

Mapping and assessment of ecosystems and their services: Developing a knowledge base for mainstreaming ecosystem services into EU policies



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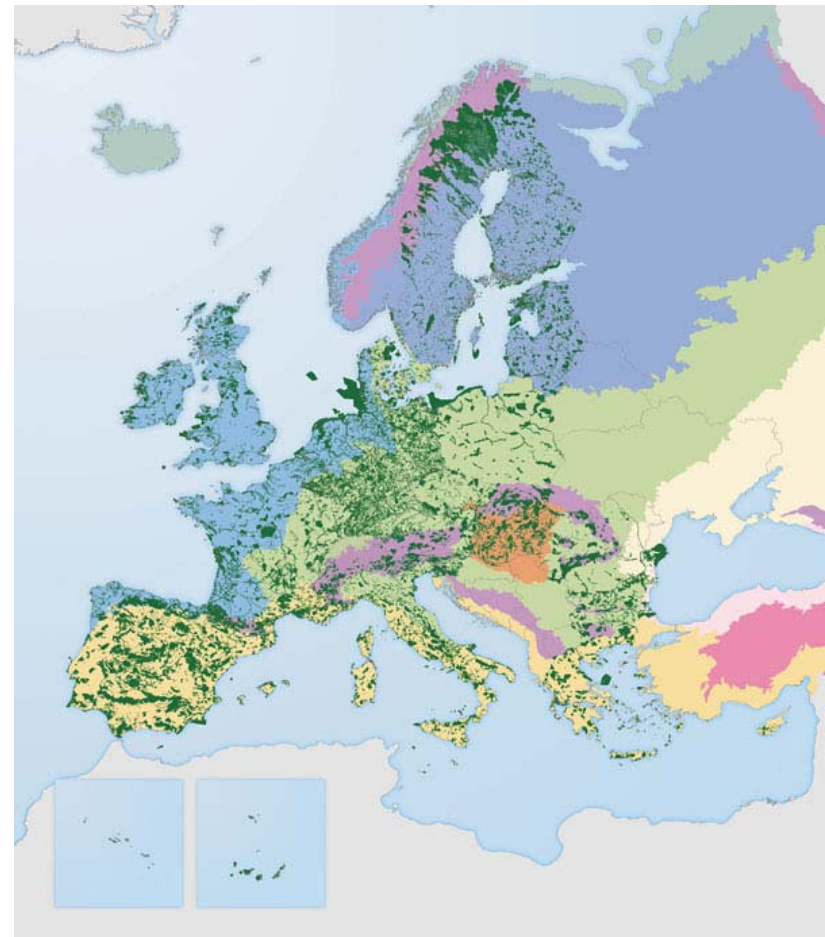
Joachim Maes

EU Habitats Directive and the Biodiversity Strategy to 2020

Target HD: Threatened habitats and species in favourable conservation status (FV)

