

EURIMA Position Paper on the revision of the Energy Performance of Buildings Directive (EPBD)

March 2022

Introduction

EPBD: the cornerstone of the Fit-For-55 Package

EURIMA welcomes the European Commission's proposal to revise the EPBD as part of the Fit-For-55 Package. In order to reach EU 2030 climate targets, the Fit-For-55 Package must be underpinned by a strong EPBD that significantly reduces the energy needs of buildings.

This will align EU policies with the Energy Efficiency First (EE1st) Principle, as the most cost- and resource-optimal way to decarbonise the energy system relies on front-loading energy efficiency improvements focused on the building envelope, which in turn pave the way for electrification, integration of renewables and reduction of energy system costs.

Putting energy efficiency first and front-loading building renovation also ensures that the green transition is socially just. Current price volatility in the energy markets serves as a reminder that the only way to keep energy bills in check and ensure a lasting reduction in energy poverty is by increasing the rate of deep renovations. Energy efficiency – and deep renovation in particular – is also the most impactful way of reducing Europe's dependence on fossil fuel imports¹.

However, the overall level of ambition of the Commission's EPBD proposal is not sufficient to deliver on these objectives. The proposal places a disproportionate emphasis on measures to decarbonise energy supply without securing strong measures in parallel to reduce energy demand.

Renovation rate and depth

The Renovation Wave Strategy is based on two interlinked headline objectives: (i) to increase the rate of renovations; (ii) to increase the depth of renovations. Only by addressing both can the EPBD put the EU building sector on a path to decarbonisation by 2050. Whilst the Commission's EPBD proposal introduces ambitious policies to drive the rate of renovations, the same cannot be said for increasing the depth, or quality, of renovations.

The current rate of deep renovation stands at just 0.2%². In order to meet EU 2030 targets, this number has to rise to 3% by the end of the decade³. In other words, deep renovation has to become the norm, not the exception, applying to at least 70% of renovation taking place by 2030³.

There are a number of ways the EPBD can facilitate this. This paper outlines how the EPBD proposal can be adjusted in the co-decision phase to ensure that the Commission's far-reaching proposals on raising the rate of renovations are complemented by equally ambitious measures on raising the depth and quality of renovations.

¹ Ecofys (2014) Deep renovation of buildings: An effective way to decrease Europe's energy import dependency, see [here](#)

² European Commission (2020) A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives, see [here](#)

³ BPIE (2020) Contributions from the building sector to a strengthened 2030 climate target, see [here](#)

1. Strengthen the MEPS framework

By introducing MEPS for existing buildings, the Commission has taken a much needed, bold step that will trigger millions of renovations across the EU. However, the Commission's proposal requires that the worst performing buildings (EPC Classes F & G) merely reach an EPC Class E by 2033. This would mean that affected households would have to renovate their homes several times on the road to 2050, wasting time and resources in the process, and jeopardizing any possibility of eliminating energy poverty or reaching a climate neutral building stock by 2050. This would undermine the political support for any national renovation programme and the EU's Renovation Wave more broadly. It would also mean that buildings undergoing renovations triggered by MEPS would not be ready to switch from fossil fuels to low-carbon heating solutions, as the cost-optimality of technologies like heat pumps is closely correlated with the energy performance of the building envelope. To avoid the damaging effects of carbon lock-in, MEPS should require that all worst performing buildings reach an EPC Class C by 2035. Certain buildings segments – such as public buildings and non-residential buildings – are well positioned to act as front-runners and should be required to achieve EPC Class C by 2030.

Member States should complement MEPS requirements with a policy framework that incentivises deep renovation to ensure that building owners with the means to go further than EPC Class C take this route. Proportionately greater financial, technical and administrative support should be provided to those carrying out deep renovation in one step or a limited number of stages to encourage quicker action where it is feasible. When carrying out deep renovation in stages, building owners in receipt of public funds should be required to obtain a Renovation Passport which lays down a step-by-step approach to deeply renovating the building.

