Resilience of urban eco-systems:
EU biodiversity policy implementation and development and urban biodiversity

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Environment

- Current EU and global policy developments

- The MAES EU – wide ecosystem assessment

- EU GI implementation review and Guidance documents

- Urban biodiversity – EnRoute and Biodivercities projects

An important moment for EU and global biodiversity policy

- **New Commission, European Green Deal, Biodiversity Strategy 2030**

- **New global biodiversity framework to be adopted at CBD COP 15 (October 2020)**

- **Ongoing evaluation of the current EU biodiversity strategy to 2020**

Watch this space: www.ec.europa.eu/environment/nature/index_en.htm

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Political guidelines for the new Commission 2019-2024

A European Green Deal

"Climate change, biodiversity, food security, deforestation and land degradation go together.

"We need to change the way we produce, consume and trade.

"Preserving and restoring our ecosystem needs to guide all of our work.

"We must set new standards for biodiversity cutting across trade, industry, agriculture and economic policy.

"Europe will work with its global partners to curtail biodiversity loss within the next five years. I want us to lead the world at the 2020 Conference of the Parties to the Convention on Biological Diversity, just as we did at the 2015 Paris Climate Conference."

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THE 2030 BIODIVERSITY STRATEGY
IN THE EUROPEAN GREEN DEAL

European Commission

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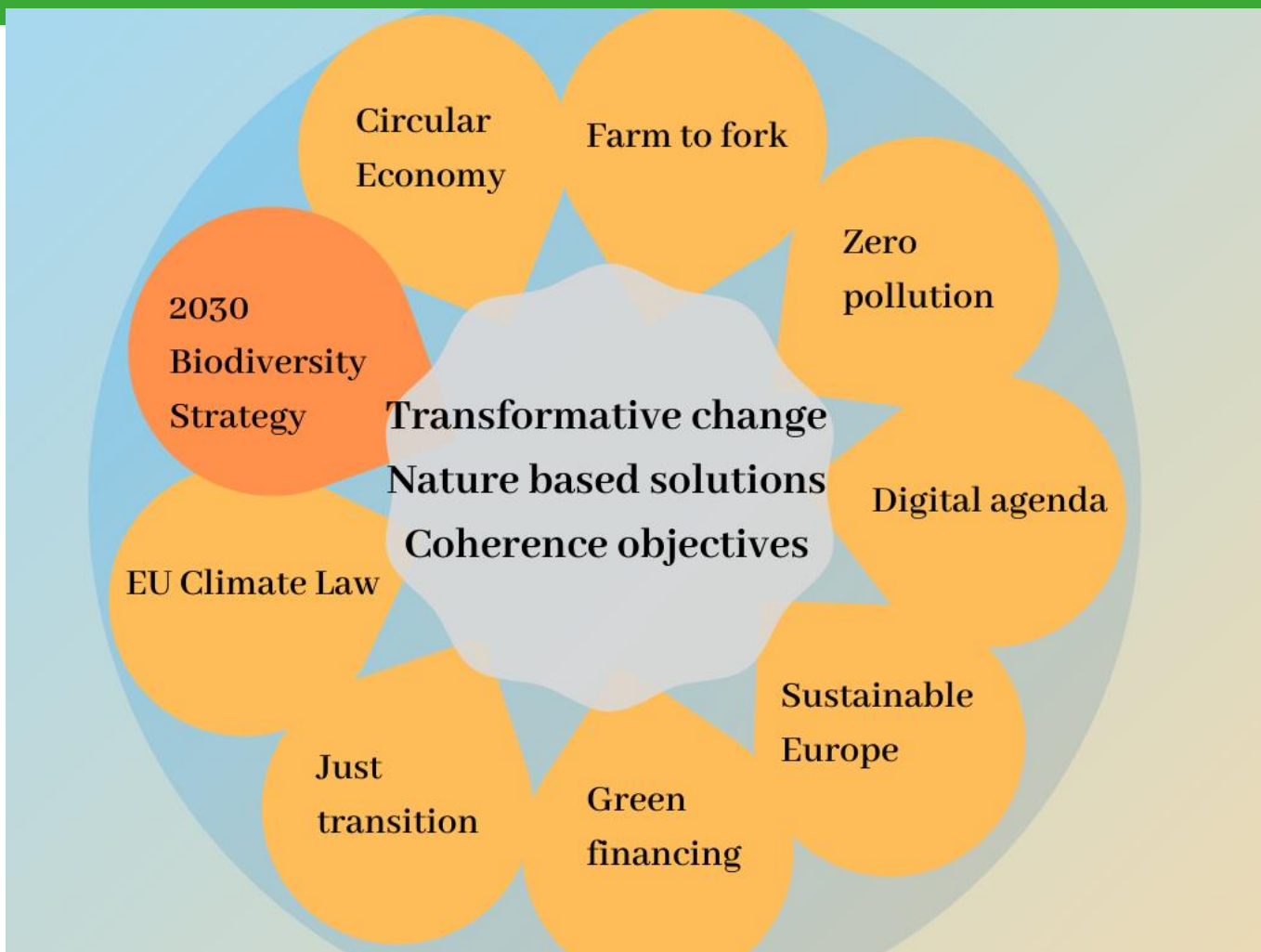
The global biodiversity crisis - biodiversity loss and the degradation of ecosystem services continue in the EU and globally

