

Ecosystem Science for Policy & Practice

Natural Capital and Ecosystem Services: Status and opportunities of integration

Patrick ten Brink

Senior Fellow and Head of Brussels Office Institute for European Environmental Policy (IEEP)



Edinburgh 2 December 2014





Objectives of the Work

- Understand how the NC/ESS concepts are integrated into Policy – at EU level and at the country level (Scottish exemplar)
- Clarify where there are gaps and needs for further integration in policies
- This will help identify cases of win-wins (i.e. good mainstreaming), opportunities for avoiding trade-offs (i.e. where NC/ESS not mainstreamed but where it should be) and overall improvement in the added value of policy making and good governance.



NC/ESS: status and opportunities of integration

Focus and approach

Policy focus: Air; Soil; Water; Agriculture & rural dev.; Forestry; Marine & coastal (inc. fisheries); Regional dev./ Cohesion; Climate; Bioenergy; Transport & grey infrastructure

Review of EU policy documents: policies/strategies, regulations & directives, communications, guidance docs, assessments...across policy areas

Categorise and assess: level of integration at conceptual and operational levels



NC/ESS: status and opportunities of integration

OPERAS WP4 Analysis: Categorising integration

Level of integration	Conceptual integration	Operational integration
Comprehensive and explicit	All ecosystem services & recognition of contribution to human wellbeing	Dedicated instruments enabling comprehensive integration.
Explicit but not comprehensive	Some ecosystem services & recognition of contribution to human wellbeing	Some instruments that proactively address / build on ESS/NC within the policy area.
Implicit and incomprehensive	Generally focus on preventing negative impacts of a policy sector to ecosystem services and natural capital	Some aspects - mainly avoid negative impacts on (some) ecosystem services - integrated into sectoral instruments.
No specific integration	No recognition (direct / indirect) of ecosystem services and natural capital	No instruments exist that would in any way address ESS/NC.

Source: Kettunen et al 2014: WP 4 Deliverable 4.3

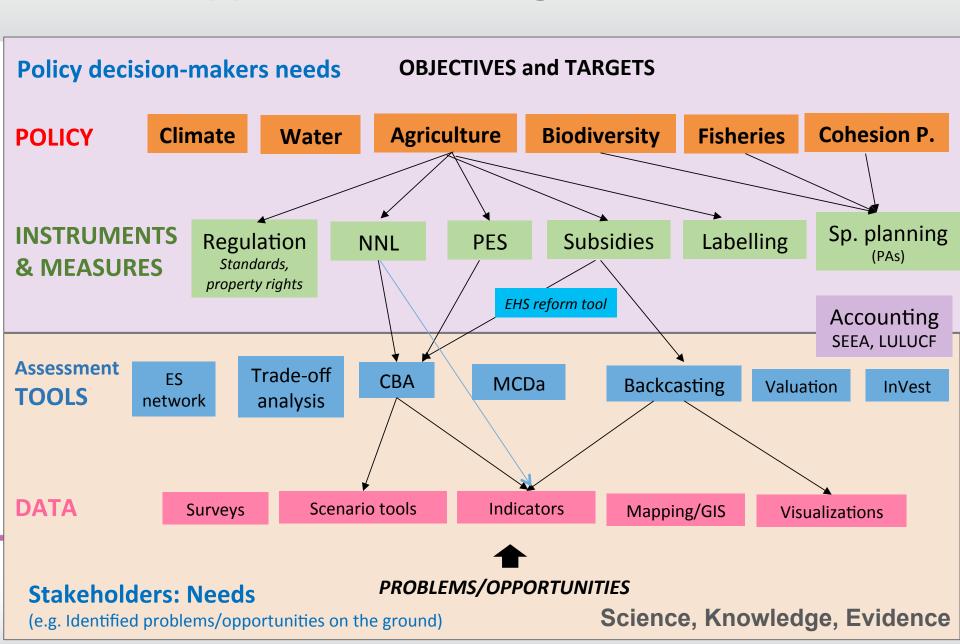
NC/ESS: status and opportunities of integration

