

Enhancing Resilience of Urban Ecosystems through Green Infrastructure (EnRoute)



ec.europa.eu/jrc



Joint Research Centre
the European Commission's
in-house science service

Policy framework

EU Biodiversity Strategy

→ Halt the loss of biodiversity and ecosystem services in the EU and globally

Target 2

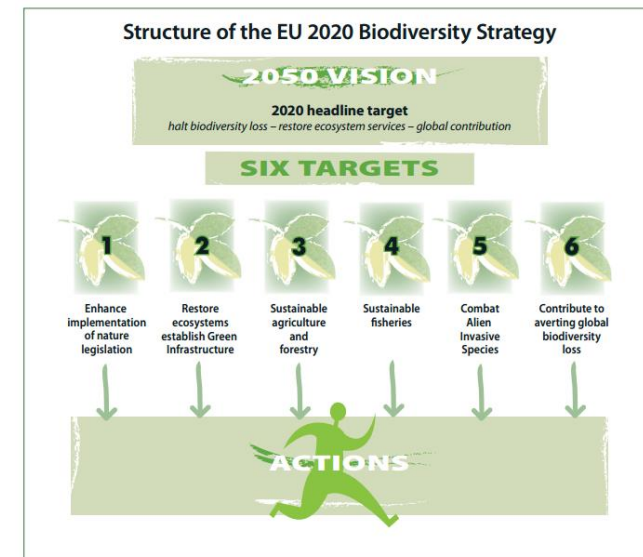
→ Maintain and restore ecosystems

Action 5

→ Map and Assess Ecosystems and their Services in the entire EU territory; economic valuation; develop natural capital accounting

Action 6

→ Green infrastructure strategy and restoration prioritization



MAES working group oversees the implementation of Action 5

Research community
H2020 projects

www.esmeralda-project.eu

European Commission,
European Environment Agency

Cities and regions
Stakeholders

EU Member States
and other countries



TASKS of the Working group

- 1. Guidance for member states*
- 2. Common Ecosystem assessment pilots*
- 3. EU wide assessments*

MAES working streams

Member States

- Mapping and assessment at national scale
- Work is ongoing in many countries

MAES working group

- MAES reports provide guidance
- Thematic pilots to test the guidance

ENV Support contracts (MESEU/TRAIN/T2)

- Contracts DG ENV
- Guidance and training at MS level

ESMERALDA

- Horizon 2020
- Flexible approach to mapping and assessment

IPBES

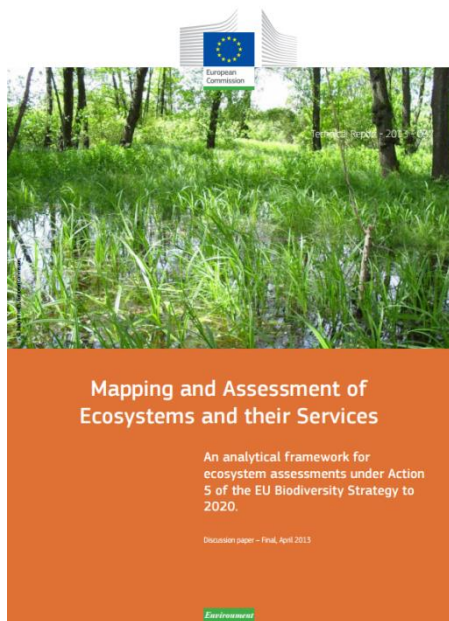
- Regional assessments

KIP-INCA

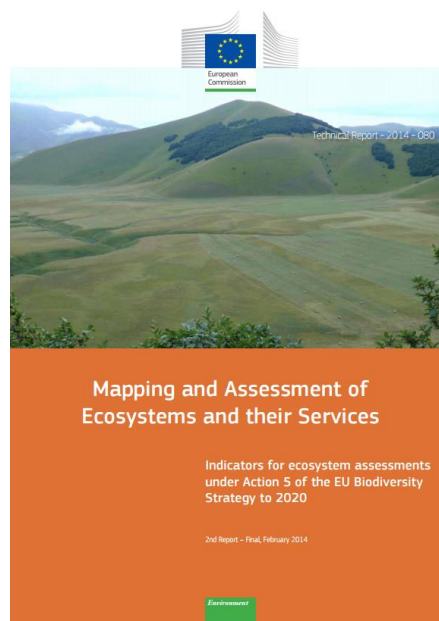
- Integrated system of Natural Capital Accounts
- Depends heavily on MAES inputs

