



Experience story on the use of satellite data products in policy planning – Case of Riga Urban Greening Plan

April 2026

CHALLENGES



extreme
precipitation



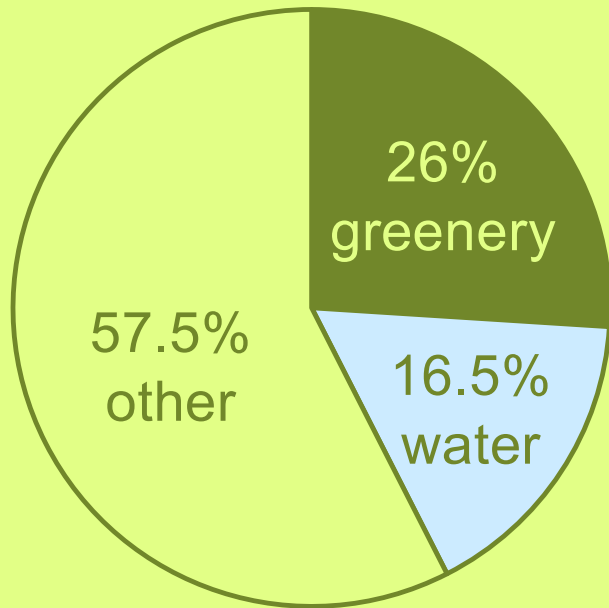
heat
waves



bio-
diversity

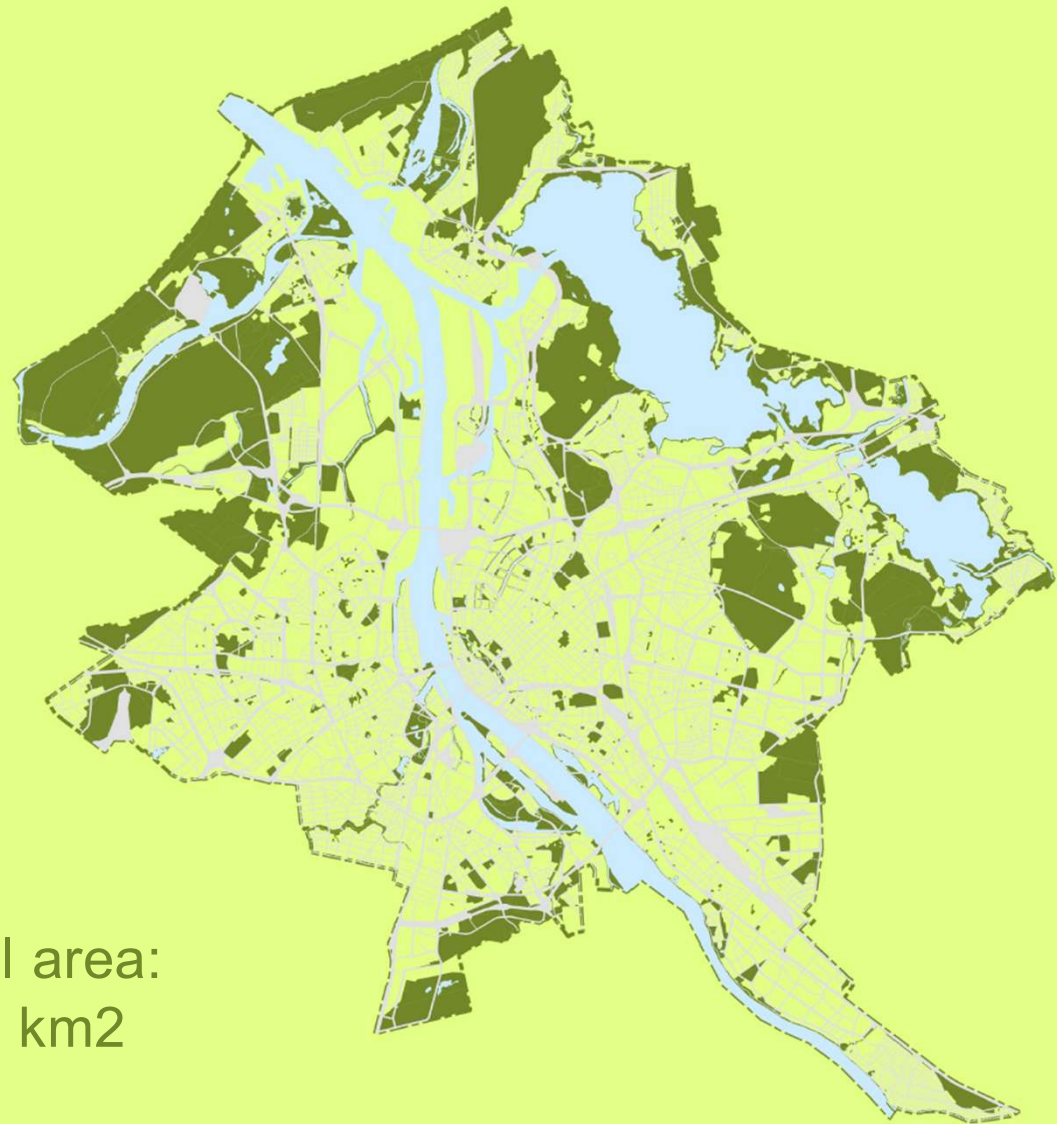


HOW GREEN IS RIGA?