EURIMA recommendations on MEPS:

- Article 9 should require that the worst performing buildings (EPC Classes F & G) in front-runner building segments reach EPC Class C by 2030, and that all worst performing buildings meet this requirement by 2035;
- Article 9 should state that Member States shall implement national renovation programmes that incentivise deep renovation well in advance of MEPS compliance deadlines;
- Article 15 should require that Member States only subsidise staged deep renovations that are guided by a Renovation Passport.

2. Raise the level of ambition on new buildings

The Commission's proposal introduces a new Zero Emission Building (ZEB) standard that all new buildings must adhere to as of 1 January 2030. EURIMA welcomes the initiative to develop a common Union standard for new buildings with harmonised energy consumption thresholds, adjusted per climatic zone. However, the energy consumption thresholds proposed in Annex III for new buildings are not sufficiently ambitious, as they merely reflect the values recommended by the Commission for Nearly Zero Emission Buildings in 2016⁴. Such thresholds risk undermining the ongoing evolution of EU building standards towards higher energy performance as well as the innovation potential in the sector for better performing envelopes. The experience of EU countries

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016H1318&from=RO>

with more ambitious requirements, like that of Denmark, Ireland, France and others⁵, shows that lower energy consumption thresholds for new buildings are not only desirable, but are also cost-effective and technically feasible.

The ZEB definition relies on primary energy consumption as its sole energy performance metric. Such an approach would lead to new buildings with high energy needs being labelled as Zero Emission Buildings, so long as these high energy needs are met using large volumes of renewables. This goes against the EE1st Principle, as all energy waste – renewable or otherwise – should be avoided whenever possible. To address this, Annex III must provide two sets of indicators, covering both primary energy consumption and energy need for heating and cooling⁶. The second indicator – ‘energy need for heating and cooling’ – refers to the amount of energy required to maintain adequate thermal comfort in the building during a given timeframe. This indicator ensures that the state of the building envelope is considered in its own right, independent of the energy carrier used to heat/cool the building.

Thus, a ZEB standard based on this methodology can promote both a highly energy efficient building envelope and the transition to renewable heating and cooling. A well-insulated building envelope is a precondition for making buildings technically ready to play an active role in a flexible and renewables-based energy system. By tapping into the full potential of the building envelope, policy makers can ensure that the energy system is decarbonised in an equitable way, avoiding disproportionate rises in energy bills and alleviating energy security concerns; all the while delivering the health and productivity benefits associated with adequate thermal comfort.

The Commission’s proposal requires that life-cycle Global Warming Potential (GWP) is calculated and disclosed for all new buildings as of 1 January 2030. This is a welcomed first step; one which will eventually allow EU policy to move towards benchmarking and targets to reduce the whole life carbon (WLC) impact of buildings. However, this will only be possible if reporting obligations, and related WLC requirements, are met using a harmonised EU methodology for calculating GWP. Whilst the proposed Annex III highlights that Level(s) and standard EN 15978 can be used as the basis for calculating GWP, it does not require that Member States with existing national tools meet these minimum requirements. This risks undermining the much-needed comparability of whole life cycle performance and related improvements across the EU. In order to ensure a level playing field for construction products and materials in the EU’s Single Market, and lay the groundwork for future EU policies that address the sustainability of buildings, any national tools developed for calculating the life-cycle emissions of buildings, and related thresholds, should be based on the Level(s) common Union framework and be fully in line with the EN 15978 standard.

EURIMA recommendations on new buildings:

- Increase the level of ambition for new buildings by adjusting the thresholds for energy consumption provided in Annex III;
- Complement Annex III maximum limits on primary energy consumption with maximum limits on energy need for heating and cooling;
- Ensure that national tools developed for calculating GWP of buildings, and any deriving thresholds, are based on Level(s) and standard EN 15978.

⁵ BPIE (2021) Nearly Zero: A Review of EU Member State Implementation of New Build Requirements, see [here](#)

⁶ EN-ISO 52000-1:2017(E) standards define ‘energy need for heating and cooling’ as heat to be delivered to or extracted from a thermally conditioned space to maintain the intended space temperature conditions during a given period of time.