Key outcomes

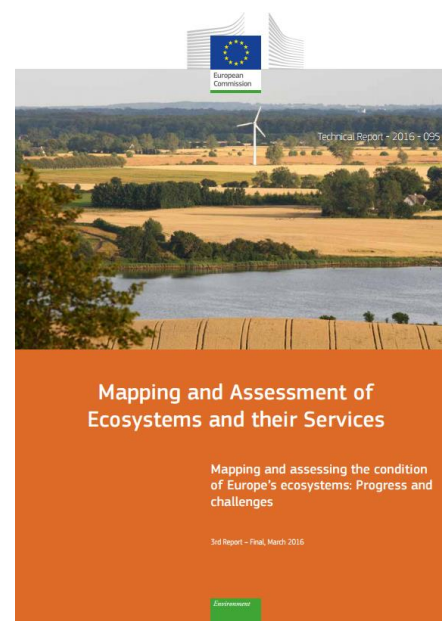
Conceptual framework



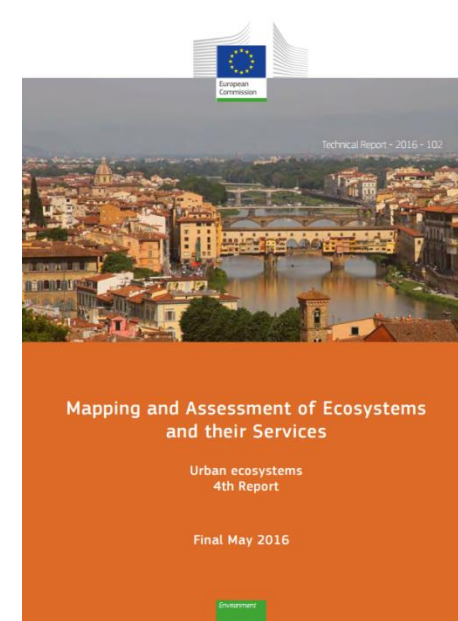
Indicators



Ecosystem condition



Urban ecosystems



<http://biodiversity.europa.eu/maes>



Technical Report - 2016 - 102



Mapping and Assessment of Ecosystems and their Services

Urban ecosystems
4th Report

Final May 2016

Environment

MAES urban pilot

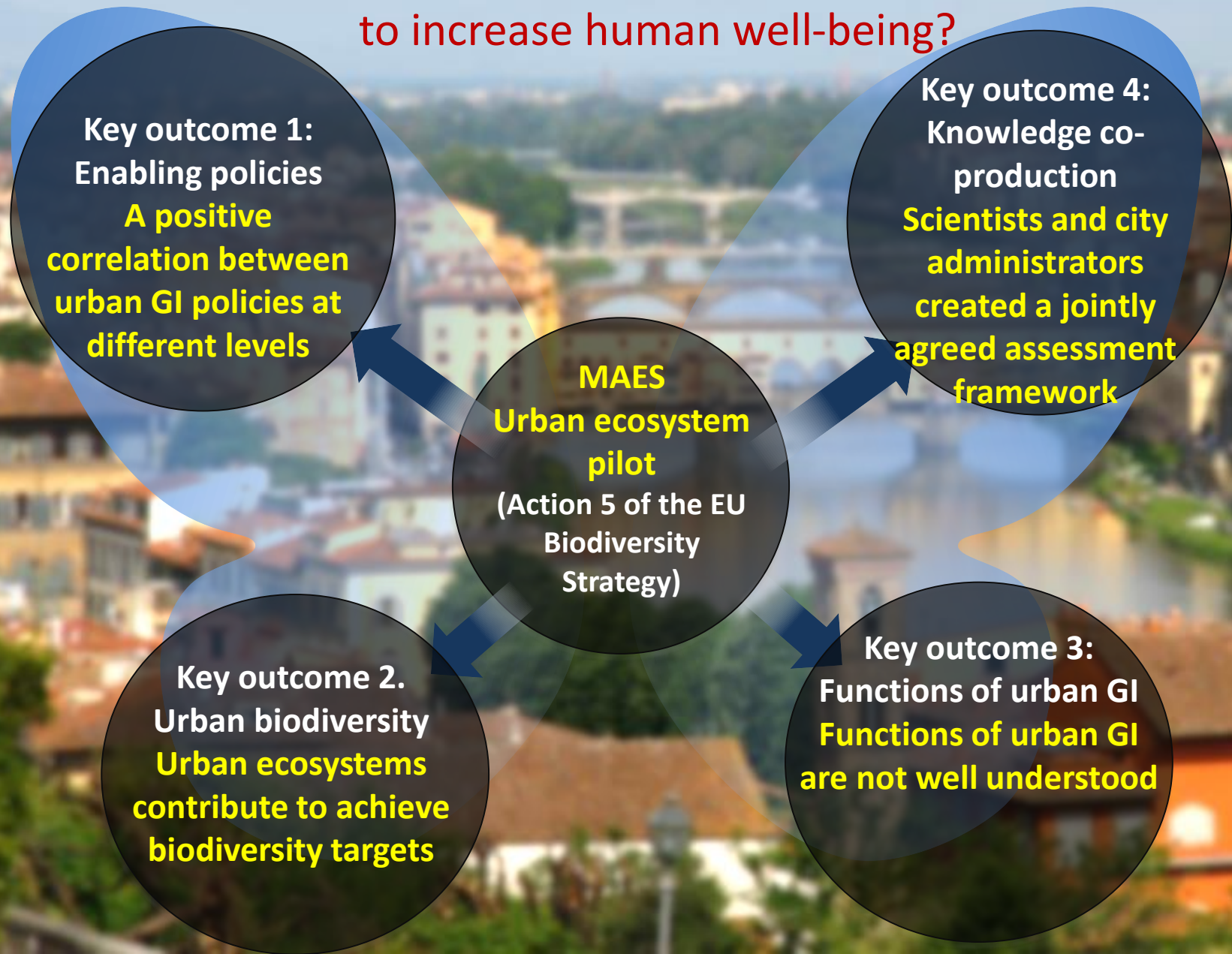
How to map and
assess urban
ecosystems and
urban ecosystem
services

Opportunities for
urban planning,
policies and
biodiversity



How to map and assess urban green space?

How can urban ecosystems be part of inter-sectoral planning to increase human well-being?



City or socio-ecological system where most people live

Urban ecosystem (different scales)

Functional component

Green infrastructure

Built infrastructure

Structural component

Urban green spaces

Next steps

- Enhancing networking, communities of practise (EU urban agenda)
- Testing and validating the indicator framework
- Using urban ecosystem mapping and assessment for urban GI development
- Better understanding of positive interactions and mutual reinforcement between urban GI policies and objectives at different governance levels

EnRoute

Enhancing Resilience of Urban Ecosystems through
Green Infrastructure

European Parliament Pilot (funding) but managed by
the European Commission DG Environment and the
Joint Research Centre

Objectives of EnRoute

MAES community of practise on urban ecosystems (cities, researchers, member states, EU services)