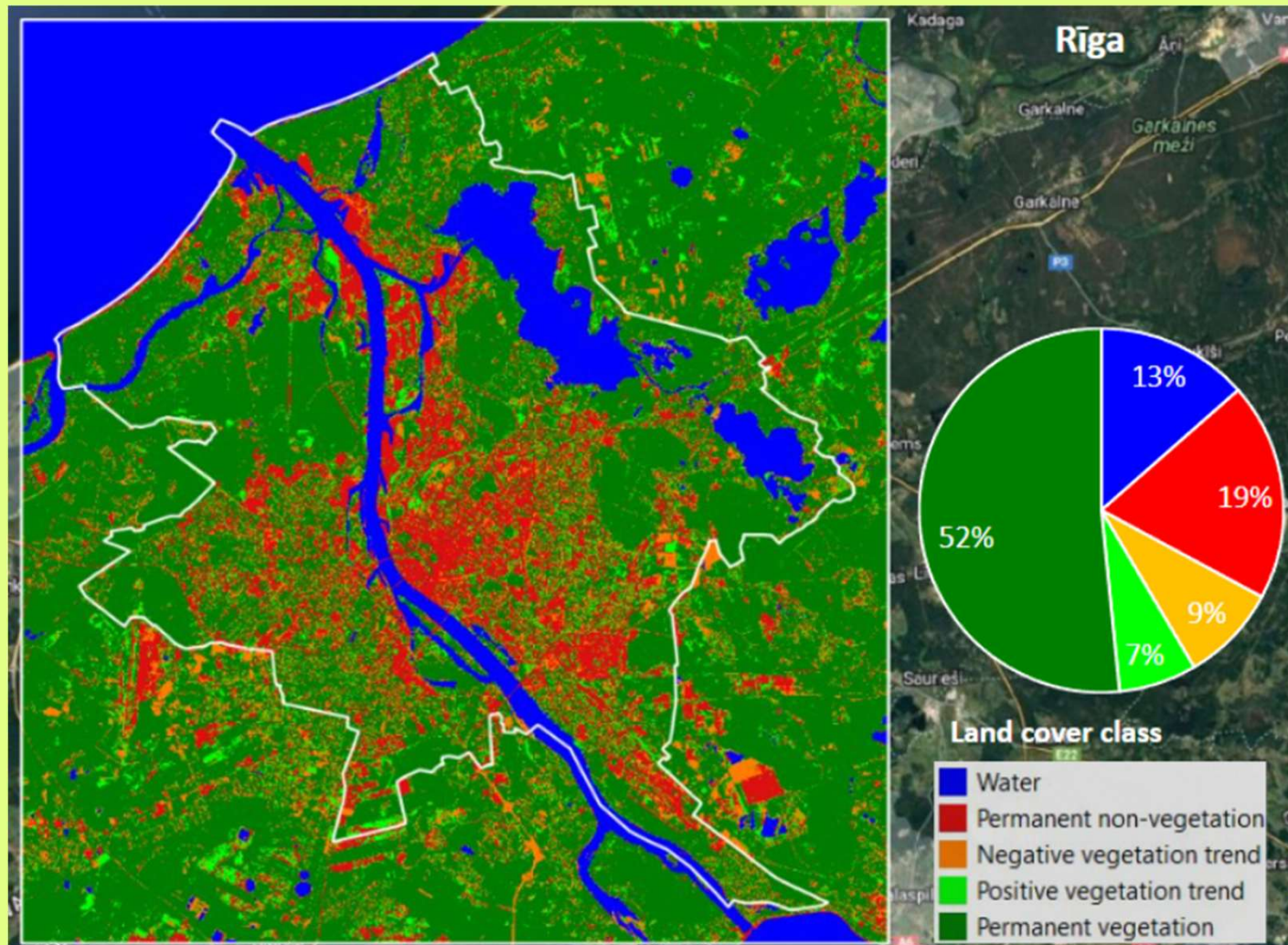


unequal
distribution of
green territories

total area:
307 km²



HOW GREEN IS RIGA?



D.Jakovels, VRI, 2023

SOLUTIONS

Green infrastructure, nature-based solutions and ecosystem services:

- A cost-effective solution in the long term
- Promotes biodiversity
- Regulates the microclimate
- Absorbs rainwater and reduces flood risk
- Reduces noise and air pollution, and
- Positive impact on physical and mental health
- Increases real estate value



SOLUTIONS

Riga Urban Greening Plan 2027-2031

Enhance Riga's resilience to climate change by creating high-quality public outdoor spaces and green infrastructure, using nature-based solutions, and promoting the development of green infrastructure on properties owned by residents and entrepreneurs.



