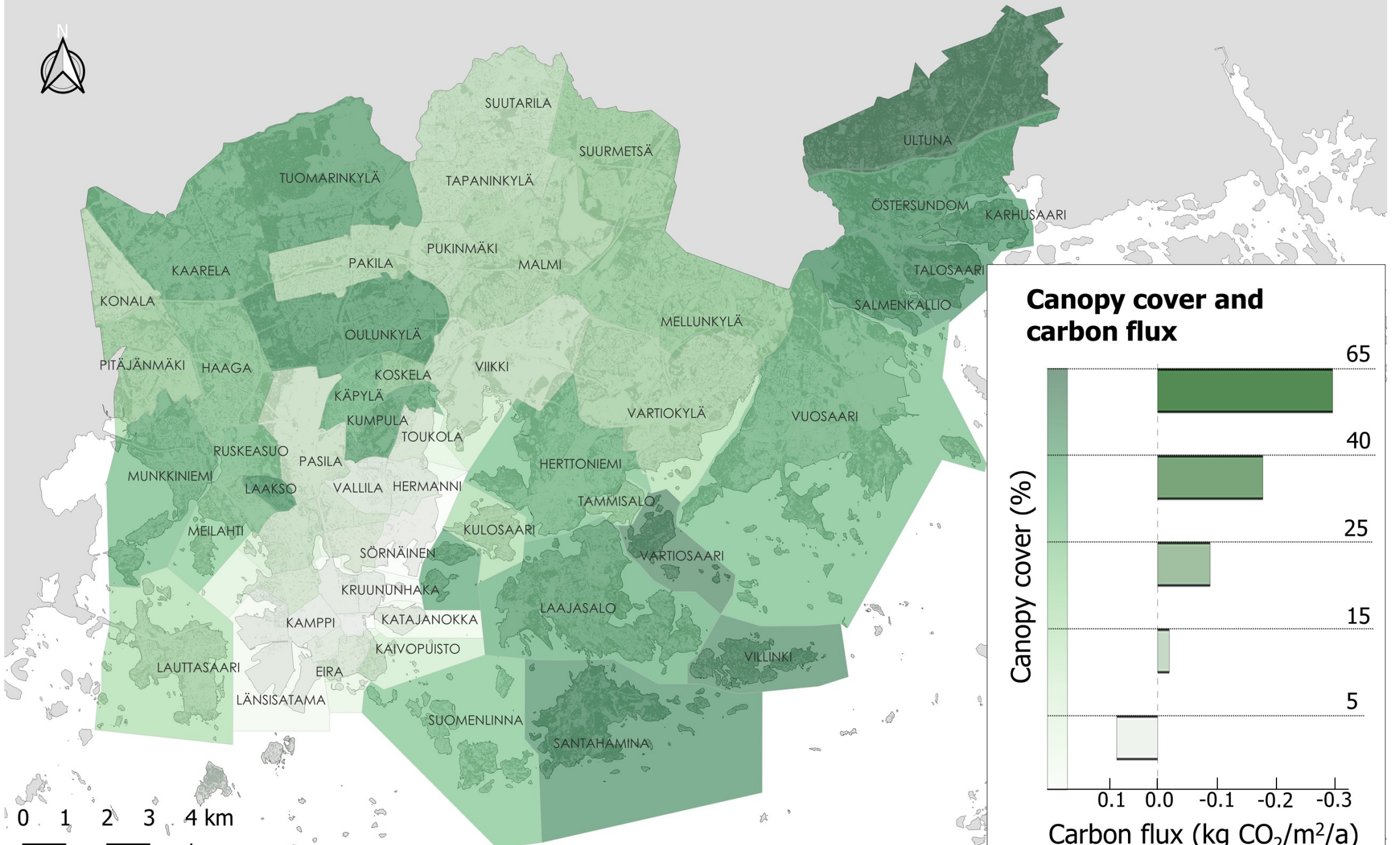




# Urban green and development in regenerative cities

Mari Ariluoma & Antti Kinnunen  
Aalto University



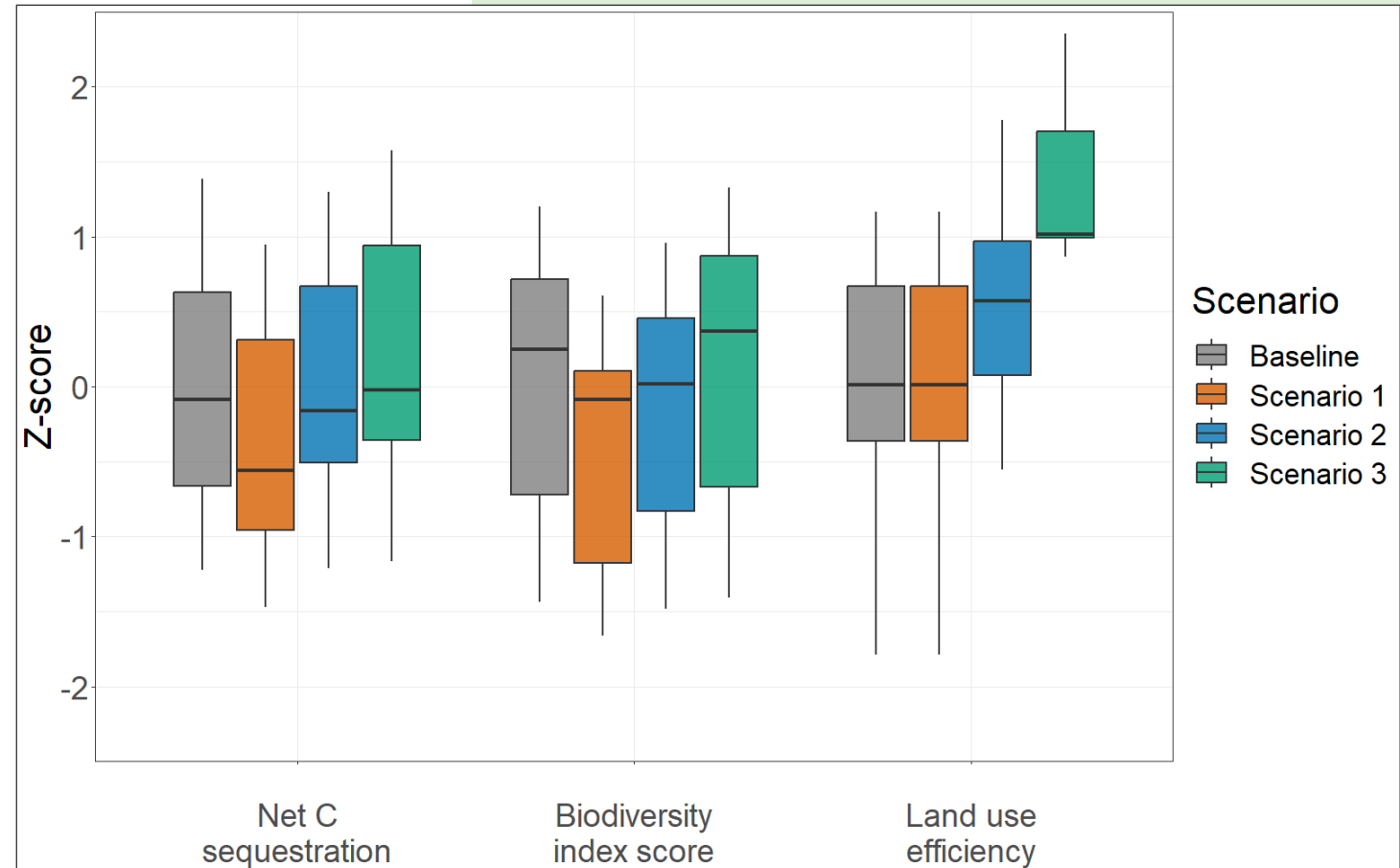


0 1 2 3 4 km



# Green space amidst shifting regulatory landscape

- Scenario 1: BAU-urban development
- Scenario 2: Adherence to NRR minimum thresholds
- Scenario 3: Urban greening



# Urban density and residential greenness

- Increasing density results in lower levels of green space.
- The amount of vegetation cover has been decreasing in relation to density at contemporary residential properties.



