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# The secret ingredient – the role of governance in green infrastructure development: through the examples of European cities

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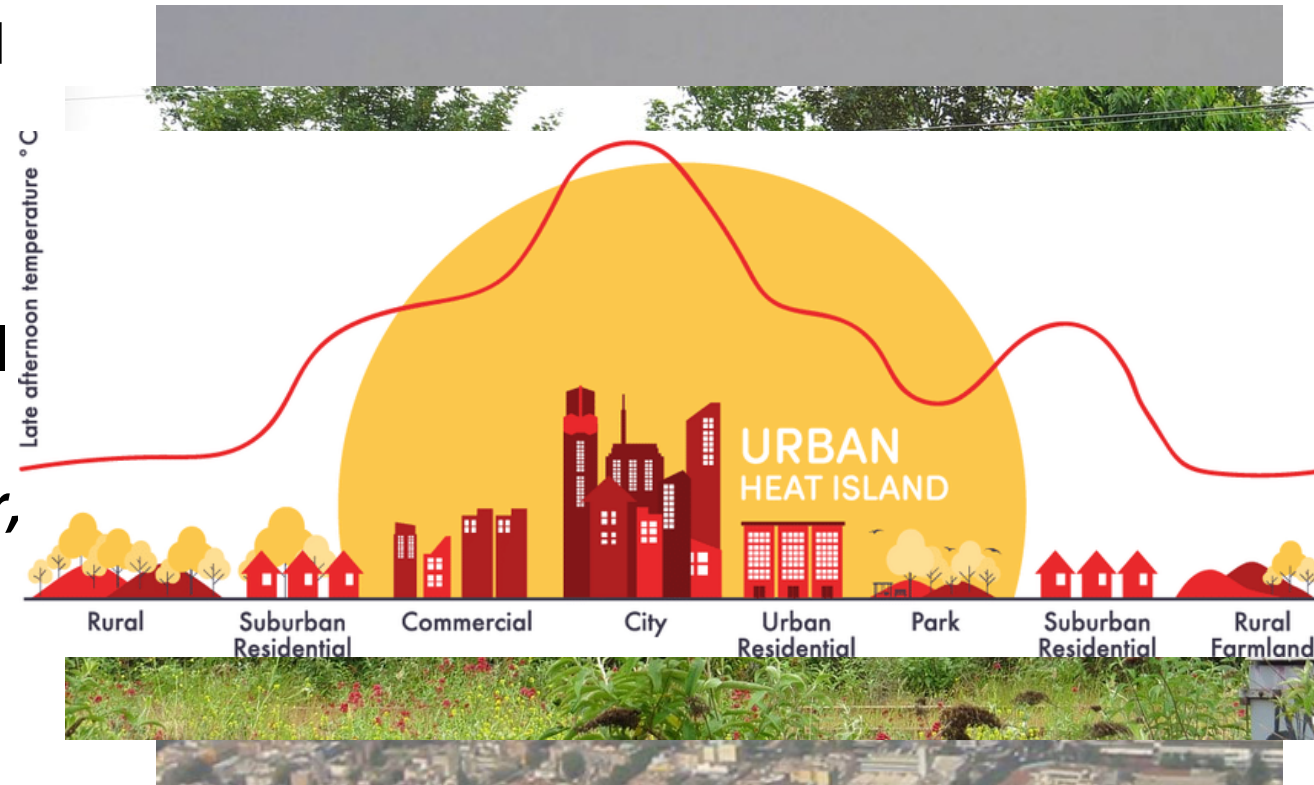
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# Growth of population, urbanization



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- In 1900 there were 16 cities with over 1 million inhabitants and in 2010 this number grew to 449.
- Urban Heat Island intensity grow 10-times faster than global warming annual average growth: world:  $0.0075^{\circ}\text{C}$ , Budapest:  $0,06^{\circ}\text{C}$  (*M. Szilágyi and Jámber, 2004*)
- physical and mental health of citizens depends on the urban environment
- Quality of green spaces are crucial



# Aim of research



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- collect and analyse the processes that lead to successful green infrastructure development in the cities of London, Copenhagen, Graz and Budapest.
- analyse the differences and similarities in how these cities react to the urbanisation and climate issues
- investigate strategic plans, governance and participation projects





- literature review
  - historical overview
  - In-depth interviews
- Investigation of:**
- operative and valid plans
  - policy implementations
  - process of green space management.
  - local characteristics
  - green and nature-based projects of linked third parties and non-governmental organisations.

