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EUROPEAN INDUSTRY ASSOCIATION

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Team member	Phone	Email	Date
Stijn Renneboog	+32 (0)466 90 04 01	stijn.renneboog@eurovent.eu	2021-03-19

Eurovent Position Paper on the Review of the EPBD

In a nutshell

Eurovent strongly supports policy option 3 to inscribe the ambition of the Renovation Wave initiative into legislation. The review should also focus on mainstreaming indoor environmental quality (IEQ) considerations into the Directive, for which a dedicated stakeholder workshop on IEQ should be convened. Eurovent makes the following specific suggestions for improvement:

- **Better implement and enforce the requirements on long-term renovation strategies.**
- **Revisit the flexibility allowed for transposition, converge towards harmonised models.**
- **Introduce EU-wide Minimum Energy Performance Standards.**
- **Align the Ecodesign framework and the EPBD.**
- **Add IEQ aspects to technical building system requirements.**
- **Make access to funds for building renovation conditional upon IEQ criteria.**
- **Improve the EPC framework and include mandatory IEQ and SRI indicators in the EPC.**
- **Mandate the inspection of ventilation systems, add IEQ aspects to all inspections.**
- **Include information requirements related to IEQ.**
- **Make air quality objectives explicit in the review.**

Preamble

The European Union's (EU) ambition to reduce greenhouse gas (GHG) emissions by 55% by 2030 requires a reduction in emissions from the building sector of 60% compared to 2015 levels. The path to this 60% reduction is governed by a stubborn arithmetic: to reach it, the average annual rate of deep renovation will have to increase to 3% until 2030 – more than a tenfold increase of the current 0,2%[1]. This necessarily requires a thorough review of the Energy Performance of Buildings Directive (EPBD) well before the 2026 review foreseen under article 19, with a step up in ambition.

Eurovent therefore strongly supports policy option 3 to inscribe the ambition of the Renovation Wave initiative into legislation, and to ensure that the EPBD is 'Fit for 55'. Moreover, the reviewed EPBD will have to be bolstered with much more financing, guidance, and enforcement at the national and local level to be effective.

That said, indoor environmental quality (IEQ) should not fall by the wayside in consequence of a singular focus on energy performance. Nor should the wellbeing of building occupants hang in the balance owing to the decarbonisation imperative. Buildings must continue to deliver on their primary function of providing healthy and comfortable indoor environments. To that end, IEQ considerations must be mainstreamed into the review of the EPBD. If this is done well, the EPBD has the potential to help achieve the dual aim of both healthier *and* more energy efficient buildings, leveraging the synergies between the two. A dedicated stakeholder workshop on IEQ should be convened for this purpose, involving stakeholders from the building engineering sector and occupational health and safety professionals.

[1] https://www.bpie.eu/wp-content/uploads/2020/12/On-the-way-to-a-climate-neutral-Europe-_Final.pdf

Non-compliant and insufficiently ambitious long-term renovation strategies

Most national long-term renovation strategies (LTRS) were submitted well after the deadline of 10 March 2020 and do not comply with the requirements stipulated in article 2a of the EPBD[2]. At the time of writing –a full year after the deadline – seven Member States have still not submitted their LTRS.

Moreover, the modalities of the national public consultations required by paragraph 2 of article 2a to support the development of the LTRS vary greatly from one Member State to another. Experience has shown that they are rarely modelled after best practice. In the most egregious cases, no consultation took place at all, or it took place without the involvement of key stakeholders in the sector.

In analyses by the Buildings Performance Institute Europe (BPIE), none (!) of the LTRS analysed ambition full decarbonisation by 2050[3]. Only half aimed at GHG emissions reductions of at least 90%. The BPIE also found that most LTRS aim primarily at the decarbonisation of energy supply rather than improvements in the energy performance of buildings per se.

In light of the above, the European Commission should consider amending paragraph 2 of article 2a, to revise upward the 2050 ambition from 80-95% GHG emissions reduction to 100% GHG emissions reduction. The inclusion of an intermediary target of 60% by 2030 should also be considered.

The requirements on the national LTRS, especially the requirement to carry out a public consultation and establish its modalities in an inclusive way, should be much more strictly enforced. The European Commission could further improve its guidance to Member States and encourage best practice, to make sure that LTRS are timely submitted, complete, and sufficiently ambitious.