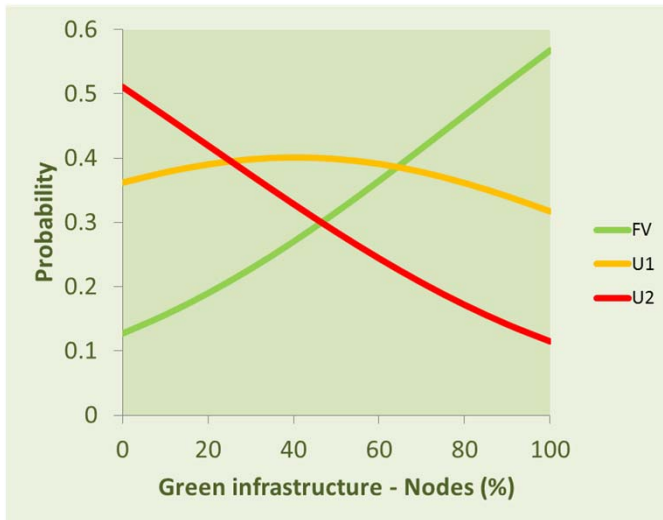
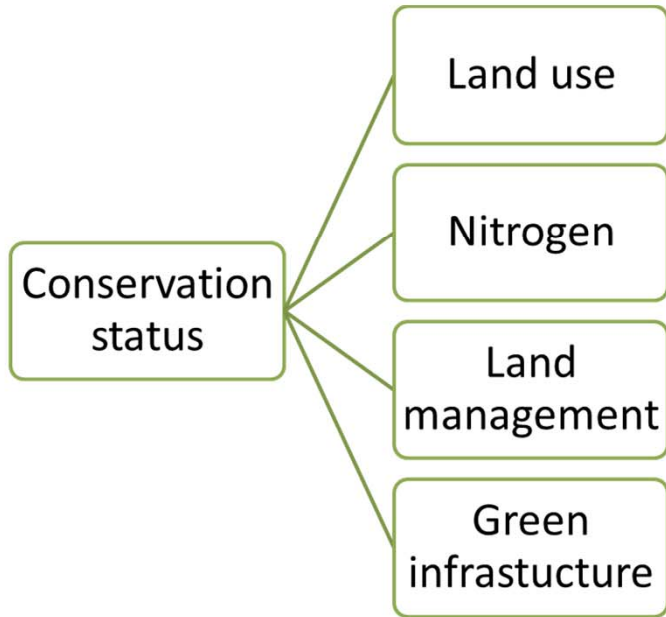
Art.17 assessments: 17% of habitats and 17% of species are in FV