Source: IPBES Global assessment 2019
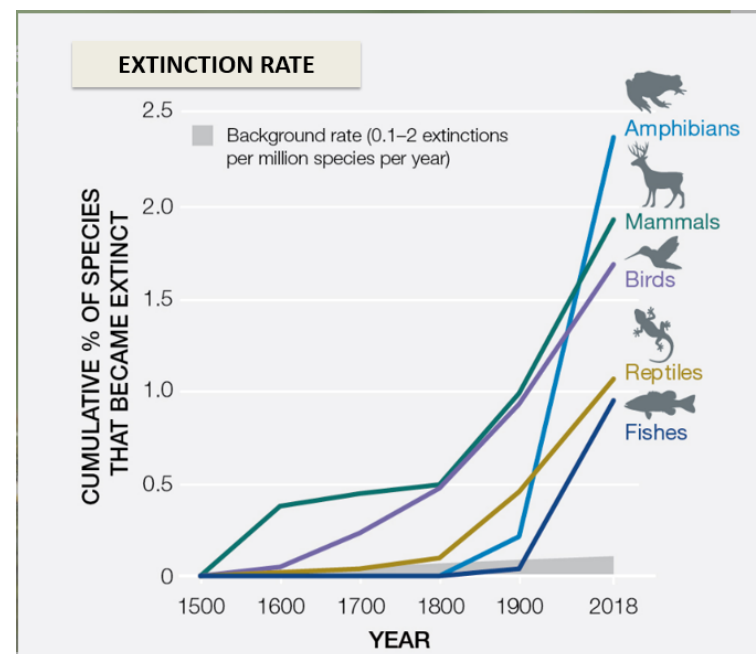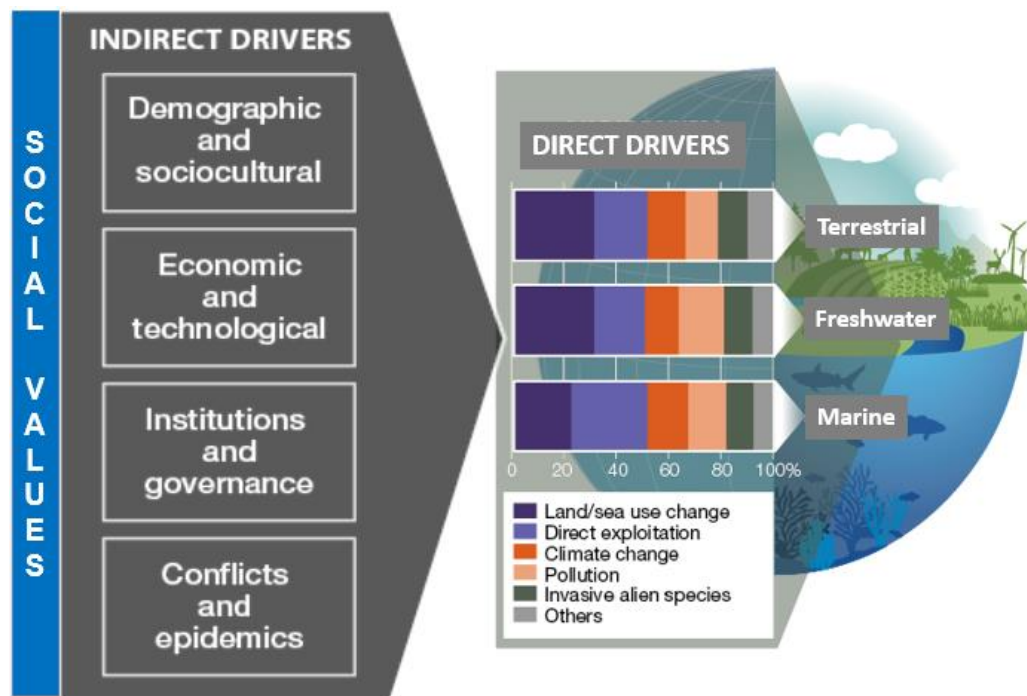
The EU Biodiversity Strategy to 2020

