

EU wide assessment Urban Ecosystems

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“Gearing up towards Urban Greening Plans” workshop

18/09/2020

EU biodiversity strategy for 2030



- Adopted the **20th of May 2020**
 - Brings Europe on the path of recovery by 2030
- The **MAES** WG -> was important for shaping the strategy



- For the first time **urban green** is included
 - Section 2.2.8 “Greening urban and peri-urban areas”

https://ec.europa.eu/environment/nature/biodiversity/strategy/index_en.htm

What is MAES and why it is important



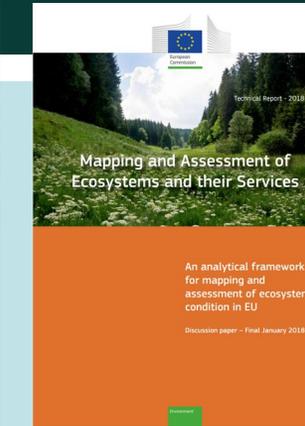
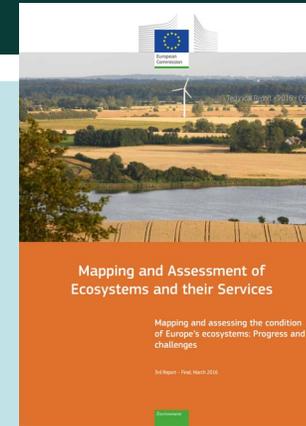
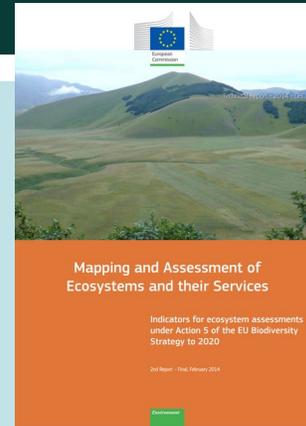
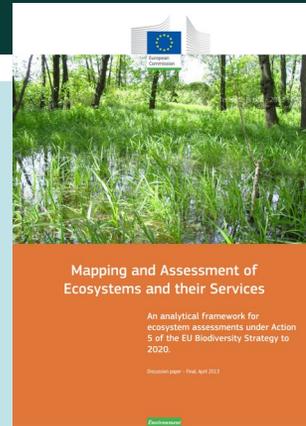
Target 2 -> Action 5 of the **Biodiversity strategy to 2020** calls Member states, with the help of the Commission, to
“..Map and assess the state and economic value of ecosystems and their services in the entire EU territory; promote the recognition of their economic worth into accounting and reporting systems across Europe”.

