Sustainability initiatives in Vilnius

Presenting sustainability agenda in the making

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2024 12 05

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One of the fastest growing cities in the region & economies in the EU with 600,000 residents

EU net zero mission city

A city of happy citizens with 98% happy to live in Vilnius

61% of Vilnius is covered in green

European Green Capital 2025

Why do we want to be sustainable

- Quality of life
- Climate neutrality
- Resilience, adaptation, mitigation

From sustainable actions to acting sustainably

Topics for balanced city and better quality of life

Environmental:

- Climate neutrality
- Green transformations
- Adaptation & mitigation

Social & Governance:

- Citizen involvement & transparency
- Digital & open city
- Health, social, economy etc.

Vilnius sustainability guidelines

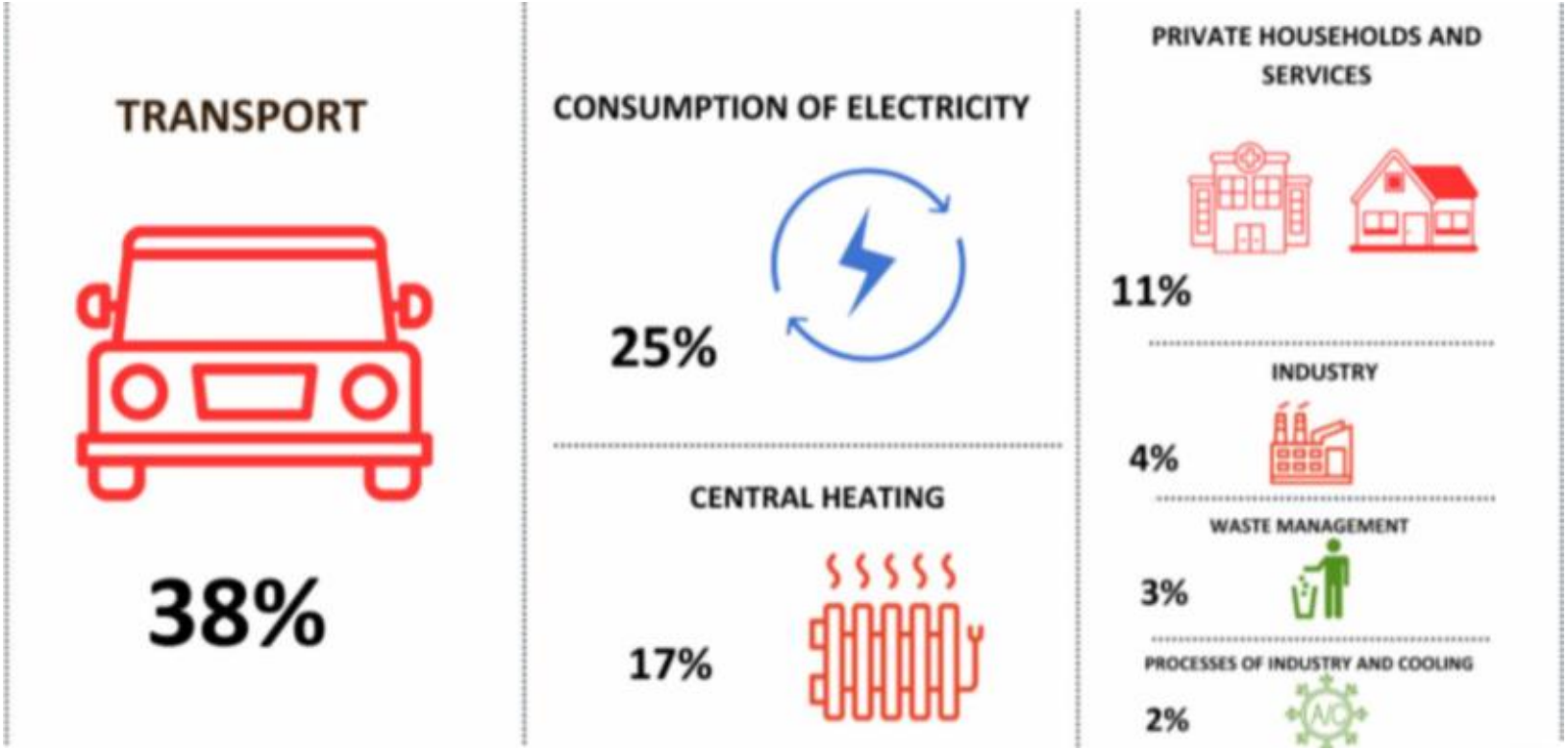
Policy documents:

