Green High Five:
Vertical Gardens along the Egnatia Corridor

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Background

Urban Green Spaces provide **Environmental** Benefits

Air Filtration

Greenhouse Gas Reduction

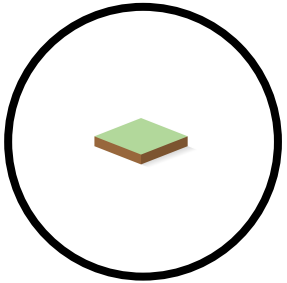
Urban Heat Island Effect Reduction

Biodiversity Increase

Green Space in New York, USA

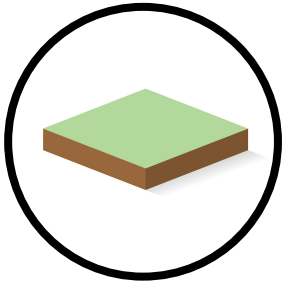
Urban Green Spaces provide **Health** Benefits

10% Green
15.5% Unhealthy



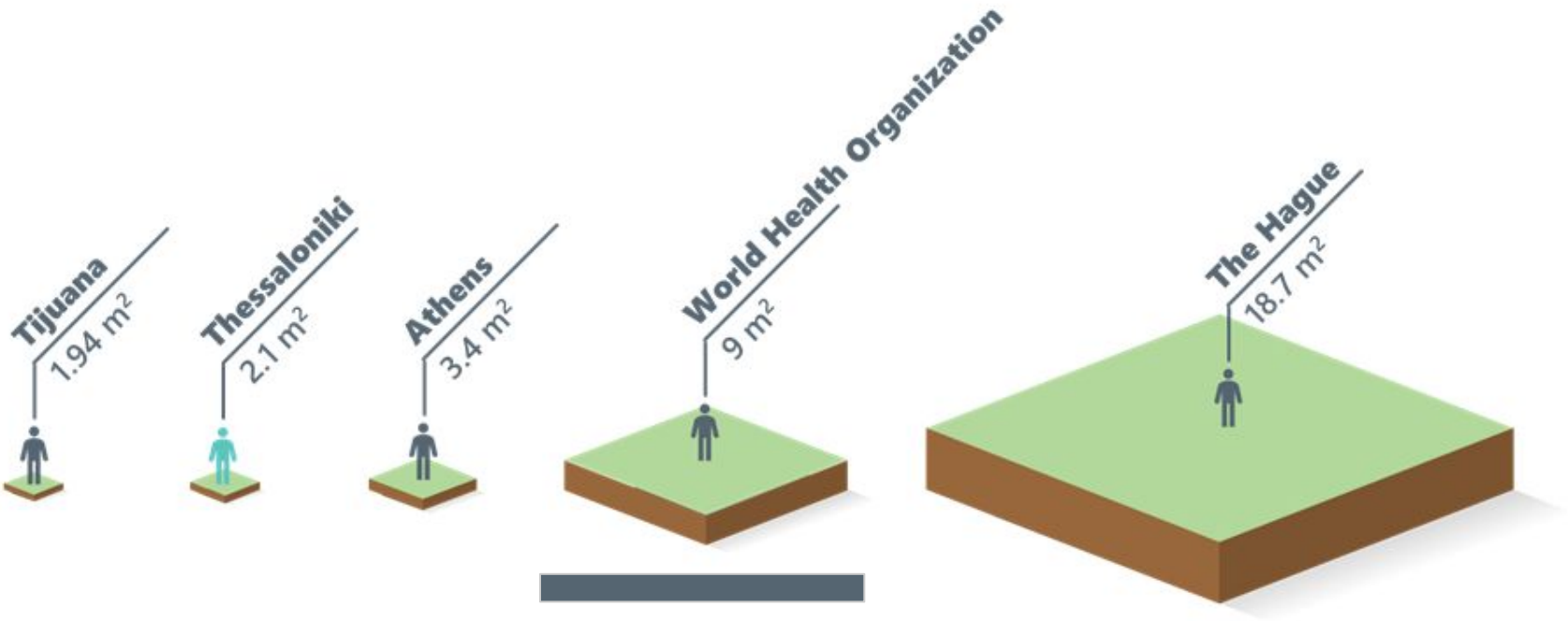
Increase in green space in a walkable radius

90% Green
10.2% Unhealthy



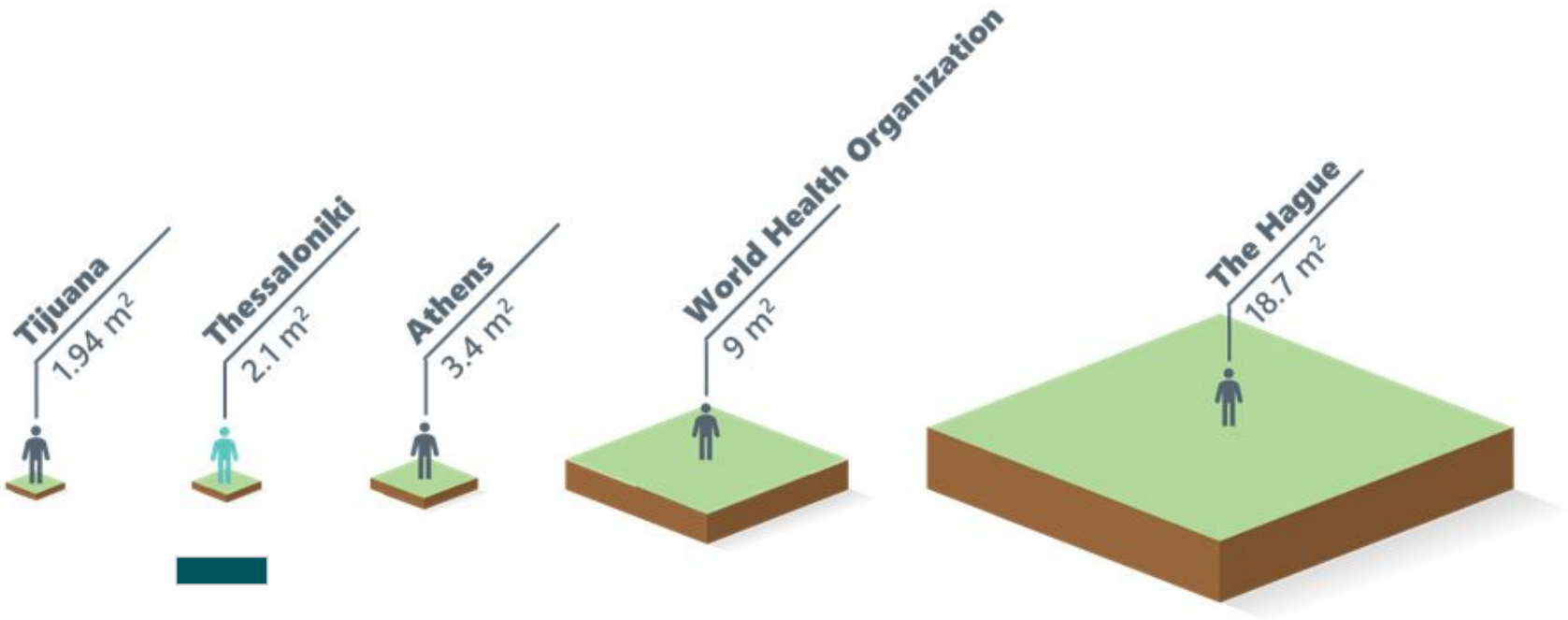
Urban Green Spaces provide **Socioeconomic** Benefits

