

Digital platforms for municipal ecosystem accounting? – testing the TEP URBAN in Oslo

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Contents

- 1. TEP Urban platform of the European Space Agency**
- 2. World Settlement Footprint**
- 3. Modelling regulating services of urban forest using i-Tree Eco in Oslo**
- 4. Preliminary test of TEP Urban as platform for communicating urban ecosystem accounting data in Oslo**
- 5. Next steps**

Tracing Global Urbanization: New Data from Space

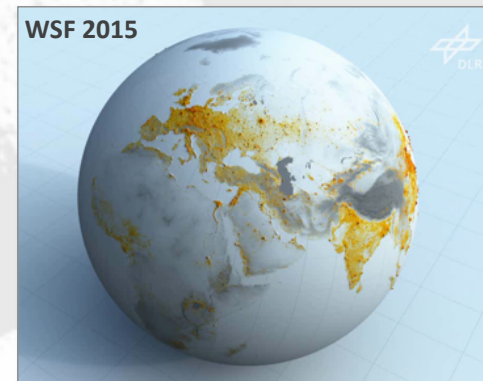
▪ **Global Urban Footprint (GUF)**

- Data base: 182,249 TerraSAR-X/TanDEM-X images (3m) collected in 2012 (308 TB)
- Spatial resolution: 12 m (scientific use), 84m (non-profit use)
- Release: November 2016



▪ **World Settlement Footprint (WSF)**

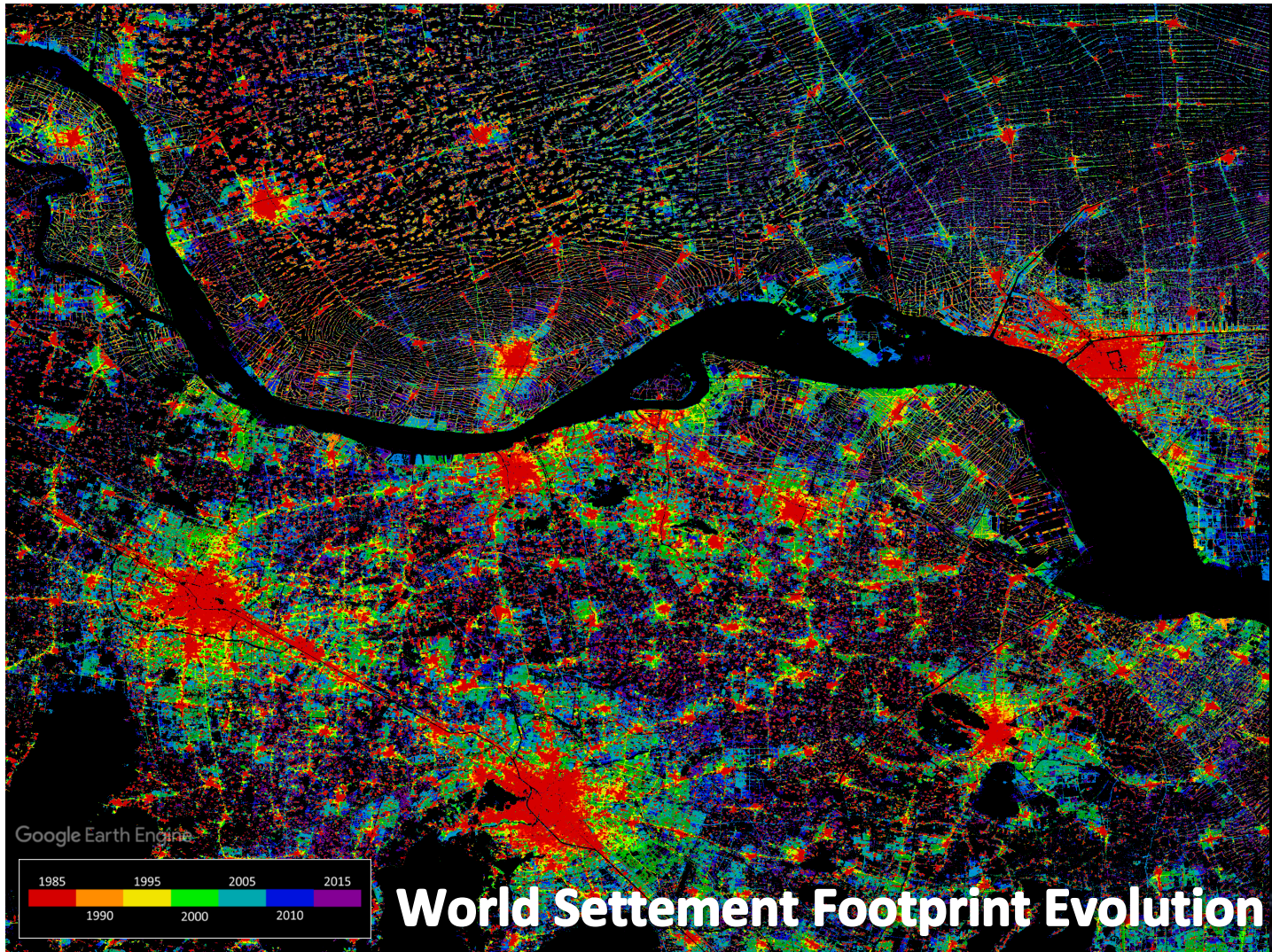
- Use of free and open data
- Multi-sensor (Sentinel-1, Landsat/Sentinel-2)
- Multi-date (use of all scenes acquired, > 2.5 PB)
- Multi-facility (DLR, U-TEP, GEE)
- Release: January 2018



