



# **Outlook on the development of Energy Efficiency with the framework of the new EPBD requirements**

*Session 'Policy for Deep Retrofits: Why and How'*

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## **Who we are:**

Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 170 member organisations active in 38 European countries, representing over 1.500 NGOs and more than 47 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

# Why buildings are so important in the fight against climate change?

## International perspective

- United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement adopted in 2015 (COP21) with the goal of limiting global warming at 1.5° C by 2050.
- UN's Intergovernmental Panel on Climate Change (IPCC) indicates that crossing the 1.5°C threshold risks unleashing severe climate change impacts, incl. more frequent and severe droughts, heatwaves and rainfall
- To limit global warming to 1.5°C, greenhouse gas emissions must peak before 2025 at the latest and decline 43% by 2030.
- According to the latest IPCC Report, the share of GHG emissions of buildings was equivalent to **21% of global GHG emissions**.
- Final energy demand from buildings in 2019 represented around **31% of global final energy demand**, where residential buildings consumed **70%** of the global final energy demand from buildings.

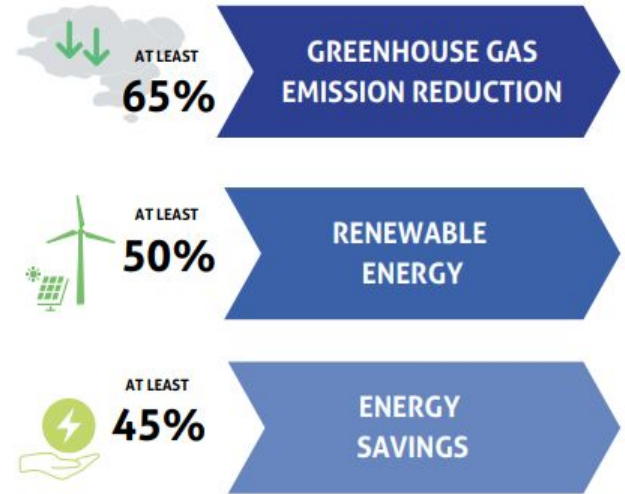
# Why buildings are so important in the fight against climate change?

## European perspective

- **From an environmental perspective:**
  - Buildings are responsible for 36% of total CO2 emissions in EU and 40% of total energy consumption
  - In EU 75% of buildings are inefficient, and 60% of EU residential sector is depending on fossil fuels
- **From a geopolitical perspective:**
  - With the Russian war against Ukraine and energy prices crises, consumers (especially vulnerable ones) are the first to pay for the inefficiencies of their homes
- **From a social perspective:**
  - 50 million households in EU live in energy poverty and experience inadequate levels of essential energy services (energy efficiency levels is one of the causes of this phenomenon, along with cost of living and energy prices)
  - The surge in energy prices worsened by the Russia's invasion of Ukraine, along with the impact of the COVID-19 crisis, **have likely worsen an already difficult situation for many EU citizens**

# Revision of EPBD: how to align with 1.5 ° C goal?

- Framework of EPBD revision:
  - In 2020 Renovation Wave Strategy proposed the objective **to at least double energy renovation rates for the next 10 years** (and support deep renovation) = -60% CO<sub>2</sub> emission and -14% final energy consumption
  - In 2021 the '**Fit for 55 Package**' initiative wants to translate the ambition of the European Green Deal by aligning EU law with the climate objectives of the European Union (-55 % GHG emissions cut by 2030)



Level of ambition underpinning Fit for 55 Package is not sufficient to support the achievement of the 1.5 °C goal.



Commission's EPBD proposal is a step in the right direction but we need to do more!

# Where to boost ambition to ensure high energy efficiency levels in buildings?

- Deep Renovation Definition ←
- National Building Renovation Plans (operational LTRS) ←
- Inclusion of new zero-emissions buildings standard for new constructions (with annexed whole life carbon assessment requirements) ←
- Minimum Energy Performance Standards (MEPS) scheme, and update of energy performance certificate (EPC) scheme ←
- Enabling framework for MEPS: financial incentives, technical assistance and safeguards/prioritization of people living in energy poverty
- Solar Energy in Buildings (REPower EU)
- Decarbonisation of heating and cooling



# What are MEPS?

- MEPS are regulated standards that existing buildings must meet at a designated point in the future or at a natural trigger point in the building lifecycle, like sale or renovation.
- The standard can be defined in many ways:
  - Presence of minimum energy efficiency measures,
  - Maximum carbon emissions or
  - Minimum energy performance
- European cases already exist



