Joint position on the combination of the energy labels for local space heaters (ENER Lot 20) and air-to-air heat pumps, air conditioners, and comfort fans (ENER Lot 10)

Brussels, 31 August 2022

Introduction and Executive Summary

Following the open letter published on 8 February 2022, the joint industry position of 22 June 2022, and the Consultation Forum of 24 June 2022, this joint position paper further elaborates the undersigned associations' recommendations against the merger of the energy labels under ENER Lots 10 (air-to-air heat pumps, air conditioners, and comfort fans) and 20 (local space heaters).

In our 22 June 2022 position paper, we elaborated the following concerns:

1) Local space heaters and air conditioners are incomparable products.
2) Merging different energy labels will not enable consumers to make informed purchase decisions.
3) Smart local space heaters provide the potential of flexible grid management.
4) Incentivising investment and innovation are needed and fostered by split energy label scales.
5) A level playing field and technology neutrality are ensured by split energy label scales.

This paper further elaborates on the flaws that we have detected in the Commission proposal and offers a proposal on how to move forward while updating the energy labelling requirements in line with the latest technological and market developments:

Part I: The consumer study on merging the energy labels

1) The study cannot predict real-life effects of a merged energy label scale
2) The consumer study is based on the response of only 50 % of the respondents
3) The study ignored the supply aspects of the market
4) The consumer study does not consider that existing buildings do not always offer the conditions for switching between heating appliance types

Part II: Our proposal for aligning the energy labels with technological and market developments

Part I: The consumer study on merging the energy labels

1. The study cannot predict real-life effects of a merged energy label scale

The consumer study cannot predict the real-life effect of a combined energy label.[1] The choice experiment described in Chapter 4 raises the following limitations:

1. The experiment **does not consider technical constraints**, as consumers could choose any alternative. However, not all the European consumers can install a chimney (e.g., apartment buildings), the external element of a heat pump (e.g., historical buildings), or there could be other technical constraints.
2. It **does not consider regulatory constraints**, as several European countries have national or regional laws that constrain which appliances can be installed (e.g., regional air quality laws).
3. It **assumes that consumers had access to all energy sources** (electricity, wood, and gas). Access to energy sources is a huge limitation on the selection of a technology type and strongly influences consumer behaviour.
4. It assumes that **consumers had access to all technologies** (with 3 different models for each technology). Unfortunately, not all the technologies nor the support to service them are available across Europe.
5. It minimises the role of the **consumer's evaluation of the aesthetics of the product.** Consumers that buy LSH also evaluates cosiness and aesthetic of the product. Companies invest millions in communication and showroom network to gain competitiveness. Whereas the study relied only on a photo on a table that strongly minimise the effect.
6. Hypothetical willingness to pay for a product in a consumer study leads to strong '**hypothetical bias**.' This happens because the answer does not impose any financial consequences for the participants' decisions (hypothetical willingness to pay). Participants regularly overstate their real willingness to pay when measured hypothetically by 50 %.[2] The hypothetical bias is not evaluated in the study.

Above-mentioned implies an **overestimation of the average energy efficiency gain** with the combined energy labelling scale. In fact, all the previous variables are barriers for consumers to switching product types. This means that there are less consumers that choose a product type based on energy efficiency than suggested by the study. For the consumers who are forced to choose a product for one of the aforementioned reasons, a combined label brings results in a loss of information due to a lack of granularity (in distinguishing different energy efficiency levels within the product groups).

In fact, the study evaluated the importance of these variables by analysing recent consumer behaviour. It supposed that the consumers are buying a fixed heater **without consider other types of heaters:**

- 30.4 % could not, due to legal or practical issues (variables 1 to 4, effect not considered).
- 26.6 % did not, because they were expensive (variable 6, underrated effect).
- 9.5 % did not, because of an unattractive design (variable 5, underrated effect).

[1] This CentERdata study was published on 30 March 2021, distributed to stakeholders on 16 June 2021, and subsequently presented at the Consultation Forum on Ecodesign and Energy Labelling of 6 July 2021.

[2] Schmidt, J., Bijmolt, T.H.A., 'Accurately measuring willingness to pay for consumer goods: a meta-analysis of the hypothetical bias,' *J. of the Acad. Mark. Sci.* 48 (2020), pp. 499–518.