Target 1 BS: In 2020 34% of habitats and 25% of species in FV



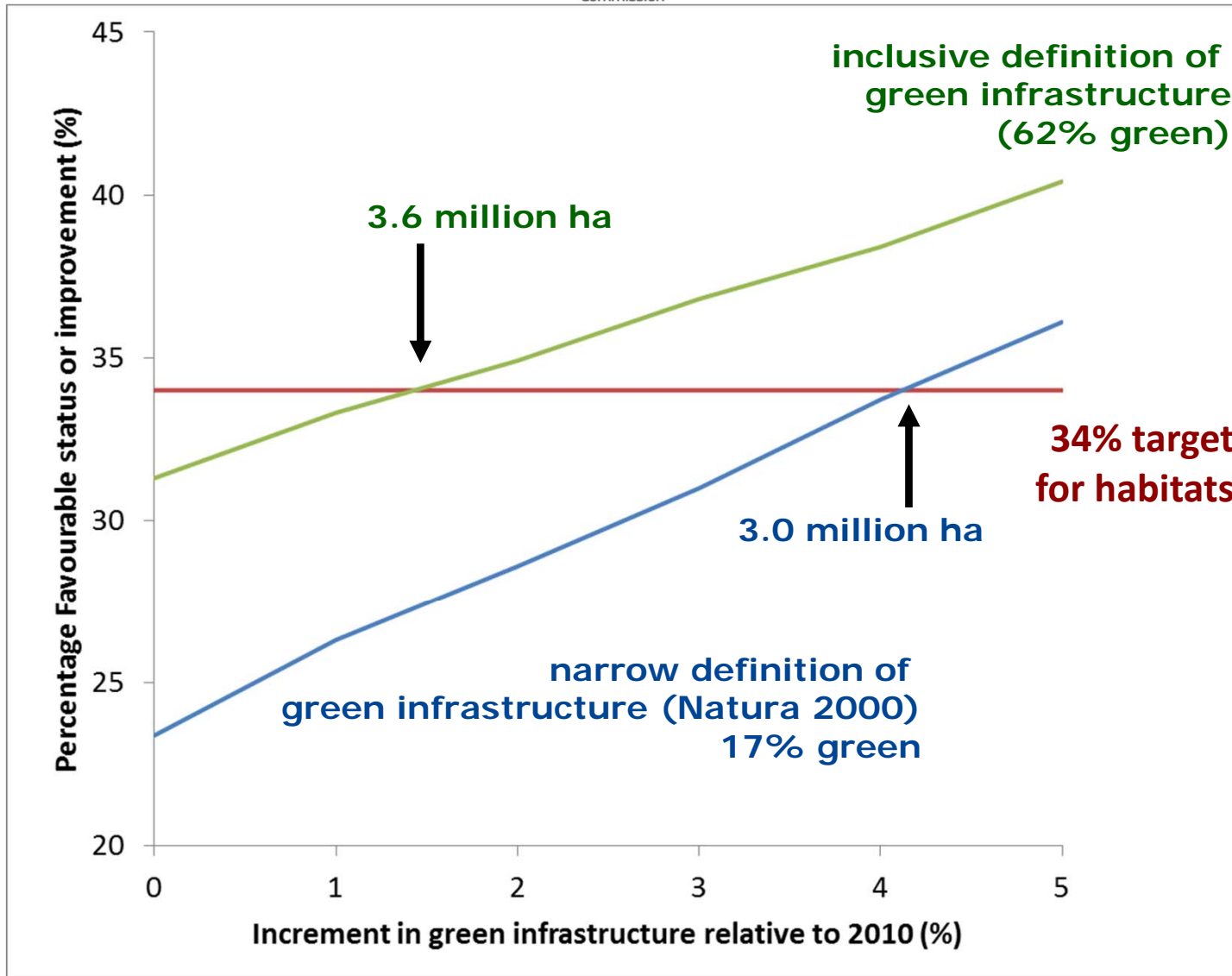


European Commission





European
Commission

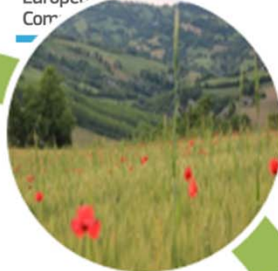


Research
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European
Comm

Green infrastructure



return on investment
in terms of jobs and
growth



support sustainable
agriculture and
forestry through
ecological
intensification



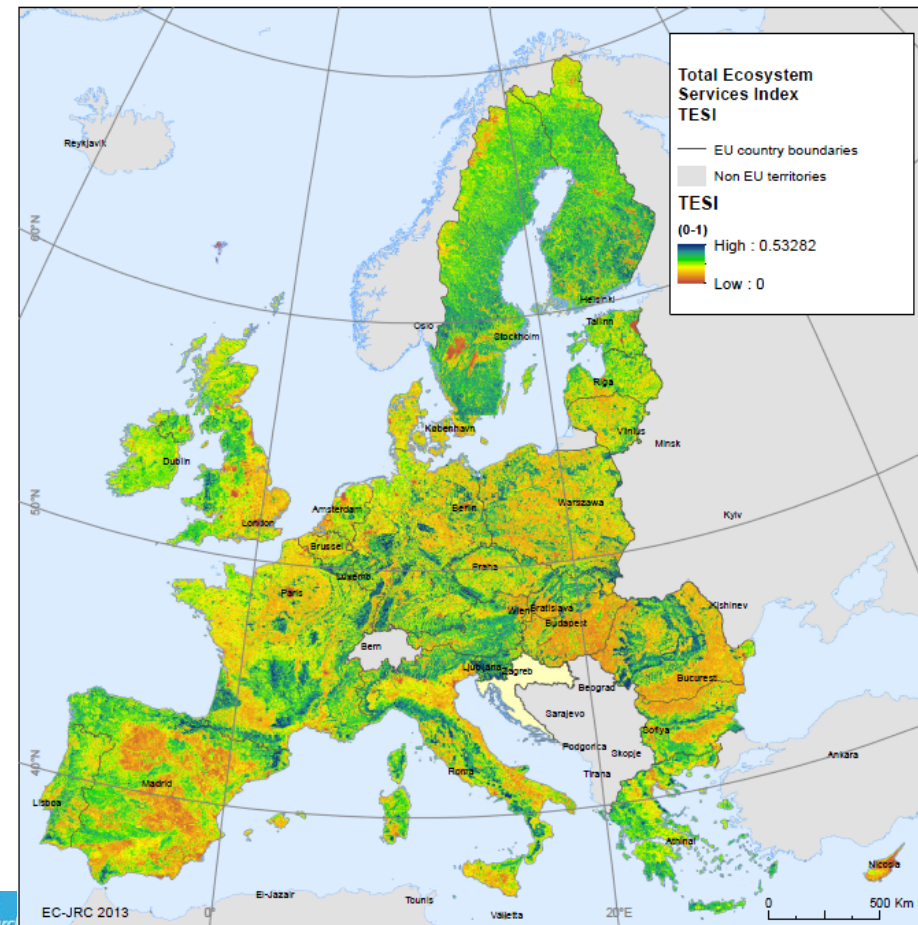
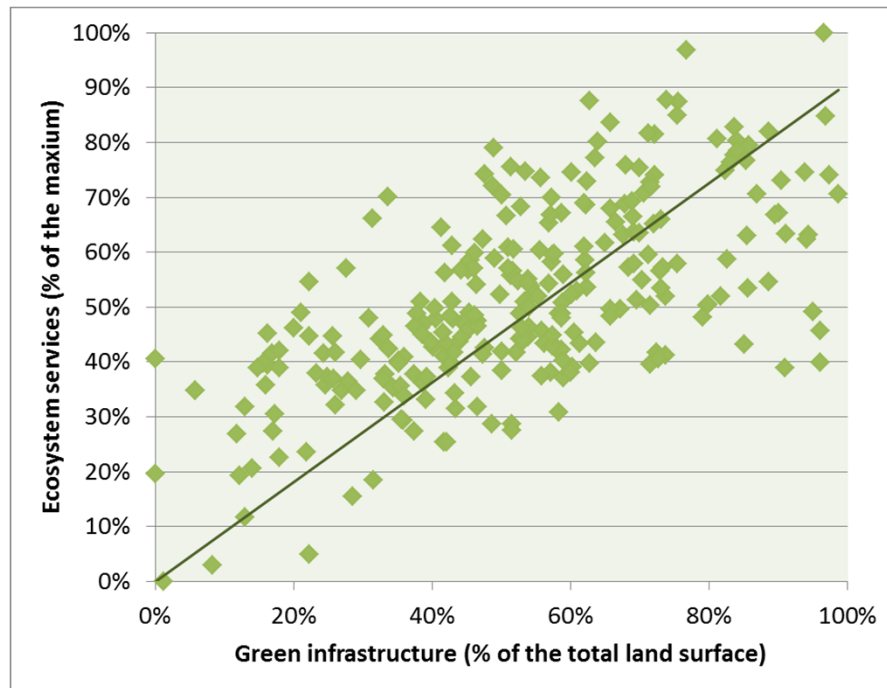
support action in
climate adaptation