## European examples



**England & Wales**  
Privately rented buildings must be EPC E from 2020



**Scotland**  
Privately rented homes must be EPC E by 2022 and D by 2025



**The Netherlands**  
Offices must be EPC C by 2023



**Flanders**  
Rented homes must have minimum roof insulation from 2020 and double glazing from 2023



**France**  
Private homes must be EPC E by 2028

# “1.5°C-proof” Recommendations: MEPS

- “G” and “F” buildings need to be transformed into “E” by 2030/2033
- Parallel to MEPS, EPCs will need to be recalibrated by 2026 (Articolo 16):
  - Class “G” = 15% worst energy performing buildings at national level
  - Classes “F” to “B” = redistribution of classes based on a equal bandwidth
  - Class “A” = ZEB levels

- Keep the focus on worst-performing buildings, and aim at “C” level by 2030/2033
- Using MEPS as trigger for deep renovations but ensuring that strong framework is in place (technical assistance, financing, focus energy poverty)
- EPCs to at least harmonise the worst and the highest classes to ensure we define a common “starting point” and “end-goal”



# “1.5°C-proof” Recommendations: ZEB

- As of 2030, all new constructions should be ‘ZEB’
- Energy performance levels calculated and categorised by segment and climatic zone
- life-cycle Global Warming Potential (GWP) calculated as of 2030. Calculated in accordance with the Level(s) framework
- ZEB need to address **healthy indoor climate conditions, adaptation to climate change, fire safety, risks related to intense seismic activity and accessibility for persons with disabilities.**

- As of 2025 new construction should be ZEB, or at the latest 2027
- Clear division ZEB for new construction and existing buildings
- Lower thresholds for maximum energy consumption
- Earlier GWP Calculation requirements
- ZEB need to address **healthy indoor climate conditions, adaptation to climate change, fire safety, risks related to intense seismic activity and accessibility for persons with disabilities.**

**Units built today will be standing for the next 50 to 100 years - We need to make things right for the occupants and the environment now!**

# “1.5°C-proof” Recommendations: Deep Renovation

- As of 2030, deep renovation deliver ZEB
- Renovation Passport is strengthened to ensure that there is guidance for renovation steps
- Requirement to incentivise deep renovation that result into overall reduction of at least 30% primary energy savings

- Deep renovations deliver ZEB as of 2025 or at the very latest 2027
- Renovation Passport should: 1) promote deep renovations with limited steps; 2) Introduce one-step deep scenario; 3) ensure Energy Efficiency 1st Principle
- More, tailored and proportionate financing needs to be unlocked
- Incentive to deep renovation with energy savings higher than 60%

# “1.5°C-proof” Recommendations: National Building Renovation Plans



- Final & intermediate goals for renovation rates, tailored timelines for all existing buildings to achieve decarbonisation goal 2050
- An outline of the investment needs, financing and measures, and the administrative resources
- Contribution of buildings to EED/RED targets
- Involvement of civil society in drafting of NBRPs (public consultations) and better monitoring from Commission (recommendations)

## Additional points to add

- Addition of deep renovation interim and final goals
- Introduction of EE1 Principle as guiding principle
- Better focus on energy poverty (keep focus on worst-performing buildings)
- Faster phase out date of fossil fuel use in buildings (2035)



# European Institutions positions on EPBD: what to expect?



- MEPS (D class by 2030/2033) + EPC rescale [**exemption social housing**]
- Stronger social safeguards included and stronger focus on energy poverty
- **Integrated Renovation Programmes**
- Inclusion of a phase out of fossil fuel date in buildings by 2035, or 2040 if not feasible.
- Stop to fossil fuel subsidies as of 2024
- More ambitious ZEB standards (WLC provisions)
- More ambitious solar mandate

- MEPS included but too flexible (dual approach between residential and non-residential)
- Minimal EPC rescale and big exemptions for few Member States
- National Building Renovation Plans requirements safeguarded, but no prioritization energy poverty
- Not ambitious ZEB standards (WLC have stayed the same as Commission proposal but levels of energy performance are very low)
- Not very ambitious heating & cooling decarbonisation requirements
- Inclusion of solar mandate as per Commission proposal

# An ambitious EPBD: an opportunity for all!

- Strong implementation will indeed require administrative capacity and the readiness of the construction sector to ensure that roll out of renovations and efficient and sustainable construction will happen
- By **tripling deep renovation rates per annum**, we will ensure that energy savings, CO2 emissions cut and high level of comfort are delivered to occupants
  - Cutting energy demand means less reliance on fossil fuels, hence lower energy bills.
  - It also means that penetration of RES is easier and cheaper
- A long-term trajectory created by a clear regulatory framework will help all the actors of the renovation/construction value chain to prepare in a timely manner
- MEPS will signal at the right time the needed renovation action and will tackle energy poverty (a phenomenon that is affecting more and more people)
- As much as for the construction sector, financial sector needs to be alerted to ensure that enough private financing instruments/products are there to support consumers



**Thank you!**



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