

Position Paper on the EPBD Recast [COM (2021) 802 final]

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Background

- 40% of energy is used in buildings. Yet 97% of the existing EU building stock is not sufficiently energy efficient. This is endangering our transition to a climate safe future.
- Energy efficiency is also critical for energy security – as highlighted in REPower EU and the objective to reduce Russian gas import by 48 bcm by 2030.
- The EPBD is the key legislative framework for delivering energy efficient homes. Within this framework Energy Performance Certificates (EPCs) are a key tool, meant to act as a trusted foundation for our understanding of the energy performance of buildings.

Our Concern

- Regrettably, EPCs can be wildly inaccurate and therefore do not provide a trusted foundation. No one in the market can be sure that they are getting what they pay for. As a result, we are stuck at a 0.3% annual renovation rate, whereas we need to be at 3% to achieve our climate targets.
- Fortunately, European digital innovation now enables us to meter the real energy performance of buildings. For the first time we can calculate day-after-day the kilowatt hours (kWh) saved by a renovation. Moreover, we can benchmark the fabric improvement attributed to the works. In short, trust can be restored to the marketplace.
- However, this critical innovation has not been sufficiently provisioned for in the EPBD recast. This means that breakthrough European technology will be sidelined. Therefore, as the EU attempts to transition to a low carbon society, renovation rates will remain low, the most vulnerable will be left in fuel poverty, and energy security will not be addressed.

Call to Action

- **Amend Article 16** to provide Member States with the option to use digital energy efficiency meters to determine the energy performance of buildings within the EPCs.
- **Amend Article 20** to enable Member States to use digital energy efficiency meters to benchmark the overall operational energy efficiency of buildings as an alternative approach to EPCs.
- These minor amendments will create a pathway for the EU to establish a trusted foundation for energy performance in buildings, delivering a major boost to the renovation wave.

Knauf Energy Solutions is a GreenTech company building the world's Virtual Energy Infrastructure (VEI). VEI replaces power generation with metered savings from energy efficiency renovations. It deploys smart connected technology to enable buildings to actively support the transition to a net zero carbon energy system. For more information visit www.knaufenergy.com email Marie.Cletienne@knaufenergy.com or call +32 (0)472 92 43 18

<p style="text-align: center;">Article 16</p> <p style="text-align: center;">Energy performance certificates</p> <p>3. Member States shall ensure the quality, reliability and affordability of energy performance certificates. They shall ensure that energy performance certificates are issued by independent experts following an on-site visit.</p>	<p style="text-align: center;">Article 16 (new)</p> <p style="text-align: center;">Energy performance certificates</p> <p>3. Member States shall ensure the quality, reliability and affordability of energy performance certificates. They shall ensure that energy performance certificates are issued by independent experts following an on-site visit.</p> <p>3a (new) Member States may use certified energy efficiency metering technologies as an alternative approach to determining the energy performance of a building in accordance with Article 16.1. Buildings that use this approach will be exempt from the requirements laid down in paragraph 3 to use an independent expert following an on-site visit.</p> <p>3b (new) The Commission will establish, at the latest by the 31st of December 2023, a European certification approach for energy efficiency metering technologies.</p> <p>3c (new) Certified energy efficiency metering technologies will be considered an acceptable approach to determining improvement in energy performance for the purposes of Article 15 paragraph 9.</p>
<p style="text-align: center;">Article 20</p> <p style="text-align: center;">Inspections</p> <p>8. Member States shall lay down requirements to ensure that from 1 January 2025, new residential buildings and residential buildings undergoing major renovations are equipped with:</p> <ul style="list-style-type: none"> (a) the functionality of continuous electronic monitoring that measures systems' efficiency and informs building owners or managers when it has fallen significantly and when system servicing is necessary; and (b) effective control functionalities to ensure optimum generation, distribution, storage and use of energy. 	<p style="text-align: center;">Article 20 (new)</p> <p style="text-align: center;">Inspections</p> <p>8. Member States shall lay down requirements to ensure that from 1 January 2025, new residential buildings and residential buildings undergoing major renovations are equipped with:</p> <ul style="list-style-type: none"> (a) the functionality of continuous electronic monitoring that measures systems' efficiency, and informs building owners or managers when it has fallen significantly and when system servicing is necessary; and, (b) effective control functionalities to ensure optimum generation, distribution, storage and use of energy; and,

<p>9. Buildings that comply with paragraph 7 or 8 shall be exempt from the requirements laid down in paragraph 1.</p>	<p>(c) <i>the functionality of electronic monitoring that measures and benchmarks the buildings overall operational energy efficiency in so far that such systems are certified at national or European level.</i></p> <p>9. Buildings that comply with paragraph 7 or 8 shall be exempt from the requirements laid down in paragraph 1.</p> <p><i>9 (bis). Buildings that comply with paragraph 8 sub paragraph (c) will be able to replace the obligations in Article 16 paragraph 1 with an operational benchmarking score, expressed by a numeric indicator of primary energy use in kWh/(m2.year).</i></p>
<p>Justification</p> <ul style="list-style-type: none"> • The European Renovation Wave Communication [SWD (2020) 550 final] explicitly committed (Page 7, paragraph 5) “...to reform Energy Performance Certificates” and stated that “...given that solutions are increasingly available to measure and manage energy performance during the use of the buildings, the Commission will propose to update the EPC framework, taking into account emerging energy performance metering technologies”. The European Commission also committed (Page 16, paragraph 4) to “...establish a trusted scheme for certifying energy efficiency meters in buildings that can measure actual energy performance improvements.” • Both these commitments were made based on the fact that the current Energy Performance Certificates have been demonstrated to be highly inaccurate and that existing digital technologies now allow for highly accurate and cost-effective measurement of the real energy efficiency of buildings, including for single family residential buildings. • To make a success of energy efficiency policy in buildings it is essential to ensure that these commitments are realized as part of this revision of the EPBD to ensure that consumers can trust that either new buildings or renovated buildings are delivering the promised energy efficiency levels. • Currently, whilst Article 2.8 of the European Commission’s proposed EPBD recast [COM (2021) 802 final] states that “Energy performance of a building means the calculated or metered amount of energy needed to meet the energy demand...”, this clause alone is insufficient to operationalize digital energy efficiency meters. • Highly accurate digital energy efficiency meters will also ensure the necessary basis for creating pay for performance approaches to delivering energy efficiency measures that can transform the market and deliver the scale and quality of renovation that is needed to meet Europe’s climate ambitions. • Finally, smart retrofits using digital energy efficiency meters can ensure that gas consumption is actually reduced, ending our reliance on Russian gas imports – and delivering the REPowerEU 48bcm of savings through energy efficiency measures. 	