

Citizen science for data-informed, resilient cities

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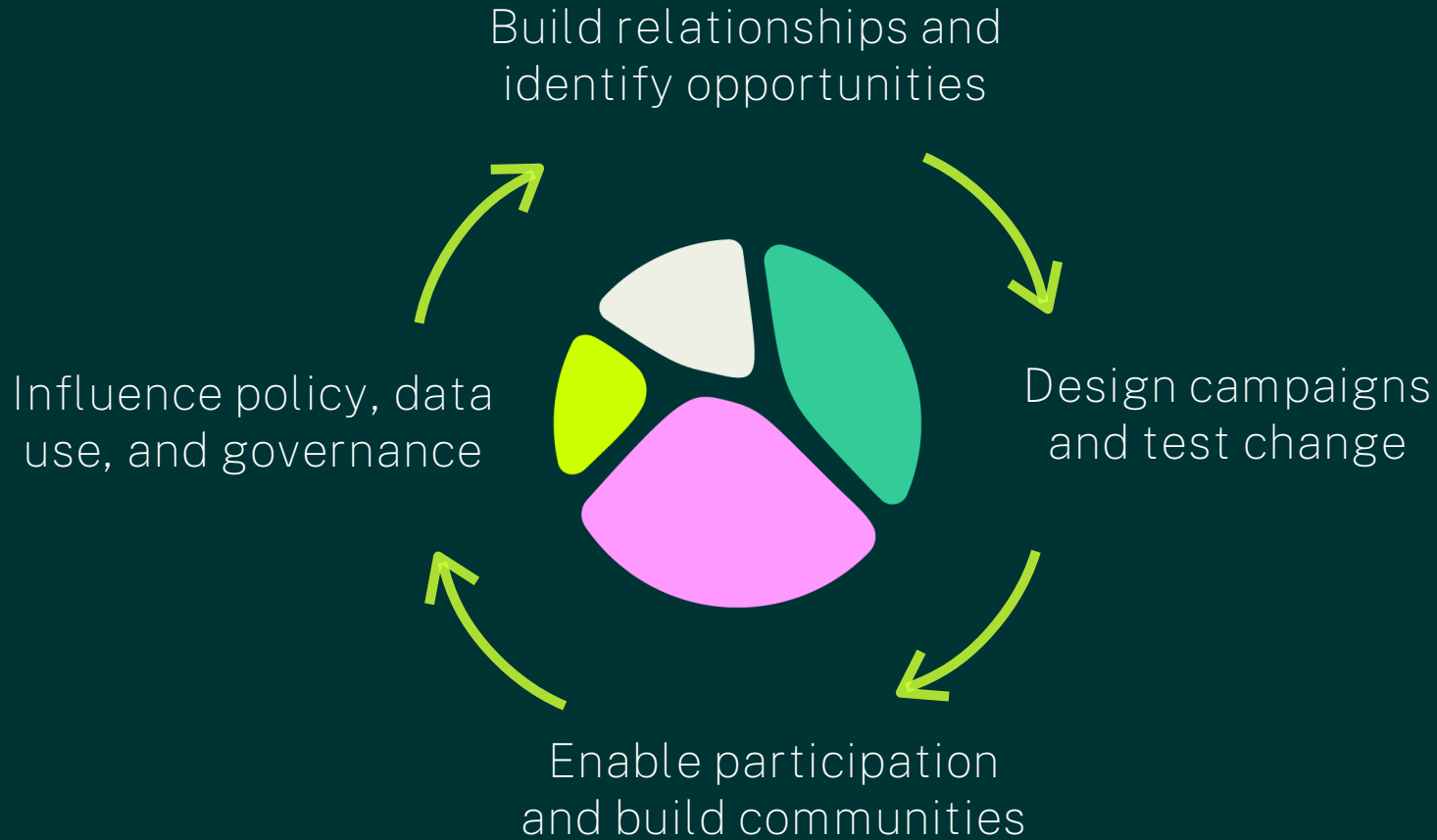
Important data gaps limit policy development for just and sustainable cities

Accentuated inequalities in access to greenspace and health-related benefits

Public participation developing slowly and variably



Urban ReLeaf empowers communities with citizen-driven data to influence public policy and strengthen city resilience for all



