

Position Paper

'CLEAN ENERGY FOR ALL EUROPEANS' PACKAGE

April 2017

The 'Clean Energy for All Europeans' package and its intention to put 'Energy Efficiency First' sits at the heart of Europe's climate and energy strategy. We strongly believe that energy efficiency plays the most important role in delivering the objectives of the Energy Union and in respecting its global commitment to combating climate change through the Paris Agreement.

Buildings represent the most cost-effective energy savings potential. Ambitious renovation policies make good sense both from a societal (climate and energy) as from an individual (citizens') perspective because of the important ancillary benefits linked to the economic importance of the building sector and the primary function of buildings for living comfort, health and well-being.

With buildings contributing to 40% of Europe's final energy bill, 90%¹ of our buildings leaking energy (their energy performance is well below what is possible within reach today) and more than 10% of Europeans living in energy poverty - this package is a once-in-a-decade opportunity to address in a holistic manner the European building stock. However, Eurima doubts whether the current EPBD and EED revision proposals by the European Commission will truly enable us to unleash the full potential of the building stock both in energy savings as regarding all the co-benefits of energy efficiency.

THIS PAPER OUTLINES THE THREE MAIN ELEMENTS WHICH WILL HELP BUILDINGS DELIVER MORE IN THE ENERGY TRANSITION

1. INCREASING THE ENERGY RENOVATION RATE: MAKING BUILDINGS DELIVER

In order to reach our energy and climate goals in 2050 we must ensure that existing buildings deliver the lion's share of the 2030 energy efficiency target: renovation is a must. We therefore need to address both increasing the renovation rate and the renovation depth². Today's renovation rate across Europe is at an average of 1% a year. Renovation rates across Europe will need to be at least doubled in the next decade. To achieve this goal, we see the following aspects as key:

A clear vision for a decarbonised building stock by 2050. A decarbonised building stock must first and foremost be achieved by lowering the energy demand of the building stock, in line with the savings potentials available in our existing buildings. The stock, by 2050 should be decarbonised up to at least 'a Near Zero Energy level', in full consistency with the 'Nearly Zero Energy Building' (NZEB) definition³, Article 9 of the current EPBD and the Energy Efficiency First principle. In other words, such a transition would mean that the energy demand of the building stock is reduced by 80% by 2050, compared to 2005 levels, taking into account the potentials, contributions of building typologies and climate zones.

An ambitious and binding energy efficiency target for 2030 needs to be coupled with a clear contribution from building renovation activity. The energy efficiency market and its respective business players need coherence and consistent regulatory signals to upscale and trigger investments, especially with regard to energy renovation activities. A binding target is essential to prioritise energy efficiency in realising our climate and energy ambition and to stimulate deep renovation of the European building stock in a way that is compatible with our 2050 ambition. As shown in the EED Impact Assessment, an increase from 1% to 2.1% in the existing renovation rate is needed to reach a 30% energy efficiency target. Moving to a 40% target would, according to the Impact Assessment, increase the rate to 3.1%⁴.

¹ 50% of buildings date before 1970 and 40% before between 1970 and 1999.

² EPBD Art 4 minimum energy performance requirements

³ COMMISSION RECOMMENDATION (EU) 2016/1318 of 29 July 2016 on guidelines for the promotion of nearly zero-energy buildings and best practices to ensure that, by 2020, all new buildings are nearly zero-energy buildings

⁴ Whilst policy option II of the EPBD (the one selected) is assumed to increase the renovation activity between 16 and 24% (EPBD Impact Assessment).

In order for the latter to become a reality (3,1% rate) and guarantee that it is through acceleration of building renovation that the 2030 energy efficiency target is achieved, a clear link should be established to clarify the contribution of buildings (residential and tertiary) to the 2030 energy efficiency target.

Renovation Strategies must include clear milestones for 2030 and 2040, so as to deliver the 2050 ambition. The 2030 national milestones for building renovation must be consistent and coherent with the 2030 energy efficiency target. The strategies should also be designed in a way that facilitates their implementation, namely through an open and inclusive process with national stakeholders. They should also include: key 'trigger points' for anchoring energy measures into other investments; phasing out the worst performing buildings; taking account of drivers for each segment (ownership, motivations and barriers); have a clear tie to financing platforms and the multiple benefits of energy efficiency.