- Vilnius city master plan
- Strategic development plan
- SUMP
- SECAP
- CCC & GCAP (in preparation)
- Green city accord

Other strategies:

- PT development strategy
- Eco transport development strategy
- Social services plan

GHG emission by sector



Vilnius, 2021

Documents in preparation

- Climate City Contract as part of the EU Cities Mission
- Green City Action Plan
- EU Mission: Adaptation to climate change


Initiatives?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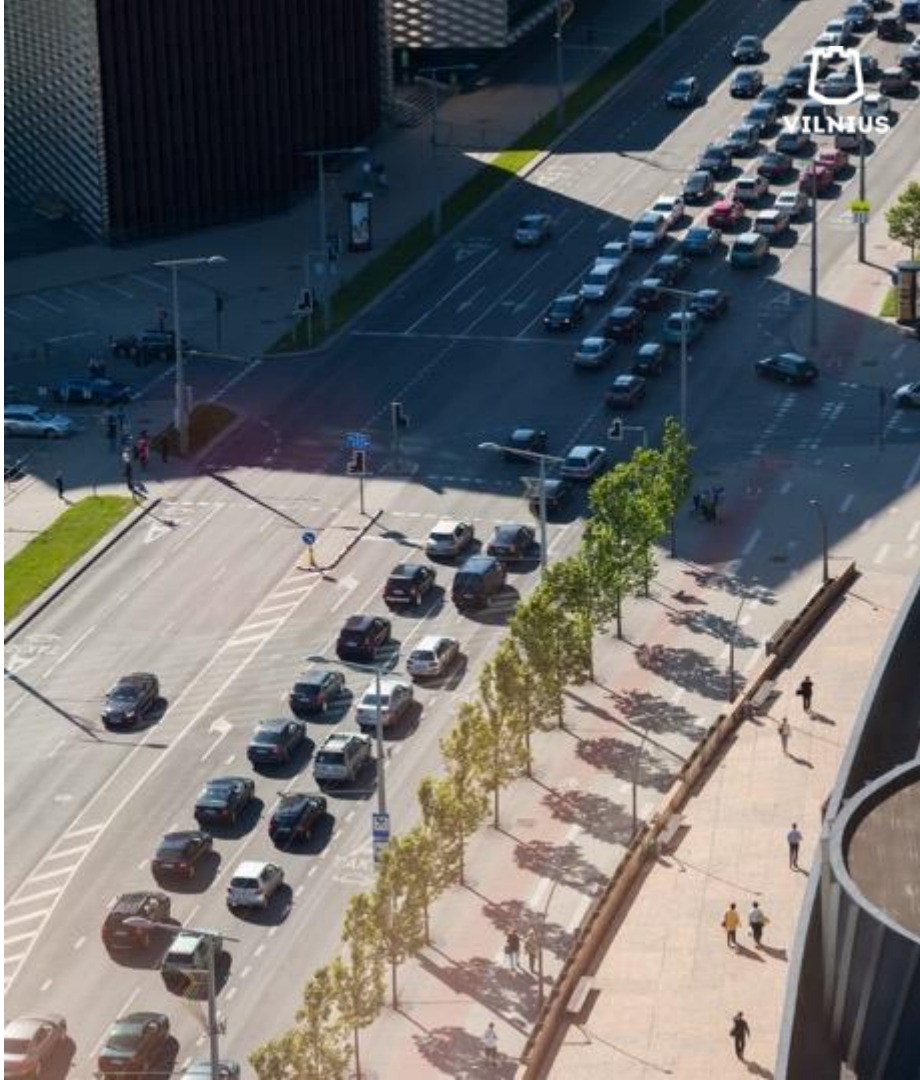
Transport