Product portfolio

- WSF 2015 (10m, binary mask)
- WSF 2015 Density (30m, imperviousness)
- WSF 2015 Network (settlement pattern)
- WSF Evolution (30m, 1984-2015)
- WSF/GUF 3D (average building volume)





Contents

- 1. TEP Urban platform of the European Space Agency**
- 2. Example: World Settlement Footprint**
- 3. Modelling regulating services of urban forest using i-Tree Eco in Oslo**
- 4. Preliminary test of TEP Urban as platform for communicating urban ecosystem accounting data in Oslo**
- 5. Next steps**

4 Active Tests - Great project ->ESM Urban TEP

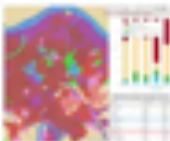
Both Views

https://urban-terp.eu/#/communities/details/starter

Starter community where you can find applications and resources for managing your workspace and your data in the Urban TEP.

OverviewMembersApplicationsActivitiesEps servicesUsers ManagementUsageCommunity Management

Community Applications

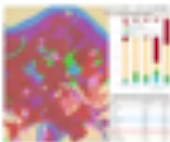


Explore State of Global Urbanization in 2015

Analyze State of Global Urbanization in 2015

Jun 17th 2019

Open App

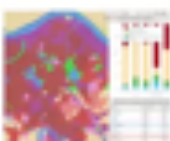


Analyze State of Global Urbanization in 2015

World Settlement Footprint 2015 (WSF 2015) generated by the German Aerospace Center (DLR) is the first map using mass collections of both radar and o...

Jun 17th 2019

Open App




Sustainable Development Goal 11.3.1

Same application showing the information about the Sustainable Development Goal 11.3.1 for Cambodia, Laos, Thailand and Vietnam.

Jun 17th 2019

Open App

Expert



Test my processor

By Remko

Test my processor application allows an expert user to discover and test its newly deployed processing service.

