

Opening the Door to Efficient Buildings

Buildings are responsible for 36% of greenhouse gas emissions and soak up 40% of energy supply. If the EU is to hit its 55% emissions cut target for 2030 and net zero target for 2050, these figures need to be slashed and the EPBD is one of the main weapons to achieve that.

Better performing buildings will lead to multiple benefits such as cleaner air, healthier living and working environments, cheaper utility bills and more. An efficient building stock will increase Europe's energy independence, which given Russia's invasion of Ukraine and the impact on energy markets, is an extremely important objective. The current legislation is under review and policymakers must push for as much ambition as possible during upcoming negotiations to maximise these benefits. Consistency with other parts of the Fit for 55 related to building performance must be ensured. This includes total alignment with the Energy Efficiency First Principle and coherence with pieces of important legislation such as the renewable energy and energy efficiency directives.

We at EuroACE – Energy Efficient Buildings, support the negotiation of an ambitious Directive that plays a central role in the EU's overall climate and energy policy. EuroACE represents all energy efficient technologies and materials, including heating and cooling, insulation, building automation and control, lighting and daylighting, ventilation and so on, all of which needed to make the EPBD a success for EU citizens and stakeholders alike.

What the EPBD update must include

01. Strengthen policy measures to boost energy renovation

Europe needs stronger tools to unlock the benefits offered by building renovations. This includes sufficiently ambitious **minimum energy performance standards (MEPS)**. The Commission's proposal says residential and non-residential buildings need only reach 'E' class by 2033 and 2030. This does not reflect the pressing need to accelerate renovations across the EU. Long-term planning and holistic deep renovations should form the foundation of MEPS design, while national building renovation plans also need to be integrated so that 2050 zero-emissions building stock can be achieved.



The deployment of **renovation passport schemes** must also be accelerated, as MEPS need to be implemented via these instruments. The two initiatives will form a virtuous circle for building renovations when implemented correctly. Well-designed passports will provide investors with invaluable information like timeline of works, the benefits that have been unlocked and technical/financial support that is available.

Energy Performance Certificates (EPCs) should make performance ratings across member states more comparable by 2025 and their coverage should be increased across the EU. EPCs should be better linked to other instruments like renovation passports and smart readiness indicators. New trigger-points that will issue an EPC to a building – construction, major renovation, sale etc – are welcome changes. Stricter financial penalties for member states that do not fulfil their requirements to make checks and upload information to a new centralised database should also be deployed.

02. Promote zero-emission buildings

The criteria that define a ZEB need to be more ambitious so that they can be differentiated from nearly-ZEBs. Both primary and final energy consumption need to be factored in, so that energy savings policies are not neglected in favour of tweaks to energy supply side. ZEBs must also source their residual power needs from renewable and decarbonised energy sources both from on-site and the grid.

03. Go beyond energy savings

Provisions on new buildings - a common vision on whole-life carbon is required. Provisions should go beyond just ZEBs, and member states need to ensure the Global Warming Potential of a new building is calculated and reported using both standard EN 15978 and the Level(s) framework as a basis. This should lead to a common framework across the EU so that data can be collected and exchanged.

Multiple benefits such as improved health, comfort, indoor environmental quality and more need to be better factored into building renovations to make them more holistic but also more attractive to property owners and investors. More ambition is needed under a 'Healthy Indoor Climate' framework. Ninety percent of time is spent indoors, so it is time to leverage that fact into policy action.



04.

Bolster technical buildings systems and digital approaches

It is clear that **digital technologies** will play a key role in gathering data about building renovation projects across the EU but also to improve the design process. Policymakers should encourage the use of **digital design and simulation technologies** like digital twins and building information modelling, which will enable a robust planning approach throughout the entire planning life-cycle. This will allow the simulation, evaluation and optimisation of life-cycle carbon emissions, energy performance and overall functioning of a building from the concept phase all the way to construction.

Technical buildings systems (which includes ventilation and heat pumps) should be extended to electrical installations – the monitoring of which can yield 10% energy savings – and should mandate that outdated systems be replaced during deep renovation works. Passive building design is also crucial and should complement active systems. Recommendations on inspecting ventilation and air conditioning systems should be implemented within a three-year period.

The time to act on buildings is now

All in all, the current geopolitical and climate situation calls us to act fast and act now. Our future, our energy independence, and the fulfilment of our climate targets and well-being as EU citizens depends on it.

Considering the great impact that our buildings have on both our energy consumption and greenhouse gas emissions, the EPBD presents itself as the perfect key to open the door to a highly efficient building stock, to open the door to a better future for the entire EU.

Read [here](#) the detailed suggestions that EuroACE proposes to future-proof the EPBD for a climate and energy-resilient building stock in the EU.