RIGA URBAN GREENING PLAN: EXPECTED RESULTS

- **Greener Riga**

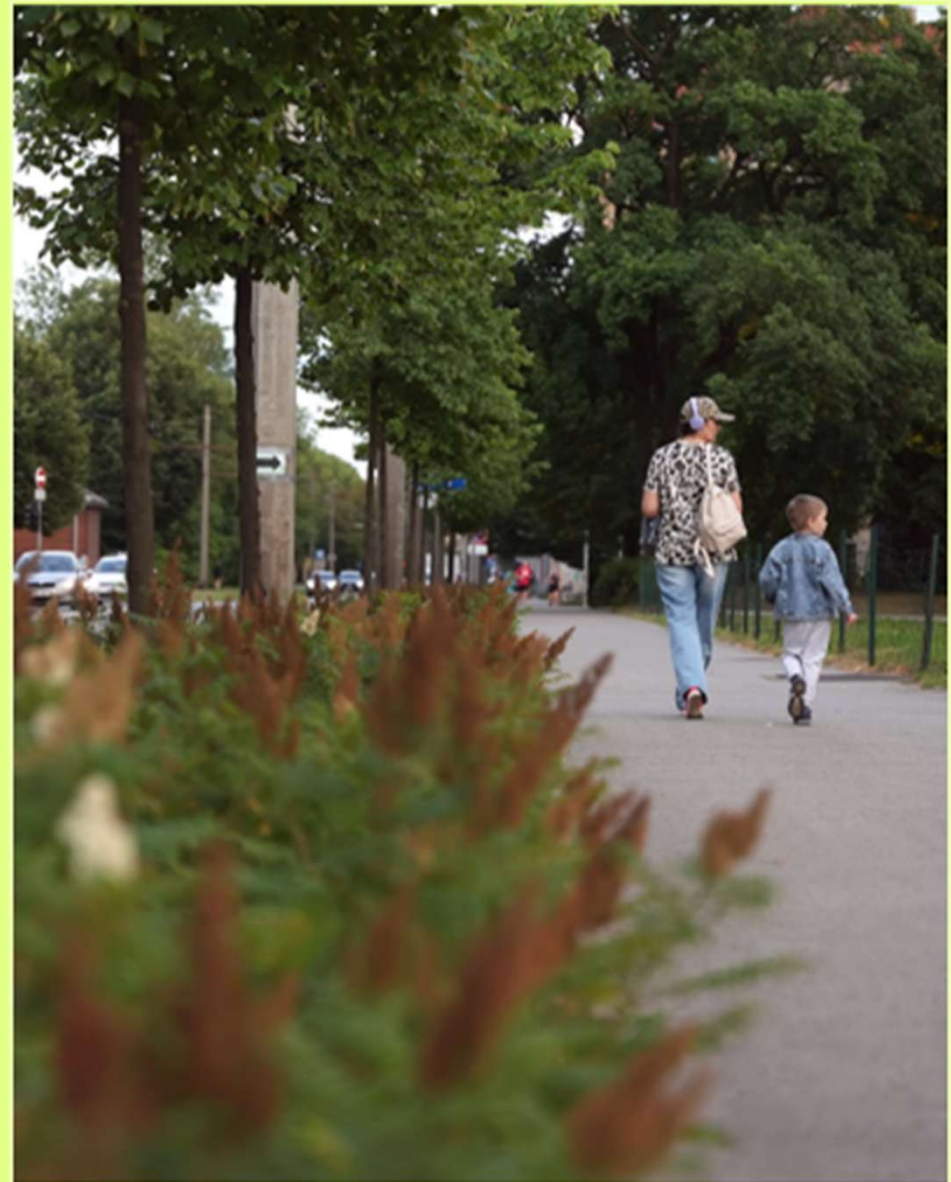
Better and more green infrastructure in public and private properties

- **Climate resilient Riga**

Reduced heat island and reduced stormwater influence on cities inhabitants and infrastructure

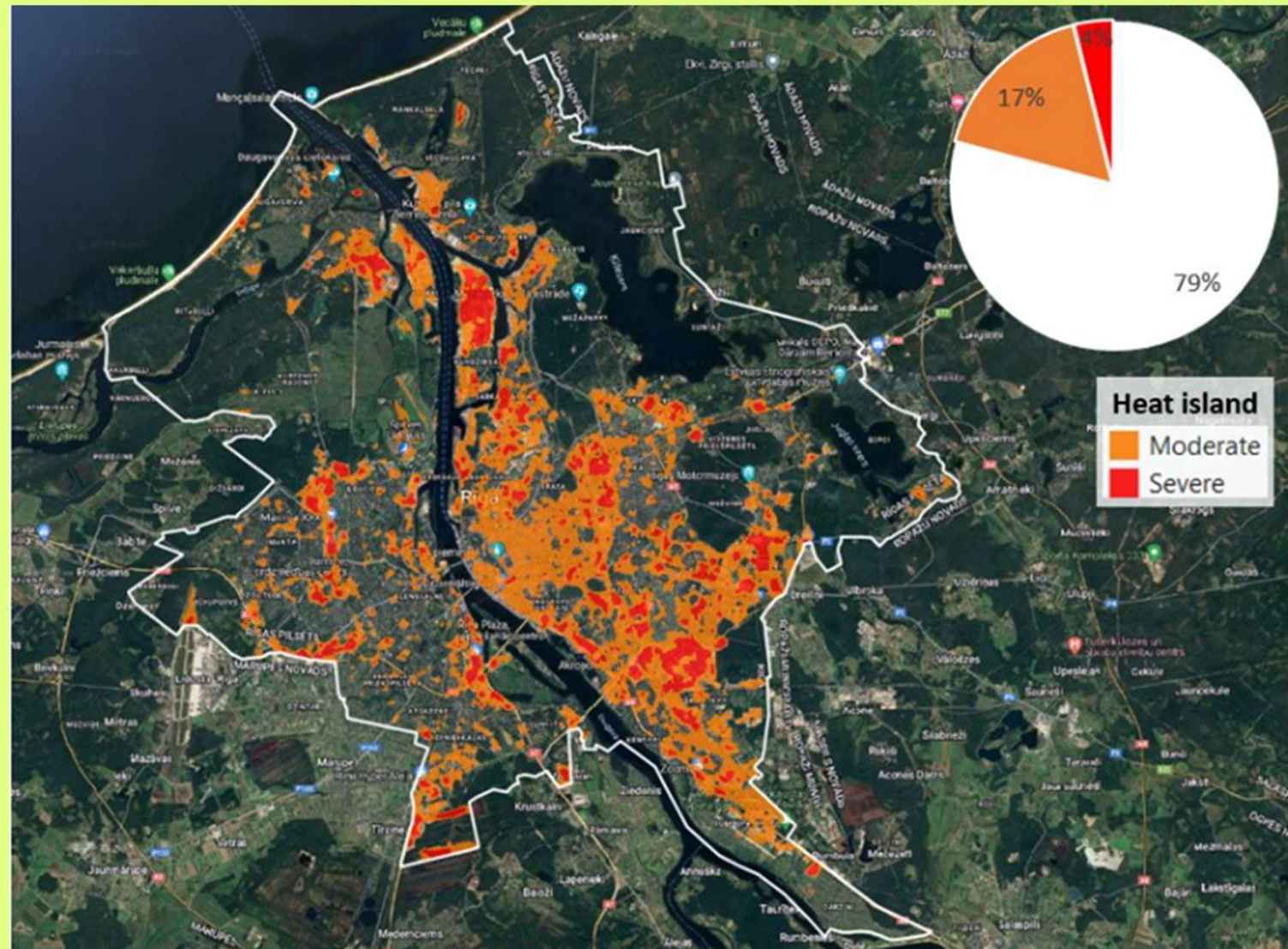
- **Sustainably managed green infrastructure**