OPERAS WP4 Analysis: working insights & examples

OPERAS WP4 Analysis: Working Insignts & examples			
Policy sector	Conceptual integration	Operational integration (examples)	
Air	Clean Air Policy Package Clean Air Programme for Europe	Negative effects of air pollution to ecosystems are addressed, but not the positive effects that ecosystems have on air quality or consequences of pollution on ESS.	
Soil	Soil Thematic Strategy. EU Roadmap to a Resource Efficient Europe	No dedicated policy instruments; Some aspects integrated into CAP & Land Use, Land Use Change and Forestry (LULUCF)	
Water	Blueprint to Safeguard Europe's Water Resources	Some indirect proactive elements - e.g recognising the role of natural flood retention areas under the Flood Directive; None of the existing instruments explicitly recognise the role ecosystem services in maintaining water quality or maintaining ground water sources.	
Agriculture & rural dev.	Some ESS promoted under Pillars of the EU Common Agriculture Policy (CAP).	Some proactive elements (mainly agri-environment-climate, support to Natura 2000 areas, and non-productive investment measures in Member States' RDPs)	
Forestry	EU Forest Strategy	No separate / dedicated instruments for forest ecosystem services. EU Treaties : limited EU competence for common forest policy	
Marine & coastal (incl. fisheries)	Marine Strategy Framework Directive EU Common Fisheries Policy (CFP)	Some pro-active elements recognising the role of ecosystem service. A number of instruments preventing negative impacts on ecosystems.	
Regional development / Cohesion Policy	Regulations for Cohesion Policy funds (ERDF, ESF and CP) - recognise and addressed ecosystem services explicitly.	Opportunities for win-wins of ESS and Reg. Dev / Cohesion policy objectives Not obligatory for the Member States to take up these opportunities. Nor obligatory to integrate ecosystem services into reporting on results / outputs of ERDF and CP funding.	
Climate Mitigation & Adaptation	Mitigation: & EU LULUCF (Land Use, Land Use Change and Forestry) accounting rules EU Strategy on Adaptation to Climate Change recognises ecosystems services Ecosystem services are referred to directly in the	Mitigation: direct but not comprehensive. e.g. Wetlands Adaptation: mainly indirect, preventing negative impacts on ES / ESS. Only explicit instrument is support to ecosystem-based approaches under EU funds. There are no EU-level sustainability criteria for solid biomass.	
Bio-energy	Loosystem services are referred to directly in the	There are no Lo level sustainability entend for solid biomass.	

Bio-energy Renewable Energy Directive **Transport & grey** Indirect, preventing negative impacts on ecosystems - via EU environmental Union guidelines for the development of the transimpact assessment procedure. infrastructure Furonean transport network

Tools to support NC/ESS integration – an illustration



Ongoing and Future Work

- 1. Analysis presented at EU level being finalised deliverable in December.
- 2. Scottish exemplar Scotland analysis for level of reflection of NC/ESS in policy
 - a. Analysis by University of Edinburg Master's student: Clement
 - Scoping assessment: conceptual and operational integration of NC/ESS
 - Focus on particular sector for more in-depth assessment including 3rd level of mainstreaming: Implementation (sub-set of sectors, instruments + urban and rural case)
 - b. Guidance Marc Metzger, Marianne Kettunen and Patrick ten Brink.
 - c. Understand that SNH and Natural Capital group have interests in this area of work coordination will be helpful meeting planned for January.



Ongoing and Future Work

To get comprehensive understanding and added value for policy - good to have further complementary analysis: actual implementation on the ground in instruments, measures and investments –

- Further MSc student/thesis?
- which sectors,
- which instruments,
- and which regions would be of most interest?



www.operas-project.eu • info@operas-project.eu









OPERAsProject



































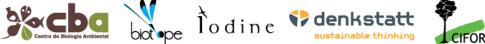






















This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement number 308393.





