

Mapping the Flemish Garden: A lever for Climate Adaptation and Biodiversity

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Abstract Gardens cover more than 12% of the Flemish territory—an area comparable to that of all forests and nature reserves combined. This figure highlights the significant, often untapped potential of gardens as allies in the fight against climate change and as providers of ecosystem services such as water infiltration, cooling, biodiversity, and quality of life. However, the extent to which gardens fulfill these functions strongly depends on how they are designed and managed by individual owners.

To better understand and activate this potential, we have developed a detailed garden map. This map forms the basis for a new garden indicator, which is currently under development. The indicator will consist of a set of parameters that will allow for the systematic monitoring of the condition and ecological value of Flemish gardens. This information will support policymakers and planners in taking targeted actions to improve quality and increase greenery in Flemish gardens.

The indicator is expected to include, among other aspects:

- the average garden area per inhabited building,
- the total garden area,
- the extent and type of paving,
- and eventually also the share of different types of vegetation, linked to the detailed green map.

These parameters will be analysed at various spatial levels, including urban, peri-urban, and rural areas, as well as within coherent open space areas.

This approach aligns with the conference track “Transformative Strategies for Adaptive Regeneration,” by viewing gardens as a form of decentralized green infrastructure. In this way, the initiative contributes to nature-based solutions that help mitigate the urban heat island effect, promote biodiversity, and improve water management. Although the indicator is still under development, this initiative represents a promising step toward climate-resilient and biodiverse living environments, and a bridge between research and practice.