

Data Collection methodologies

Collection of public and municipalities' owned data

Data are collected from public sources and from municipalities' owned data

List of data requirements needed for each N4C Tool

DATA COLLECTION

- Alcala de Henares
- Çankaya
- Città Metropolitana di Milano
- Szeged

Four groups involved in the activities

Data are collected and saved on EMDESK for each city and tool

Most of the data derived from public database:



<http://www.geoportale.regione.lombardia.it/en/home>

Satellite Imagery Analysis

HIGH RESOLUTION IMAGERY ANALYSIS

have been used to **collect** and **produce urban data**

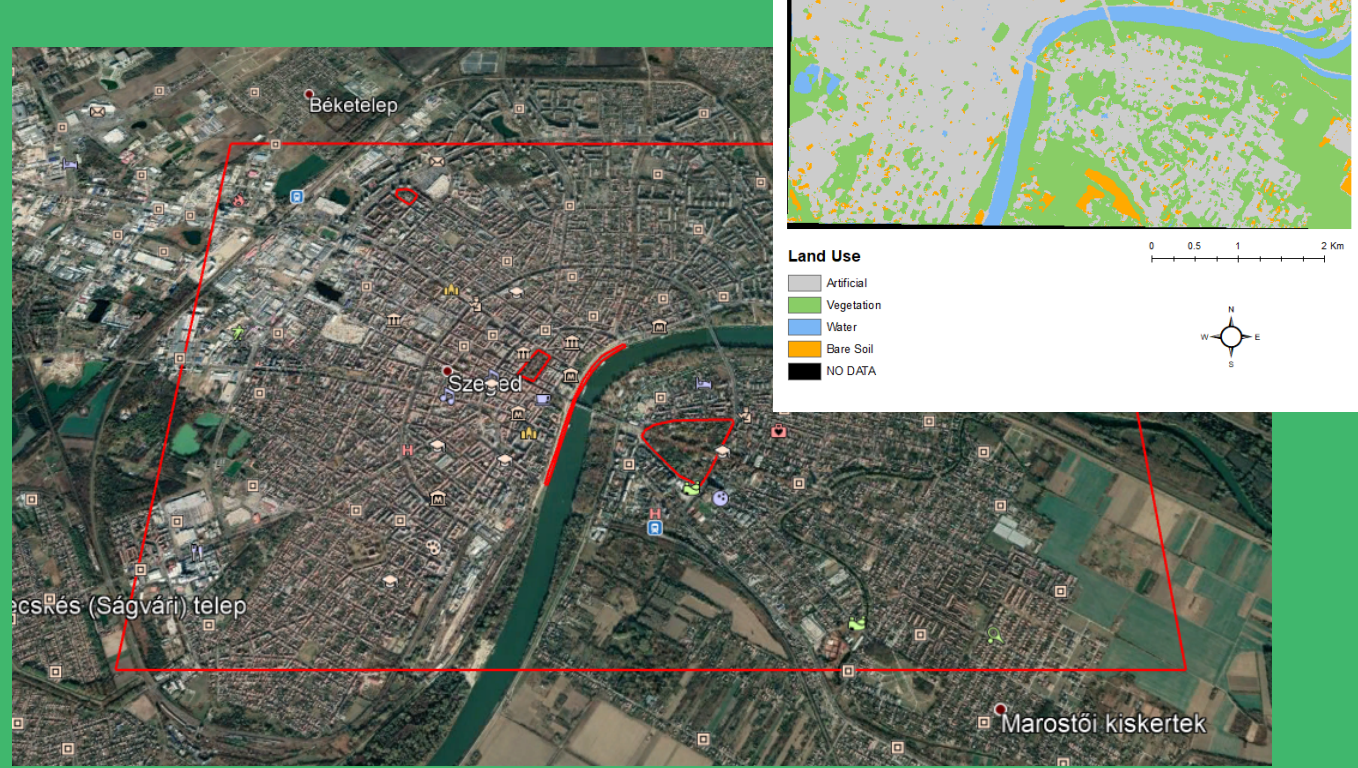
Analysis of landscape pattern

- Maps of vegetation zones
- Maps of existing green roofs

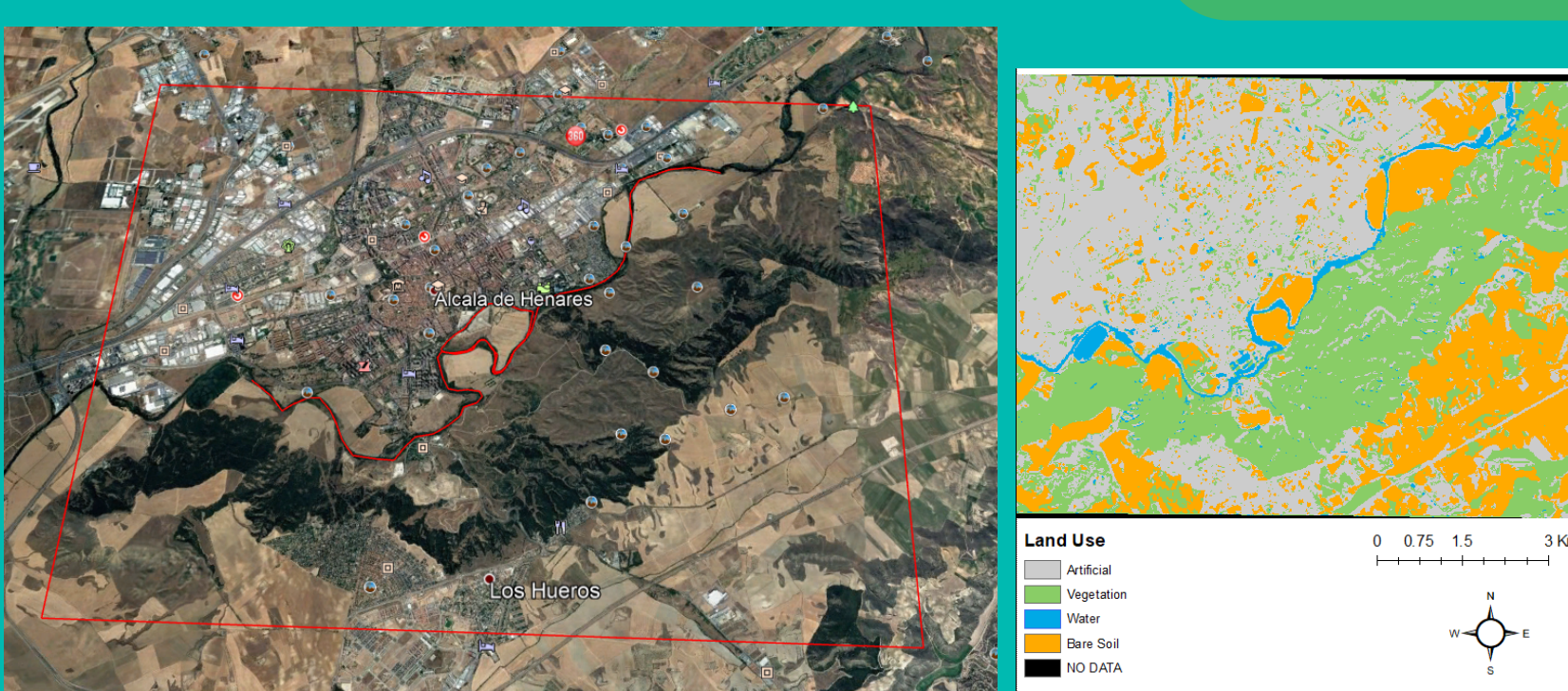
City scale analysis

- Ecological continuum / landscape mosaic
- Urban Climate Zones
- Green roof potential