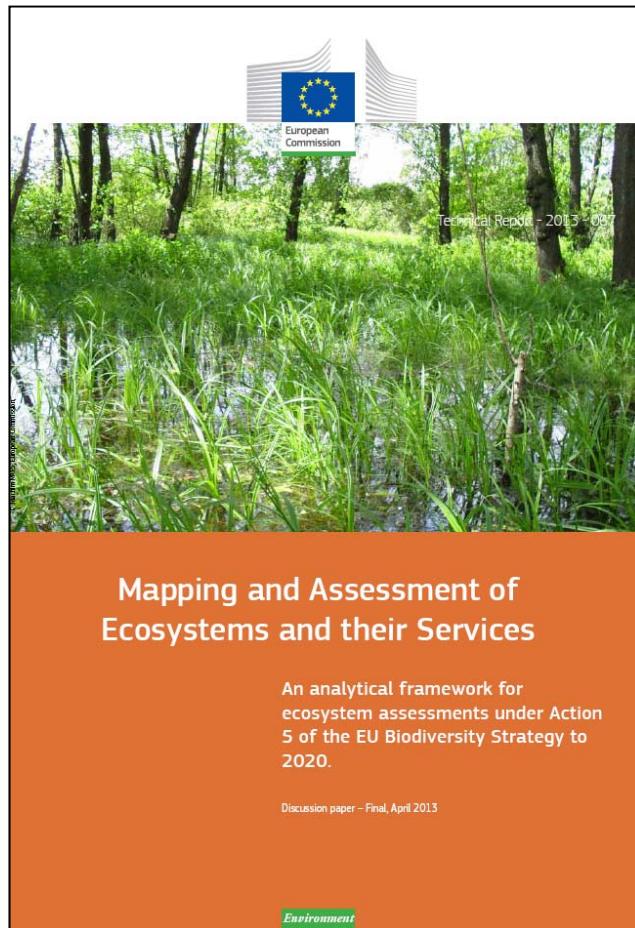
provides essential
services and supports
biodiversity targets
(including NNL and
15% restoration)