Thessaloniki has very little green space



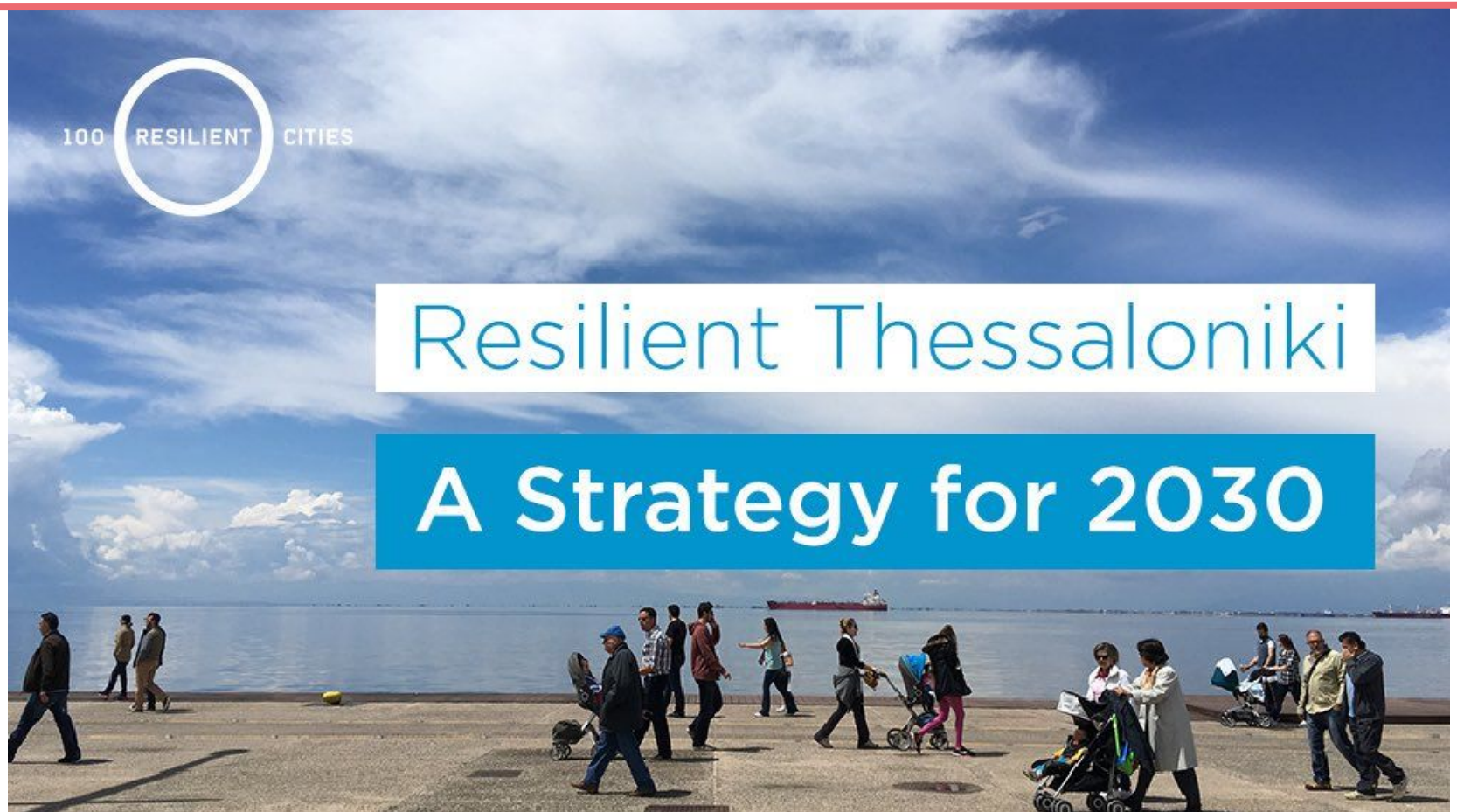
Square meters (m^2) of green space per person

Thessaloniki has very little green space



Square meters (m^2) of green space per person

Resilient Thessaloniki is a long term strategy to develop the city and strengthen its urban economy