Safeguarding and promotion of biodiversity, clear and improved governance of the green infrastructure



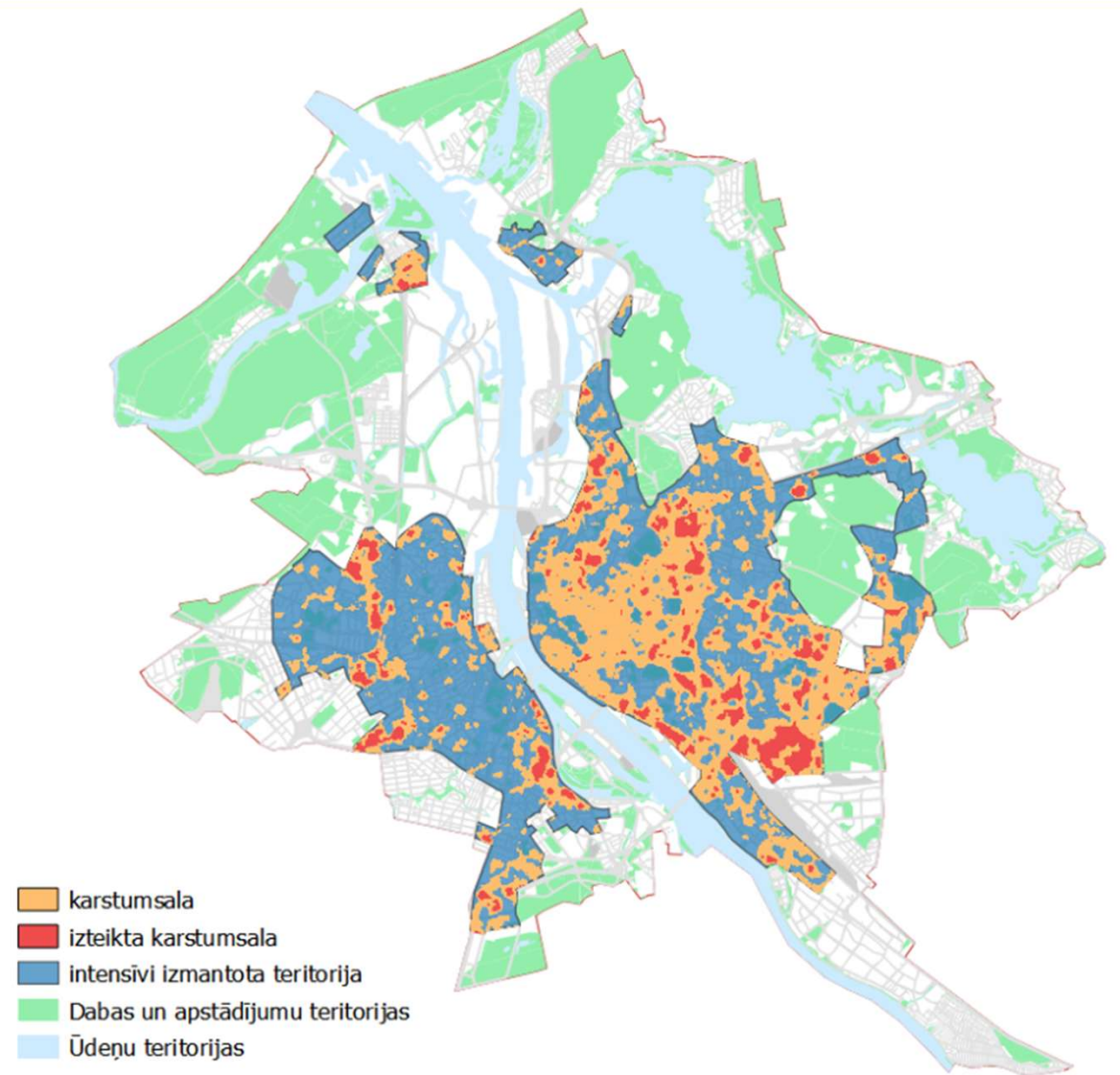
SPATIAL ANALYSIS

Heat island mapping