## What are The Key Factors of Success for Green Development in Cities?



**Hypothesis:** the success of green infrastructure development lies not only in the coherence and consistency of plans, but also in governance that ensures the implementation of community priorities.



# The planning traditions in Europe



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Managing economic and social inequalities with development and infrastructure programs

## Regional economic

PT, FR, IE, DE UK, HU, LV, LT, SK

## Land use management

BE, IE, LU, UK, HU, CY, CZ, MT

Regulation of land-use change with strategic and local plans

## Comprehensive, integrated

AT, DK, FI, NL, SE, DE, NO, CH, UK

Focusing on the spatial effects of policies and the and coordination of actors and sectors

## Urbanism

GR, IT, ES, CY, MT

Conditioning urban design, cityscape and construction with zones and regulations.

# Copenhagen - (comprehensive integrated)



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- Copenhagen's Fingerplan dates back to 1947
- The key factor of success is a planning metaphor
- The concept has been in use for more than 70 years now!
- There is a strong consistency of plans: transportation, spatial planning, economy, green infrastructure
- It's become an example to be followed

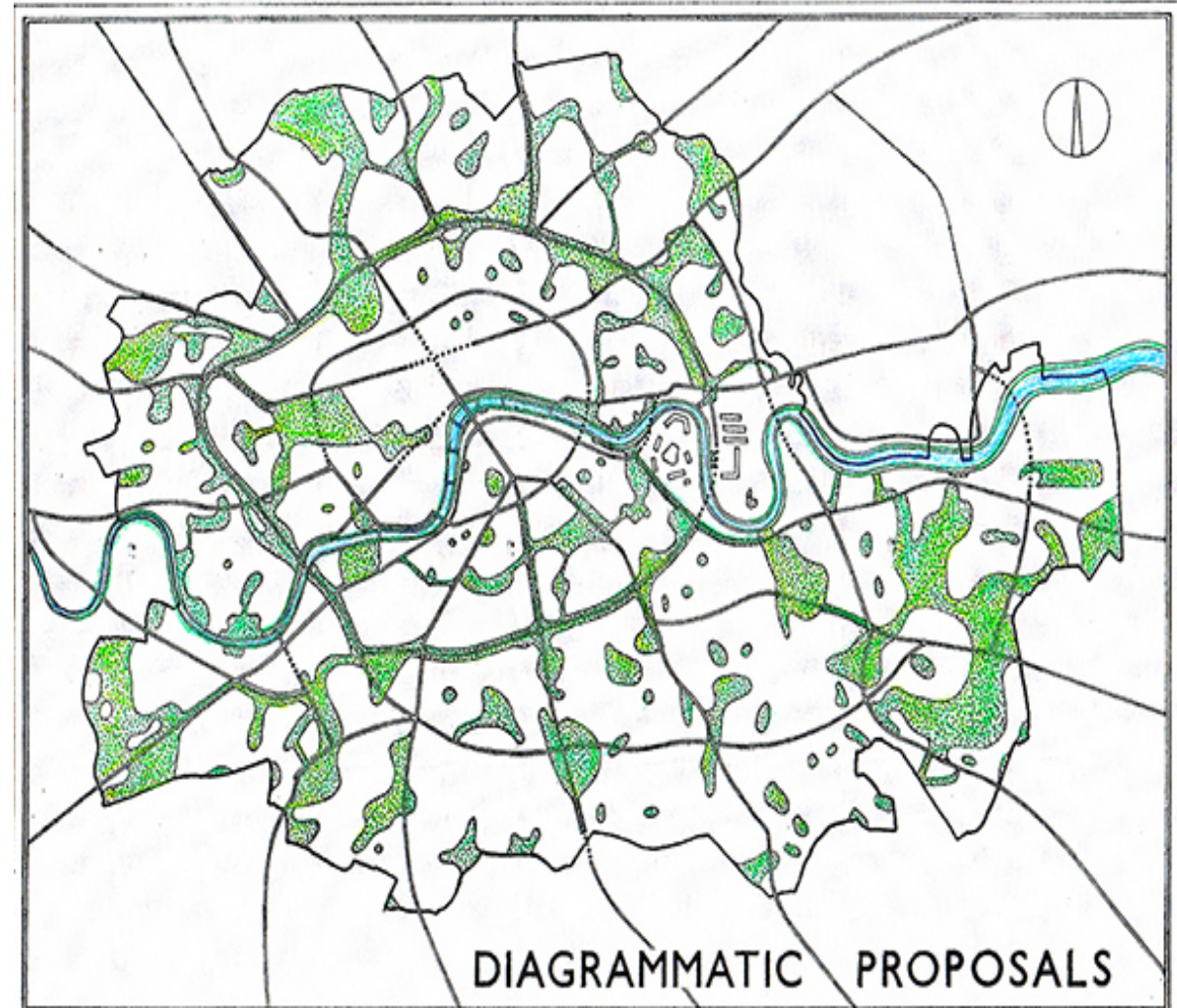


# London - (land use management)



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- Abercrombie's plan – 1943
- Greater London plan
- The main motivation of taking green spaces and urban cross-ventillation into consideration was the foggy, smoggy climate of London, and serious health issues in the 50's.