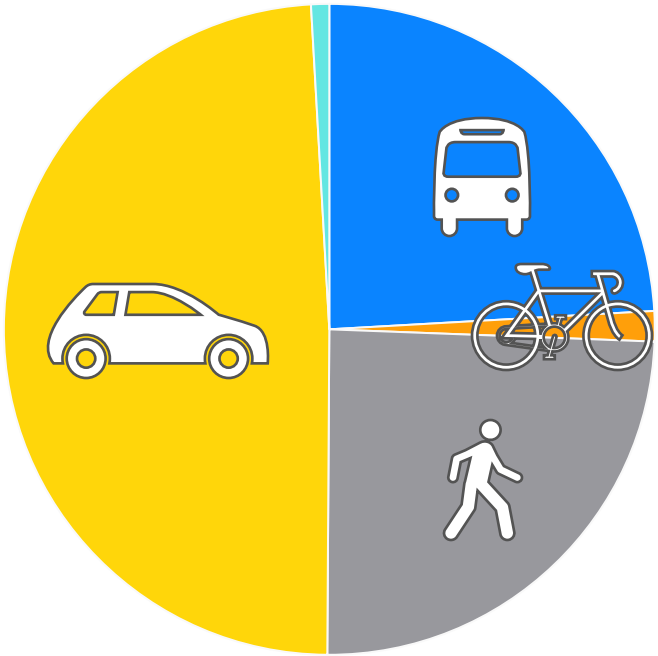
Mobility & transport

SUMP goals: increasing sustainable modes

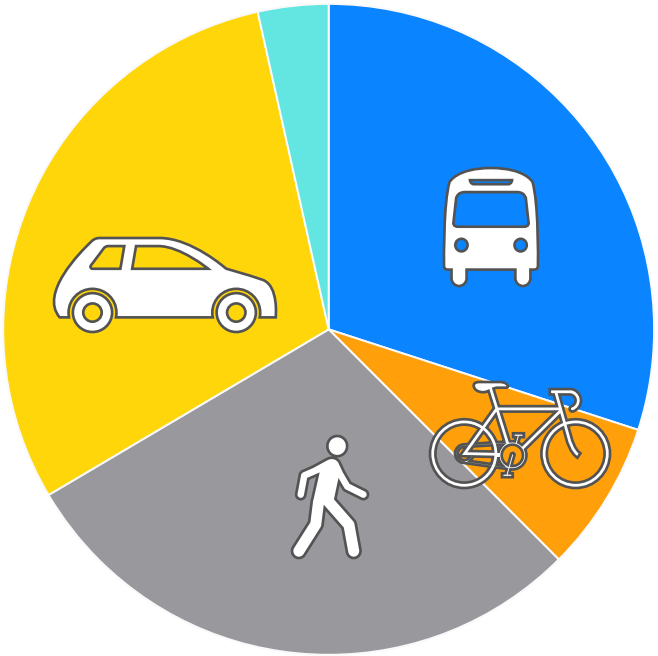
- Street transformations
- Prioritising walking, cycling and micromobility
- Public transport system development
- (Car) mobility management



