

ENERGY PERFORMANCE BUILDINGS DIRECTIVE (RECAST) 2024 FACTSHEET OVERVIEW

INTRODUCTION

The European Commission proposed a recast Energy Performance of Buildings Directive (EPBD) on 15 December 2021. The Council adopted its negotiating position in October 2022; the Parliament on 14 March 2023. The co-legislators reached a provisional agreement on 7 December 2023. Fast forward to 12 March 2024 when the approval of the recast Energy Performance of Buildings Directive was given.

This factsheet provides a preview of upcoming regulatory changes. It is expected to be translated into Irish legislation later in 2025 upon the final sign-off by the Commission. These changes will impact businesses by implementing stricter requirements for building energy performance, smart readiness, and environmental impact.

1. EPBD APPROVED REQUIREMENTS



1.1 Article (1) Subject Matter:

- Improve energy performance for a zero-emission building stock by 2050.
- New minimum requirements for energy performance and a common framework for embodied carbon, solar energy, fossil fuel phase-out, and indoor air quality.



1.2 Article (4) Adoption of a Methodology:

- Member states must adopt a methodology for calculating energy performance based on Annex I.
- This methodology applies at the national and regional level.
- It provides consistent methodology for energy performance calculations across buildings.



1.3 Article (5) Setting of Minimum Energy Performance Requirements:

- Member states set cost-optimal levels for NZEB and ZEB.
- Intermediate requirements for building envelope, energy use, heating, and demand response.



1.4 Article (6) Calculation of Cost-Optimal Levels:

- Comparative methodology framework for cost-optimal levels.
- Commission to revise methodology for existing buildings by June 2024.

Net Zero Energy Buildings:

Net Zero Energy describes buildings where their total energy use over the course of a year is approximately equal to the amount of renewable energy generated onsite or sustainably procured.



1.5 Article (7) New Buildings:

- By January 1, 2026: Public authority buildings must be zero-emission.
- By January 1, 2027: Lifecycle greenhouse gas emissions must be disclosed for all new buildings.
- By January 1, 2028: All new buildings must be zero-emission.
- Phasing out fossil fuel for heating system.
- A zero-emission building has very high energy efficiency and utilises renewable energy sources or waste heat to cover its energy needs, resulting in no net carbon emissions.



1.6 Article (9) Minimum Energy Performance Standards:

- Energy Performance Class D: Minimum standard, by January 1, 2030, for all buildings requires deployment of solar and renewable energy in major renovations.
- Energy Performance Class E: Minimum standard, by January 1, 2027 (for non-residential) and by January 1, 2030 (for residential), includes mandatory deployment of solar and renewable energy in renovations.



Mandatory deployment of solar and renewable energy in renovations



1.7 Article (11) Technical Building Systems:

- Member states implement system requirements for energy-efficient technical building systems.
- Buildings are mandated to install self-regulating devices and environmental monitoring systems.
- Emphasis on improving energy performance and automation in non-residential buildings.



1.8 Article (11(a)) Indoor Environmental Quality:

- Requirements for indoor environmental quality standards.
- Measurement indicators include CO₂ levels, temperature, humidity, daylight, ventilation rate, and acoustic comfort.



1.9 Article (12) Infrastructure for Sustainable Mobility:

- New non-residential buildings with more than five parking spaces require one recharging point per five spaces, pre-cabling – for EVs, and 15% bicycle parking. By 2027, non-residential buildings with more than twenty (or ten if feasible) spaces require one recharging point per ten spaces and bicycle parking.
- New residential buildings with over three parking spaces need pre-cabling for EVs, one recharging point, and two bicycle parking per dwelling.



1.10 Article (13) Smart Readiness of Buildings:

- By December 31, 2024, the Commission will establish a standard Union scheme for smart buildings readiness, focusing on adaptability and energy efficiency.
- From January 1, 2030, it becomes mandatory for non-residential buildings with HVAC systems over 70 kW.



1.11 Article (16) Energy Performance Certificates:

- Energy performance scale: A+ to G
- Class A corresponds to Zero-Emission Buildings.
- A+ requires:
 - Energy requirements for heating, cooling, ventilation. Hot water < 15 kWh/m²/year
 - Higher on-site renewable energy production
 - Carbon positivity throughout the building's lifecycle

2. Executive Summary Insights:

- The proposed EPBD revision will reshape construction standards, underlining energy efficiency and sustainability.
- NZEB and ZEB criteria, lifecycle GWP calculation, and embodied carbon inclusion.
- Mandates for zero-emission buildings by 2026 and 2028, associated with emissions disclosure.
- Minimum Energy Performance Standards require advances in design to meet Class D and E standards by 2030.
- Focus on energy efficiency, renewable energy, embodied and operational carbon, smart systems, and indoor quality underlines the need for innovation.
- Requirements for sustainable mobility and smart readiness will drive differentiation in our offerings.



Conclusion

The EPBD is a crucial step toward the EU's climate neutrality goal. Businesses should anticipate changes and align plans with the proposed directive, focusing on energy efficiency, carbon neutrality, and indoor environmental quality. Further updates may occur during inter-institutional negotiations.



Contact Us for your Net Zero Goals

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