Headline target: halt the loss of biodiversity and ecosystem services in the EU, and restore them as far as possible, while also helping to avert global biodiversity loss

Target 1: Fully Implement Nature Legislation	**Target 2:** Maintain and restore ecosystems and their services	**Target 3:** Sustainable agriculture and forestry	**Target 4:** Sustainable fisheries and marine ecosystems	**Target 5:** Combat invasive alien species	**Target 6:** Help to avert global biodiversity loss

**Horizontal measures**: partnerships, knowledge, financing

EU non-legislative tools to maintain and restore ecosystems and their services

✓ EU MAES (mapping and assessment of ecosystems and their services)

✓ EU Pollinators Initiative

✓ Deploying Green and Blue Infrastructure

✓ EU Guidance on:

- ✓ Integrating ecosystems and their services into decision-making

- ✓ Strategic EU level green and blue infrastructure projects

✓ Building partnerships (Business and Biodiversity Platform)
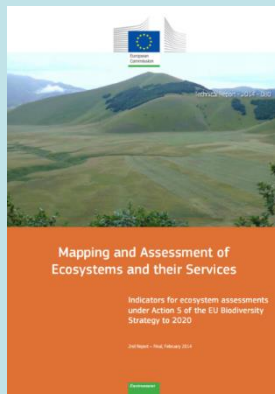
✓ Financing, including through LIFE-Nature

… and mainstreaming into other EU and Member States' policies

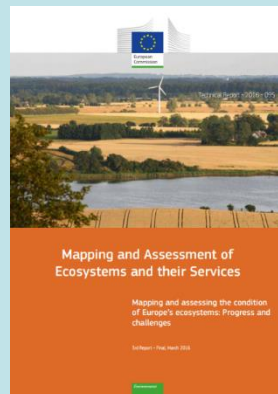# Mapping and assessment of ecosystems and their services

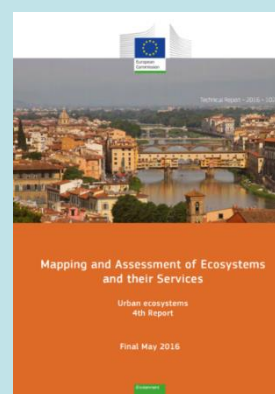**Conceptual framework and typologies**
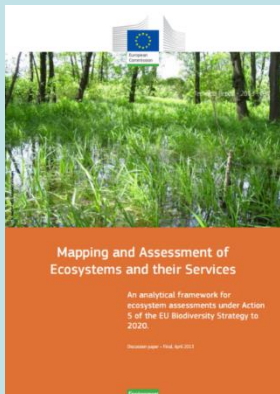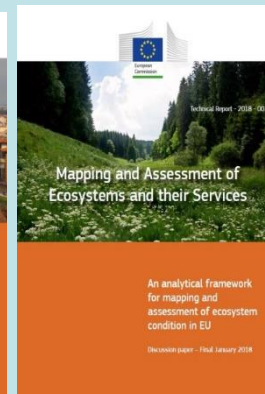
Indicators for ecosystem services
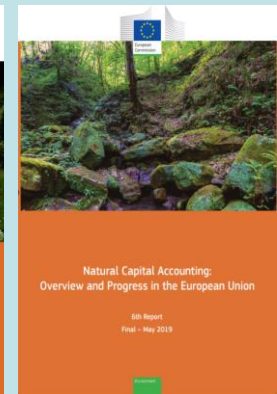
Ecosystem condition assessment