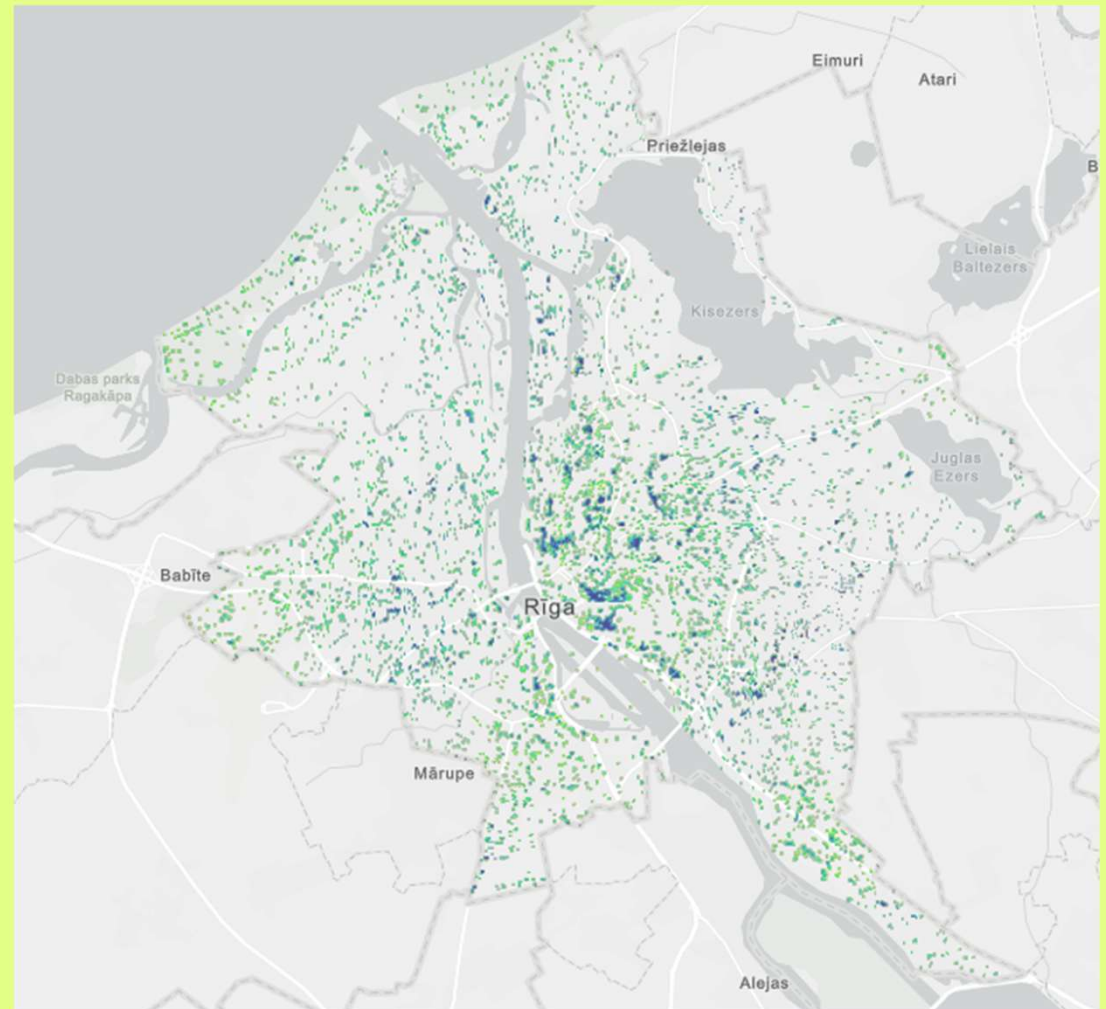
SPATIAL ANALYSIS

Heat island and intensively used territories



SPATIAL ANALYSIS

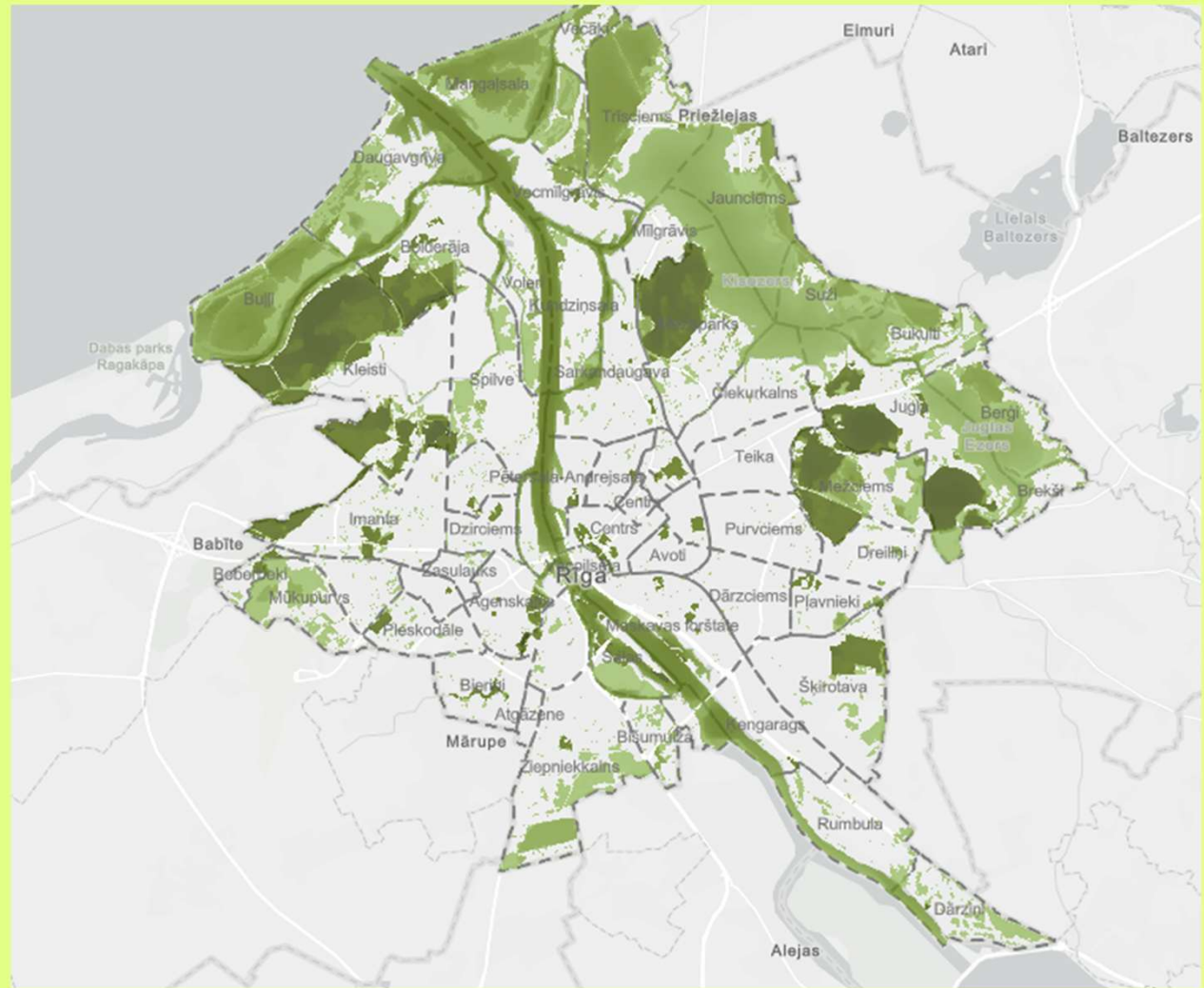
Stormwater runoff model



J.Kondratenko, RTU, 2024