Vertical Gardens come in many forms and are highly versatile

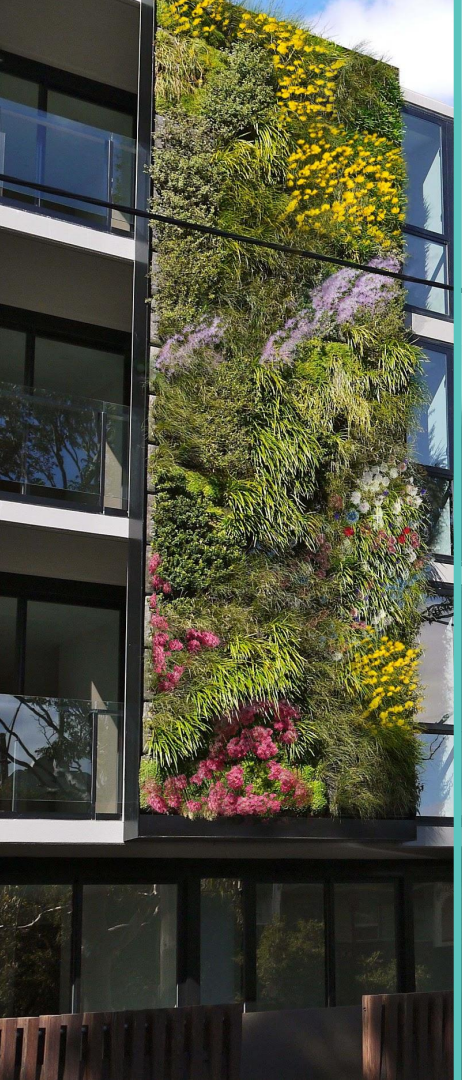
Balcony Gardens

Green Façades

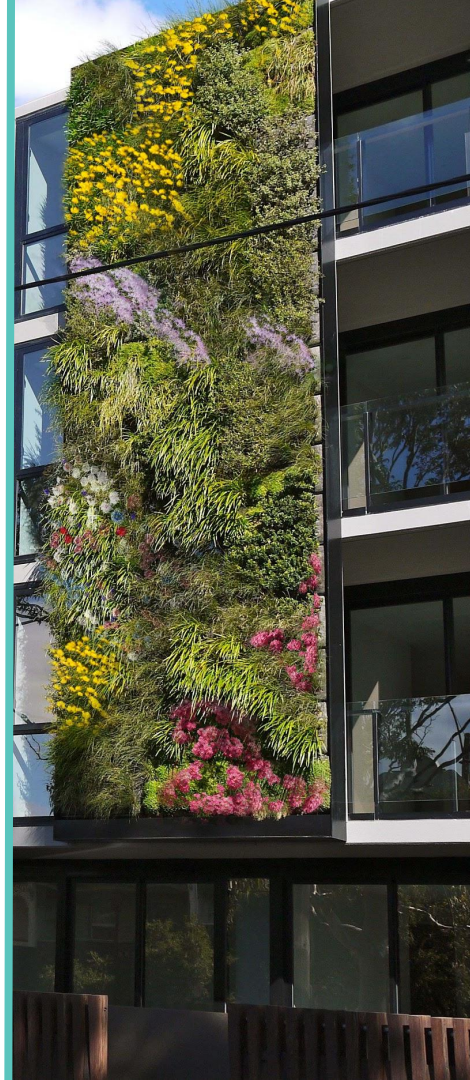
Soil-based Living Wall

Hydroponic Living Wall

Vertical Gardens come in many forms and are highly versatile

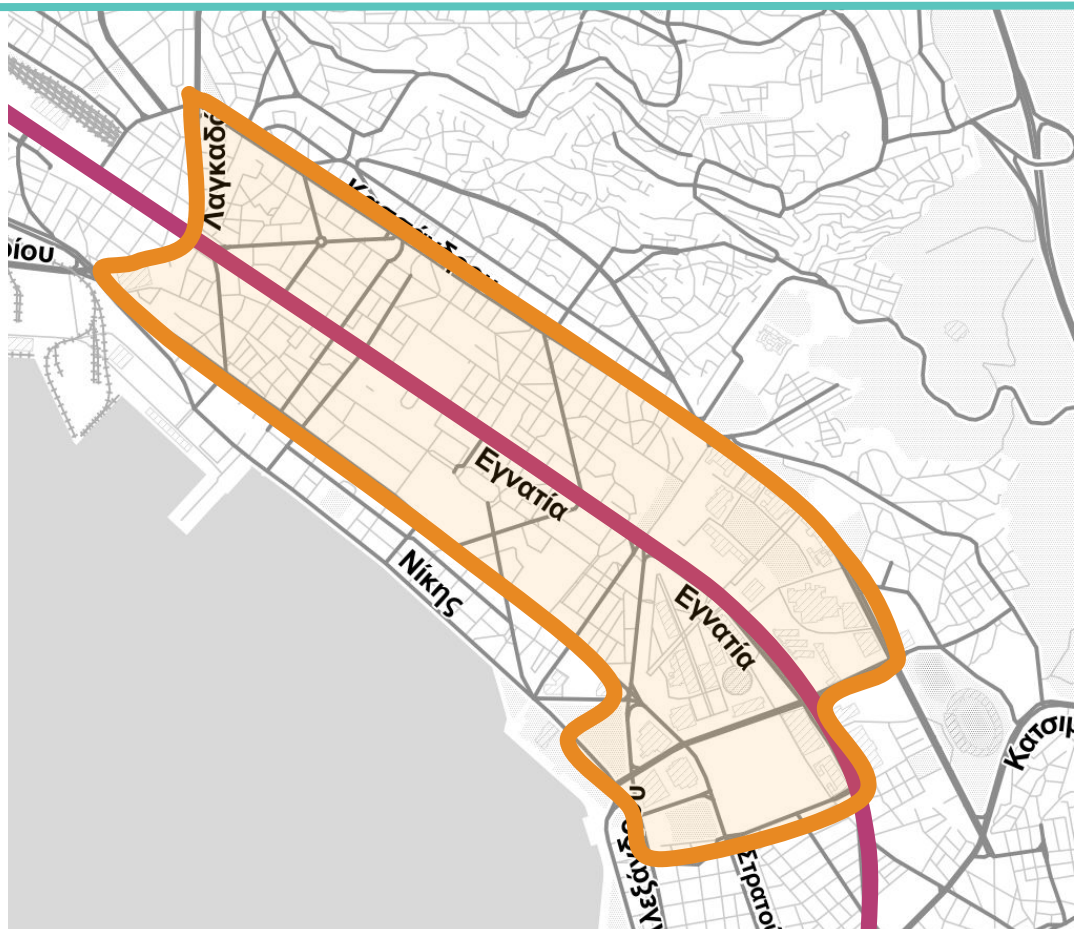


Research Objectives



Assessing the feasibility and value of integrating vertical gardens in Thessaloniki along Egnatia Corridor

1. Gauge Stakeholder Interest in Vertical Gardens
2. Identify Sites and Provide Spatial Analysis Tools
3. Develop Broad Designs and Siting Framework



