

Towards a City-Adaptive Evaluation Framework for Urban Greening: Supporting Implementation and Demonstrating Impact

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Keywords: urban greening, evaluation framework, impact assessment, co-development

Abstract As urban greening becomes a key strategy for climate mitigation and adaptation, cities increasingly need robust and adaptable ways to evaluate the effects of their interventions. This paper presents early insights from ClimaGen (2025–2029), a Horizon Europe project supporting nine European cities in designing, implementing, and evaluating targeted greening efforts.

Central to the project is the co-development of the ClimaGen Impact Model, an evaluation framework to be developed by addressing the specific partner cities' needs. The challenge is to integrate inputs that are context-dependent (geography, climate, urban layout, goals, etc) in a coherent and flexible framework to support cross-case comparison and shared learning.

The model builds on and extends existing frameworks by aligning local priorities with national and European policy goals. Relevant Key Performance Indicators (KPIs) are defined from what cities already monitor, supplemented where needed by new indicators developed within the project. The process begins by establishing a preliminary evaluation of the status of selected intervention areas (baseline) to which the impact of the actions is evaluated by means of identified KPIs.

This is followed by a methodological discussion on how to meaningfully assess, weight, and compare urban greening efforts across cases. Key issues include balancing standardization and flexibility, integrating quantitative and qualitative indicators, and aligning with cities' existing monitoring practices.

We reflect on the practical and conceptual challenges of creating an umbrella framework that is both adoptable and useful across heterogeneous urban realities, and how such a framework can provide practical support for city practitioners and help bridge the gap between strategic ambitions and operational decision-making in climate-resilient urban development.