to be aimed for, despite the associated impact on the market.

There seems to be an inconsistency between the minimum SEPR values and the equivalent minimum COP values, but without seeing an explanation for where the SEPR values came from, it is difficult to assess their suitability. **Further clarification is needed on this point.**

As in the case of RCUs, we propose the introduction of an **energy label** for the same reasons as above and with similar characteristics. This label should apply for all products irrespective of the technology used.

Professional Cabinets: convergence with household fridges should be sought

We are concerned with the current performance of service cabinets compared to that of household refrigeration and the proposed minimum performance requirements. Even though the calculation methodology of energy consumption for these product groups cannot be directly compared and there are other concerns (such as size etc), the differences of performance in the region of 100 up to 300% are too high. **The tiers proposed should be more ambitious, and an energy performance similar to that of household fridges should set the level for middle-term tiers.**

The proposed energy label is a good suggestion. However, the energy classes should be stringent enough for several years before additional classes are needed. From the proposed methodologies, **Option 2 seems the most appropriate one.** For more specific details on the energy classes, see the recommendations by the Topten International Services, which we fully support.¹

The inclusion of refrigerants in the product information requirements is welcomed. However, **further incentives for the use of greener refrigerants should be given** (see page 1). The cost efficiency argument supporting no regulatory requirements for greener refrigerants is not sufficiently justified.

Finally, the European Standards proposed should be scrutinised, ensuring the reproducibility of these tests. From field experience, this has not always been the case with standards such as the EN 441, for which there is a lot of room for legal interpretations. On market surveillance, the verification tolerance of 5% should be maintained at this level.

¹ http://www.topten.eu/uploads/File/Recommendations_Prof-Refrig_Jan12.pdf

Blast Cabinets: low-hanging fruit to be grasped

The potential energy savings for blast cabinets are low hanging fruit - these savings should be swiftly reaped, since the investment costs to reach these would be minimal. For this product group, **we strongly support a Tier I at the least life-cycle cost (LLCC) level**. A longer term signal should be given early enough, so **an early review** of this product group (**2014/2015**) would be welcomed, to discuss future steps and check the accuracy of the LCC calculations with more market data.

In the product information requirements, the wording concerning refrigerants is different from other product groups. This should be harmonised. **Further incentives for the use of green refrigerants**, given the significant relative benefit from using low-GWP refrigerants for these products, should be given (page 1). The safety/legal argument (compliance with EN 378 and other political debates - F Gas review - respectively) does not justify dropping any regulatory action.

Walk In Cold Rooms: targeted minimum requirements are possible

We suggest splitting the working document on Walk In Cold Rooms (WICR) into two. The result would be (a) one draft regulation on prefabricated kits for WICR and (b) another one on insulation panels, doors, windows etc. intended for the customised WICR. Definitions, requirements etc. in the current Working documents need to be separated accordingly. This approach aims to address the products as they are placed on the European market.

In part (a) minimum requirements on the cooling unit should be included. These could include the minimum COP of the compressor(s) and maximum temperature difference (or minimum UA) for the evaporator(s) and condenser(s) based on the rated capacity of the selected compressor (on the refrigeration unit). Similarly, **minimum efficiency for monoblock systems** would not be difficult to apply. Finally, **regulatory action needs to be taken and incentives given for the use of low GWP refrigerants** (see page 1).

In part (b) the minimum requirements should be more stringent. For windows, there are already products on the market which have U values around 0.5 (found in windows used in domestic housing) while experience from the US shows that the U values for walls can be set at a more ambitious level than the ones proposed. **More stringent values for windows, doors and walls have to therefore be set.**

Incentives should be given to foster products with high insulation characteristics - like vacuum insulation. For the assessment of vacuum panels, a longer lifetime of 20 years (compared to 10 years as stated in the working document) is reasonable. Such a change would impact the LLCC values and highlights that it would already make sense now to undertake the necessary investment in order to achieve the related energy savings.

Finally, it is not clear why the proposed review is set after 5 years, whereas for the rest of the parts of ENTR Lot 1 this is set to 4.

Missing benchmarks

The Ecodesign Directive states that "... benchmarks must be identified by the Commission in the implementing measure on the basis of information gathered during the preparation of the measure" as well as "benchmarks set in other countries' legislation should be taken into consideration (...) when setting requirements". The European Commission should therefore introduce benchmarks for all parts where these have not yet been included, namely Parts 2 to 5. These benchmarks should cover not only the energy performance but also the refrigerants.

END.