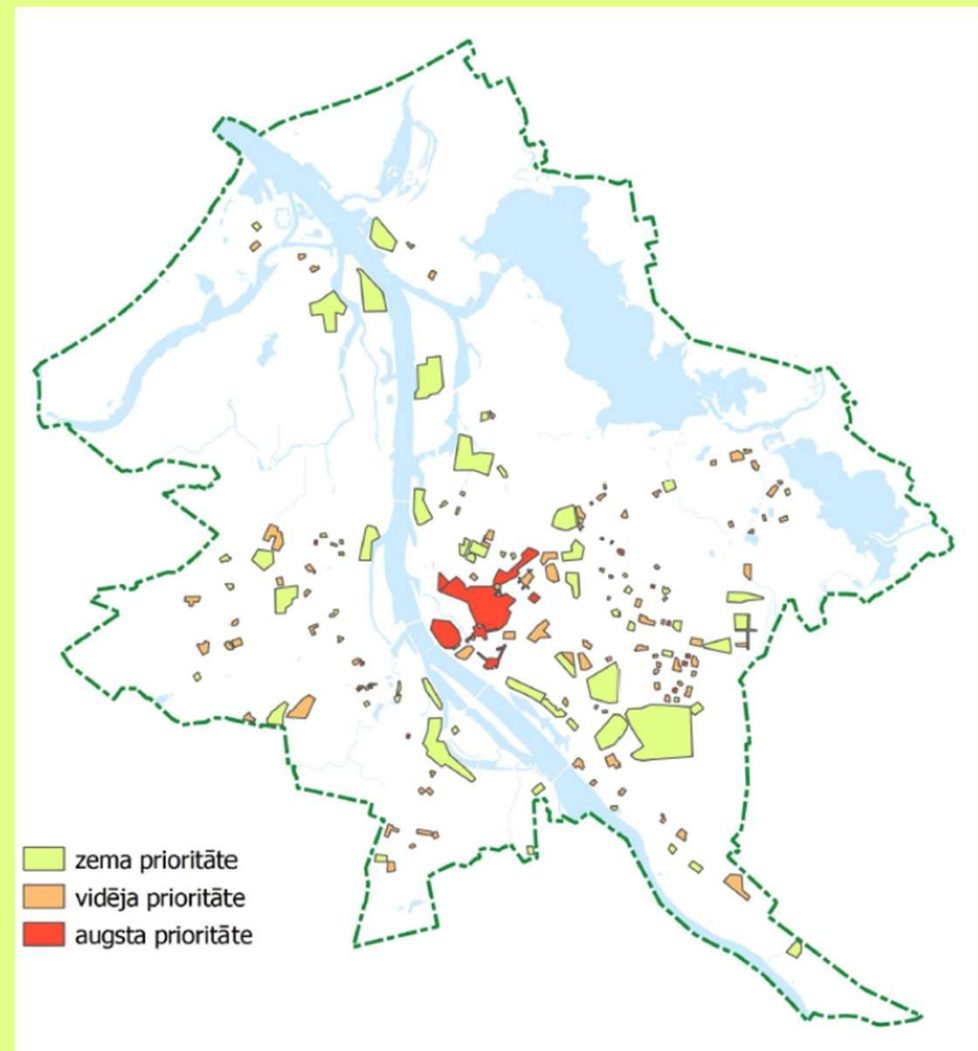
SPATIAL ANALYSIS

Green infrastructure evaluation



SPATIAL ANALYSIS

- **186 most affected areas**
- **Prioritized based on number of inhabitants and workplaces**