SUMP strategy goal: more balance

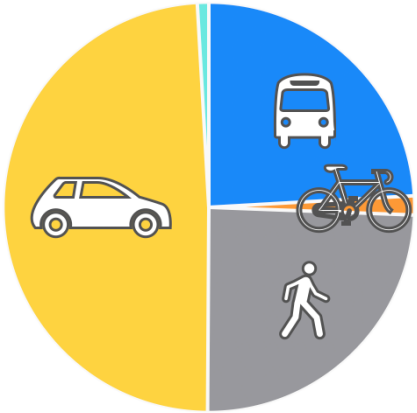


2017

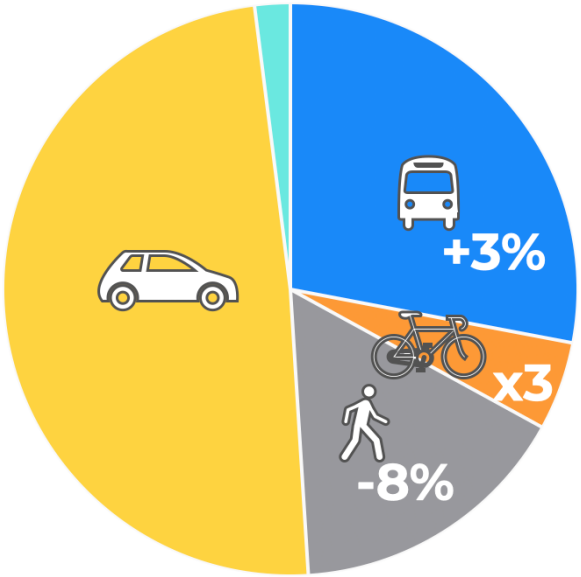


2030

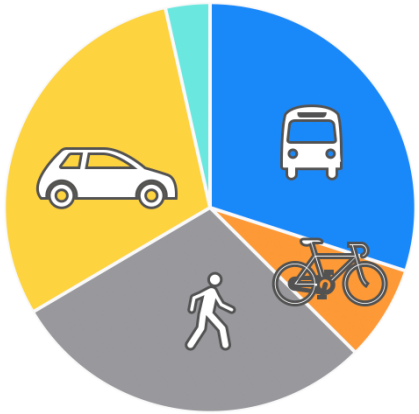
Investments to sustainable modes start to give results



2017



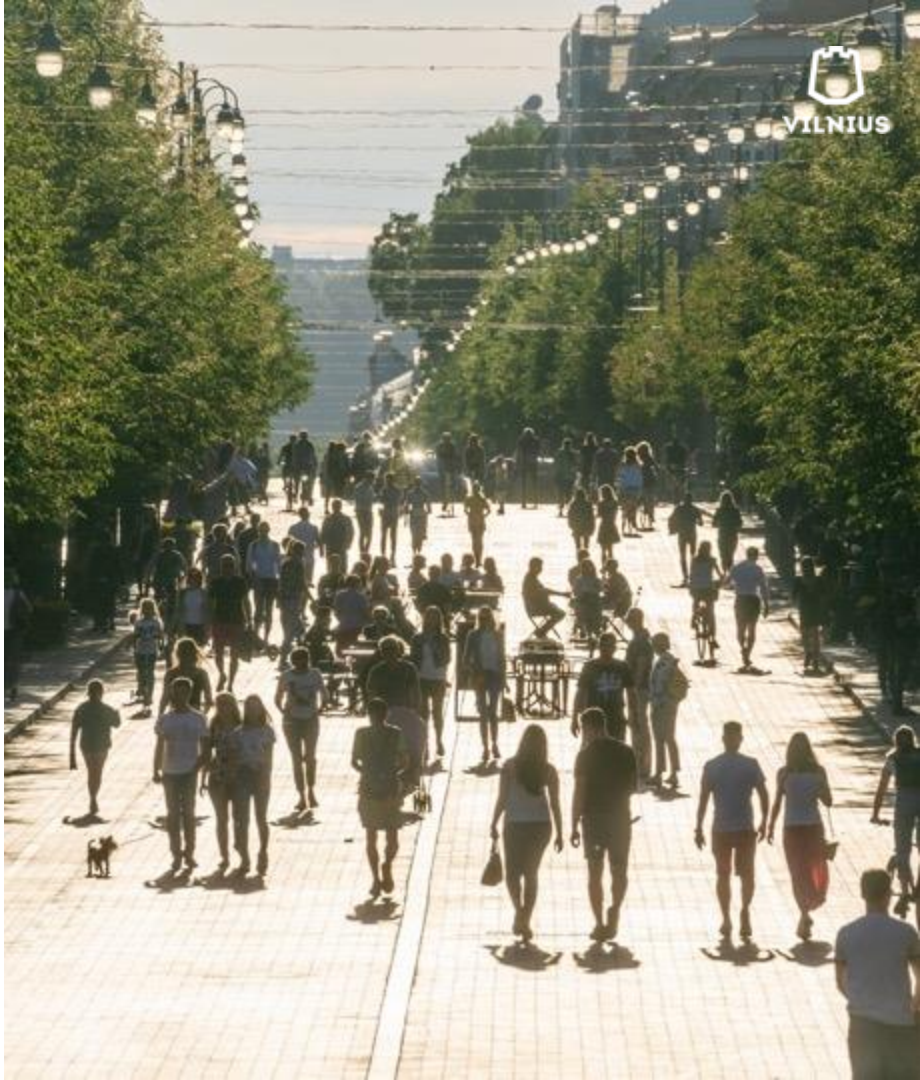
2023-2024 (vs. 2017)