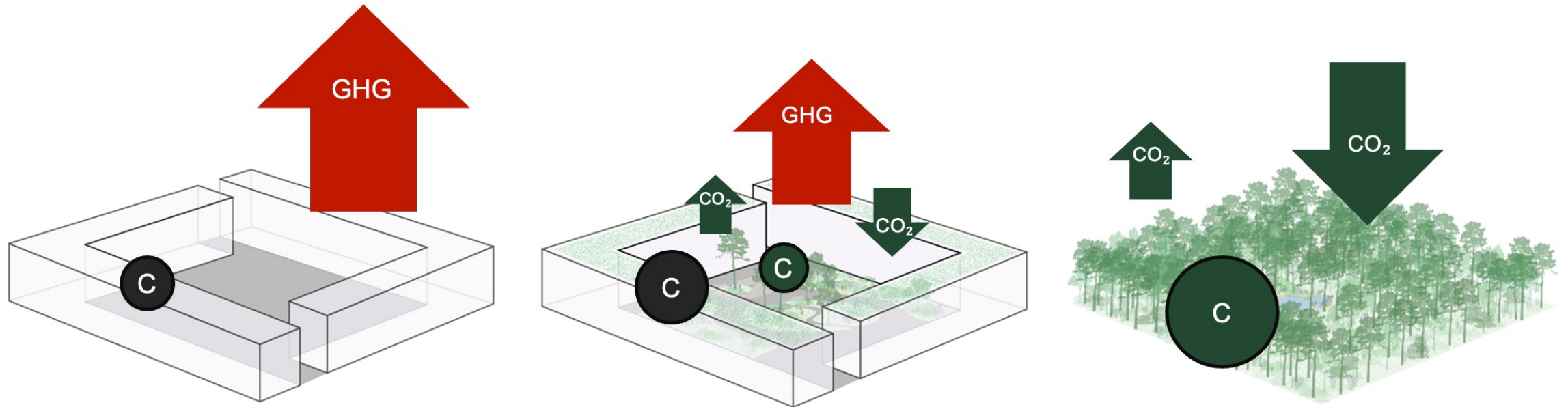
# Residential landscapes

- Urban residential yards are increasingly recognized for their potential to address key global challenges
- Major part of the urban green consist of private urban yards
- Most of the new construction in cities is residential land use
- More than half of urban carbon sinks related to other than forest ecosystems (Havu et al. 2014)



