Press Release

IWG5 unveils its 2025 Implementation Plan and sets new targets for sustainable and energy-efficient buildings in Europe

19 August 2025 – The Implementation Working Group on Energy Efficiency in Buildings (IWG5 Buildings) unveils the 2025 revision of its Implementation Plan. The updated plan presents a strategy to accelerate the decarbonisation of Europe's built environment, ensuring it contributes meaningfully to the EU's targets of reducing CO_2 emissions by 2030 and achieving climate neutrality by 2050.

Europe's building sector stands at a critical crossroads. Accounting for 40% of the EU's energy consumption and greenhouse gas emissions, and generating a significant volume of construction waste, the sector faces mounting pressure to transform. Amid challenges such as resource scarcity, urban heat intensification, a shortage of skilled labour, and lagging digitalisation and industrialisation, urgent and strategic action is needed.

IWG5 Buildings is leading this transformation by emphasizing resource efficiency, circularity, and social equity as integral elements of the green transition. It also supports advancing renewable energy and innovative building technologies.

The IWG5 Implementation Plan is a strategic document which outlines the challenges faced by the building sector, the group's key areas of work, priorities, and quantifiable sectoral targets for the introduction of new technologies. This document requires regular updates to reflect policy and technological developments relevant to the built environment.

Key highlights from the 2025 Implementation Plan

The IWG5 Implementation Plan outlines 11 strategic targets across its two subgroups 'Sustainable materials and technologies for energy efficiency solutions for buildings' and 'Cross-cutting heating and cooling technologies for buildings'.

It also sets out 9 key Research and Innovation (R&I) activities that are crucial for meeting the ambitious goals for the building sector:

- Sustainable materials
- Prefabricated active modules for façades and roofs
- Digitalisation of buildings
- Heat Pumps
- District Heating and Cooling
- Combined (Cooling) Heat and Power generation
- Thermal Energy Storage
- Solar Thermal and PVT technologies
- Technology combination and integration

The Implementation Plan takes into account the European Green Deal, the Clean Industrial Deal, and several updated directives, most notably the revised Energy Performance of Buildings Directive (EPBD) of 2024. It supports the EU's targets to reduce CO_2 emissions by 2030 and to achieve climate neutrality by 2050.

More than 90 flagship projects are also featured in the 2025 update, reflecting cutting-edge advancements across the EU.

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Driving building innovation

As the sector continues to evolve, IWG5's future R&I priorities may increasingly focus on:

- Innovative and sustainable cooling solutions
- Whole-life carbon neutrality in buildings
- Integrated renovation strategies that combine technology, design, and social inclusion

These forward-looking approaches not only unlock energy savings and carbon reductions, but also shape a socially just, climate-resilient built environment, ensuring universal access to safe, renewable, and affordable energy, where buildings interact optimally with urban spaces and infrastructures.

Annett Kühn, IWG5 Buildings Chair added:

"Europe's buildings are central to meeting our climate goals. This updated Implementation Plan not only drives technological innovation, but also ensures that sustainability, resilience, and social inclusion go hand in hand. It provides a clear roadmap for scaling up innovation, aligning policy, and mobilising investment."

For more information, you can download the 2025 IWG5 Implementation Plan on the project's website.

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Background information on IWG5 Buildings:

IWG5 Buildings is part of the European Strategic Energy Technology (SET) Plan and it provides technical recommendations to the Steering Group. IWG5 Buildings is composed of government representatives of EU members states and associated countries, industrial stakeholders, non-governmental organizations, and research institutes. It provides expert knowledge on decarbonizing both new and existing buildings, via innovative technologies and supportive policy measures. Its two main areas of focus are energy efficiency technologies and renewable energy technologies. The IWG5 is supported by a CSA, coordinated by EUREC, in collaboration with ECTP, EURAC Research and WIP Renewable Energies. To stay informed about the project, subscribe to the project newsletter and social media channels (X, LinkedIn).

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