For the purpose of consistency, the scope of national renovation strategies needs to be enlarged to cover all public buildings. The current mandatory annual renovation of 3% (under article 5 of the existing EED) applies only to buildings owned and occupied by central government (amounting to 1% of EU's building stock). Public buildings account for around 12% of the EU's building stock. Setting such a narrow definition is significantly limiting the potential of this building segment.

Ensuring a long term-perspective through EED Art 7. By proposing to add a new ten-year period for the 1.5% saving obligation schemes up to 2030, with further periods applicable by default until 2050, the European Commission moved a step in the right direction. We therefore support the removal of a sunset clause for both 2020 and 2030. However, if not cumulative, these periods would prevent long-term savings, encouraging short-time measures. It would also be in contradiction to ensuring consistency between long term renovation strategies and how measures generated under Art 7 contribute to their implementation. On Art 7, flexibility should be maintained for MS, as such, where alternative measures are applied. However, savings from the buildings sector should be counted only when they are truly 'additional' and are generated through energy or major renovation activities, which go beyond the Minimum Energy Performance Requirements (Art 4 EPBD).

2. ENERGY RENOVATIONS: ENHANCING COMFORT & RESILIENCE

The building envelope plays a crucial role in determining the building's energy demand, as it prevents heat losses and ensures stable, comfortable temperatures. A high performing envelope⁵ combined with adequate ventilation is essential to reduce the energy demand but also to guarantee a healthy and comfortable indoor environment. The benefits are clear: structural measures, such as a good building envelope enabling the correct sizing and efficiency of equipment's, prevent the lock-in of voluminous portions of savings and have a fundamental role in guaranteeing individual comfort and well-being to the occupants throughout the whole year⁶, meaning a stable operational temperature (no cold wall effect, no drafts, using all available space).

It is important to address the biggest challenge within buildings by remaining true to the intended objective of the Directive, which is to improve the energy performance of the building by optimizing the demand reduction potential, in the light of the Energy Efficiency First principle. This can be done in a simple way: the evaluation of the overall building performance, currently required for the 5 major needs⁷ in an undifferentiated manner, should be complemented with a secondary requirement on maximum heating and cooling energy demand (kWh/m²/year) set at national level and accounting for the specific conditions and climatic zones. Not doing so, combined with expanding of the system boundary (beyond building level) by putting on equal footing on-site and off-site renewable energy when it comes to Primary Energy Factor (PEF), goes against the principle of 'Energy Efficiency First'.

A recent study⁸ found that 50% of Member States, as part of the evolution of their building codes, and in parallel to implementing their overall nZEB definitions, have already set secondary requirements for either the overall heating and cooling demand of the building or the major elements of the building envelope.

5 EPBD Art 2 (7) building envelope means the integrated elements of a building which separate its interior from the outdoor environment,

6 Transolar, 2017. Heating and cooling research. Available here.

7 Heating, Cooling, hot water, ventilation and lighting.

8 2peach aps, 2016. Building resilience through buildings codes. Secondary Level Requirements for Heating and Cooling in European Building Codes. By Jens Laustsen & Sophie Shnapp.

Such a secondary requirement on H&C needs would therefore build on existing practice without adding any unnecessarily prescriptive requirements and be an important default requirement. It is also found that secondary requirements can be easier to understand for small enterprises and building owners and will help industry to develop new and innovative solutions.

Highly efficient buildings are also essential for our future energy system in two ways: by reducing the energy demand, hence reducing the energy system costs by providing a higher flexibility to the grid. A recent study⁹ found that in a high efficiency scenario, 57 GW in peak load can be saved compared to a low efficiency scenario by the year 2050, which equals the current total electricity production capacity of Austria and the Netherlands combined. The impact of energy efficiency on the flexibility of the power systems leads to an additional reduction in peak load of the EU power system of around 12 GW. The potential reduction of peak loads and increased flexibility, considering a high efficiency scenario, translates into 89-153 billion EURO of CAPEX reduction in the power sector until 2050. thereby safeguarding against inevitable changes on the energy supply side.