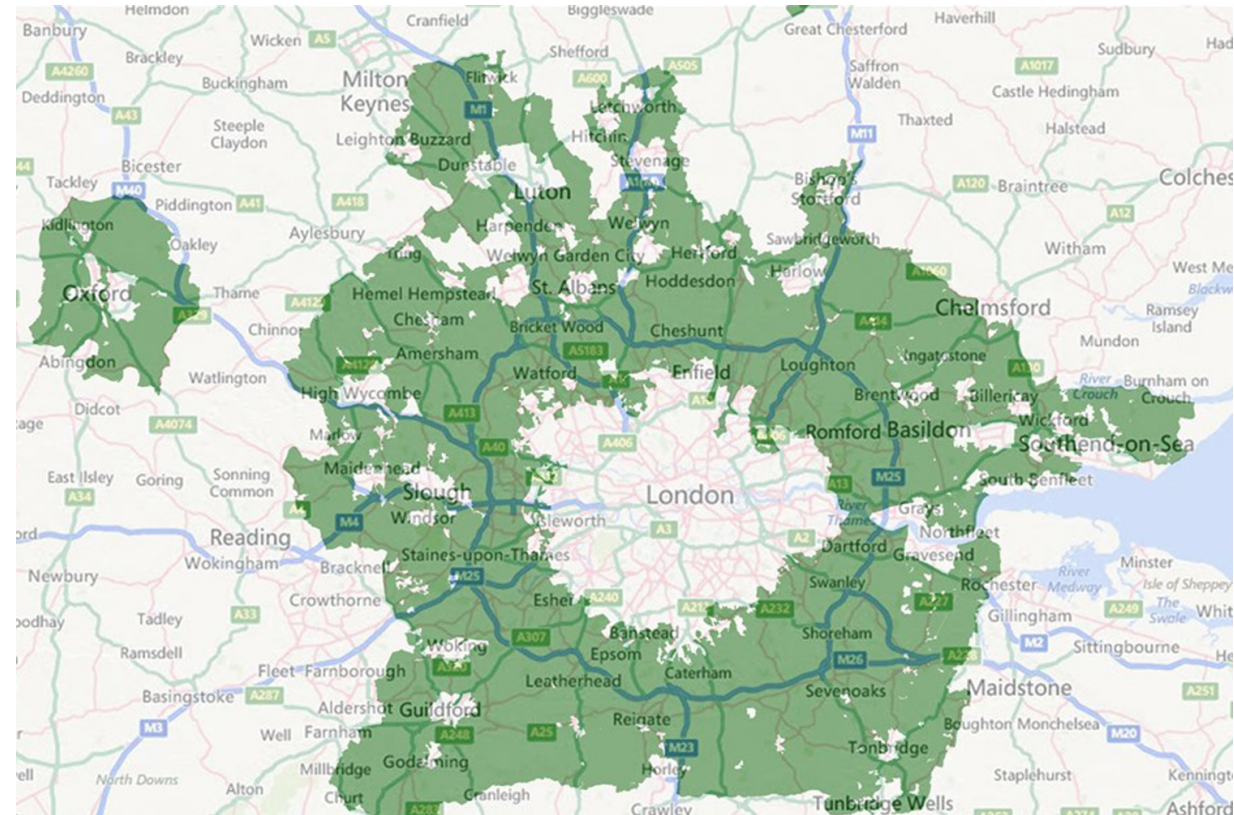


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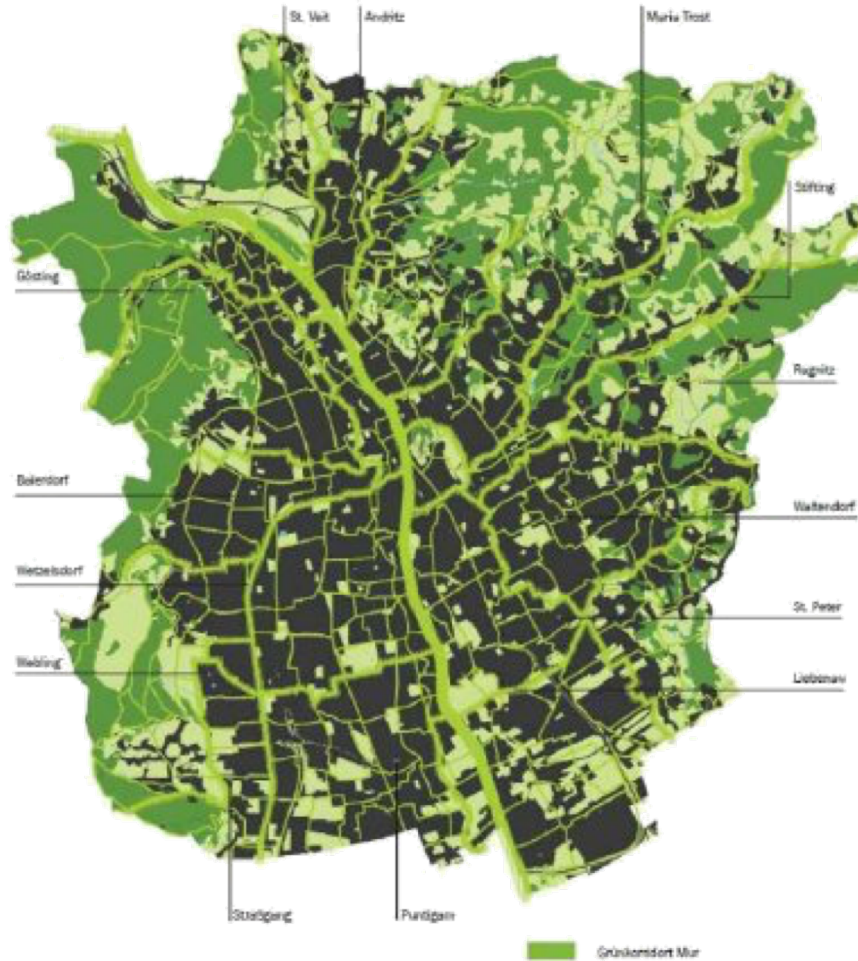


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The Green Net of Graz" (City of Graz, department for Urban planning, development and construction, 2006)



Development Concept of the green surface system plan

## Graz: Vorgarten

There is a history of „vorgarten“ in Graz dating back to the 19th Century.

What are the benefits?

- „historische Gestaltungselemente
- unversiegelte, straßennahe Grünräume
- wertvolle Naturflächen
- wichtig für das Mikroklima
- „grüne Begegnungsräume“





# Examples



„Die Stadt Graz möchte Sie mit Fördergeld aus dem Altstadterhaltungsfonds motivieren, aus einem versiegelten Vorgarten einen wertvollen Grünbereich zu gestalten. Auch Teilentsiegelungen werden gefördert. Mit jeder Revitalisierung eines Vorgartens wird ein bedeutsamer Beitrag für das städtische Mikroklima und die (eigene) Lebensqualität geleistet.“

- Financial support: € 100,–per planted sqm.





# Examples



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## Budapest: XII. District (Municipality of Hegyvidék)

- half of the territory of the municipality is green surfaces (forest)
- Set up a so-called „Green Office” within the municipality
- Coordinates lot of green projects
- The Green Fostering Programme was started:
- 25 projects were initiated in 2 year's time.
- Starting an urban bee-keeping project (URBACT)





# Summing up results – the „secret ingredients“



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(1) The coherence and consistency of plans is essential in implementing green space development. Master plans influencing green infrastructure development were formulated around the beginning of the 20<sup>th</sup> century and set a clear target for the next 100 years. Today, the number of plans have multiplied, and it is essential to align small scale short-term developments with overall aims of long-term master plans.

(2) Due to massive social and economic changes of past century, the planning process has become more complex and involves more actors and fields than ever before. A problem of urban green infrastructure development is that it has no priority against other grey infrastructure elements, which proves the necessity of cooperation between all actors. City councils often have limited resources; therefore, the complexity of social and economic situations requires a variety of methods to ensure the integration of green areas into the urban infrastructure.

(3) Third and most importantly, to successfully introduce new structures, additional local stakeholders and residents must be involved in the participation process, especially in the case of small-scale projects. The focus here lies in considering all needs and interests that will influence effective programme implementation. Moreover, people tend to favour such actions if they feel their needs and interests are met.



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**Thank you for your attention!**