



# FSEU Position Paper

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## INTEGRATING FIRE SAFETY FOR A DEEP AND SUSTAINABLE RENOVATION WAVE

In the EU, energy use in buildings is responsible for approximately 40% of EU energy consumption, and 36% of carbon emissions<sup>i</sup>. Yet, 75% of European buildings are energy inefficient<sup>ii</sup>. As the European Commission's Roadmap on "A Renovation Wave Initiative for public and private buildings"<sup>iii</sup> acknowledges, buildings have an essential role to play in reaching the EU's carbon neutrality and energy-efficiency objectives. The Renovation Wave is indeed a powerful tool to make our buildings fit for the future.

The Renovation Wave is a once in a decade opportunity to improve both the sustainability and the safety of our buildings, and we must do it right. The emphasis put on "deeper renovation" and complementary dimensions<sup>iv</sup> is crucial, and we believe the inclusion of fire safety and fire resilience in the Renovation Wave will generate valuable cross-dimensional returns for individuals and society.

Fire resilience and renovation work in synergy. When a building is fire resilient it can resist to, adapt to, recover from a fire and resume to its essential functions timely and efficiently; this fosters and strengthens the same non-monetary benefits as renovating: an increased safety, health and well-being for users and better circularity and sustainability. Hence, we call upon European and national legislators to integrate fire safety and fire resilience as high priorities into the Renovation Wave. This inclusion can boost the initiative's positive returns and support the aims highlighted in the Roadmap, in particular:

- Stimulating the volume and depth of renovation;
- Tackling worst performing buildings and energy poverty;
- Public sector and public buildings leading by example.

Furthermore, we believe that providing for fire safety and fire resilience in the Renovation Wave will have the additional benefits of:



- Ensuring a building's fire performance is not weakened or compromised when improving energy efficiency;
- Decreasing inequalities between EU citizens and ensuring all buildings perform well on all levels;
- Making our buildings fit for the future environmentally, socially and economically.

The Renovation Wave is an opportunity for a massive improvement in our building stock. Let's do it correctly to create resilient and future proof buildings, not leaving out crucial aspects for our safety and well-being.

## Integrating fire resilience into the Renovation Wave stimulates deeper renovations

Increasing energy-efficiency through renovation sometimes implies the use of new materials and technologies. These innovations can make a building more sustainable but can also substantially impact a building's fire performance and bring about new fire safety concerns which compromise the safety of building users. Improved energy performance should never trump fire safety; that is why we must make the most of this renovation surge to boost both energy-efficiency and fire safety.

In 2018, the revised Energy Performance of Buildings Directive (EPBD) took decisive steps by inserting fire safety into article 2a paragraph 5 and article 7 paragraph 5 and by calling upon the Member States to provide for fire safety in buildings undergoing major renovations and in their long-term renovation strategies<sup>9</sup>. The Renovation Wave is an opportunity for the EU and national regulators to build upon their success and foster deep and holistic renovations by ensuring fire safety is duly considered and by encouraging a coordinated implementation of the EPBD provisions on fire safety among the Member States.

- ⇒ *Recommendation: Include fire safety in the European Commission's stocktaking and gap analysis of building renovation across the EU, and particularly look at how fire safety was integrated into the 2020 national long-term renovation strategies.*

## Including fire resilience in renovations helps to tackle worst-performing buildings

The COVID-19 pandemic emphasised the importance of living in healthy and safe buildings. More than ever, buildings are our shelters and have to perform well on every level. Yet, the health crisis also showed that, even within the continent, we are not all equal



in terms of living environment.

Affordable and social housing, for instance, are often multi-story or multi-dwelling buildings and can be more vulnerable to risks such as fire. This is an important issue to address during renovations, especially as in this type of high-rise, high-density, high-risk buildings, safe-evacuation, and firefighting may be more difficult. It then becomes crucial to limit fire spread and its dangerousness by ensuring the level of fire safety matches the increased risk.

Thanks to the Renovation Wave, we have an unprecedented chance to improve people's living conditions and reduce inequalities. The EU has a duty of care towards its citizens, that is why European and national policymakers must take a holistic approach to buildings' renovation and include fire safety and fire resilience to cater for Europeans' safety and well-being.

- ⇒ *Recommendation: FSEU urges the EU Commission and the Member States to ensure EU citizens are equally safe across the continent by paying particular attention to fire safety and fire resilience aspects for worst performing buildings when renovating.*

## By stressing the importance of fire resilience the public sector and public buildings will lead by example

Schools and hospitals are buildings of public utility, whose smooth operation is crucial for the society to function properly. A fire in this kind of buildings can significantly disrupt essential services to citizens. School and hospitals are also « high risk » buildings where evacuation is difficult due to the high density of people or to their inability to escape without assistance. Considering their importance for society, making such public buildings fire resilient must be a priority when renovating.

A powerful way for the EU to convey the importance of holistic and fire resilient renovation in public buildings is by providing the right incentives. In this context, the European Commission should closely scrutinise how Member States' use the EU recovery funds. When it comes to renovation, these funds should be used towards renovations that improve both energy and fire performance.

- ⇒ *Recommendation: Provide financial incentives under the "Next Generation EU" instrument to encourage renovations of "high risk" buildings that account both for energy-efficiency and fire safety.*



## Building fire resilient contributes to a sustainable and climate-neutral future

The Renovation Wave aims to at least double the annual renovation rate in EU countries<sup>vi</sup> and offers a unique opportunity to modernise the ageing EU building stock. This energy-efficiency upgrade is essential to decarbonising the continent; yet to achieve climate-neutrality by 2050, it is crucial to renovate to the highest level of quality and safety, and thus ensure sustained public support. When a building burns, one consequence is the release of greenhouse gases like carbon dioxide<sup>vii</sup> that can negatively impact air quality. The Renovation Wave is an unprecedented occasion to minimise the negative externalities of building fires and to truly enable climate resilience, circularity and overall sustainability; it is vital to factor in fire resilience.

⇒ *Recommendation: In line with the integrated approach of the future Communication and the Sustainable Built Environment Strategy, encourage the use of sustainable and fire resilient building materials during renovation.*

We believe the Renovation Wave presents a once in a generation opportunity to both the European Commission and the Member States to future-proof European buildings. Accounting for fire safety and fire resilience in the Renovation Wave will contribute to ensuring the deep and holistic nature of renovations. Integrating fire resilience will also maximise 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.



## REFERENCES

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<sup>ii</sup> The European Commission DG ENER. « Driving energy efficiency in the European building stock: New recommendations on the modernisation of buildings ». The European Commission. Accessed: 24 August 2020. [https://ec.europa.eu/info/news/driving-energy-efficiency-european-building-stock-new-recommendations-modernisation-buildings-2019-jun-21\\_en](https://ec.europa.eu/info/news/driving-energy-efficiency-european-building-stock-new-recommendations-modernisation-buildings-2019-jun-21_en)

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<sup>vii</sup> McNamee, M. et al. 2020. "Research Roadmap: Environmental Impact of Fires in the Built Environment". Fire Protection Research Foundation. Accessed: 24 August 2020. <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/US-Fire-Problem/RFRoadmapEnvironmentalImpactFires.pdf>