“We care about the safety of people all over Europe”

Overview of fire safety of the energy transition in the EU

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European Fire Safety Alliance

What

Independent alliance of fire professionals whose **mission is to reduce the risks from fire**, especially in domestic area – NGO based on voluntary work

Why

We do believe that in Europe, **most of the fire victims in homes are preventable**

How

- creating **international network of relevant actors** acting for improvement of fire safety and for putting it on a **higher level in a political agenda**
- defining the biggest EU fire safety challenges expressed in the **European Fire Safety Action Plan** – the first evidence and knowledge-based fire safety agenda for Europe
- organising EU-wide fire safety initiatives e.g.: **European Fire Safety Week**, **European Fire Safety Award, European Smoke Alarm Day**

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Fire safety in the EU

The need to act

- European firefighters believe that the **fires have never been as dangerous in the history of mankind as they are today**
- The question is not just whether we can improve, but **how we can maintain the current level of fire safety** in a world facing an unprecedented pace of changes and innovations
- Energy transition is **reshaping European buildings like never before**

We still have no idea how to get out of the cladding crisis, and now we are on a path to easily overlook the next risks that can lead to devastating fires resulting from the new hazards accompanying the energy transition

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Fire safety in the EU

The need to act

- **5,000 fire deaths** and **50,000 injuries** in domestic buildings each year
- **30%** of domestic fires have an electrical source
- **50%** of accidental domestic fires have an electrical source
- **132 millions** of obsolete electrical installation
- majority of these **fires and deaths are preventable**

"**The simple truth is that the deaths that occurred were all avoidable**,"
Martin Moore-Bick, chairman of the public inquiry into the Grenfell Trower fire

Grenfell Tower fire
London, 2017
72 fatalities

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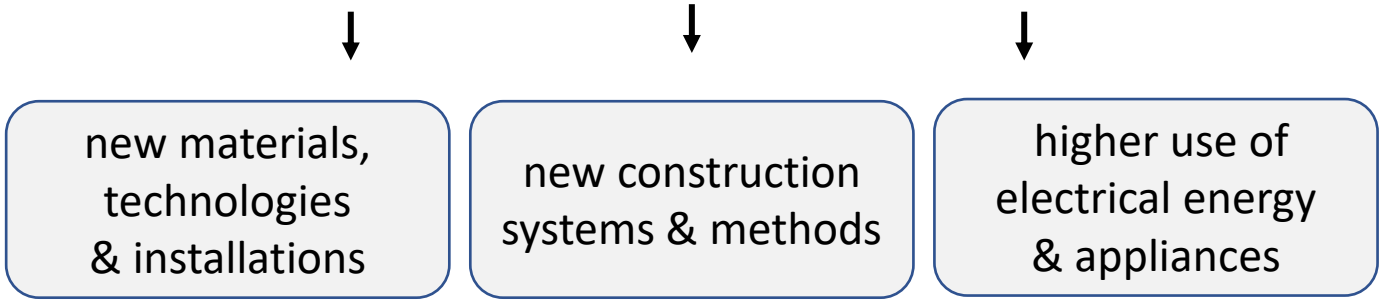
New fire safety challenges – game changers

- **Energy transition** → more complex buildings → **higher fire hazard and less predictable fire envir.**



- **Ageing demographics**
  - unique fire safety challenges (behaviour, evacuation)
  - requiring tailored attention for **increased vulnerable groups** and people affected by **energy poverty**, **substandard housing** or **disabilities**

- **innovation leads to risk** - this is normal
- when the risk becomes too big, **intervention is needed**
- this is where we are **NOW**

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Energy transition as a major fire safety challenge

Energy transition has been defined as 1 out of 5 biggest fire safety challenges by 238 European experts involved in the development of the European Fire Safety Action Plan

Focus area 3 - Fire safety must be inseparable part of the energy transition

There is **insufficient awareness, knowledge and competency regarding the new fire hazards associated with the energy transition**. The already established rise of fires associated with this development demands that fire safety is seen as an essential aspect of the energy transition and circular construction. This will prevent an increase in fire casualties in the coming years.