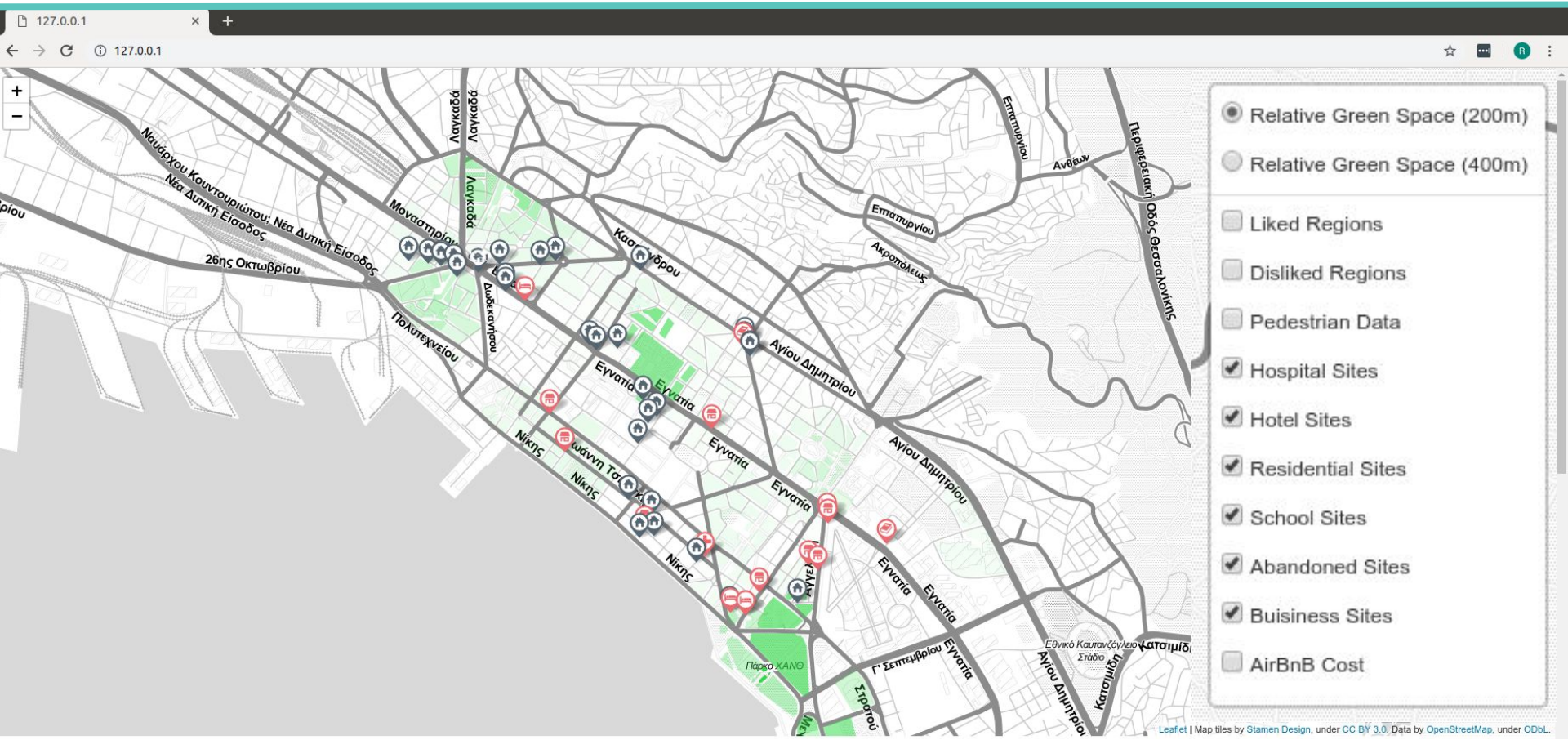
Gauge Stakeholder Interest in Vertical Gardens

Vita Verde

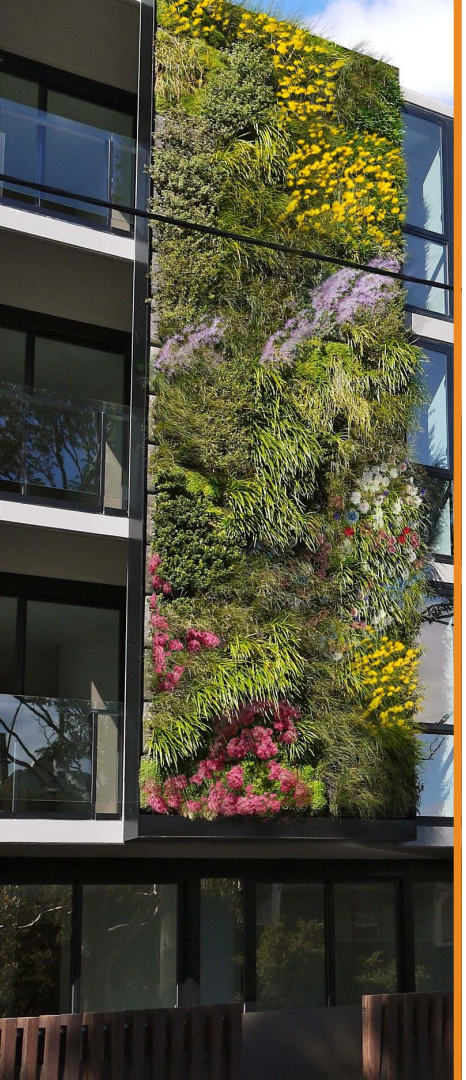
CITY OF THESSALONIKI

Callisto
Wildlife and Nature Conservation Society

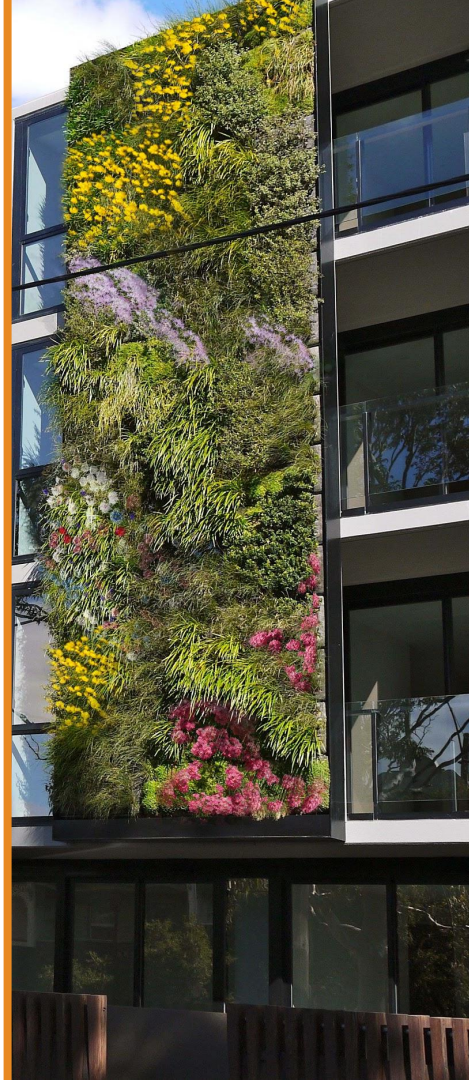
Identify Sites and Provide Spatial Analysis Tools