https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/index_en.htm

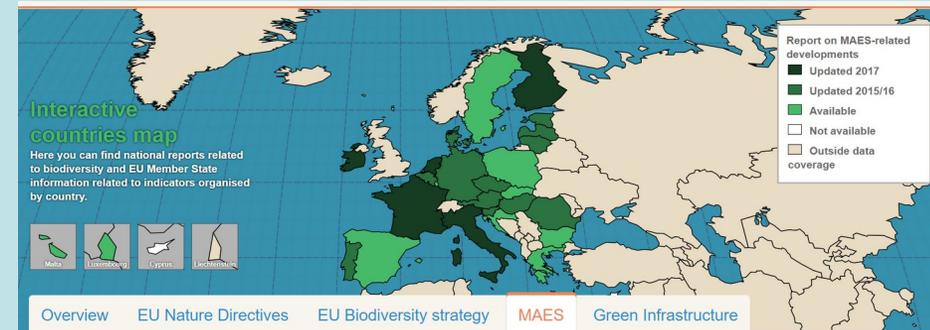
Between 2013 and 2020 MAES delivered

https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/index_en.htm

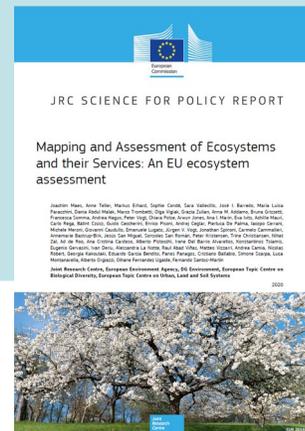
- A series of reports



- National Level assessments

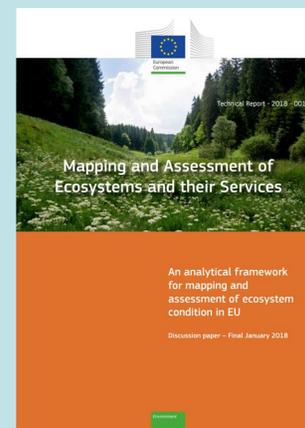
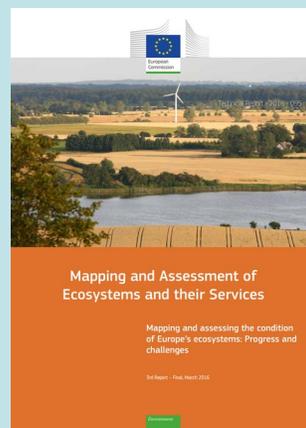
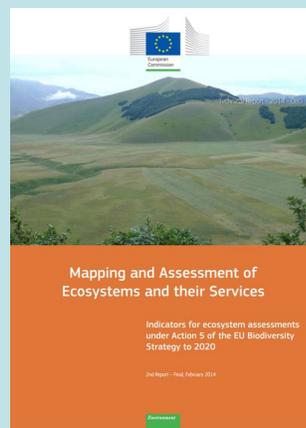
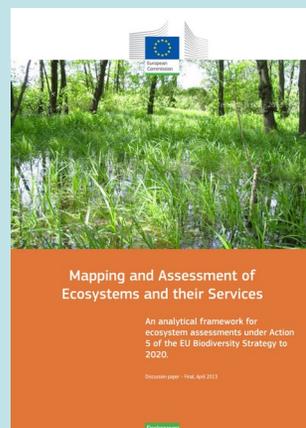


- EU-wide assessment



The MAES reports

https://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/index_en.htm



2013

2014

2016

2016

2018

Discussion paper and common ecosystems typology

Condition of Europe's ecosystems

Urban ecosystems

Integrated analytical framework and set of indicators for mapping and assessing the condition of ecosystems in the EU

Consistent **analytical framework** to map and measure ecosystems extent, condition and services

JRC-research activities on Urban Ecosystems

MAES Urban Pilot

- Developing a framework

2015-2016

EnRoute

- Benchmarking cities
- Working on science policy interface

2017-2018-2019

EU wide assessment

- Assessing Trends

2019-2020

BiodiverCities

- Mapping urban biodiversity and microclimate regulation

2020-2022



EU wide ecosystem assessment – published in 2020

- Analysis of the **trends** in the pressures, condition and services of marine, freshwater and land ecosystems of EU+UK (EU28) based on a **common integrated monitoring framework** and using 2010 as policy baseline year
- Covers total land area of the EU28 as well as the EU28 marine regions
- Evaluation of the impacts of the 2020 biodiversity targets
- Baseline for the 2030 biodiversity policy and the EU Proposal for a Nature Restoration Plan

Pressure and condition measured using

- 10 indicators for which trends data were available
- Over 700 Functional Urban Areas in Europe

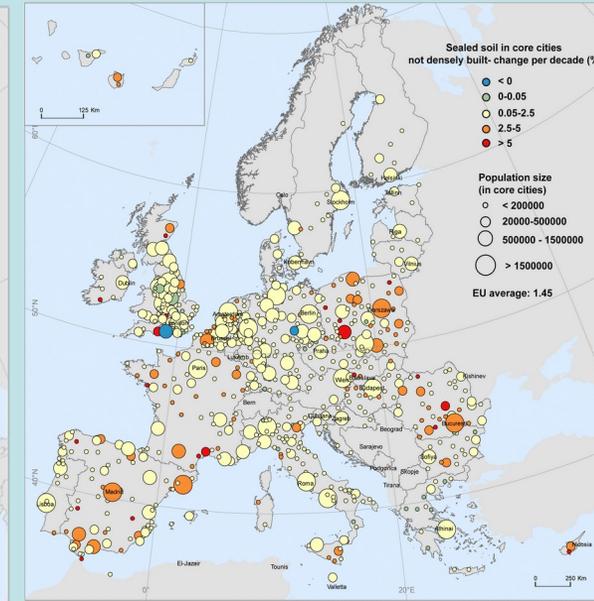
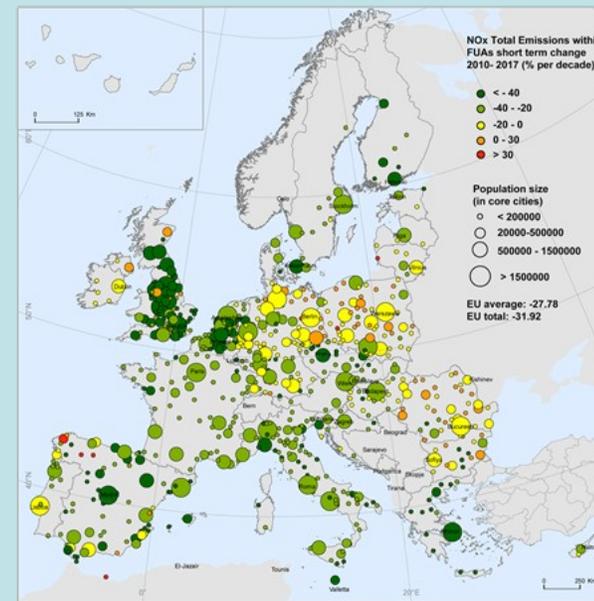
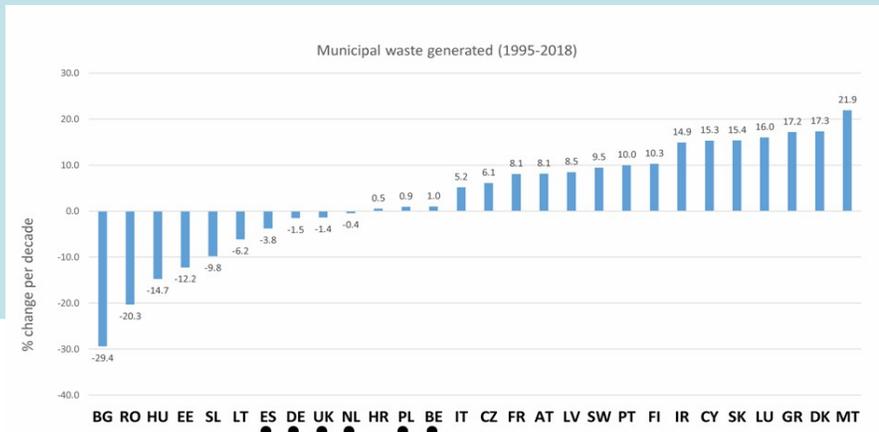
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The EU land area:
 Ⓟ 22% FUA
 Ⓟ 5% core cities