3. Mainstream deep renovation throughout the EPBD and other EU legislation

Each tool in the EPBD should be assessed for its potential to mainstream deep renovation. The Commission has clearly considered this with respect to some tools. Eurima welcomes the proposal for Renovation Passports that will provide a pathway for building owners to undertake deep renovations. It is also positive that the rate of deep renovation is recognised as an important metric in the proposed template for National Building Renovation Plans (NBRP).

However, in addition to framing MEPS in a way that properly drives deep renovation, the potential for mainstreaming deep renovation should be better considered in Art.15 on finance provisions. Whilst the Commission's Impact Assessment concludes that currently public financial support is not sufficiently targeted toward deep renovations, Member States are not guided to address this barrier in the EPBD. Art.15 should mandate that Member States only provide financial support for works that either attain at least an EPC Class C following a one-step renovation, or that are carried out as part of a staged deep renovation that results in the attainment of at least an EPC Class C by 2035. When carrying out deep renovation in stages, building owners in receipt of public funds should be required to obtain a Renovation Passport. Whilst Renovation Passports ultimately serve the purpose of guiding building owners to deep renovation and hence the highest possible level of energy performance, these tools can also be used to identify the most appropriate first steps to be taken in carrying out a staged deep renovation that will result in the achievement of EPC Class C by 2035.

Art.15 should also state that Member States shall ensure that national renovation programmes provide proportionately greater financial, administrative and technical support for deep renovations. Art 15. (11) of the Commission's proposal does not achieve this, as the language used can be interpreted in a number of ways, potentially leading to divergent interpretation across the EU. The language proposed risks creating legal uncertainty over the definition of 'deep renovation' and should be addressed by the co-legislators.

This uncertainty around the definition of 'deep renovation' is exacerbated by frequent references to the EU Taxonomy throughout the Directive, which defines renovation as a sustainable economic activity whenever that renovation achieves 30% energy savings – a level far below what's needed for deep renovation. This should be addressed as part of the revision of the Taxonomy delegated act on climate change adaptation and mitigation. Meanwhile, the EPBD should clarify that policy choices must be guided by the need to maximise the number of deep renovations as defined in EPBD Art.2, instead of the definition put forth in the EU Taxonomy.

To accelerate deep renovation, a clear, harmonised EU definition of the term is required. The Commission proposal would introduce such a definition, but only as of 1 January 2030. Until then, deep renovation would be defined on the basis of national nearly-zero energy building (NZEB) standards. Given the current divergence in national NZEB standards, it is imperative that a Union-wide definition for deep renovation is introduced without delay. It is unclear why an extended transition period spanning 7 years is envisaged; this will solely delay the uptake of deep renovations and the necessary alignment of financing instruments. Given the varying technical realities of new and existing buildings, EURIMA recommends establishing a separate set of energy consumption requirements for new and existing buildings in Annex III.

The EPBD provisions on skills and NBRPs should reference the direct link between the availability of skilled professionals, and the quality of holistic, deep renovations that can be achieved. Insufficient numbers of qualified professionals in the renovation sector lead to poor workmanship, thereby

reducing energy savings attained and generating risks of carbon lock-in. To avoid this, Member States should introduce conditionality for public financing schemes that requires certification of workers, whilst simultaneously expanding, and actively supporting, national training and certification opportunities for such professionals. Without putting in place dedicated measures to increase the availability of qualified workers well in advance, Member States run the risk of failing to meet their NBRP objectives, as it takes several years to develop large-scale certification programmes and ensure sufficient uptake.

Finally, other elements in the Fit-For-55 Package should also be aligned with the EPBD to mainstream deep renovation. Art.6 of the Energy Efficiency Directive, which sets requirements for renovating public buildings, should require that public buildings undergo deep renovation, in accordance with the definition of 'deep renovation' introduced in Art.2 of the EPBD. In order to mitigate the negative social externalities arising from carbon pricing in the building sector (ETS-2), the Commission has proposed that ETS-2 revenues are used to finance energy efficiency improvements. The co-legislators should amend provisions to ensure that revenues are only spent on financing deep renovation and technical assistance for low-income households.