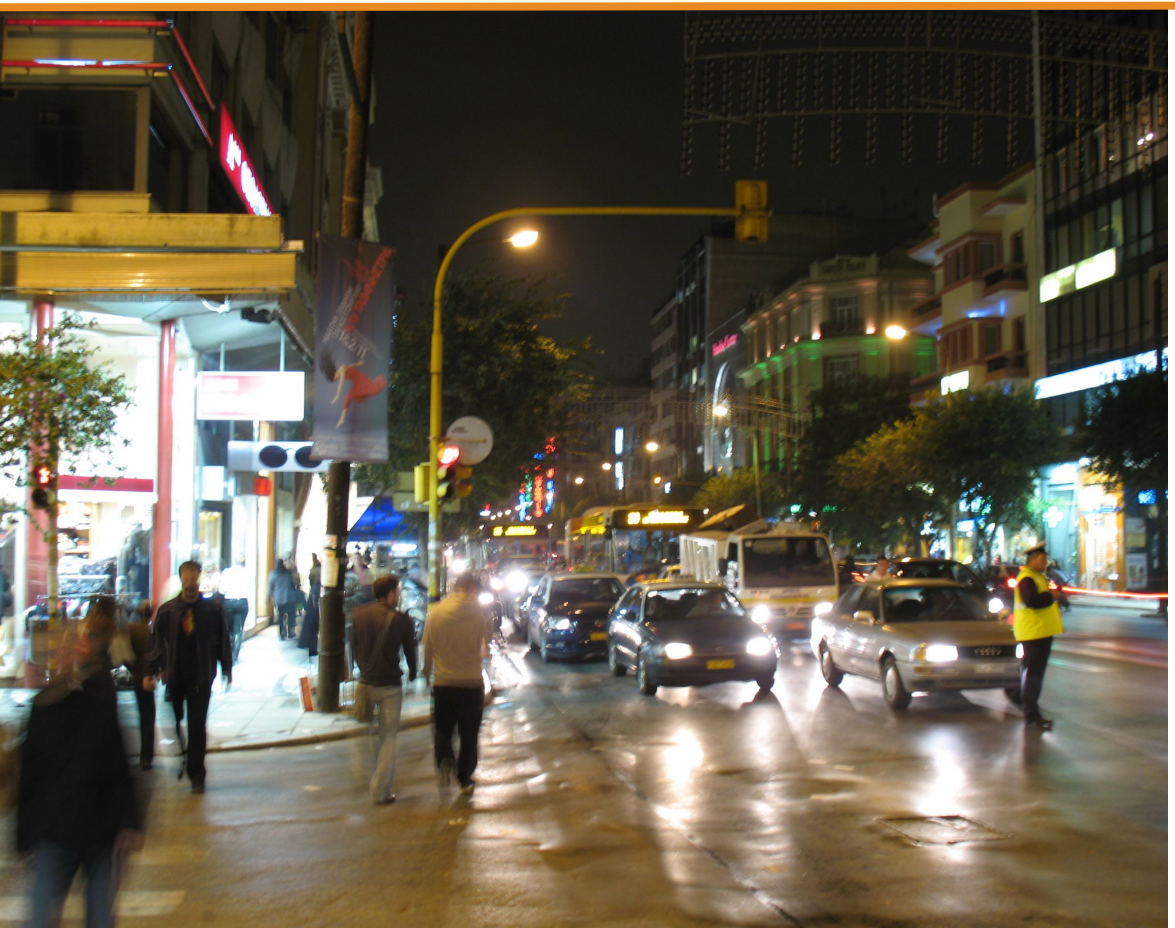
Develop Broad Designs and Siting Framework



Suitability Factors



The addition of green spaces around Egnatia street has the potential to grow the economy in various areas surrounding the Corridor



85% of people prefer establishments with gardens

88% of people prefer locations with green spaces

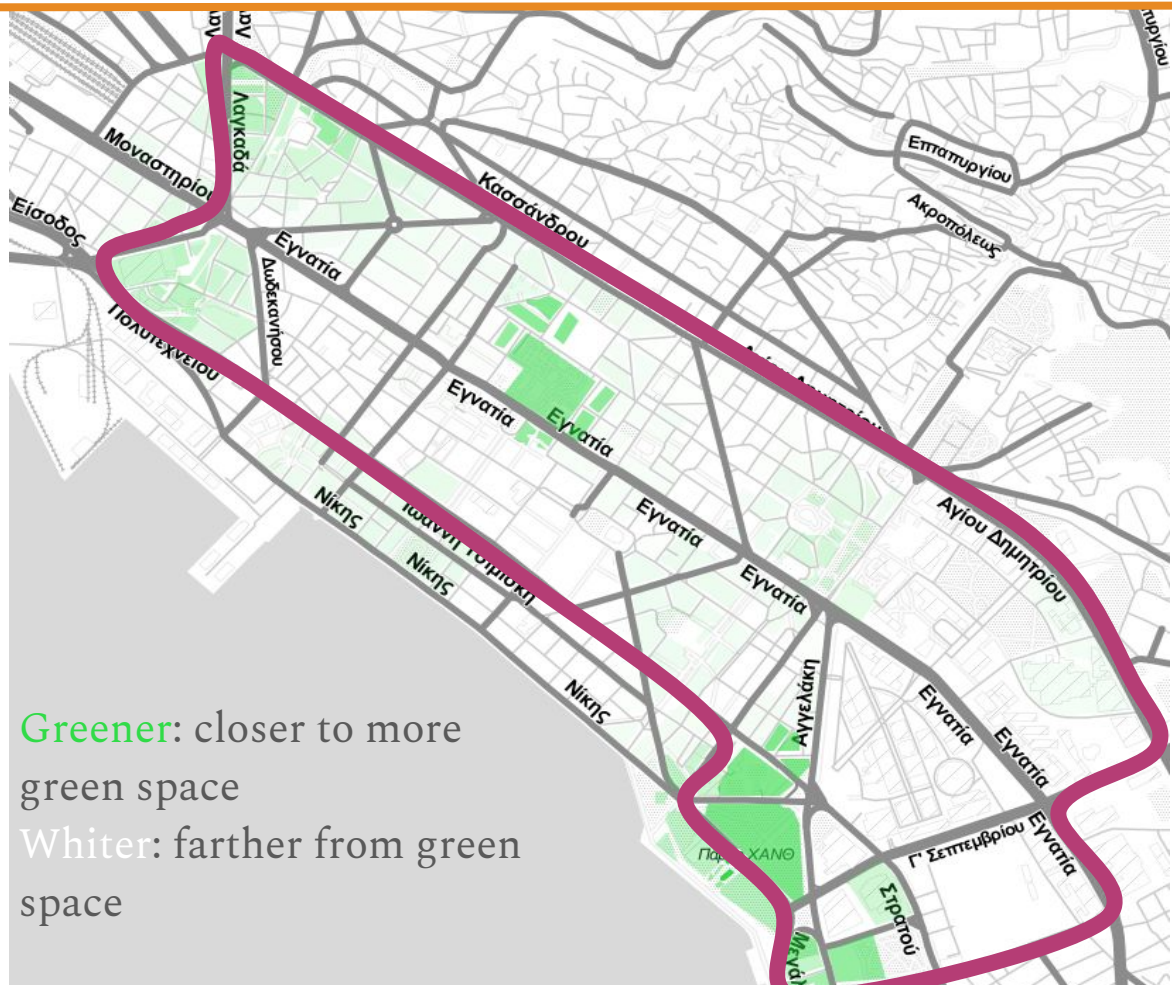
Proposals of plans to increase biodiversity have been welcomed by the municipality in the past

Svolou Neighborhood, Thessaloniki, Greece

Callisto
Wildlife and Nature Conservation Society

Being in close proximity to green spaces improves human health

Map of city plots, colored based on the area of green spaces is within a 200m radius of each building