The extent of Artificial Land (CLC Level 1) is **increasing** by 2% per decade on the long-term

Pressures:

Air pollution is decreasing at EU level **BUT** absolute values are still very high
Municipal waste shows **No CHANGES**
Soil sealing is increasing (by 2%)



Trends are not geographically homogeneous

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Urban population is increasing by 6% in the last decade

Unsustainable use of land ☹️ impacts the Urban Configuration

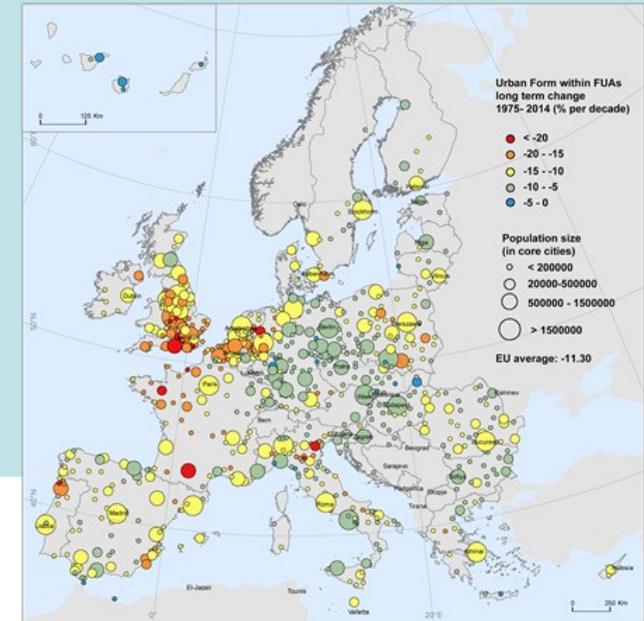
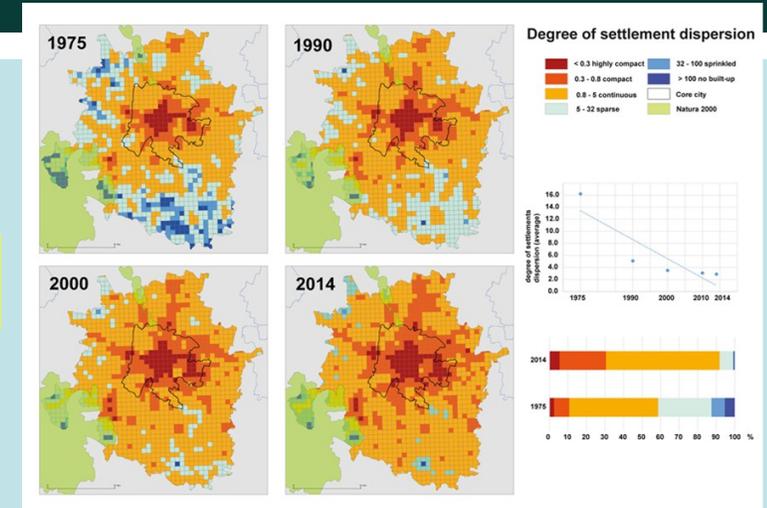
Condition- structural indicators