Urban ecosystems

Indicators for ecosystem condition

Natural capital accounting

http://biodiversity.europa.eu/maes

Thematic ecosystem assessments: Pressures and condition per ecosystem type

Urban ecosystems

Agro-ecosystems (cropland and grassland)

Forests and other woodlands

Heathlands and shrubs

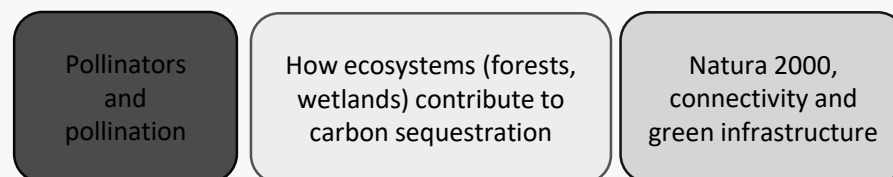Sparsely vegetated lands

Wetlands

Rivers and lakes

Marine ecosystems
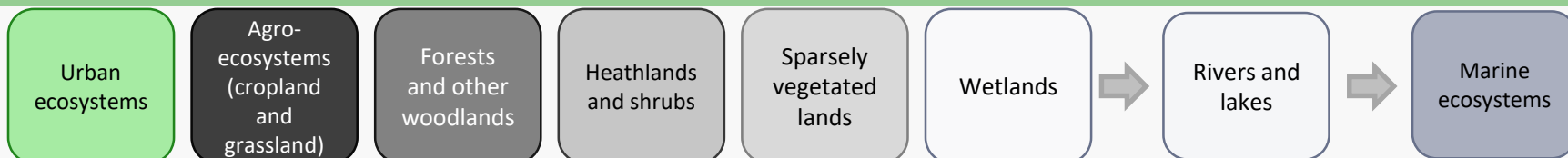
Integrated ecosystem assessment

What are the relations between pressures, condition and ecosystem services?

Ecosystem services

Ecosystems — Condition

Humans — Well-being

Drivers of change (incl. pressures)
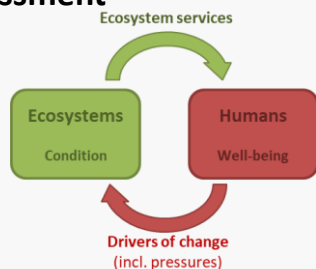
Integrated narratives on key policy issues (examples)

Pollinators and pollination

How ecosystems (forests, wetlands) contribute to carbon sequestration

Natura 2000, connectivity and green infrastructure

Cross-cutting ecosystem assessments: Pressures, condition and services across ecosystem types

Climate and climate change

Invasive alien species

Landscape mosaic and connectivity

Soil

Ecosystem Services: Crop provision – Timber provision – Pollination – Global climate regulation – Flood control – Nature-based recreation

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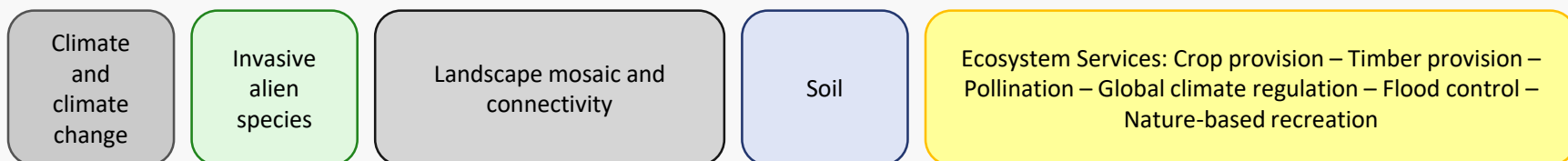
Recently published EU package on ecosystems and Green Infrastructure

EU Green Infrastructure strategy implementation review

Guidance on a strategic framework for supporting the deployment of EU-level green and blue infrastructure

Guidance on integrating ecosystems and their services into decision-making

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Follow-up of EU guidance documents
www.ec.europa.eu/environment/nature/ecosystems/index_en.htm

Summary in all EU languages

Online interactive platform with tools and case studies

Follow-up

Tailored training materials and webinars

EnRoute: Enhancing Resilience of Urban Ecosystems through Green Infrastructure

Joachim Maes

Urban green infrastructure: a city's life support system

- Network of urban green spaces and natural and semi-natural ecosystems.