Proliferation of calculation methodologies and definitions

The goal of decarbonising the building stock across the EU can be better achieved using harmonised EPB calculation methodologies and definitions of nearly zero-energy buildings (NZEB). The current EPBD provides too much leeway for national and regional models and definitions, which are proliferating. The introduction of the Smart Readiness Indicator (SRI) is leading to further fragmentation of the market: Member States may choose to make use of it or not and may even choose to adopt a different methodology altogether than the one proposed in the delegated acts.

Better harmonisation and comparability would reduce uncertainty, lower administrative burden, and enable economies of scale and the standardisation of renovation solutions for industry stakeholders. Better harmonisation of calculation methodologies would also enable better synergies with EU product-level legislation, including the Ecodesign framework and the Construction Products Regulation, across the Single Market.

Ultimately, the laws of physics are the same everywhere in the EU, and objective parameters that account for local particularities exist. The European Commission should revisit the flexibility that is allowed to Member States for transposition and better encourage convergence towards a harmonised European calculation model based on the EN standards developed for that purpose.

Introduction of minimum energy performance requirements

The phased introduction of EU-wide mandatory minimum energy performance standards (MEPS) would be effective at overcoming barriers to renovation if combined with proper funding, guidance, and

[2] https://www.bpie.eu/wp-content/uploads/2020/09/LTRS-Assessment_Final.pdf
[3] https://www.bpie.eu/wp-content/uploads/2021/03/BPIE_LTRS-_10-1.pdf

enforcement mechanisms[4]. MEPS are obviously most effective when combined with an ambitious renovation policy. Given the average annual renovation rate required to reach the 2030 and 2050 targets, compliance with MEPS should be triggered frequently, at as many possible moments in the natural life of the building as feasible.

The European Commission's own modelling in 2016 proved that a basic MEPS would have been the most beneficial measure of all measures considered. The reason it was ultimately not implemented in the reviewed EPBD was a cited lack of statistical data on national building stocks. Since then, the availability of such data has improved, in part thanks to the creation of the EU Building Stock Observatory (EU BSO) and several EU-funded projects.

The European Commission should therefore reconsider the introduction of a basic MEPS requiring the renovation of the worst performing buildings at sale or rent for both domestic and nondomestic buildings. The standards can be raised over time to bring the building stock to the desired level of performance by 2050. The EU-wide MEPS can be designed in such a way as to leave sufficient flexibility to Member States to adapt to national or local particularities of their building stock.

Technical building system requirements related to indoor environmental quality

Technical buildings systems fulfil the ineluctable preconditions for safe human occupancy of indoor spaces. Their primary functions – among them to maintain appropriate humidity levels, to supply fresh air, to enable thermal comfort, to prevent and protect against fire and smoke, and ultimately to safeguard human health and wellbeing – are unmissable, and the fundamental reason why buildings require and will always require energy.

In the pursuit of energy efficiency, these primary functions should not be compromised. And they need not be. Thanks to the Ecodesign framework among others, products meant to be integrated into technical building systems marketed in the EU already meet minimum performance requirements. Most are compatible with net-zero building design, many of them are crucial to it. These Ecodesign-compliant products need to find their way into existing buildings as well as new ones, where they can contribute to both energy efficiency and IEQ.

The European Commission should consider how to better enable synergies between product-level requirements such as those developed within the Ecodesign framework, and the EPBD. The review of the EPBD also offers the opportunity to resolve the inconsistencies between national building codes regarding technical building system requirements affecting IEQ, such as prescribed ventilation rates.

As a starting point, the obligations stipulated in article 8 of the EPBD to set requirements for technical building systems, and assess their energy performance when installed, replaced, or upgraded, should be amended to include IEQ requirements.

Financial incentives and investments in health and productivity

To deliver on the EU's renovation ambitions, innovative ways must be found to unlock much more funding earmarked for energy efficiency improvements in building, from both public and private sources. At the EU level, monies from both the Multiannual Financial Framework (MFF) and Recovery and Resilience Facility (RRF) should be made available for building renovation in proportion to the 2030

[4] See for example: https://www.raponline.org/wp-content/uploads/2020/06/rap-sunderland-santini-mini6mum-energy-performance-standards-june-2020-final.pdf

and 2050 building emissions targets. Positive Money Europe has suggested repurposing some of the European Central Bank's (ECB) refinancing operations to help finance building renovation as well[5].

Investing in building renovation can pay off not just in terms of energy savings, but in health and productivity gains as well, provided sufficient attention is paid to IEQ aspects. Such savings can be achieved whether the benefits are tallied at the building level or at the wider societal level. At the building level, for example, very healthy office spaces have been estimated to yield between 4,4 and 7,7 percent more rent per square meter[6], and to result in reductions of 2% in the prevalence of sick leave[7]. At the societal level, it has been estimated that each Euro spent on building renovation saves around 0,42 EUR in public health expenditure[8].