Make Friends

~~Find a group of people
who are like you~~

~~Find a group of people
who are like you~~

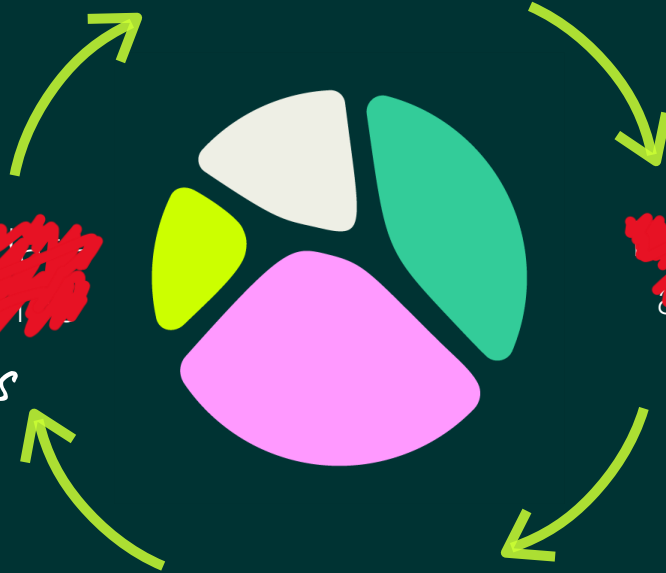
Try cool stuff

~~Find a group of people
who are like you~~

Rally people

~~Find a group of people
who are like you~~

Change the rules





6 Cities

Athens, Cascais, Dundee,
Mannheim, Riga, Utrecht

4 Themes



Greenspace perception



Urban Trees



Air quality



Heat stress

Cascais

An urban park for the future

Community perceptions and use of greenspaces

Cascais is transforming its urban green spaces to improve both the environment and quality of life for its residents, while showcasing its commitment to sustainable development.

Through the campaign "A Future-Proof Urban Park," citizens complete online or app-based surveys to share their thermal comfort and experiences in green spaces, contributing to shaping green space planning and policies. By identifying locations with extreme urban heat island effect impacts, the initiative helps protect vulnerable groups from health risks like heat strokes, promoting a more resilient and connected community.

2024 Campaign Data



1400 citizens engaged
58% female participants
7 urban parks

Climate-responsive greenspace planning





To address the challenges of urbanisation and climate extremes, Utrecht explores greening solutions to increase city resilience.

The "Green Neighbourhood, Cool Neighbourhood" campaign engages residents of Kanaleneiland, Rivierenwijk, Ondiep, and Zuilen to collect summer temperatures using mobile sensors to measure heat levels in their neighbourhoods. The data serves joint activities with policy makers and the community to identify adaptation measures, foster awareness of the greenspace benefits and to co-create a cooler urban environment.

**2024
Campaign
Data**

 **>325**
Citizens Engaged

 **60,000**
Data Points Collected

 **1** App
Co-Developed

 **((120))**
Sensors Installed/
Operating

 **14**
Workshops Held



Utrecht



Green Neighborhood, Cool Neighborhood
Measuring heat stress and building community

325 citizens engaged

120 wearables

60K+ observations

Utrecht Digital Twin





Riga's "Adopt a Sensor" campaign brings local residents together to measure air pollution in collaboration with Riga authorities.

With 20 air quality sensors in place — spread across parks and outside homes, schools, and local NGOs — residents actively track PM2.5 levels, comparing green and traffic-heavy areas. This citizen-based monitoring is not about data collection only; it also empowers people and policy to better understand and take action to improve air quality in the city.

2024 Campaign Data



7

Sensor Adopters

87,000

Data Points Collected



Sensors installed/Operating



3

Urban Policies informed

Riga city air quality improvement action program for 2026-2030
Riga action programme 2022-2027
Riga Greening plan 2027-2031

PurpleAir Riga Map



PM2.5 Pollution Sensors



Riga



Adopt a Sensor campaign

Community-based air quality monitoring

20 AQ sensors installed (PM 2.5)

7 sensor adopters

100K+ observations

Youth engagement

Integrate with city platforms

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