Mar 14th 2019

Open App

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229 total users

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Discriminate Between Urban and Rural Settlements

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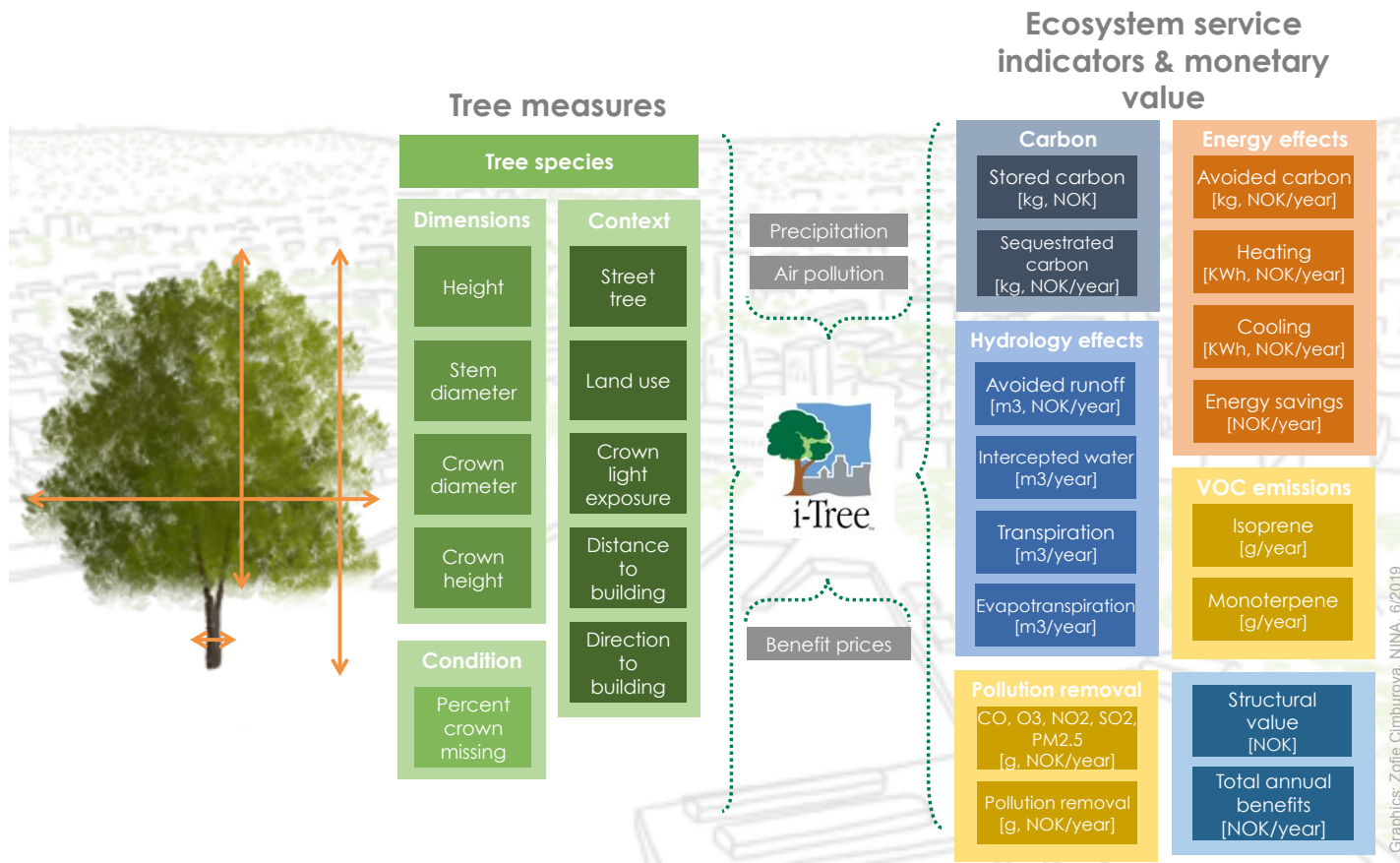