IEQ considerations should therefore be added to the conditions of access to both EU and national funds earmarked for building renovation. Criteria should be developed so that funding is targeted at projects most likely to realise a combination of energy savings and IEQ improvements, which often go hand in hand.

It should also be considered how the objectives of the EPBD could be better supported by the Energy Taxation Directive and the revenue from the Emissions Trading System (ETS). In the EPBD itself, the European Commission should amend article 10 paragraph 6 to link financial measures to improvements in IEQ.

Review of the energy performance certificates

A thorough review of the framework for energy performance certificates (EPC) is required. Too many EPC in the EU do not represent accurate appraisals of actual or measured energy consumption and there are persistent problems with data consistency and the repeatability of assessments. This decreases trust in the system and reduces the utility of EPC for occupants, owners, and investors.

The European Commission's review should lead to measures that would improve the quality, usefulness, coverage, and comparability across the EU of EPC and energy audits. Requirements on the training and evaluation for EPC assessors should also be strengthened.

Furthermore, the EPC should include a mandatory IEQ indicator, which could be based on EN 16798-1. Examples of how such an indicator could be successfully integrated into the EPC exist and should be examined[9]. On the assumption that the SRI methodology is much better harmonised across the EU in future, an SRI rating should be included in the EPC as well.

Extension of system inspections

Regular inspections of a technical building system help ensure that it continues to work as closely as feasible to the intent of its design over the course of its lifetime, and indeed to assess when the design no longer suits the evolving needs of the building. In this way, inspections and the recommendations that follow from them help not only optimise the energy performance of the system but also its contribution to IEQ.

[5] http://www.positivemoney.eu/wp-content/uploads/2021/02/2021_Building-Renovation-TLTROs.pdf
[6] https://realestateinnovationlab.mit.edu/wp-content/uploads/2020/12/201214_Healthy-Buildings_Paper_V2.pdf
[7] https://www.pubfacts.com/detail/32760082/Moving-to-productivity-The-benefits-of-healthy-buildings
[8] http://bpie.eu/wp-content/uploads/2015/10/Developing-Building-Renovation-Strategies.pdf
[9] See for example the ALDREN-TAIL index: https://aldren.eu/aldren-tail/

The European Commission should therefore include requirements in the reviewed EPBD for mandatory inspections of stand-alone ventilation systems, based on the results of the feasibility study foreseen under article 19a, the conclusions of which were published in December 2019. System inspection and reporting requirements should be amended to include IEQ aspects and IEQ improvement objectives.

Raising awareness about indoor environmental quality

The information requirements of Member States towards owners and tenants stipulated in article 20 are a great way to help raise awareness and overcome barriers to renovation. Here again, the European Commission should include IEQ objectives, to help owners and tenants develop an explicit appreciation of IEQ and the co-benefits of building renovation.

Making explicit air quality objectives in the review of the EPBD

The EPBD has a role to play not just in the transition to a carbon-neutral economy but to another headline objective of the European Green Deal as well, namely the Zero Pollution ambition.

In its review of the Ambient Air Quality (AAQ) Directives, the ENVI Committee recently concluded that the European Commission should regulate Indoor Air Quality (IAQ) as a part of sustainable buildings legislation[10]. The report rightly recognised that tackling air pollution requires a comprehensive approach that goes beyond ambient air quality and emissions control legislation, because a lot of air pollution is not anthropogenic, and the most concerning air pollution is indoors. The EPBD is the only existing piece of EU legislation that could accommodate IAQ requirements. By mainstreaming IAQ and IEQ considerations into the review, the EPBD can play a direct role in reducing building occupants' level of exposure to indoor air pollution.

Moreover, the review of the EPBD should also explore the synergies between air quality and decarbonisation. Most air pollution comes from the combustion of fossil fuels. Insofar as the EPBD contributes to the deployment of renewable energy, energy efficiency, and electrification of end-uses, it would result in air quality improvements as well.

In light of the above, air quality objectives should be made explicit in the review of the EPBD.

[10] https://www.europarl.europa.eu/doceo/document/A-9-2021-0037_EN.pdf

Eurovent and transparency

When assessing position papers, are you aware 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:

1. Who receives which number of votes?

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.

2. Who has the final decision-making power?

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.

3. How European is the association?

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.

4. How representative is the organisation?

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.

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.