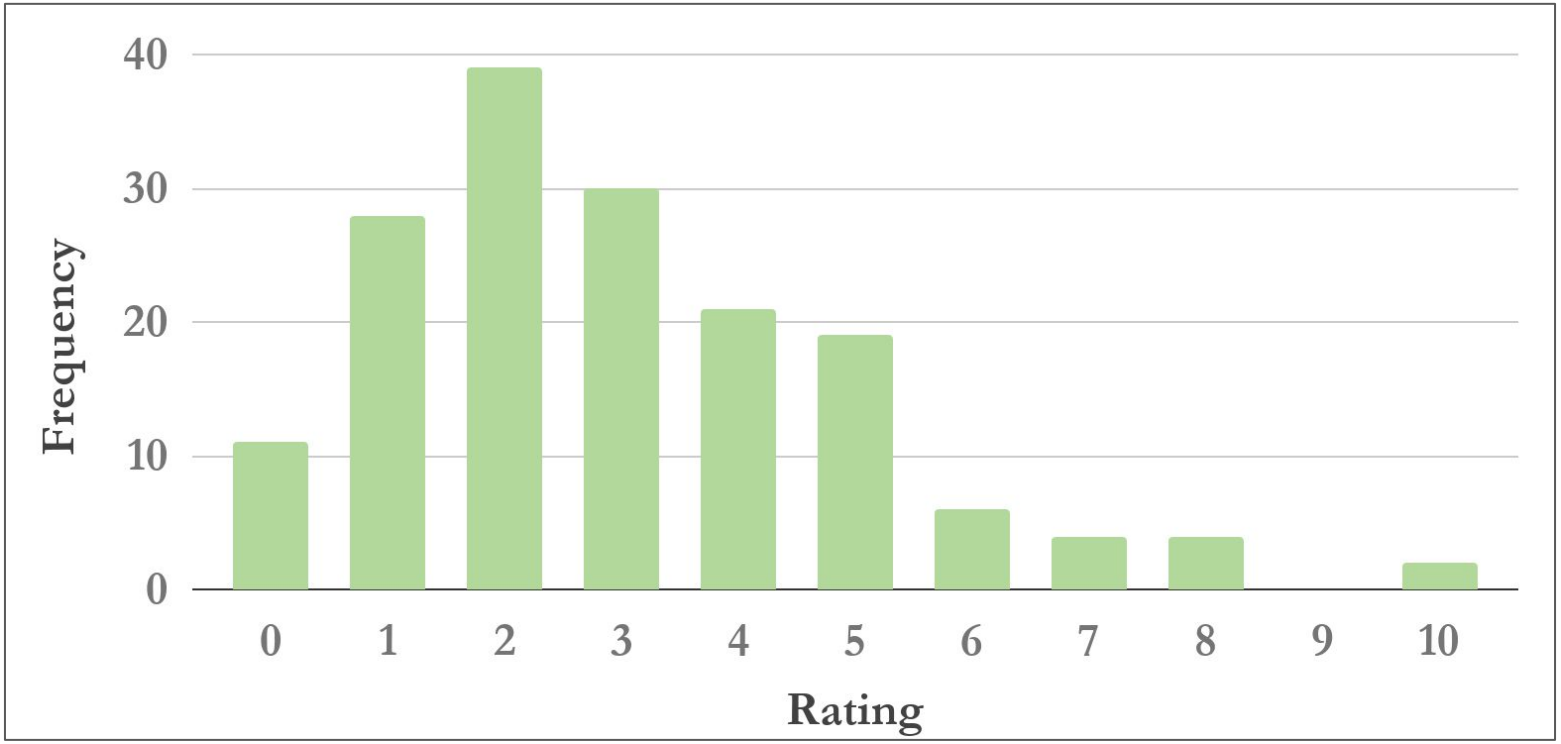


Greener: closer to more green space

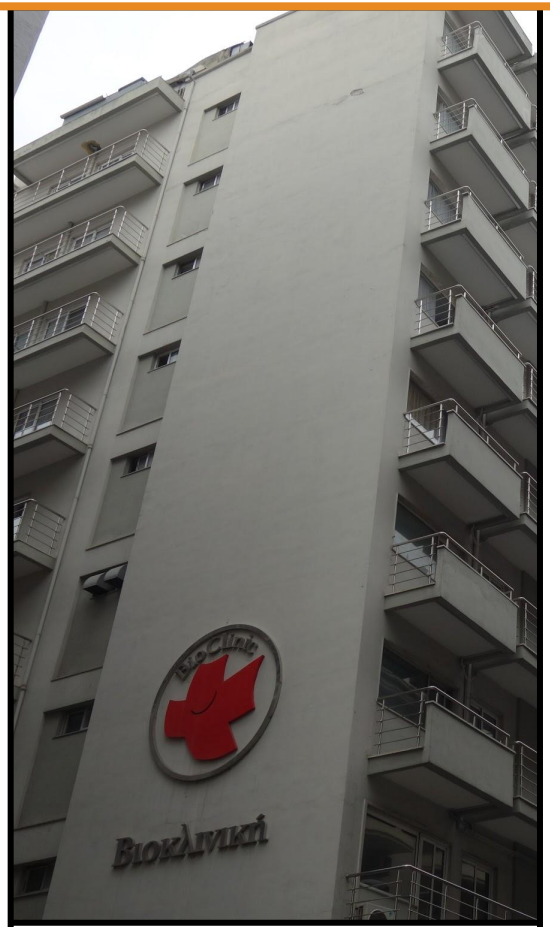
Whiter: farther from green space

Green spaces improves the aesthetics of an area

On a scale of 0-10, how would you rate the amount of greenery on the Egnatia Corridor?

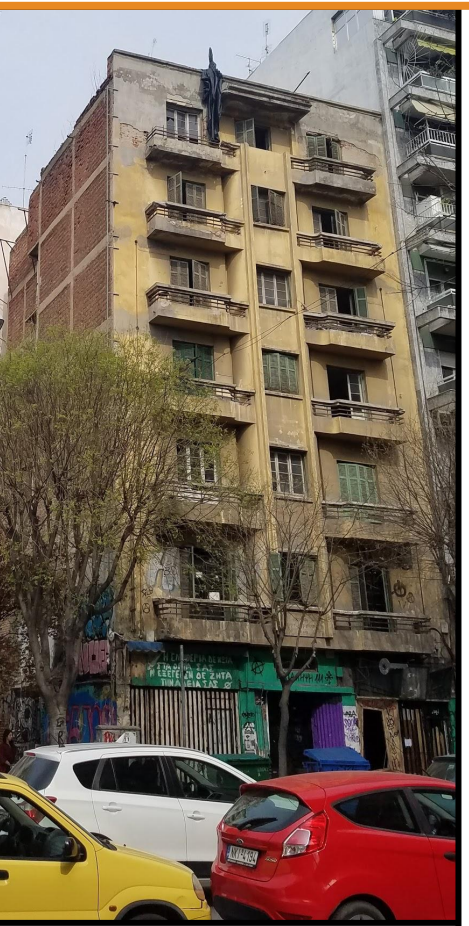


The feasibility of garden sites is dependent on the number of building owners



The feasibility of garden sites is dependent on what sector owns the particular site