Composition of urban ecosystems:

- Decrease of peri-urban agro-ecosystems (-1.5 %)
- Increase of artificial (+0.49%) and mix land types (+0.75%)

Settlements pattern:

- Increase of «dispersed settlements» (proxy of sprawl) +11%



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Trends are not geographically homogeneous

Condition- structural indicators

Vegetation cover of UGI

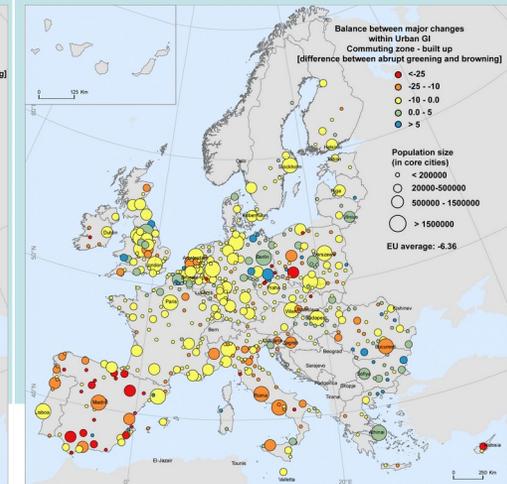
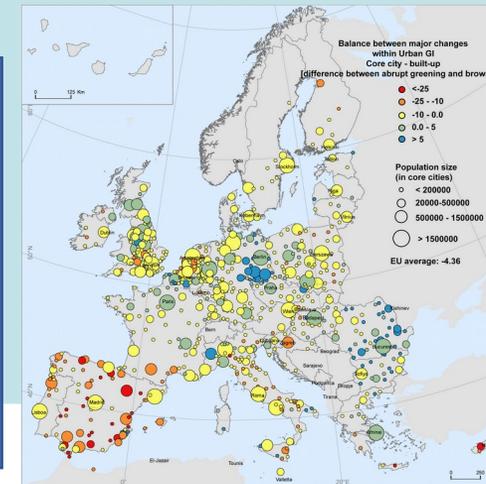
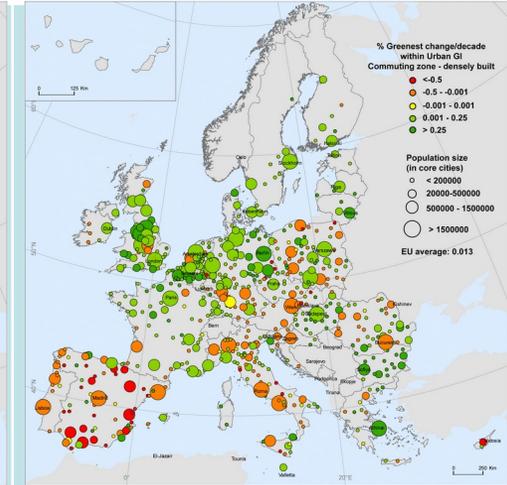
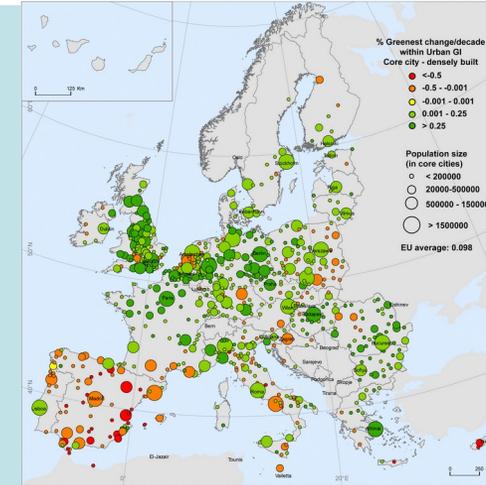
- Slight increase of vegetation cover at EU level (0.098 % in densely built zones - 0.2 % in not densely built zones)
- **Negative** balance between abrupt changes (-4.36 and -6.36% in densely built zones)



No consistent actions to **compensate** the **loss** of vegetation within UGI

abrupt changes:
- induced by land cover change

-can have a large impact on greenness within a relatively short period



In european urban ecosystems:

- Increase in Urban expansion
- **Negative** balance between abrupt changes in vegetation cover
- Urban Biodiversity impacted by **invasive alien species**

No consistent actions to **compensate** the **loss** of vegetation within UGI

June 2022 – Proposal for a Nature Restoration Law – URBAN TARGET

Represents an action to stop the urban green loss

References - EU initiatives

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EnRoute

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