Joint
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Green infrastructure and ecosystem services/benefits



The importance of Action 5

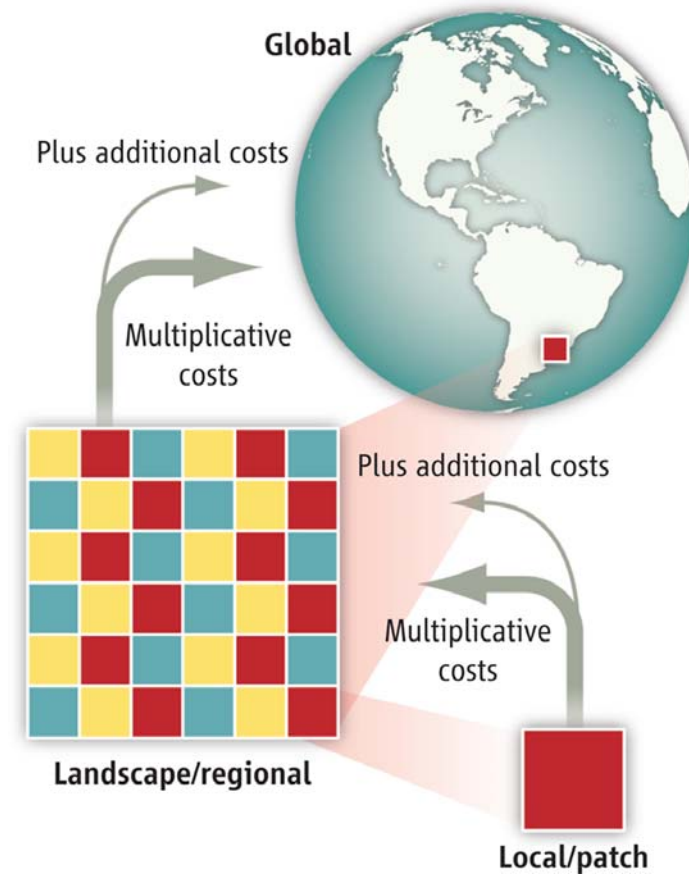


Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020

Priorities for Horizon 2020: Landscape scale restoration

Menz et al. Science 339. Hurdles and Opportunities for Landscape-Scale Restoration.

How to scale up restoration from patch size to landscape scales and beyond.



Priorities for Horizon 2020: Green growth

Edwards et al. Marine Policy 38.
Investing in Nature: [...]

Integrated assessments with more emphasis on green growth, public health, monetary and social values of ecosystem services and green infrastructure

Industry	Total
Reforestation, land and watershed restoration and sustainable forest management	39.7
Crop agriculture	22.8
Gas	21.9
Mass transit and freight rail construction	21.7
Livestock	21.7
Roads and bridges: repair	20.3
Conservation (parks land and water conservation fund)	20.3
Water infrastructure	19.8
Aviation	19.3
School buildings	19.3
Building retrofits	17.4
Biomass	17.4
Electricity generation, transmission, distribution	14.5
Roads and bridges: new	14.5
Solar	13.7
Wind	13.3
Smart grid	12.5
Financial industry	7.2
Coal	6.9
Oil and gas	5.2
Nuclear	4.2

Comparison of job creation per \$1 Million investment for various industries.

Priorities for Horizon 2020: Ecosystem services and resource efficiency



green infrastructure
restoration
Conservation

regulation
taxation
changing the default option

Picture from Benjamin Burkhard, Kiel University

Changing the default choice

Do you have any special diet requirements (vegetarian, gluten-free,...)

Please tick this box if you want green energy from renewable sources

....



Conclusions

Ambitious biodiversity targets require an ambitious plan on GI.

At EU scale, this also require mobilizing funds under the CAP and structural/cohesion funds

This needs demonstrating that such investments serve the many different interests and that ecosystem-based solutions work.

This needs dedicated support under Horizon 2020