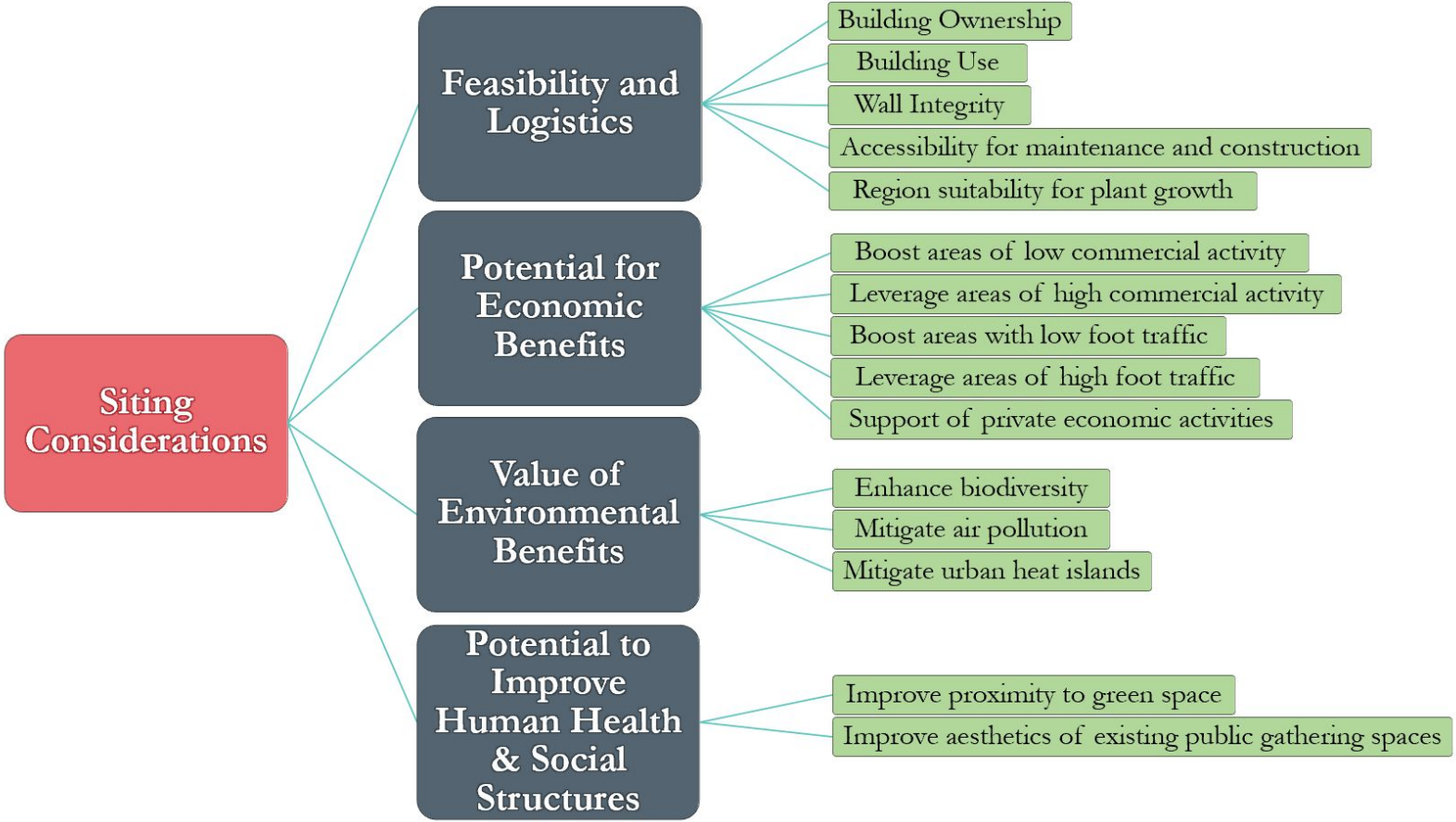
The feasibility of garden sites is dependent on structural characteristics of a wall

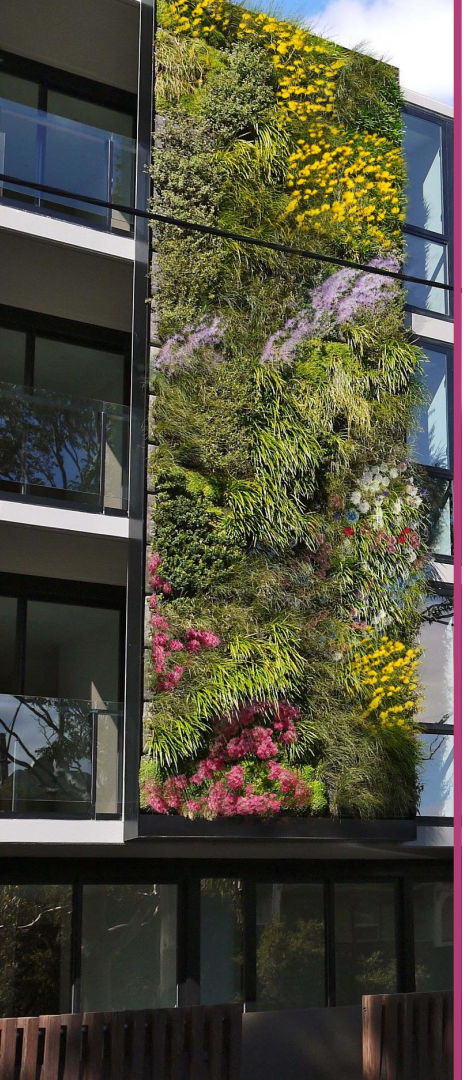


The feasibility of garden sites is dependent on the accessibility of a wall for construction and maintenance

