



EPBD revision: a crucial opportunity for sustainable buildings

Fire Safe Europe (FSEU) welcomes the revision of the Energy Performance of Buildings Directive proposed by the European Commission as an important steppingstone towards improved energy efficiency of European buildings. Coupled with the recast of the Energy Efficiency Directive, the European Union has now a crucial opportunity to improve fire safety for people and society.

Sustainable buildings are fire safe and resilient

Integrating fire safety into the revision of the EPBD can help improve the sustainability of the built environment. The adverse effects of a building fire go beyond the immediate buildings' structure and content, the victims, and emergency response personnel. It adds pollutant gases to the air, contaminates surrounding soil and water systems, and impacts the health of citizens. Inadequately factoring fire risks in buildings' design and construction can nullify the economic benefits of energy efficiency and sustainability measures: "a 'green' building is not so 'green' if it burns down and needs to be reconstructed"¹.

Hence, it is crucial to ensure fire safety of buildings is not compromised on our road to reduce carbon emissions, and to ensure the link between building fire resilience and carbon emission reduction is taken into account both at EU and Member States' levels.

Moreover, the fire risk in today's buildings is permanently changing. Increased use of renewables and other innovative energy efficient solutions/technologies to improve the energy performance of buildings increases the inherent fire risk and impacts the performance of a building in fire. We constantly must pay attention to new risks and to ensure that a high-level of fire safety is being introduced when buildings are being renovated.

Over the past years we have seen an increased number of building fires with huge human, social, economic, and environmental consequences. This shows that regulatory systems on fire safety do not always adequately address the fire risk in today's buildings. Addressing new fire risks cannot be left to the market, which do not have the full competences when it comes to fire safety. It is therefore crucial to guarantee that fire safety is included within energy renovations and not compromised in the process of enhancing energy efficiency.

Recommendation

- Better integrate fire safety into the EPBD to ensure sustainability of buildings alongside reducing their carbon emissions

Fire safety should be a pillar of national building renovation plans

FSEU welcomes the obligation in the EPBD for Member States to address, amongst others, fire safety in relation to new and existing buildings undergoing major renovations. However, fire safety is only an optional indicator in the template for the national building renovation plans. **We need to ensure that**

¹ B. Meacham, M. McNamee, "Fire Safety Challenges of 'Green' Buildings and Attributes", p. 5.



Member States properly will address fire safety in their renovation strategies. This is especially relevant when considering that only a very few Member States reported on fire safety in their recent national renovation strategies.

For these reasons, FSEU believes that Member States should report on fire safety in terms of implemented and planned policies as well as investment needs and financing sources. In particular, information on funding instruments is of crucial importance when considering that energy poverty and low level of fire safety are often interdependent: all citizens are entitled to the same level of safety in buildings across the EU!

Recommendations

- Fire safety should be a mandatory indicator in the template for national building renovation plans of EU Member States – with detailed reporting requirements.
- Member States shall take the necessary measures to inform citizens on the different methods and practices that serve to enhance fire safety while improving the energy performance of buildings, especially for vulnerable households

Fire safety competences and verification are key

New builds and renovation works should always be executed according to fire safety requirements present in national building codes. While there are fire requirements in every country, the level of safety differs from country to country. To ensure a minimum of traceability and compliance to national fire safety regulations, inspections and maintenance work should also be included. As an example, in Denmark, building projects have verification templates at three different stages: planning, design and completion. These templates ensure that fire safety engineers, project managers and contractors have followed the fire safety regulations throughout the building project.

Recommendations

- Member States shall put in place inspection schemes or alternative measures including digital tools, to certify that the delivered construction and renovation works meet national fire safety regulations
- Guidance and training to construction professionals should also address fire safety.

Information and assessment of renovation works should be holistic

Fire Safe Europe welcomes the introduction of the renovation passport as a voluntary instrument providing a clear roadmap for deep or staged renovation, helping owners and investors to plan the best timing and scope for interventions. However, renovation passports should have a holistic approach and make the necessary link between energy efficiency and fire safety.

Recommendations

- Renovation passports should also include guidance and information on how to improve fire safety.



Fire risks linked to increasing electrification need to be addressed

With the aim of decarbonising the final energy consumption, the EU building stock has experienced a rapid increase of technologies running on electricity instead of fossil fuels like PV panels, heat pumps, recharging points for electric vehicles (EV), etc. However, these new electrical systems can constitute a serious challenge for the fire safety of EU homes if not addressed properly.

Fire Safe Europe welcomes the measures proposed by the European Commission to reinforce the role that buildings can play for decarbonisation of the energy system. However, it is important to factor in the potential additional fire risk linked to an increased electrification of buildings and the large-scale installation of solutions like PV-panels. It is crucial to provide technical assistance to EU citizens that need to install these solutions in a fire-safe way.

Recommendations

- Member States should offer technical assistance on fire safety for building owners and tenants wishing to install PV panels, heat pumps, recharging points, batteries etc, including guidance on their fire safety.

Conclusions

Fire Safe Europe believes that the revision of the EPBD is a crucial opportunity to ensure sustainable buildings of tomorrow. Accounting for fire safety in the revision will contribute to ensure a resilient high-quality building stock. Integrating fire safety will also maximise the benefits of the investments made, thereby increasing energy efficiency but also improving citizens' safety, well-being and health and making the EU building stock really fit for the future.