- Multifunctional: it enhances biodiversity in cities and delivers essential ecosystem services and benefits.

- EnRoute: Integrating knowledge and scientific evidence on urban green infrastructure in local planning and policymaking
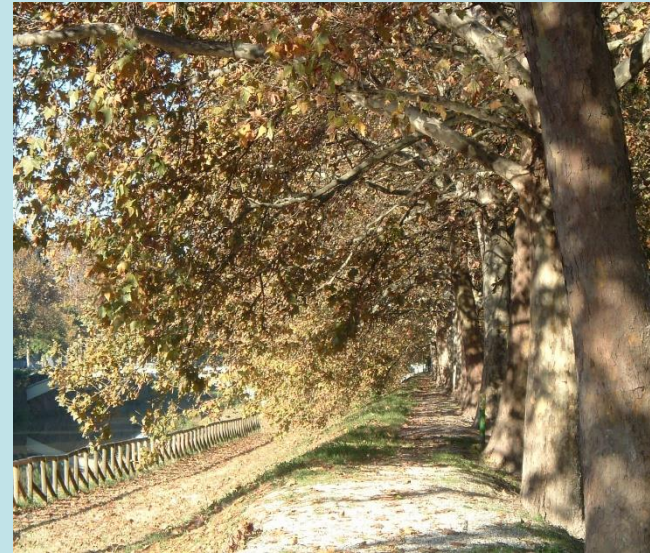
City-lab: Padua

18 EnRoute

city-labs:

How can scientists and policymakers interact to address urban challenges using urban green infrastructure?

Growing with green ambitions	**BiodiverCities**	**Improving the quality of life**
Growing cities with sufficient green space for everyone	A focus on maintaining urban trees and biodiversity; embedding the city in a regional ecological network, and urban bee keeping	Community based approaches for investing in natural capital and urban green space for recreation
Leipzig, Utrecht, Karlovo	**Lisbon, Limassol, Oslo, Helsinki-Espoo-Vantaa, Padova, Rome**	**Manchester, Poznan, Trento**
Green cities, healthy cities	**Sustainable strategic urban planning**	**Climate-proof cities**
Different examples of proper planning of how urban green space delivers benefits for physical and mental health.	Development of multi-functional urban green and blue infrastructure and integration in regional planning.	Urban nature to support climate transition
The Hague, Rome	**Antwerp, Valletta, Dublin, Trento**	**Glasgow, Tallinn, Utrecht**