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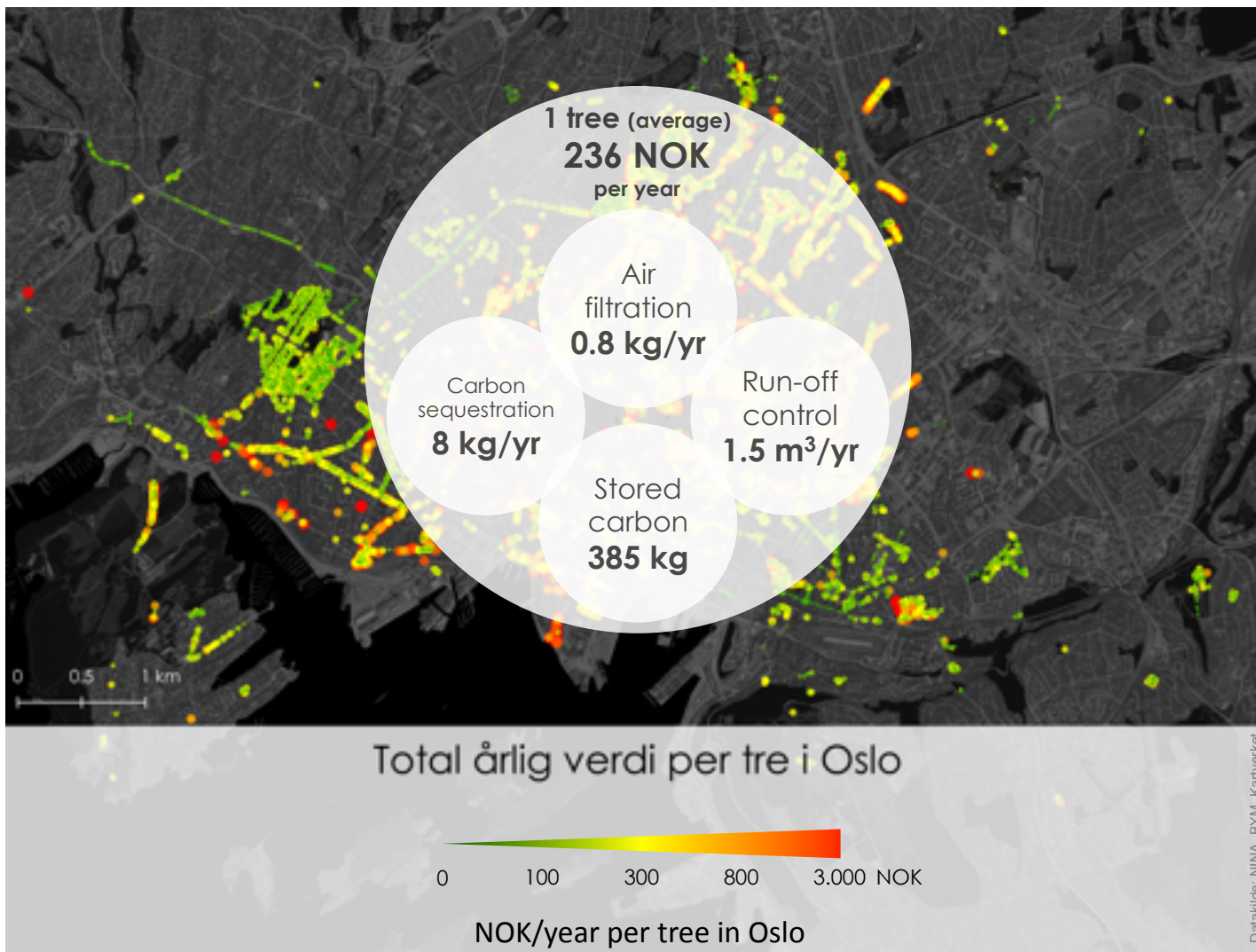
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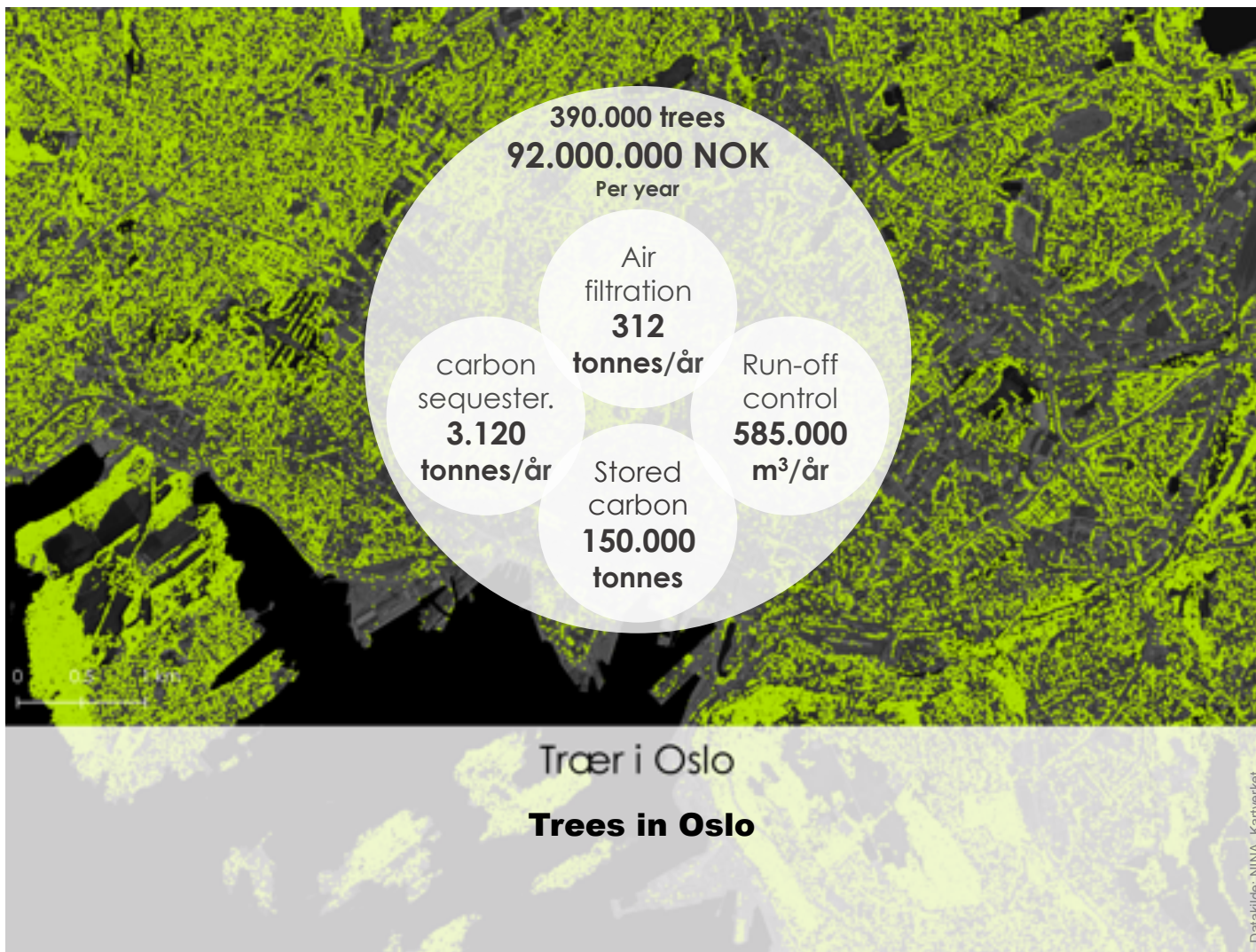
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- 2. World Settlement Footprint**
- 3. Modelling regulating services of urban forest using i-Tree Eco in Oslo**
- 4. Preliminary test of TEP Urban as platform for communicating urban ecosystem accounting data in Oslo**
- 5. Next steps**