Nevertheless, these variables, which are barriers for consumers to switching product types, were not included in the choice experiment, nor were they mentioned as sources of error in the choice experiment results. The study only acknowledges that it "*show[s] no substantial shifts in the types of products respondents considered as a result of label changes*" (…) "*These* ***results thus do not provide strong evidence that combining scales encourages consumers to consider heat pumps*** *when they intended to buy a heater.*"

As such, the assumed gain of 12 % on average appliance energy efficiency cannot be fully attributed to the combined energy label scales. The impact of the combined scales could even be negative due to the greater importance of the loss of granularity or because of the earlier-mentioned framework variables. Moreover, several simplifications in the energy efficiency savings calculations lead to overevaluations of the average energy efficiency gain.

2. The consumer study is based on the response of only 50 % of the respondents

The 16 June 2021 consumer study concludes that combining the energy labels of different product groups could better inform consumers in choosing the least energy-consuming technology. However, the study was incomplete, as it assessed only the choice of consumers that have not yet made a choice on the specific technologies (approximately 50 % of the respondents).

The impact of the choice from consumers that were aware of their preferred technology was not evaluated. This group will not compare the efficiency differences between ENER Lots 10 and 20 products but is interested in one product group only. A merged energy label will remove the granularity that they need for choosing the most efficient product model within its product group.

3. The study ignored the supply aspects of the market

In addition, the consumer study ignored the supply aspects of the market. The energy labelling framework has a pull effect: it encourages manufacturers to continuously innovate and improve the energy efficiency of their products. By artificially creating comparability between unrelated product groups and selectively pushing certain product groups towards higher energy label ratings, the manufacturers of the latter product groups will lose their motivation to continue investing in improved energy efficiency. As such, we believe that the merger energy label will have a negative long-term effect on the performance of air-to-air heat pumps, air conditioners, and comfort fans.

4. The consumer study does not consider that existing buildings do not always offer the conditions for switching between heating appliance types

The consumer study's mismatch between ignoring parts of the demand and fully leaving out the supply aspects, is further complicated that over 80 % of the buildings in use in the EU in 2050 has already been built. Existing buildings do not always offer the conditions for switching between heating appliance types, which means that most replacements or renovations will stay within the same product groups. It is therefore essential to highlight the most efficient models within specific product groups.

Part II: Our proposal for aligning the energy labels with technological and market developments

The undersigned associations appreciate and support the Commission's efforts for regulatory simplification while pursuing the highest environmental and energy objectives in line with technological and market improvements. We have taken the positive aspects from the Commission proposal and the elements that we could learn from in the aforementioned consumer study. As such, we would like to propose an alternative that could achieve regulatory simplification while maximising the energy efficiency of products on the market.

We propose separate energy labelling scales for the following product groups:

Primary function	**Product groups**
Heating & cooling	Air-to-air heat pumps
Heating	Combustion LSH
Heating	Electric LSH
Cooling	Air conditioners
Cooling	Comfort fans

Each product groups will have a dedicated energy label (A to G), and products sharing a primary function, which does not mean they are technically comparable, will share a common classification. As such, the necessary granularity level is maintained, and consumers will be able to compare products based on their functionality. In order to introduce an element on which the five different product groups could be compared, **we recommend adding the annual energy consumption on the energy label**.

The undersigned associations are currently developing a further elaboration of the proposals in light of the proposed removal of the BLF factor. We are also supporting the possibility to calculate energy efficiency on the basis of final energy instead of utilising the Primary Energy Factor (PEF) default value of 2.1. More information will follow when available.

About the signatories

About Bioenergy Europe
Bioenergy Europe is the voice of European bioenergy. It aims to develop a sustainable bioenergy market based on fair business conditions. Founded in 1990, Bioenergy Europe is a non-profit, Brussels-based international organisation bringing together 42 associations and 135 companies, as well as academia and research institutes from across Europe.

About CEFACD
The Comité Européen des Fabricants d'Appareils de Chauffage et de Cuisine Domestique (CEFACD) represents the European manufacturers of individual heating and cooking appliances. We represent over 300 local companies generating € 5 billion in sales volume. Our members have a strong European footprint and contribute to wellbeing by providing local heating appliances to European households. More information: https://www.cefacd.eu/

About Équilibre des Énergies (EdEn)
EdEn (Équilibre des Énergies) is a cross-sectional association gathering companies from the energy, building and mobility sectors. EdEn makes concrete recommendations for the reduction of GHG emissions in the European Union and in France. We aim at facilitating the uptake of low-carbon energy sources, the development of new technologies that contribute to the energy transition and the development of energy efficient processes.