Action 5

Develop **knowledge and competency** to ensure fire safety adequately accompanies the energy transition. Address the fire risks associated with the new forms of energy and **ensure regular inspections.**

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Responsibility for addressing these unmitigated fire risks and new challenges

- fire safety is primarily addressed by **building codes that are a national** competence, and **it should remain like this –** MSs should feel free in shaping their own fire safety regulations
- but **building codes do not cover many important fire safety aspects** (fire awareness, some elements of prevention, fire statistics, research, market surveillance or information exchange)
- the **EU institutions have both high potential and great interest to coordinate action and support MSs** because **fire safety impacts and is impacted by several of the EU core objectives** (concerning mainly energy transition, but also: housing, tourism, environment, human health or consumer protection)
- through the harmonisation of **fire statistics** collected in MSs, shared **fire safety research**, and **exchange of experience,** the EU offers a unique perspective that will enrich and strengthen the development of knowledge in the field of fire safety and **help to address common challenges across the Member States**
- it is possible **without challenging subsidiarity principle** – EU can develop, coordinate and support solutions which next will be implemented by MSs

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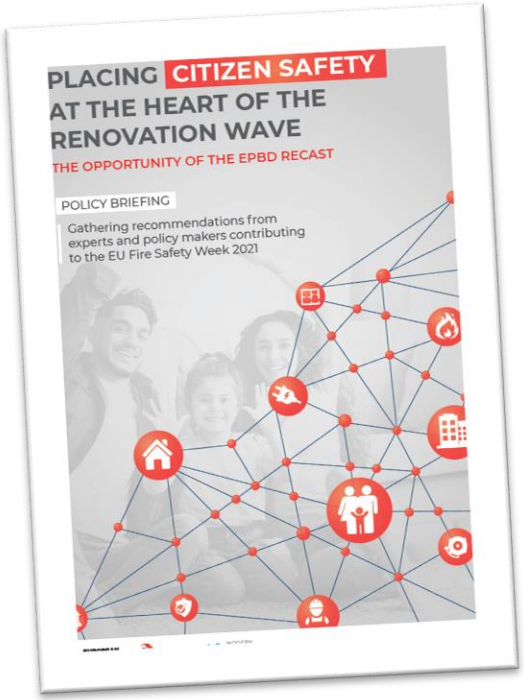
Fire safety of the energy transition – EPBD revision

Actions supporting the introduction of fire safety considerations in the revised Energy Performance of Buildings Directive (EPBD)

- the main objective of the EPBD is not impovement of (fire) safety, but to achieve a **highly energy efficient and decarbonised building stock** by 2050
- EuroFSA recognised the revision of the EPBD as an unmissable opportunity to consider building renovation in a holistic way and for **making energy transition fire safe**
- a **real risk exists that an energy-renovated building will become more dangerous** for the people, what undermines the sense of renovation
- gathered **recommendations from experts and policy makers** during the Energy Transition discussion within the EUFSW 2021 → transformed into a concrete **proposals of amendments**
- submission made by EuroFSA together with other stakeholders to MEP's and EC to include **fire safety amendments**



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Fire safety of the energy transition – EPBD revision

Actions supporting the introduction of fire safety considerations in the revised Energy Performance of Buildings Directive (EPBD)

- revised EPBD finally **adopted on 12th April 2024** and published in the Official Journal of the EU
- less fire safety that we originally proposed, but it's still a great step forward and a **significant contribution to improving fire safety** on which we can continue to build
- adopted text of the EPBD **available in the national languages** of the EU Directive - EU - 2024/1275 - EN - EUR-Lex (europa.eu)
- MSs will have **2 years to incorporate** the provisions of the Directive into national legislation
- European Commission has been working on development **implementation guidelines** for the MSs
- key contacts at the EC identified and already 'educated' to fire and electrical safety concerns

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Fire safety of the energy transition – EPBD revision

Fire safety provisions in the revised EPBD

- measures to improve the energy performance of buildings **should not affect fire safety**
- **Member States need to address changed risks with regard to the fire safety of buildings** brought by their electrification, such as through the deployment of heat pumps, solar installations, batteries and recharging infrastructure
- European Commission should publish **guidance for Member States on fire safety in car parks** by 31 December 2025 – a dedicated task force at DG MOVE has been already working on this
- Member States shall ensure a **guidance and training** for those responsible for implementation the Directive. This training may also address fire safety aspects
- the increase of fire safety was proposed as one of the indicators in the National Building Renovation Plans

Detailed fire safety provisions in the revised EPBD are presented in the next 11 slides

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

RECITALS

(11) Measures to improve further the energy performance of buildings should take into account climatic conditions, including adaptation to climate change, local conditions as well as indoor climate environment and cost-effectiveness. Those measures should not affect other requirements concerning buildings such as accessibility, fire safety and seismic safety and the intended use of the building.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