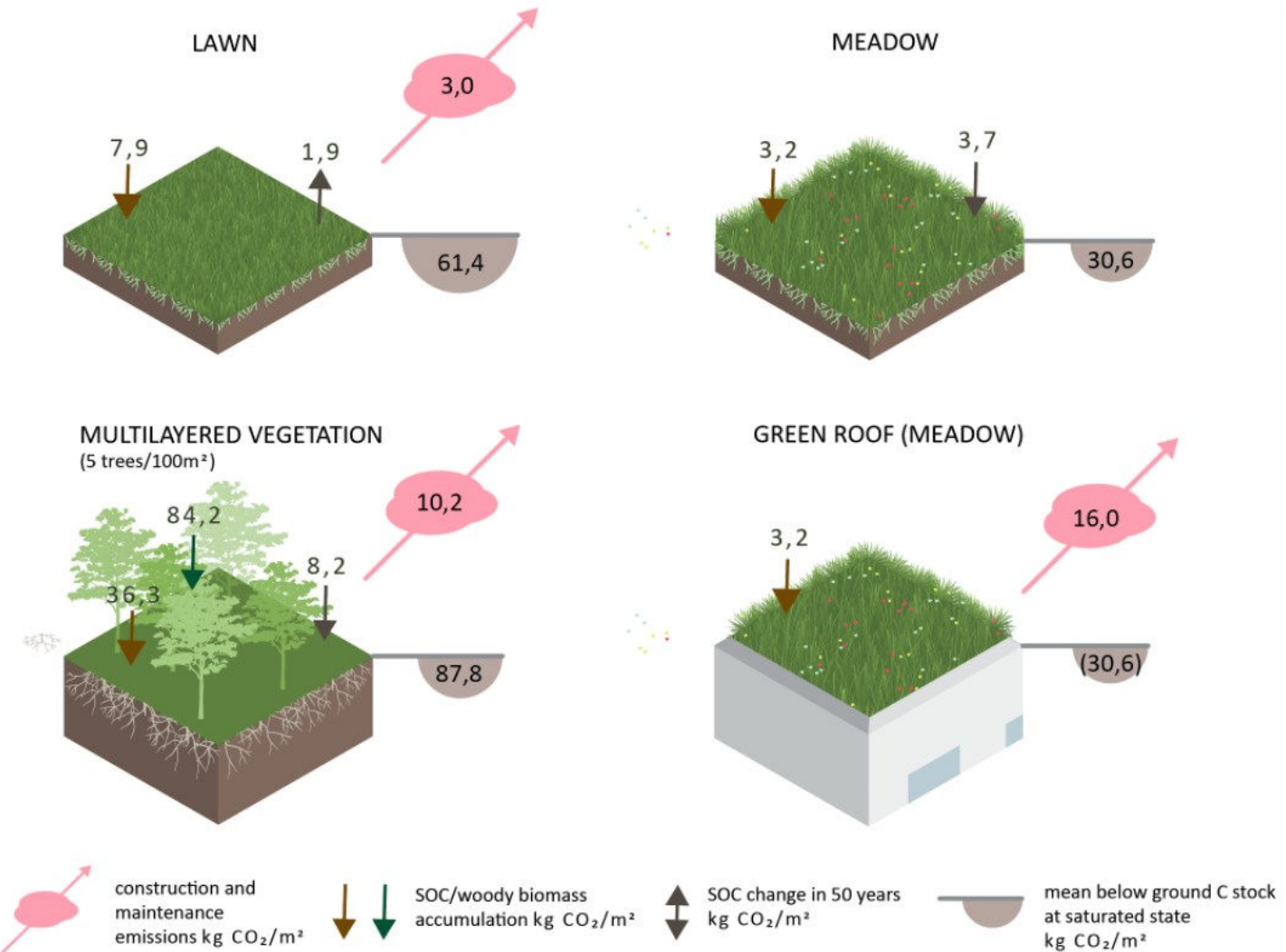
# Building dense but developing green

From emissions reduction to carbon stewardship

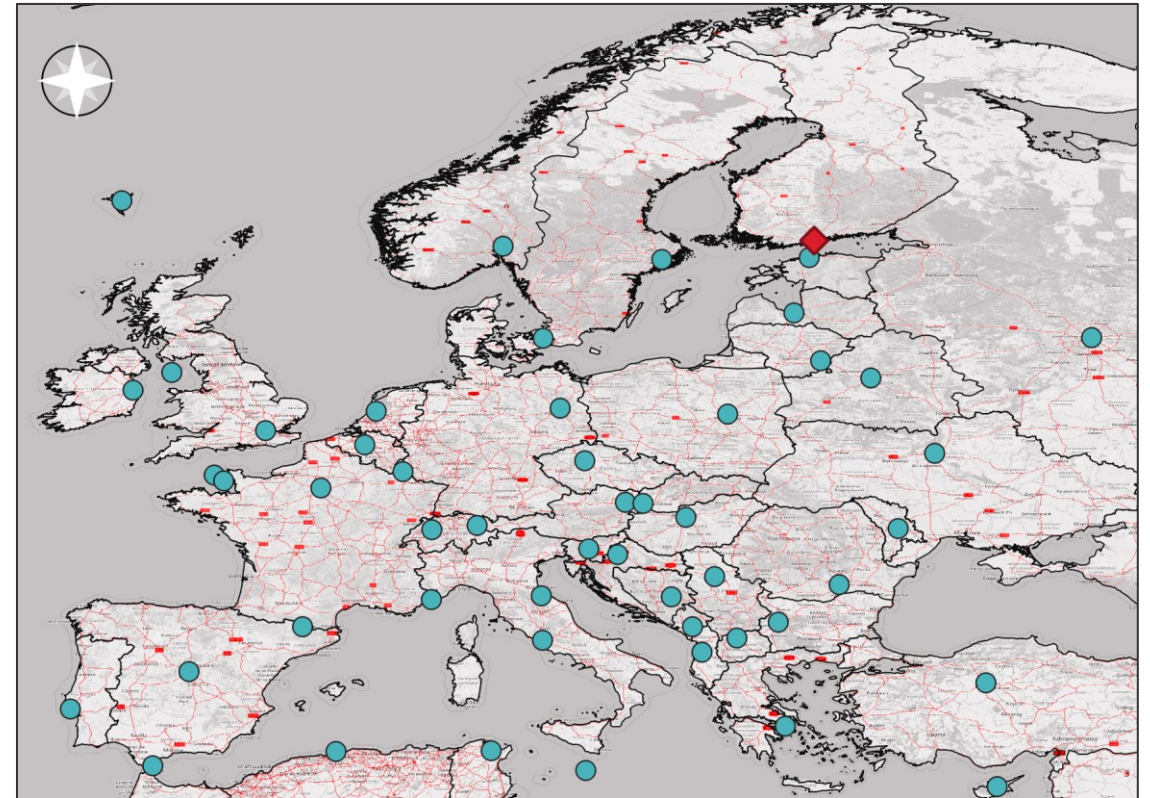
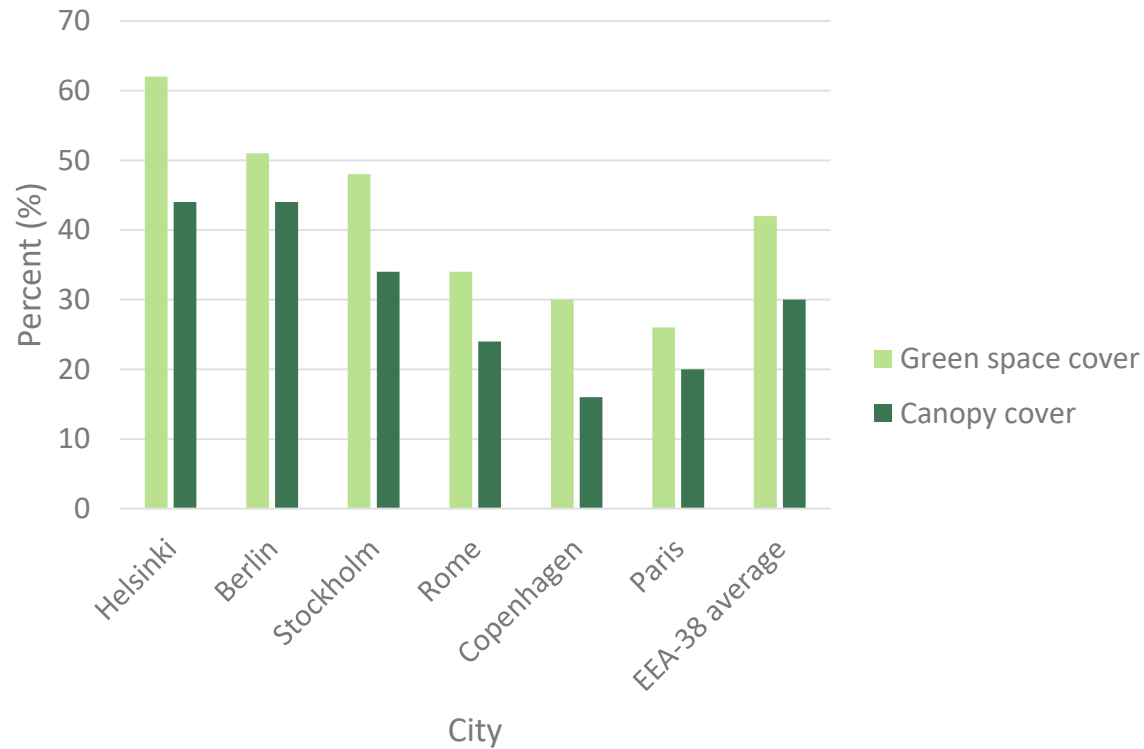


# Enhancing urban carbon sinks

- Urban carbon sinks can be strengthened even in dense, built environments
- Species-rich and multi-layered vegetation provides the highest carbon sink potential
- Long life cycles and preservation are the most effective means to cut emissions



# Strategic level implications



EEA (2022). Percentage of total green infrastructure, urban green space, and urban tree cover in the area of EEA-38 capital cities (excluding Liechtenstein) — European Environment Agency.  
<https://www.eea.europa.eu/en/analysis/maps-and-charts/percentage-of-total-green-infrastructure>

Background maps and materials © OpenStreetMap Contributors 2025, ESRI 2022, Eurostat 2021.

# Thank you for your attention!



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Tiina  
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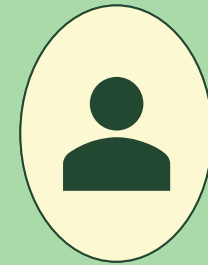
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Peerzada  
Syedin

And big thanks  
to the team!