City-lab: Karlovo

https://oppla.eu/enroute
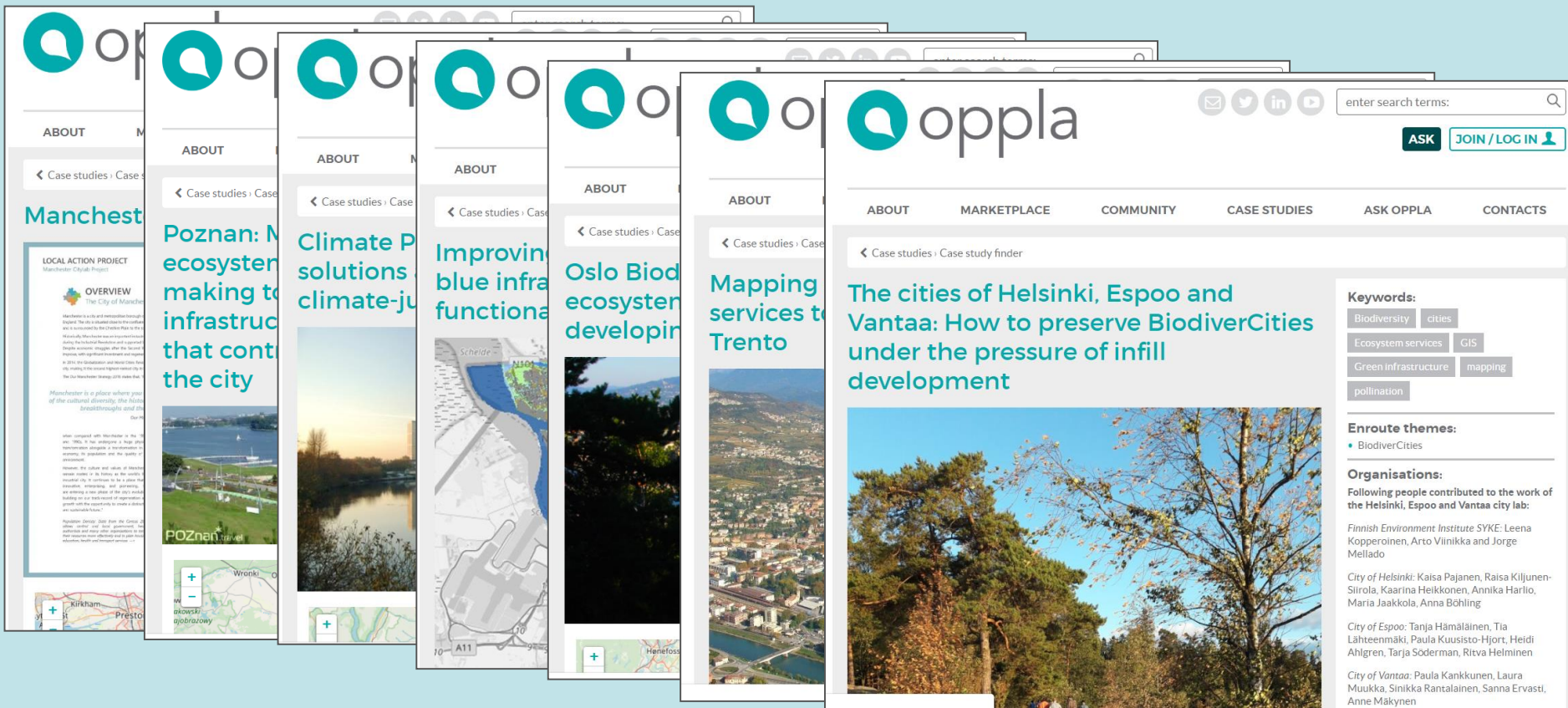
Options for upscaling based on an EU wide assessment of urban green infrastructure

917
Core cities

690
Functional Urban Areas
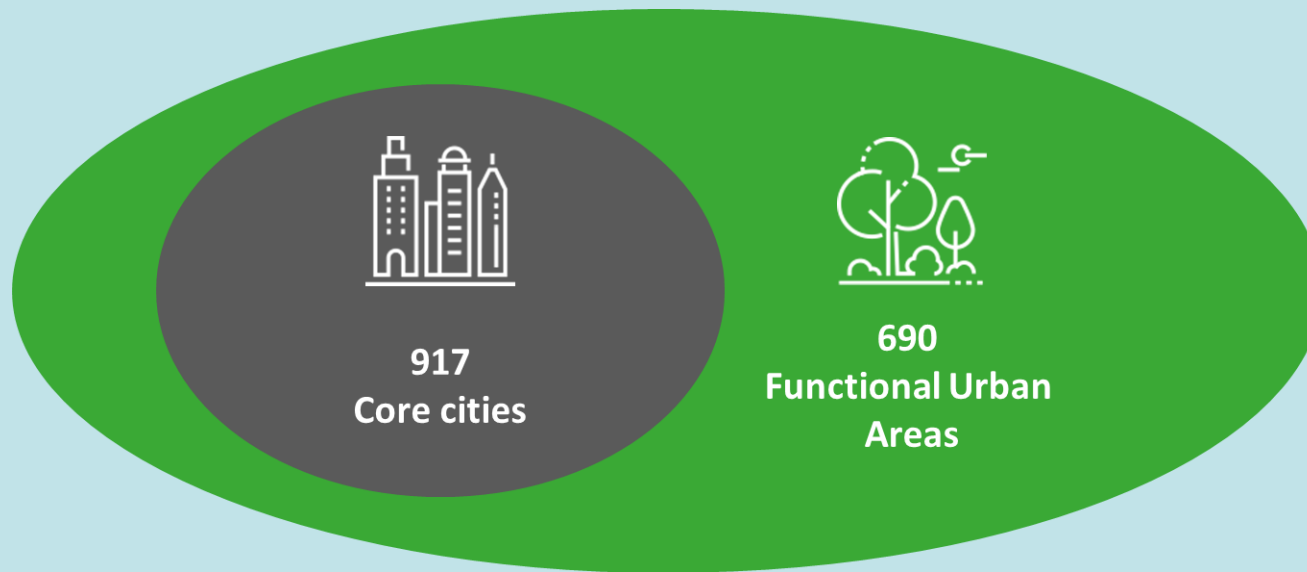
- **25 indicators**
- Green Infrastructure
- Air quality
- Population
- Soil sealing
- Ecosystem services
- Natura 2000

Cities are probably greener than we think but most urban green space is not publicly accessible.