2030

Walking

- Better environment for vulnerable users
- Focus on all users
- Wider sidewalks for pedestrians as a standard
- Shorter waiting times at the intersections



Cycling

- Systemic work since 2017
- Completion of cycling network: from 30 km to 160+ km
- 15-20 km of new cycle lanes every year until 2027
- In areas with a developed cycle network, 5% of journeys are made by bicycle
- Slow streets as part of the network

Public transport

Planned by 2028:

- 54% more frequent service
- 12 new routes
- 23,8 million km more

By 2030 in Vilnius:

- 60% electric, 40% alternative fuels public transport
- 23,4 km additional A (bus) lanes

Smart policies as soft measures for sustainable change

- 10 quality architecture principles for better urban environment
- Street design guide with 12 principles for liveable streets

Aim at having better streets

- Lively streets start with design: more space for pedestrians, active ground floors, calmer traffic contribute to better social connections
- Street redesign becomes and opportunity to protect green spaces, increase safety & improve environment
- More initiatives and involvement of residents

12 principles for better streets

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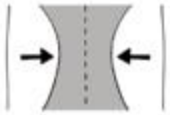
01. Trees always first

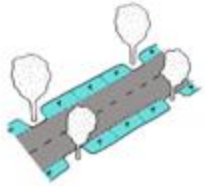
02. Trees & bushes as a buffer



03. Streets as narrow as possible

04. More safe crossings

05. Street lighting priority for pedestrians



06. Side parking with trees in between

07. Black elements for architectual distinction

08. Pavement as a symbol of priority

09. Functional surfaces

10. Declutter

11. Space 'ownership' at the façade

12. Smaller intersections

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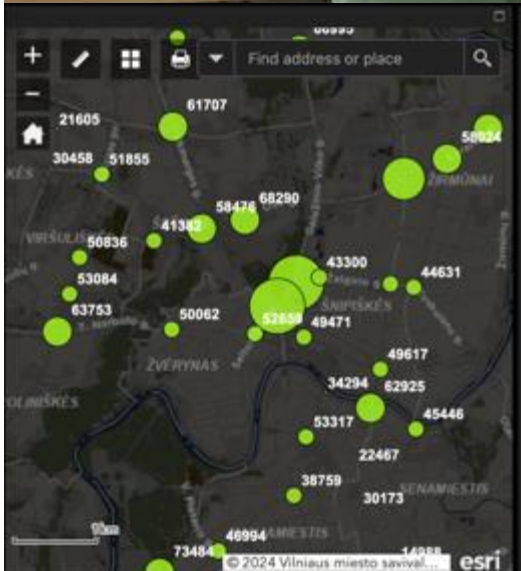
Street transformations

- Loop traffic circulation in the Old Town has proved to be a success
- Transformed streets with calm traffic are 50% safer and up to 10 dB quieter

- Happy to test new approaches! GreenMe5 and Just streets pilot projects in the making.

Urban mobility data

- Data taken from mobile operators: tracks movement and OD of people, analyses the data
- Learning to track cars, public transport, bicycles, pedestrians
- More sensors for data on intersection usage and load



Electric vehicles

Vilnius Lighting company plans:

- 250 charging stations by 2025

Two types of chargers:

- On street lighting poles
  (works when lighting is on)
- Stationary (works 24/7)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Energy

Heating sector

Currently being tested:

- Lower temperature network
- Use of residual heat

Planned by 2030:

- District cooling
- Green hydrogen production

City renewal

Last year:

- 39 applications for renovation
- 151,000 sq. m of improved areas
- First panel renovations underway
- Neighbourhood improvement program

Solar power

- Our aim is to use electricity more efficiently and to obtain it from renewable resources
- 318 municipal institutions will use solar energy in the near future
- 100 remote solar power plants will power more than half of all schools and kindergartens by the end of the year

Water

- Nature’s gift: high quality of groundwater
- Water management plans to become independent from external energy sources by 2032
- Last year already 23% of energy was produced from sewage sludge
- Testing the use of treated wastewater to generate heat energy

Green infra

Surface water

- More rainwater-permeable surfaces
- Intelligent rainwater management, collection and use
- Šeškinė surface water storage and treatment plant