RECITALS

(36) The electrification of buildings, such as through the **deployment of heat pumps, solar installations, batteries and recharging infrastructure**, brings along changed **risks with regard to the fire safety of buildings**, which need to be addressed by Member States. As regards fire safety in car parks, the Commission should publish non-binding guidance for Member States.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

RECITALS

(45) The concept of '**deep renovation**' has not yet been defined in Union legislation. With a view to achieving the long-term vision for buildings, deep renovation should be defined as a renovation that transforms buildings into zero-emission buildings; in a first step, as a renovation that transforms buildings into nearly zero-energy buildings. This definition serves the purpose of increasing the energy performance of buildings. A deep renovation for energy performance purposes **may also be a prime opportunity to address other aspects such as** indoor environmental quality, **living conditions of vulnerable households**, increasing climate resilience, resilience against disaster risks including seismic resilience, fire safety, the removal of hazardous substances including asbestos, and accessibility for persons with disabilities.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

RECITALS

(75) A sufficient number of reliable professionals competent in the field of energy renovation should be available to ensure sufficient capacity to carry out quality renovation works at the required scale. Member States should therefore where appropriate and feasible put in place certification schemes for integrated renovation works, which require **expertise in** multiple building elements or **systems such as** building insulation, electricity and heating systems and the installation of solar technologies; professionals involved may include designers, general contractors, specialist contractors and installers.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ARTICLES

Article 7 – New buildings

6. Member States shall address, in relation to new buildings, the issues of optimal indoor environmental quality, adaptation to climate change, fire safety, risks related to intense seismic activity and accessibility for persons with disabilities. Member States shall also address carbon removals associated to carbon storage in or on buildings.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ARTICLES

Article 8 – Existing buildings

3. Member States shall encourage, in relation to buildings undergoing major renovation, high-efficiency alternative systems, in so far as that is technically, functionally and economically feasible. **Member States shall address**, in relation to buildings undergoing major renovation, **the issues of** indoor environmental quality, adaptation to climate change, fire safety, risks related to intense seismic activity, the removal of hazardous substances including asbestos and accessibility for persons with disabilities.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ARTICLES

Article 14 – Infrastructure for sustainable mobility

10. By 31 December 2025**, the Commission shall publish guidance** for fire safety in car parks.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ARTICLES

Article 24 - Reports on the inspection of heating, ventilation and air-conditioning systems

1. An inspection report shall be issued after each inspection of a heating, ventilation or air conditioning system. The inspection report shall contain the result of the inspection performed in accordance with Article 20 and include recommendations for the cost-effective improvement of the energy performance of the inspected system. The inspection report shall indicate any safety issue that was detected during inspection. However, the author of the report shall not be considered liable in relation to the detection or indication of any such safety issues.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ARTICLES

Article 29 – Information

3. Member States shall ensure that guidance and training, including for under-represented groups, **are made available**, for those responsible for implementing this Directive. Such guidance and training shall address the importance of improving energy performance and shall enable consideration of the optimal combination of improvements in energy efficiency, reduction of greenhouse gas emissions, **use of energy from renewable sources** and use of district heating and cooling when planning, designing, building and renovating industrial or residential areas**. Such guidance and training may also address** structural improvements, adaptation to climate change, fire safety, risks related to intense seismic activity, the removal of hazardous substances including asbestos, air pollutant emissions (including fine particulate matter), indoor environmental quality and accessibility for persons with disabilities. Member States shall endeavour to put in place measures to support training for local and regional authorities, renewable energy communities and other relevant actors, such as citizens-led renovation initiatives, to promote the objectives of this Directive.

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ANNEXES

Annex II – Template for the National Building Renovation Plans

EPBD Article 3	Mandatory indicators	Optional indicators
(c) Overview of implemented and planned policies and measures		Policies and measures with regard to the following elements: (c) the increase of fire safety;

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Fire safety of the energy transition – EPBD revision

EPBD – text analysis (fire and electrical safety provisions)

ANNEXES

Annex VIII – Requirements for Building Renovation Passports

2. The renovation passport may include:

(c) Independent modules on:

v. Technical and safety requirements for materials and works;

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Thank you for your attention

For more information, please visit these sites:

- www.europeanfiresafetyalliance.org
- www.firesafetyweek.eu
- www.smokealarmssavelives.eu
- www.keepeufiresafe.org
- www.feedsnet.org
- www.nipv.nl

Social media channels

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