Average coverage (%) of the surface area of core cities in Europe:

➔ 39.7% urban green and blue space

➔ 2.5% publicly accessible (urban parks): 18 m2/inhabitant
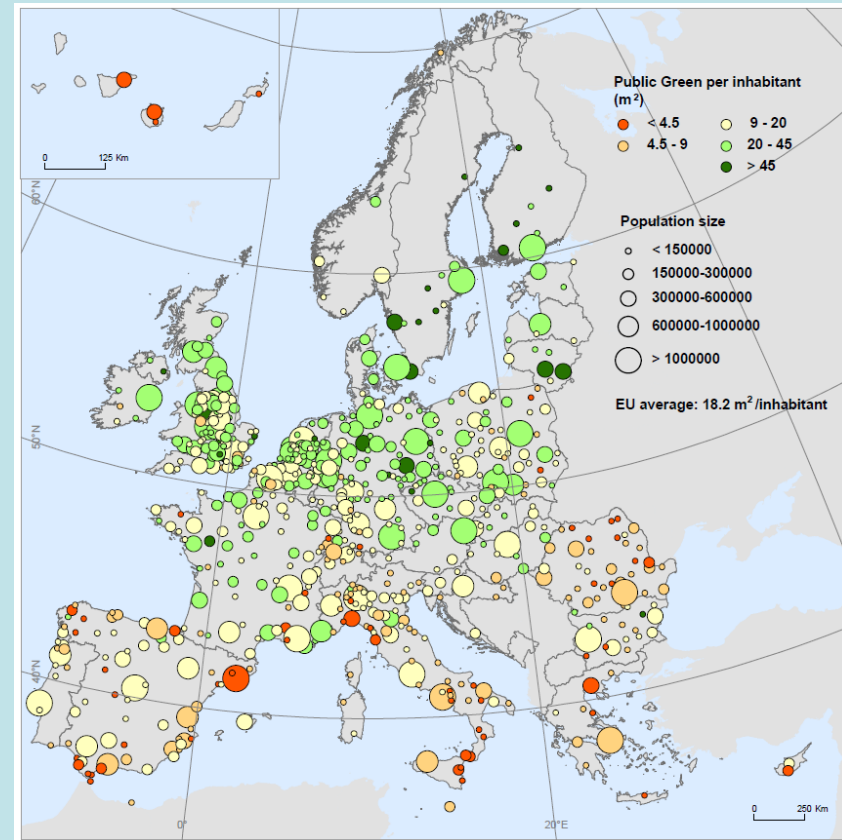
The potential of urban green infrastructure is not fully tapped

- Measuring is knowing: Urban GI map is a key product for urban planning

- A network of urban GI can help achieve local and regional **biodiversity** goals

- Urban GI: a bridge between scientists, policymakers and **citizens** to make cities sustainable and resilient

City-lab: Rome

EP pilot project to follow-up on EnRoute: BIODIVERCITIES

- **Financial support from the European Parliament for a follow-up project with the aims to:**

- enhance urban green infrastructure to solve many challenges cities face

- increase scientific knowledge and improve knowledge sharing, tools and innovative approaches

- improve civil society participation in decision-making.

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Summing up – what to expect in the coming months and year:

- EU Green Deal and Biodiversity Strategy to 2030 (early 2020)

- EU-wide MAES ecosystem assessment: 6 December 2019

- Follow-up to EU guidance documents (early 2020)

- Final evaluation of the current EU biodiversity strategy – end 2020

- EU Green Week 2020 on Biodiversity: 2-5 June 2020

Watch this space: www.ec.europa.eu/environment/nature/ecosystems/index_en.htm

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Thank you for your attention!

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