Green spaces

- 61% of Vilnius is covered in green space
- 95% of residents live within 300 m of greenery
- Sustainable mowing of meadows
- Attention to biodiversity

Green Wave Initiative

- Protect existing green space
- Planned to plant:
  100 000 trees
  10 000 000 shrubs
  300 000 vines
- Active involvement of communities and businesses
- Special attention to self-seeded trees

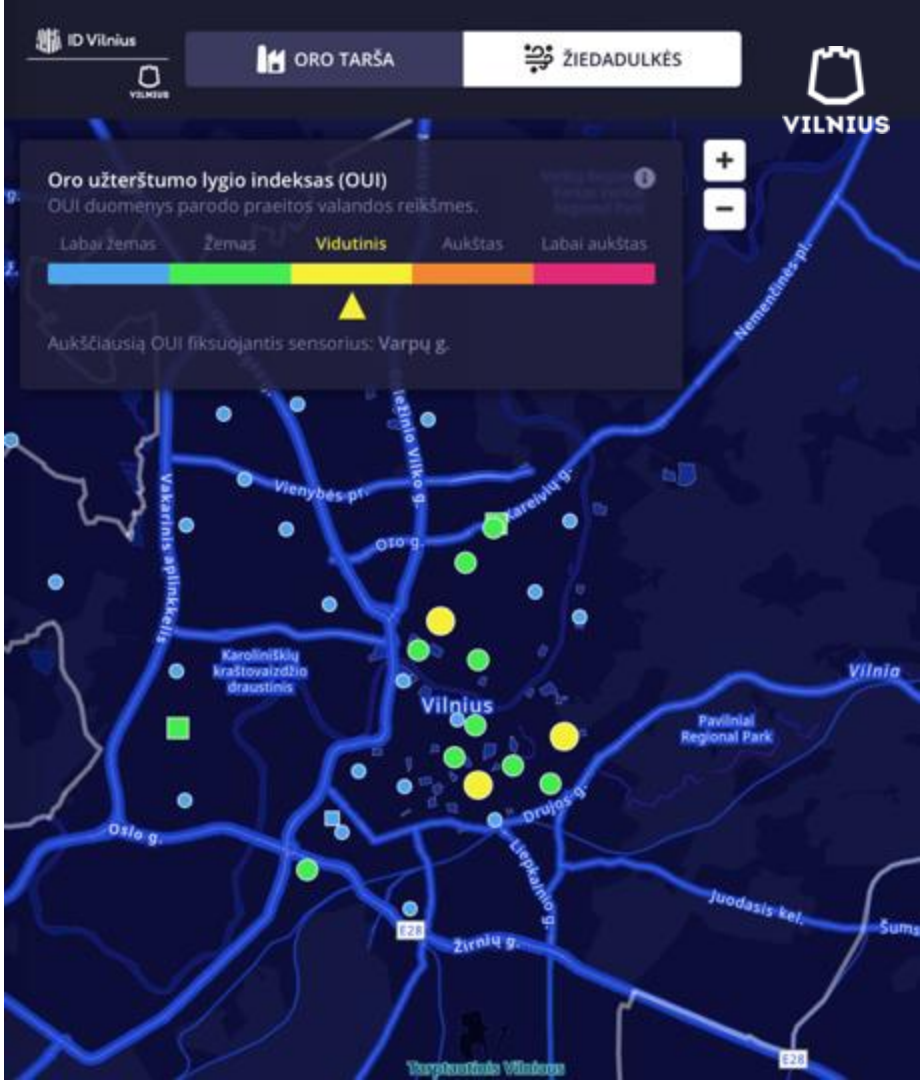
Digital

City Data

- Open data policy
- More citizen involvement & e-democracy tools
- Tidying up the city
- Autonomous drones for data collection
- 274 digital services in 2023

Intelligent City Lungs

- Real-time analysis from 34 different sensors across the city
- Data on air quality (particulate matter, carbon monoxide, ozone and other compounds) as well as pollen concentration.
- Freely accessible to everyone.