About the European Heating Industry (EHI)
EHI represents 90% of the European market for heat and hot water generation, heating controls and heat emitters, 80% of biomass central heating, as well as 75% of the hydronic heat pump and solar thermal markets. Our Members produce advanced technologies for heating in buildings, including: heating systems, burners, boilers, heat pumps, components and system integrators, radiators, surface heating & cooling and renewable energy systems. In doing so, we employ directly more than 160.000 people in Europe and invest more than 700 million euro a year in energy efficiency.

About the European Infrared Heating Alliance (EIHA)
The European Infrared Heating Alliance (EIHA) is a network of national associations that represents infrared heating manufacturers who have a strong European footprint. Together, we develop environmentally friendly heating that is powered by renewables. Our products are fully repairable, sustainable, and improve the comfort and wellbeing of users. More information: www.ig-infrared.com/en/home.html

About the Electric Underfloor Heating Alliance (EUHA)
The Electric Underfloor Heating Alliance (EUHA) represents European manufacturers of electrical underfloor heating and their immediate supply chain. Our members foster energy savings through the adoption of renewable-powered smart grid infrastructure, and continuously improve the comfort and wellbeing of users. See also: www.euha-alliance.eu.

About EuropeOn
EuropeOn is the European voice of the electrical contracting industry since 1954. With 1.8 million professionals in over 300.000 businesses and with a turnover of over 200 billion euros, electrical contractors provide electrical installations for buildings and infrastructure, enabling cities and

citizens to take part in the Energy Transition. EuropeOn addresses energy, climate, mobility, building and skills policies. The association is campaigning in favour of #Skills4Climate and #EUGreenRecovery and is part of the Electrification Alliance, Construction 2050, the Platform for E-mobility, and the Forum for European Electrical Domestic Safety. www.europe-on.org

About AIEL

AIEL is the Italian association representing the stakeholders of the wood-energy sector. Since 2011 it has worked to promote the sustainable energy valorization of woody biofuels (www.aielenergia.it). The association represents 500 stakeholders of the sector, around 70% of the Italian and European domestic appliances and boilers manufacturers (around 700 M€ of turnover). For what concern solid biofuel, AIEL represents 150 producers of woody biofuels and woodchips and 60 Italian companies producing and distributing pellets. AIEL founded and manages in Italy three certification systems: ENplus® (pellet), Biomassplus® (wood logs, wood chips and briquettes) and ariaPulita® (local space heaters and boilers).

About BVF

The Federal Association of Surface Heating and Surface Cooling e.V. (BVF) is the neutral, competent and established partner for companies in the field of surface heating and surface cooling in Germany.

Founded in 1971, the BVF has been committed to establishing standards in technology and quality in more than 50 years of association history. It represents over 60 companies from the system and component construction and cooperates with research institutes, associations and companies from related areas.

Underfloor heating, wall heating systems as well as ceiling heating and cooling and both water-based and electrical systems are on an equal footing and are presented in a product-neutral manner.

About BVIR

The aim of the Federal Association of Infrared Heating e.V. (BVIR) is to validate the many advantages of infrared heating. The BVIR is actively involved in the area of standardization, legislative procedures and scientific research projects and thus offers members and interested parties a platform for active participation and company-neutral information about the development and application of infrared heating. The aim of the BVIR is also to take into account the technological advantages of infrared heaters in the area of energetic evaluation and comfort in the recognized rules of technology.

About AVEBIOM

AVEBIOM is the Spanish Biomass Association gathering more than 160 companies from the whole supply chain of the biomass. Founded in 2004, AVEBIOM promotes the development of the biomass sector always under quality and sustainability premises. AVEBIOM is managing ENplus and BIOmasud biomass quality certification systems and it is representing the scheme SURE for sustainability.

About AEFECC

AEFECC is the Spanish Association of Solid Fuel Fireplace Manufacturers. Our members are Spanish biomass stove and insert manufacturers, but also national representatives of main European brands and suppliers of equipment, flue pipes and accessories required for construction and installation of biomass fireplaces.