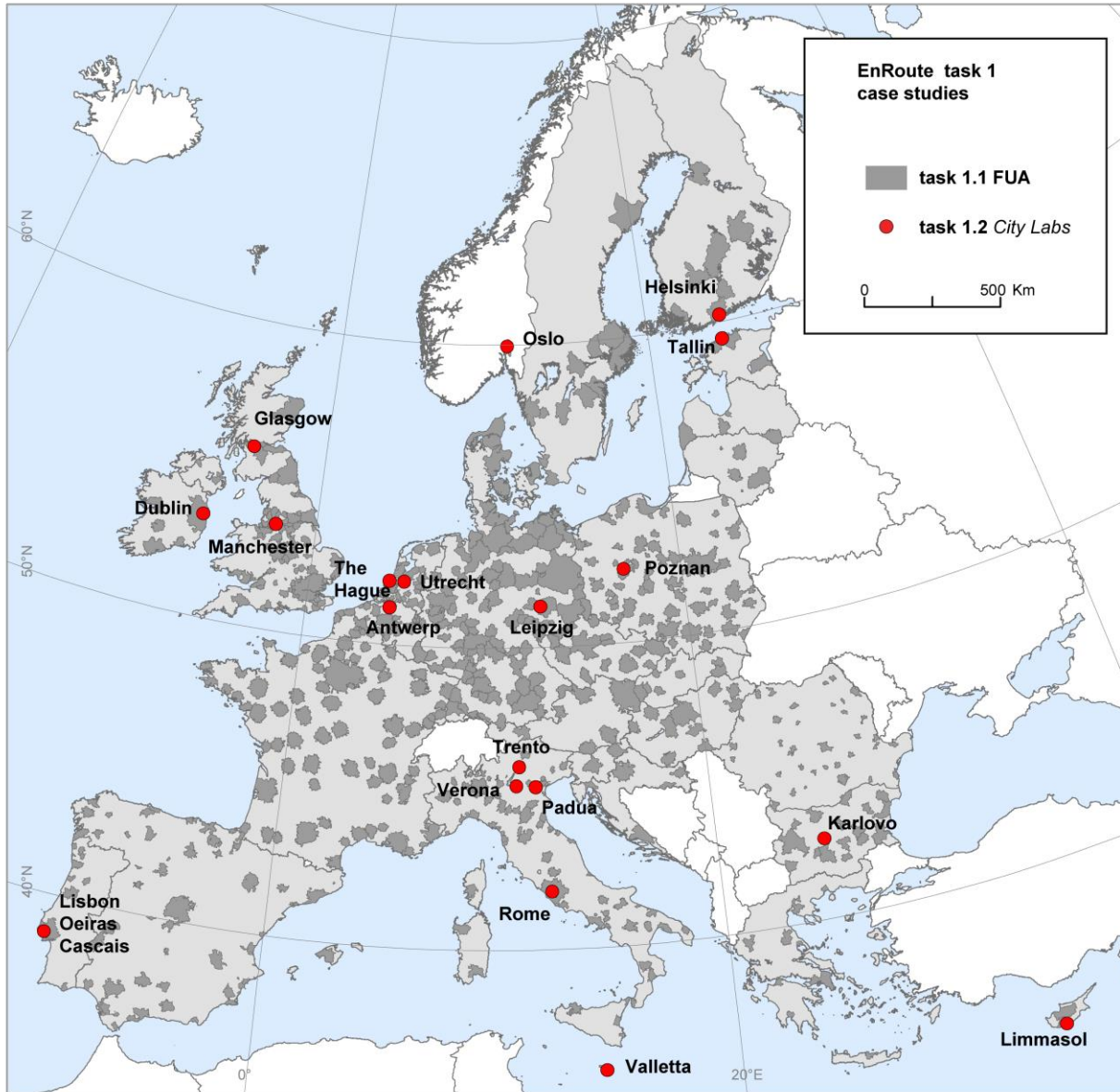
- Operationalise the urban MAES indicator framework
- Analyse how science supports urban policy
- Enhance networking activity on urban GI

Operationalise the urban MAES indicator framework

MAES urban pilot delivered an indicator framework to:

- Map urban ecosystems
- Map and assess urban ecosystem condition
- Map and assess urban ecosystem services

EnRoute will provide an urban assessment at the European scale and test it in 19 cities (city labs)



Analyse how science supports urban policy

MAES urban pilot demonstrated

- A positive correlation between urban GI policies at different levels
- functions of urban GI are not well understood

EnRoute will

- Examine how policies at different levels of governance can support urban policy on GI
- How MAES outcomes are taken up at local level
- Two on-line surveys are in preparation

Enhance networking activity on urban GI

MAES urban pilot and the conference ‘The EU Urban Agenda, Nature-Based Solutions and Green Infrastructure’ (31 May 2016, Paushuize, Utrecht) concluded that there was interest to establish a partnership with regards to NBS/MAES.

EnRoute will scope for networking opportunities

Events

- Kick off meeting in Rome: 8-9 March 2017
- **Malta** workshop on **mainstreaming**: How urban ecosystems can be part of intersectoral planning and action: 13-14 June 2017
- **Tallinn** workshop on **nature-based solutions**: Autumn 2017 (NBS event of DG RTD)
- Spring workshop in **Bulgaria** (2018): Urban biodiversity and the role of cities in achieving targets on biodiversity and ecosystem services.
- Final event in the EP or the CoR ? Autumn 2018



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MAES: <http://biodiversity.europa.eu/maes>

GI: http://ec.europa.eu/environment/nature/ecosystems/index_en.htm