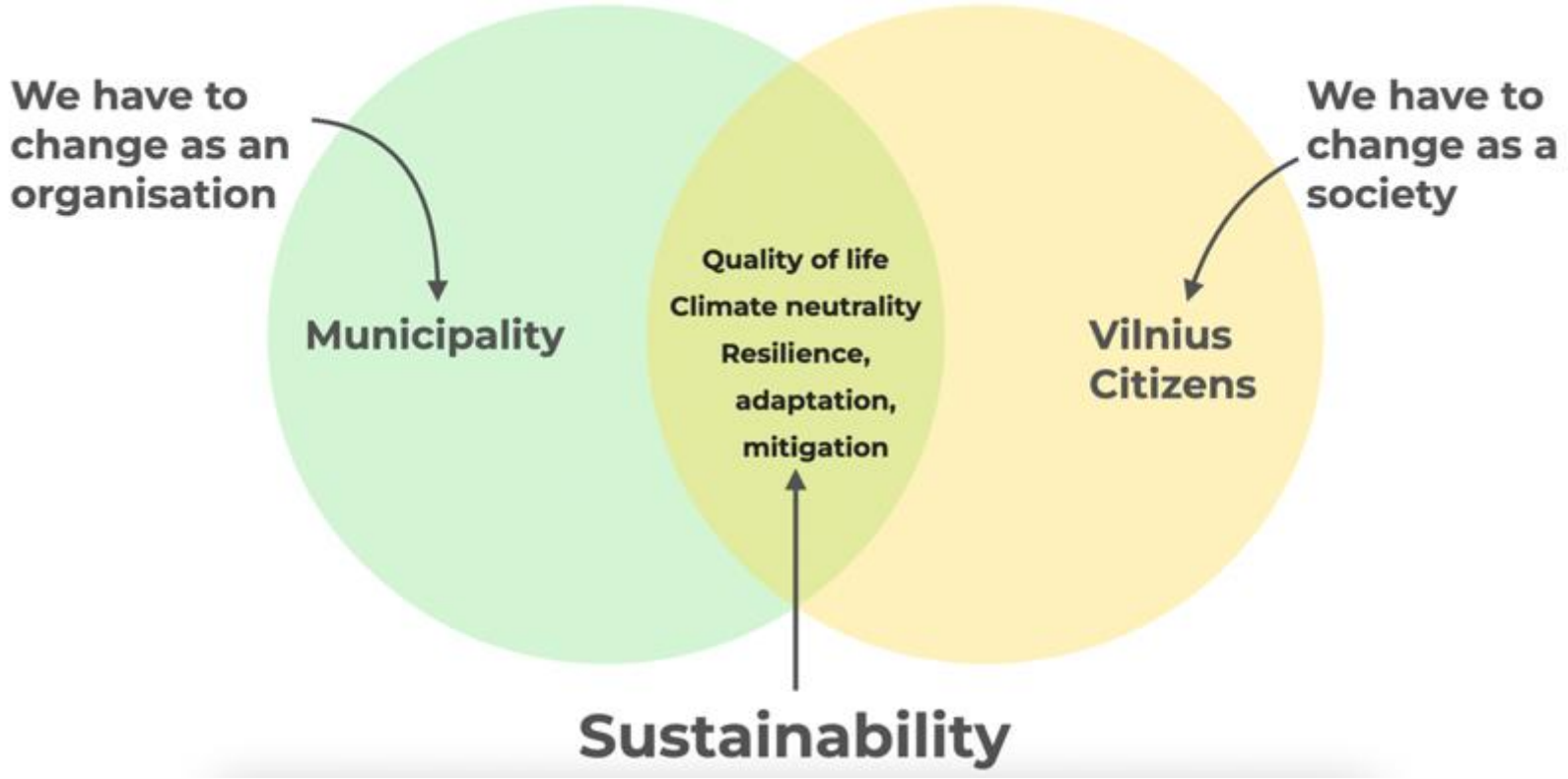


Vilnius - European Green Capital 2025

An incentive to further improve the city's sustainability in different areas

Focus on climate change, biodiversity, sustainable management and green transformation

Anyway, what's sustainability on a city level?


We have to change as an organisation
Municipality
Quality of life
Climate neutrality
Resilience, adaptation, mitigation
We have to change as a society
Vilnius Citizens
Sustainability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Vilnius:
Greenest city
in the making

2025 Vilnius – European Green Capital