EURIMA recommendations on mainstreaming deep renovation:

- Article 15 should mandate that Member States only provide financial support for works that either attain at least an EPC Class C following a one-step renovation, or that are carried out as part of a staged deep renovation that results in the attainment of at least an EPC Class C by 2035;
- Article 15 should require that national renovation programmes provide proportionately greater financial, administrative and technical support for deep renovations;
- Article 15 references to the EU Taxonomy should be removed to avoid creating legal uncertainty over the definition of 'deep renovation';
- Fast-track the implementation of an EU definition for 'deep renovation' to 2025;
- Annex III should provide two separate sets of energy consumption requirements, differentiating between new and existing buildings;
- Member States should introduce conditionality for public financing schemes that requires certification of workers, whilst expanding national training and certification schemes;
- Measures to mainstream deep renovation should be extended to EED Art.6 & ETS-2.

4. Boost the roll-out of Energy Performance Certificates

Energy Performance Certificates (EPC) were introduced in 2002, but are yet to reach the critical mass needed to provide Member States with a reliable overview of their national building stock. Without dedicated measures to boost EPC rollout, adoption will remain sluggish, which in turn undermines all other policies introduced in the EPBD: MEPS compliance can only be ensured via EPC; solid NBRP can only be developed on the basis of sound EPC data; EPC must serve as a gateway and direct building owners towards more comprehensive information tools like Renovation Passports and One-Stop-Shops.

To address this, Member States should outline in their NBRP what national policies will be introduced to ensure that EPC cover the entire building stock by 2030. This can include measures to expand the number of ‘trigger points’ determining when an EPC is required, going beyond the definition of ‘major renovation’ to determine when works on the building are sufficiently significant to warrant an energy performance assessment, subsidising EPC for certain income groups, or making EPC mandatory for certain types of buildings. Stronger enforcement is needed to make EPC available in advertisements for sell or rent to ensure that energy performance influences decisions of buyers/renters.

EURIMA welcomes the Commission’s proposals to increase the quality of EPC by mandating on-site assessment. In order to effectively serve its purpose, an EPC needs to provide reliable information and be trusted by all parties involved. On-site visits address both of these factors as reliability is improved and evidence suggests that an on-site visit – and the corresponding opportunity to interact with the assessor – positively correlates with the perceived quality and reliability of the recommendations and the likelihood that they will be implemented⁷. To further increase trust in EPC results and legal certainty linked to the deployment of MEPS, Member States should establish assessor liability under national law.

EPC should build upon more harmonised, comparable and solid asset-based calculations, which ensure that the building fabric is optimised to reduce thermal heat losses in new and renovated buildings. At the same time, given that as-built EPC and real performance solutions are increasingly available, the EPC framework should be open for Member States to complement calculated performance with real performance metrics, should national authorities choose to do so. To ensure quality, this should be based on an EU certification scheme for energy efficiency meters in buildings that can measure actual energy performance improvements, as was announced in the Renovation Wave strategy.

As EPC methodologies are upgraded to produce more accurate assessments, the cost of EPC may rise correspondingly. Therefore, Member States should consider subsidies for EPC and Renovation Passports. Schemes integrating subsidies for obtaining an EPC or Renovation Passport in combination with delivered measures should be supported, especially for vulnerable dwellings.

EURIMA recommendations on EPC:

- Article 16 should require that EPC cover the entire building stock by 2030 at the latest and that Member States establish assessor liability under national law;
- Article 16 should clarify that Member States may choose to complement asset-based EPC data with real-time performance measurement based on a certification scheme for energy efficiency meters to be developed at EU level;
- Member States should consider introducing subsidies for EPC to boost roll-out.

⁷ X-tendo Project (2020) Energy Performance Certificates: assessing their status and potential, see [here](#)