Valuation of urban trees using i-Tree Eco









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- 5. Next steps**

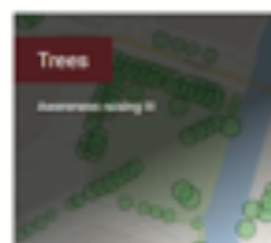


URBAN EEA

What is the value of urban nature in the Oslo area? URBAN EEA maps and values ecosystem services in the Oslo Region, and tests methods for ecosystem accounting at the municipal level.

The URBAN EEA project conducts research on ecosystem services from urban ecosystems in the Oslo Region, both green spaces in the built area and peri urban nature areas. The project contributes to research and development on the UNs Experimental Ecosystem Accounting (EEA) and its application to urban areas. URBAN EEA aims to develop ecosystem accounts for the Oslo area providing lessons for other Norwegian municipalities.

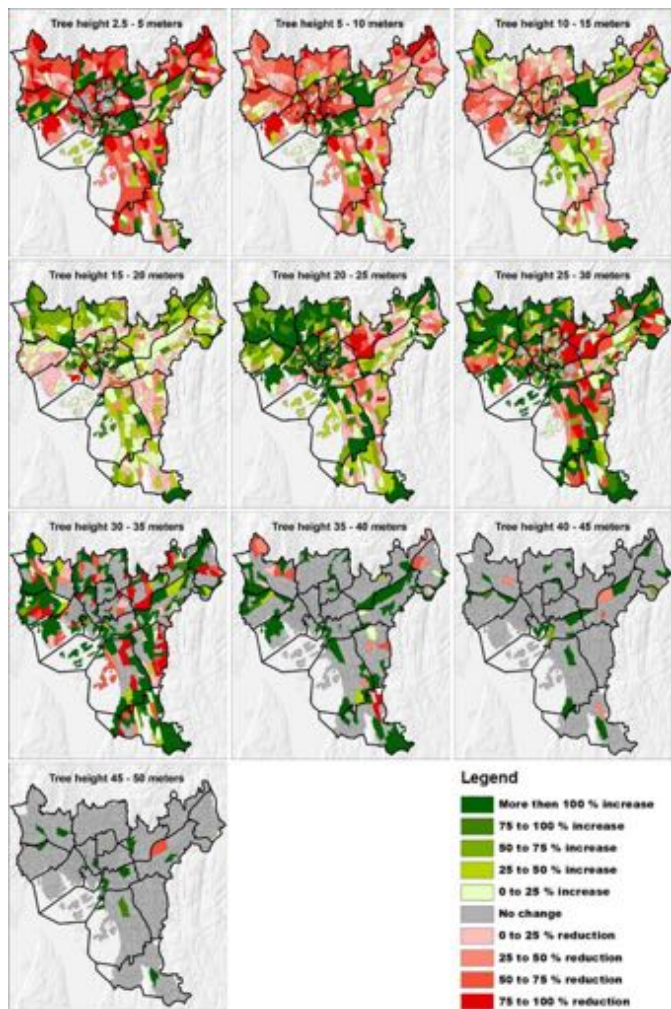
Read more: <https://www.una.no/english/fields-of-research/Projects/Urban-EEA>