Szeged
Zone: 28 km2



Alcala de Henares - Zone: 76 km2



Parcel scale plant description

- Leaf Area Index / F-Cover
- Plant health

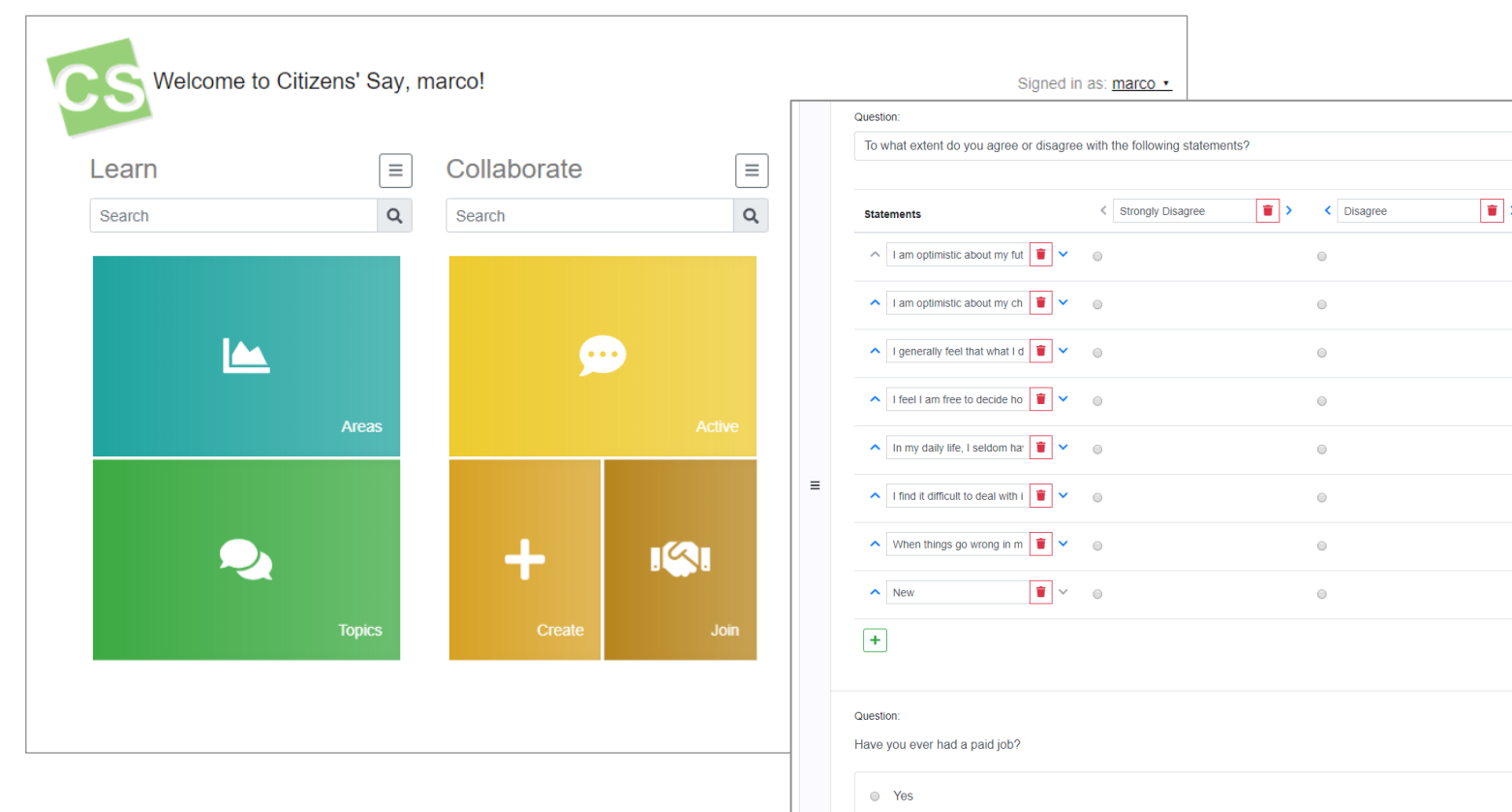
Characterization of natural areas

- Tree vs herbaceous vegetation
- Biodiversity

Citizens' Say Tool – Quality of Life survey

QUALITY OF LIFE SURVEY DATA

Can be gathered, stored and made accessible to N4C components



Extension of Citizens' Say Platform

- Completion of standalone surveys
- Representation of survey data
- API for access to survey data summaries

Representation of Data Available Online

- Integration of Eurofound EQOL data
- Localisation of survey data via coordinate areas where needed

Integration and Gathering of QoL Data

- Integration of data available in the project surveys
- Completion of surveys by municipalities