SOLUTIONS

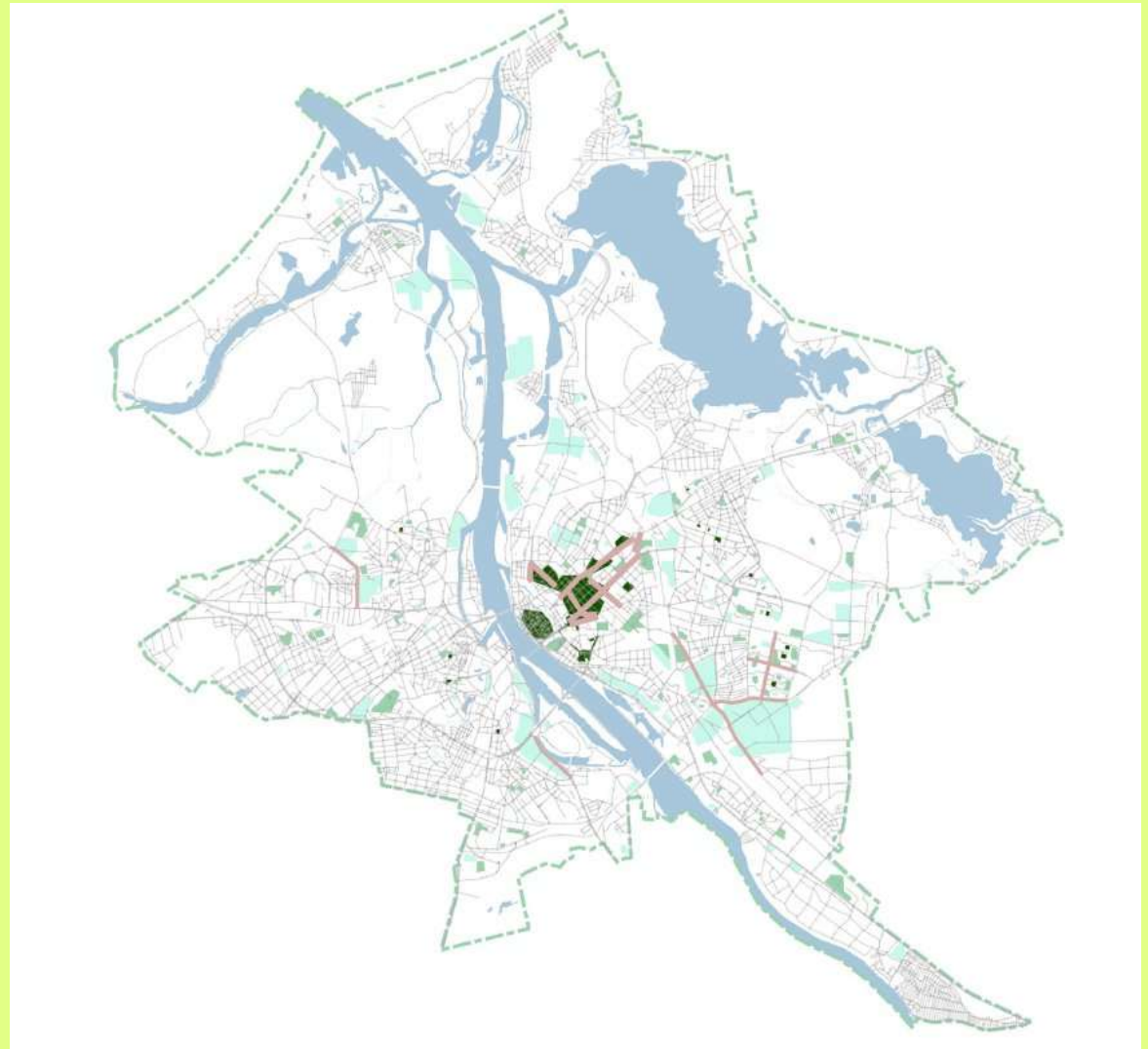
Policies and measures

30+ policies and measures identified

Governance, public involvement activities, improved management of green infrastructure, biodiversity

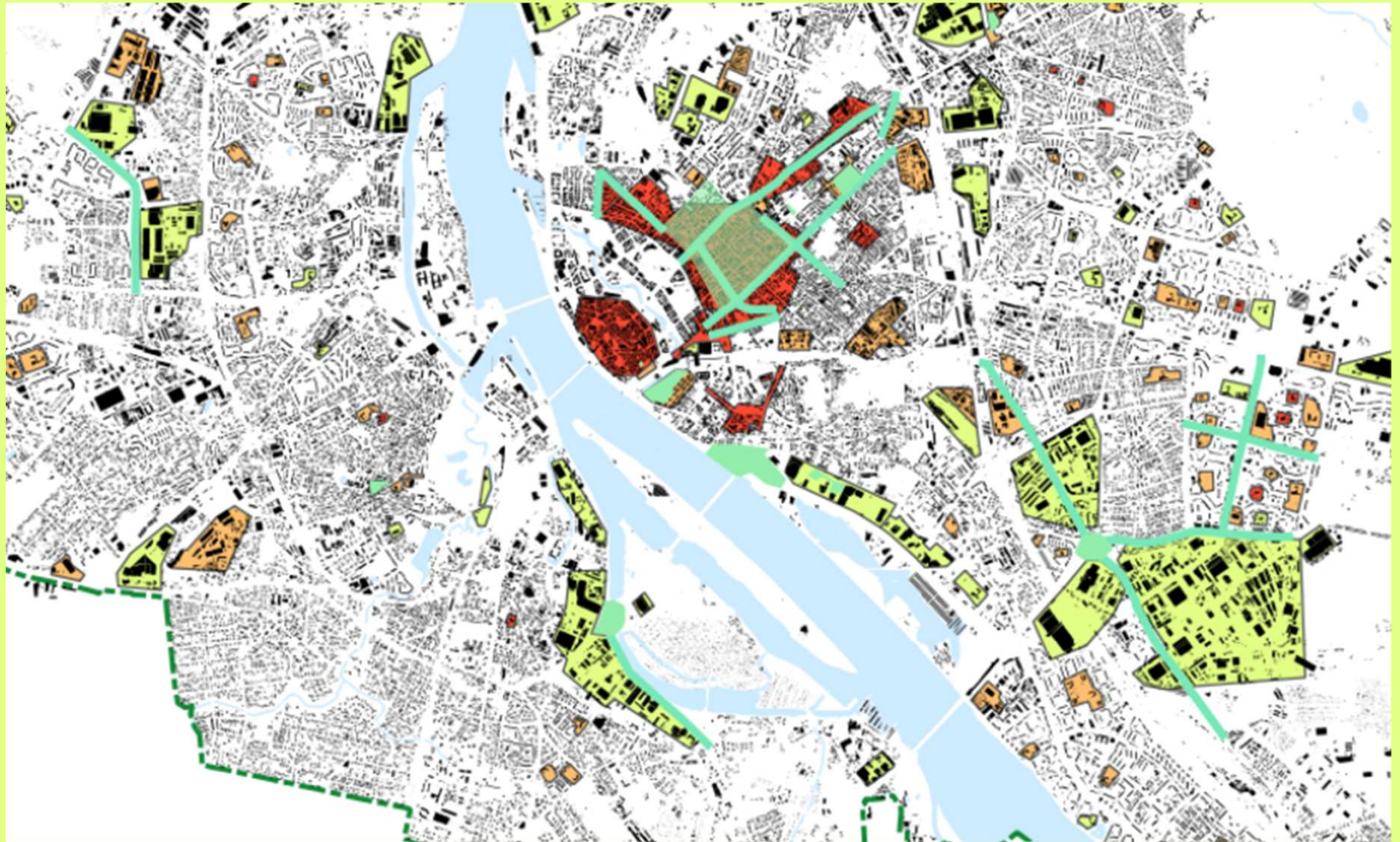
Infrastructure projects:

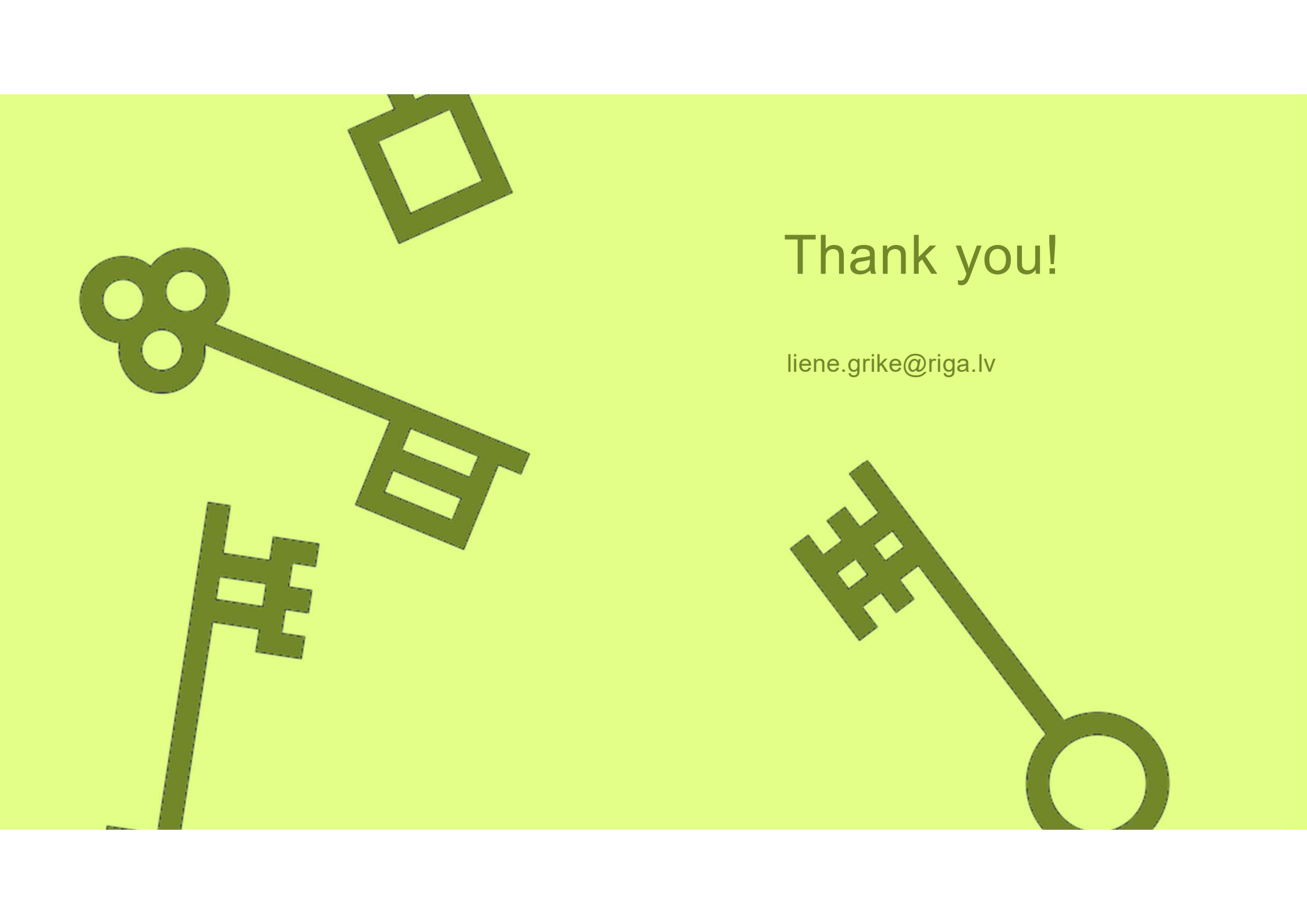
- Street greening
- Public squares greening
- Pocket parks
- Microforests
- Municipal properties greening



SOLUTIONS

Policies and measures: Street greening



The background is a solid light green color. It features several stylized, dark green geometric shapes. There are three keys: one in the upper left with a circular head and a rectangular bit, one in the lower left with a circular head and a notched bit, and one in the lower right with a circular head and a notched bit. Additionally, there is a square shape in the upper left and another square shape in the lower right, both with internal horizontal lines.

Thank you!

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