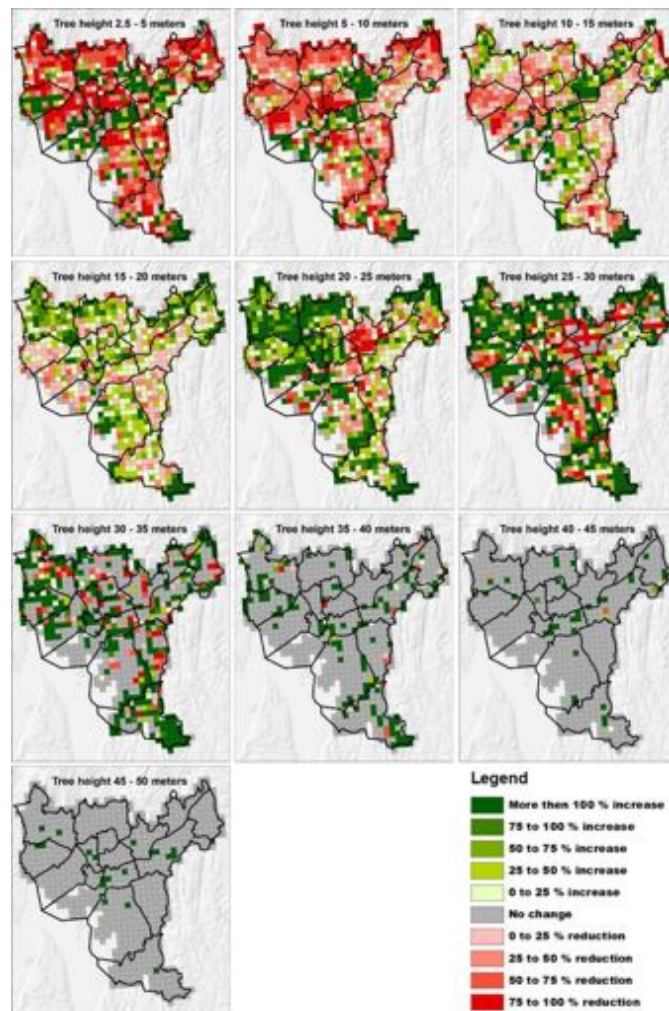
Contents

- 1. TEP Urban platform of the European Space Agency**
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- 4. Preliminary test of TEP Urban as platform for communicating urban ecosystem accounting data in Oslo**
- 5. Next steps – explore compilation alternatives**

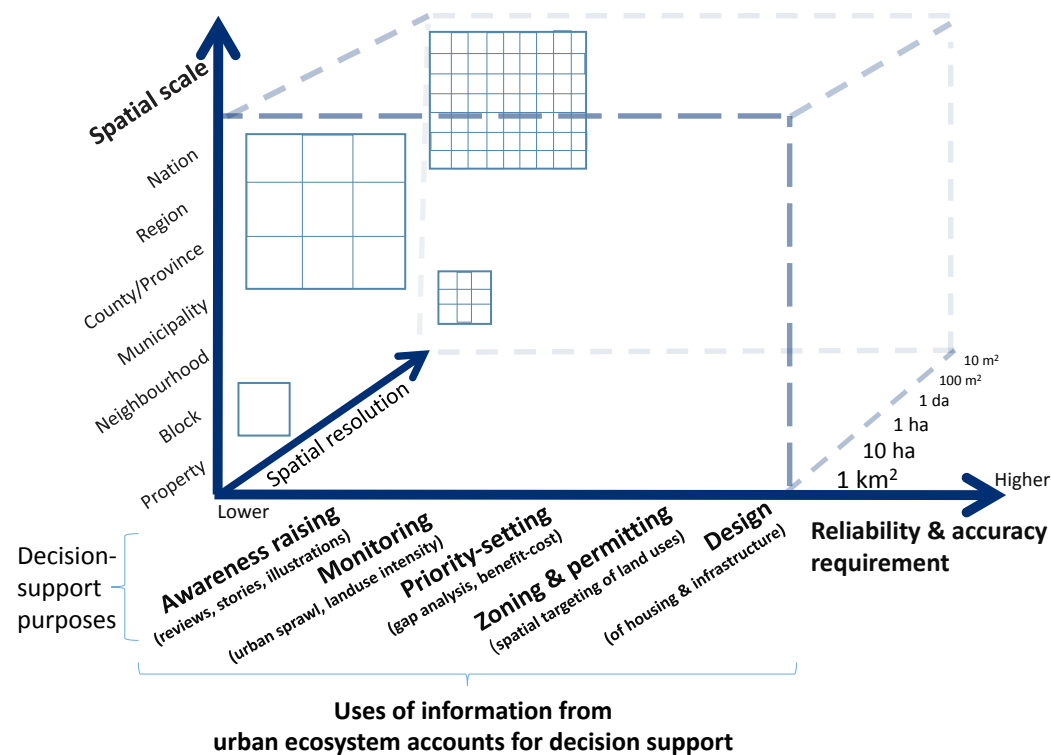
Administrative units



Grids



Next steps: demonstrate uses of ecosystem accounting data for different municipal decision support purposes



Source: adapted from Gomez-Baggethun and Barton (2013)



Thank you