3. KEY TOOLS IN THE EED AND EPBD

EPCs should be transformed from static, unused tools, to more dynamic and empowering tools for consumers, namely, Building Renovation Passports (BRPs). EPCs are an important awareness tool and have a potential to improve the performance of the building. However, they currently lack reliability and there is too little uptake of the recommendations. Therefore, first, the quality and reliability of EPCs must be improved: by increasing the number of appropriately trained experts; ensuring compliance through mandatory on-site inspections by certifiers; improvements of the certificate and the energy audits upon which they are based, and ensuring applicability of EPC's to all buildings.

Second, as consumers take a central place in the energy transition, an evolution of EPCs to building renovation passports (BRPs) is needed. BRPs can be a powerful tool to provide a clear understanding of the expected benefits and co-benefits to inhabitants (in terms of energy savings, reductions of CO₂ emissions, thermal and acoustic comfort, fire safety, indoor air quality, etc.). Such an individual renovation planning tool, assisted by a 'log book', would support the realisation of tailor-made renovation recommendations and ensure alignment with longer term ambition.

Creation of adapted financial programmes for different building segments. From a private financing perspective, there is a clear need for long term regulatory certainty so as to allow banks/pension funds to develop financial portfolios and offerings. In this sense, binding targets (clear regulation), clear objectives/milestones (trigger points), or specific national measures to phase out low performing buildings contribute to enhancing certainty. The strengthening of EPCs towards more reliability, and their evolution towards building renovation passports, where actual energy performance data complement asset ratings, will also help. Other private financing examples which can help to scale up activity include: reduced VAT on energy efficiency works and services¹⁰, KfW scheme (soft loans), Green Mortgages (GMF) and most recently the USA Property Assessed Clean Energy (PACE) programme¹¹.

From the public funding side the challenges are linking the pools of money i.e. European Structural Investment Funds (ESIF), European Fund for Strategic Investment (EFSI), European Investment Bank (EIB) with project developers, making sure that investments in building renovation is taken off the public balance sheets (accounting rules), that ESCO's¹² are incentivised to take on longer pay back programmes (Latvia) and that public funds are prioritised to phase out old public buildings, social housing whilst being a guarantor to private sectors.

9 Ecofys 2015, The role of efficient buildings in the EU's future energy system

10 Such as property taxes to encourage renovation (stamp duty in UK, recent developments in Spain)

11 Where a debt (i.e. loan for energy renovation) is tied to the property as opposed to the owner(s), so the repayment obligation may transfer with property ownership, which means there are no out-of-pocket expenses for the consumer

12 Energy Service Companies - <https://ec.europa.eu/jrc/en/energy-efficiency/eed-support/energy-service-companies>

UNDERPINNING THIS, WE NEED A STRONG GOVERNANCE FRAMEWORK

We welcome the Governance Regulation and its scope to streamline and update the reporting requirements across the areas of the Energy Union. A clear and structured monitoring mechanism is crucial to ensure Europe remains on track to meet its Energy and Climate goals and, if needed, implement corrective actions. We see the following two points as key:

A collaborative process in drafting the integrated national energy and climate plans and progress reports. A permanent collaborative platform is needed for stakeholders (including business, financial community, social parties, and cities) to exchange on common goals and objectives, so as to ensure ownerships of such ambition and align implementation process.

Coherence between the EPBD provisions and their reporting. EPBD provisions need to be fully mirrored in the Integrated National Energy and Climate Plans and Progress Reports in order to monitor the implementation and undertake corrective actions when necessary. Especially when it comes to Plans, reporting requirements on National Renovation Strategies and NZEBs, as opposed to having generic references, need to be specified.

About Eurima

Eurima is the European Insulation Manufacturers Association, representing the interests of all major mineral wool insulation producers throughout Europe. Eurima members employ over 21,000 people across. Eurima members manufacture mineral wool insulation products. These products are used in residential and commercial buildings as well as industrial facilities. Glass and stone wool insulation secure a high level of comfort, low energy costs and minimised CO₂ emissions. Mineral wool insulation prevents heat loss through roofs, walls, floors, pipes and boilers, reduces noise pollution and protects homes and industrial facilities from the risk of fire.

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