



## Special Session Proposal

### Urban Vitality, Green Infrastructure, and Sustainable Urban Form

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### Abstract

From a planning perspective, green infrastructure has emerged as an effective strategy to address the impacts of climate change on urban growth. This concept represents a paradigm shift in how green open spaces are viewed within the context of urban expansion. The proposal for this special session is based on a research project that is supported by a synergistic collaboration between universities and the government sector, which aims, first, to assess the role of green infrastructure in promoting urban vitality; and second, to evaluate its effectiveness in mitigating climate change impacts in cities, such as urban heat islands, flooding, and soil erosion, among others.

Using GIS tools, satellite imagery, census data, and land use information, the research aims to develop an index that measures the impact of green infrastructure on urban vitality in Bogotá, Colombia. This index will consider factors such as proximity to green spaces, density, social capital, territorial capital, and urban risks related to climate change scenarios and environmental conflicts.

The findings will help inform public policy decisions, offering strategies to balance territorial growth and mitigate negative externalities. The goal is to preserve ecosystem services associated with green urban infrastructure.

Contributions to the special session are welcome from research projects in metropolitan areas, particularly in the Global South, on topics such as urban greening and vitality, greening policies and climate change mitigation, cool urban environments, sustainable urban growth, and related issues.

This special session will create a platform for discussions on the impact of urban greening policies in mitigating climate change and improving urban vitality and residents' quality of life, while recognizing best practices. Additionally, it will focus on methodologies for assessing the role of urban greening in sustainable city development, which is of paramount importance given the urgency of addressing the climate crisis in large cities of the Global South, where significant environmental deficits persist due to unplanned urbanization.