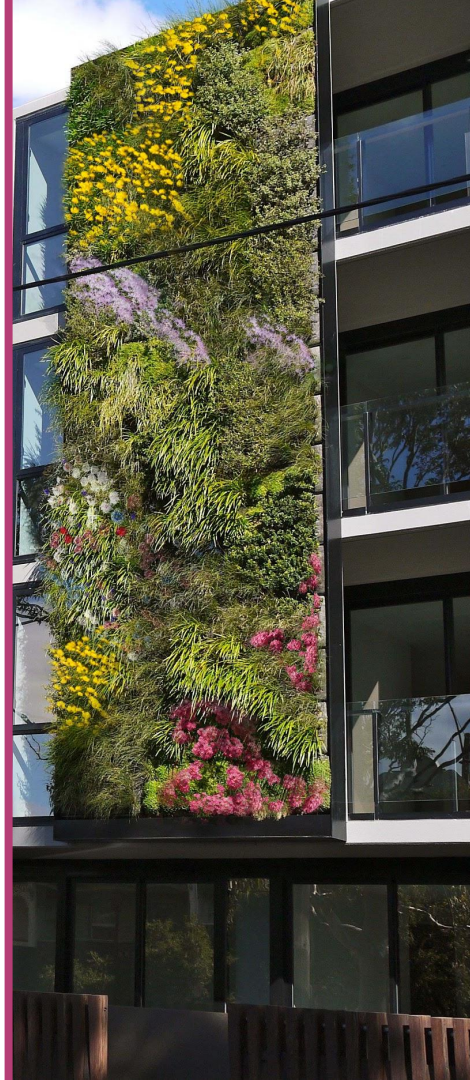
The feasibility of garden sites is dependent on environmental factors that influence plant growth

A site selection tool that determines the feasibility & appropriateness of potential sites for implementation of a vertical garden





Applications



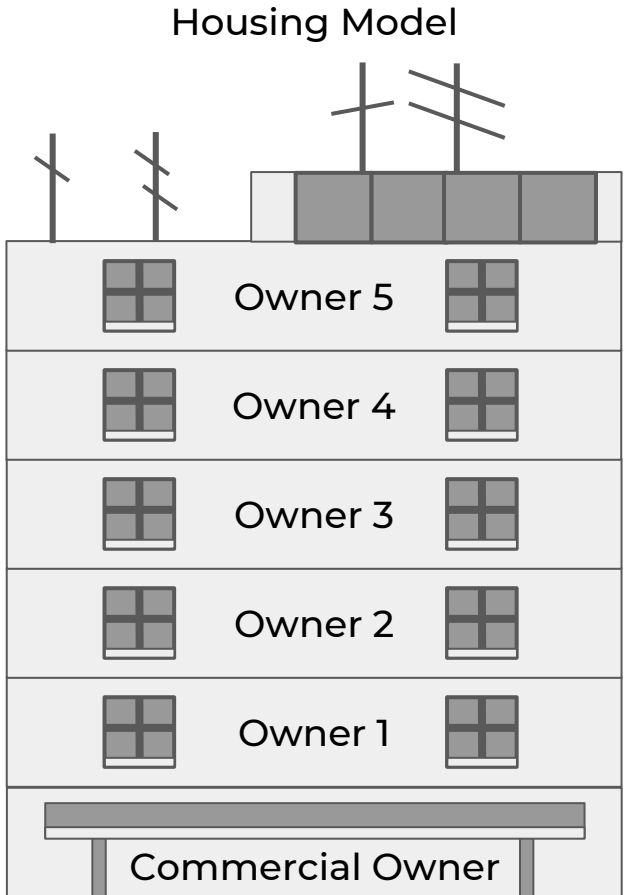
The implementation of vertical gardens should be carried out in phases

Phase 1: Private Sector

- Hotels
- Shops
- Apartment Buildings
- Private Schools
- Private Hospitals

Phase 2: Public Sector

- Municipality Buildings
- Public Schools
- Public Hospitals



Incentives from the local government could encourage the private sector to implement an extensive network of gardens

A maintenance plan should be established at the start of a new vertical garden project

Potential Site #1- Hotel El Greco

Potential Design #1- Hotel El Greco

Potential Site #2- 48 El. Venizelou Residential Tower

Potential Design #2 - 48 El. Venizelou Residential Tower

Potential Site #3- Studio Optic

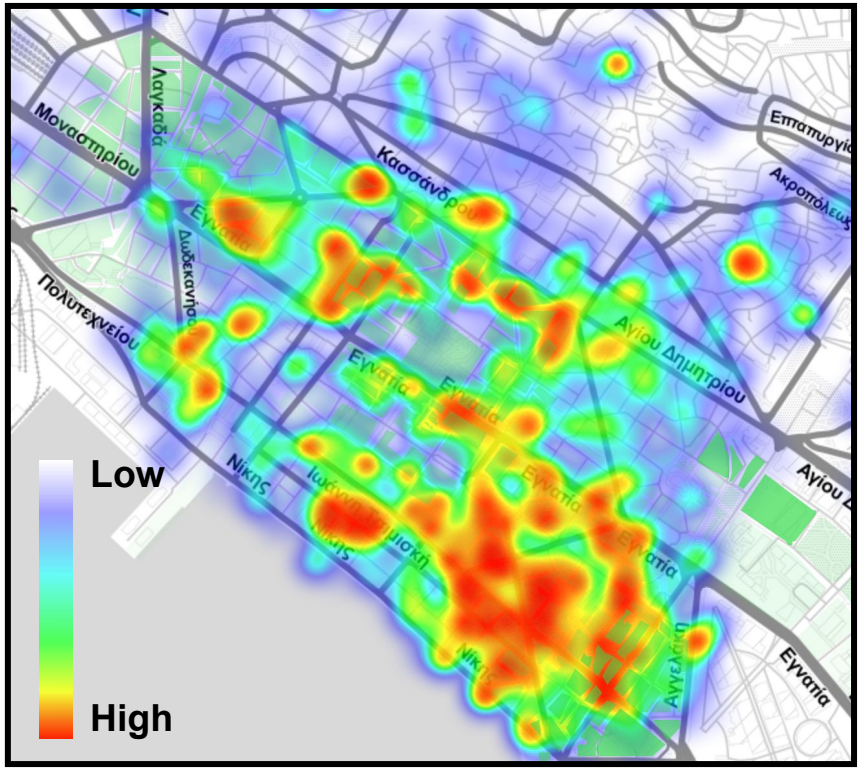
Potential Design #3 - Studio Optic

Potential Site #4- Department of Health Building

Potential Design #4 - Department of Health Building

Further Research

Foot Traffic Data



AirBnB Price Data

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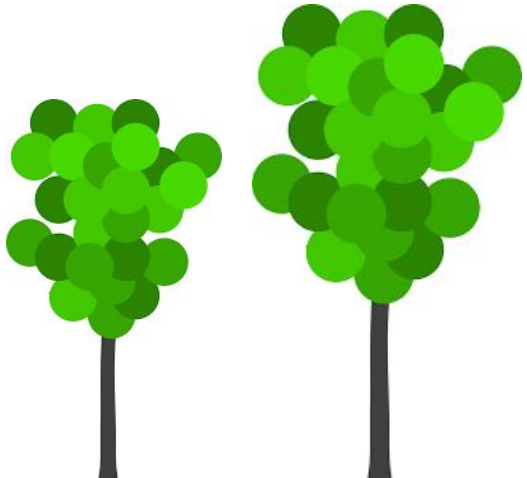

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ΕΥΧΑΡΙΣΤΩ ΠΟΛΥ