

**Introduction: The energy transition on the urban environment through the experience of pilot cities in the EU Mission '100 Climate-Neutral Cities by 2030'**

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The EU Mission "100 Climate-Neutral Cities by 2030" sets ambitious targets to accelerate the transition toward sustainable urban living across Europe. Through pioneering efforts that combine science-based approaches with sophisticated decision-making processes, including "what if" analyses that integrate various disciplines such as energy, transportation, environmental engineering, and architecture, the pilot cities are not only aligning with EU climate goals but also creating a replicable model to guide other urban centers toward energy transition and climate neutrality. Building on the ongoing experiences of pilot cities leading this mission, this presentation will provide an overview of current EU targets, regulations, and initiatives aimed at city decarbonization. It will explore how advanced technologies—such as new materials, energy system components, advanced data collection methods, and innovative digital tools—are being integrated into urban strategies. This highlights the crucial link between technological development and policy-making, and introduces subsequent speeches in the symposium.