Method. based on Environmental Justice and Placemaking

QUESTIONNAIRE FOR MUNICIPALITIES

Used to **organise and gather Citizens' related data**

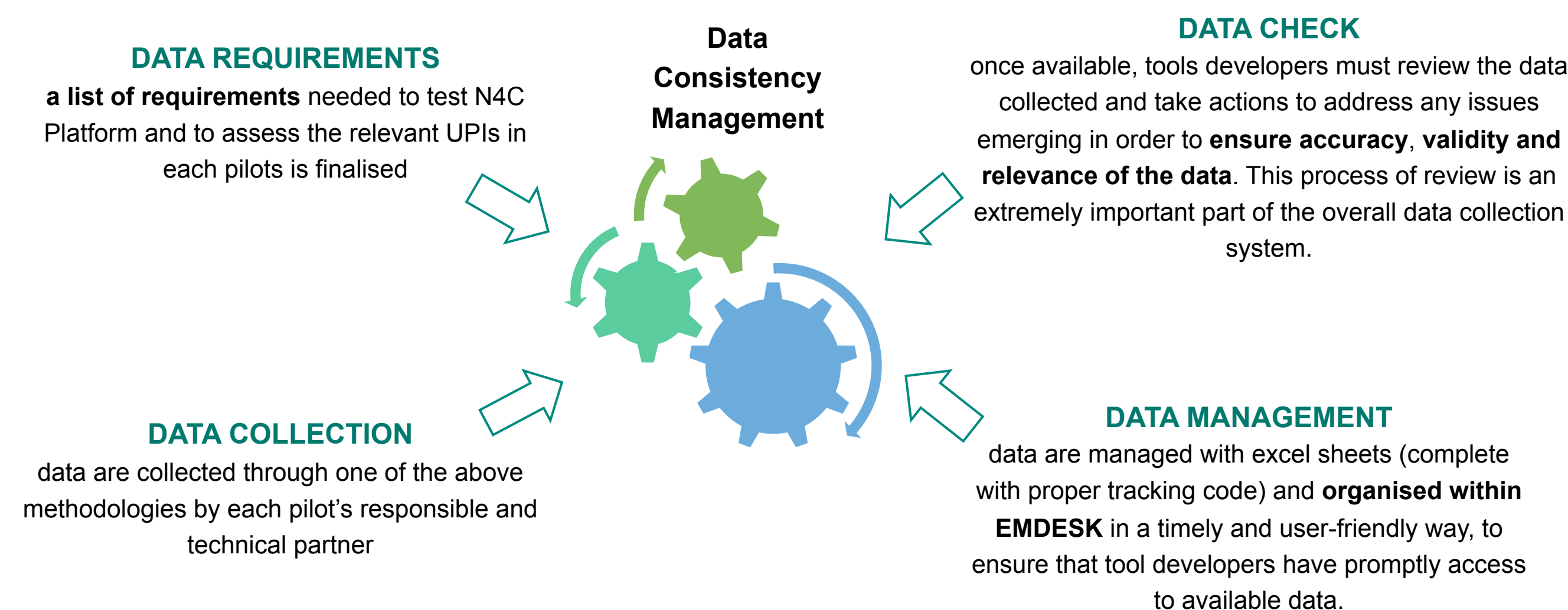
- Base on Urban Challenge Indicators** (Environmental Justice and Placemaking)
 - Recognition
 - Distribution
 - Responsibility
 - Capability
 - Recognition
- Complemented by Participation Strategy** (SBS Guide)
- Data-analysis**



Data Consistency Management and Progress of the activities

Data Consistency Management

To ensure **data collection consistency** a monitoring process has been defined with the following main steps:



Progress of the data collection in each site

| PILOTS Data collection\ | | Nautre4Cities tools | | | | | | | | | | | | | | | |
|---------------------------------|--------|----------------------|----------------|----------------------------|----------------|---------------------------------|---------------------------|----------------------|----------------|----------------------|----------------|----------------------|----------------|----------------------|-----------------|----------------------|---------------------|
| | | ET3 COLOUREE | | ET4 Satellite Im. Analysis | | ET5 Insp. via drones | | ET6 GREENPASS | | ET7 EPESUS | | Simplif. LCA tool | | ET9 MIMES-LIST | | ET6 bis BOX 3 | |
| | | Data collection RINA | Data check CLR | Data collection RINA | Data check TRS | Data collection RINA+ EUT + R2M | Post-processing EUT + R2M | Data collection RINA | Data check G4C | Data collection RINA | Data check EKO | Data collection RINA | Data check NBK | Data collection RINA | Data check LIST | Data collection RINA | Data check UN-ESTAR |
| CANKAYA [CAN + EKO] | Site 1 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | Site 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 3 | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| MILANO [CMM + R2M] | Site 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SZEGED [SZEG + SZTE + MUTK] | Site 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| ALCALA DE HENARES [AH + TEC] | Site 1 | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Site 2 | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

✓ Activity completed ⚙ Activity on-going ✗ Activity denied/not

Nature4Cities consortium

> 6 leading Research and Technology Organizations

NOBATEK/INEF4 (FR) – Coordinator
Cerema (FR), Tecnalia (ES), Eurecat (ES), Cartif (ES), Luxembourg Institute of Science & Technology (LU)

> 4 universities

University of Nantes / IFSTTAR (FR), Agrocampus Ouest (FR), University of Szeged (HU), Middle East Technical University (TR)

> 2 leading industrial organizations

Acciona Construction (ES), Acciona Ingenieria (ES), Rina Consulting (IT)



> 9 Small and Medium-sized Enterprises (SMEs)

Green4Cities (AT), Terranis (FR), Colouree (IT), Duneworks (NL), Argedor (TR), Ekodenge (TR), Innova Integra (UK), R2M Solution (IT), Grün statt Grau (AT)

> 2 clusters of stakeholders

Plante & Cité (FR), Hungarian Urban Knowledge Center (HU)

> 4 pilot cities

Alcala de Henares (ES), Città Metropolitana Di Milano (IT), Szeged (HU), Çankaya (TR)



Join the community!

www.nature4cities.eu

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