

# Accounting for natural capital in the policy mix

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Note: this presentation reflects the personal perspective of the author and should not be taken as the formal position of the European Environment Agency.

## Policy references on natural capital accounting

### At global level:

- Rio +20 communiqué on natural capital accounting
- World Bank WAVES initiative
- 2012 Aichi targets under Convention on Biological Diversity

### At EU level:

- 7EAP - Objective 1 focuses on natural capital
- EU Biodiversity Strategy to 2020 -> 'MAES' process
- EU Resource efficiency strategy

## Ecosystem assessment & valuation in EU Biodiversity Strategy 2020

Action 5 under target 2 of the EU Biodiversity Strategy to 2020 states that:

”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.”

## EU 'MAES' process

### **Support to implementation of Action 5 under target 2: 'Mapping and Assessment of Ecosystems and their Services'**

Six pilot studies are ongoing / completed:

- ❖ Use of reporting data under Natura 2000
- ❖ Agriculture ecosystems
- ❖ Forest ecosystems
- ❖ Freshwater ecosystems
- ❖ Marine ecosystems
- ❖ Natural Capital Accounting

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## EU pilot study on natural capital accounting

Support implementation of the EU Biodiversity Strategy by:

- Reviewing the concept of natural capital & its components
- Evaluating methodological options for accounting for natural capital, both for physical accounts and valuation
- Providing concrete examples of methodological approaches
- Gather information on available experience and organisational set-up in EU Member States

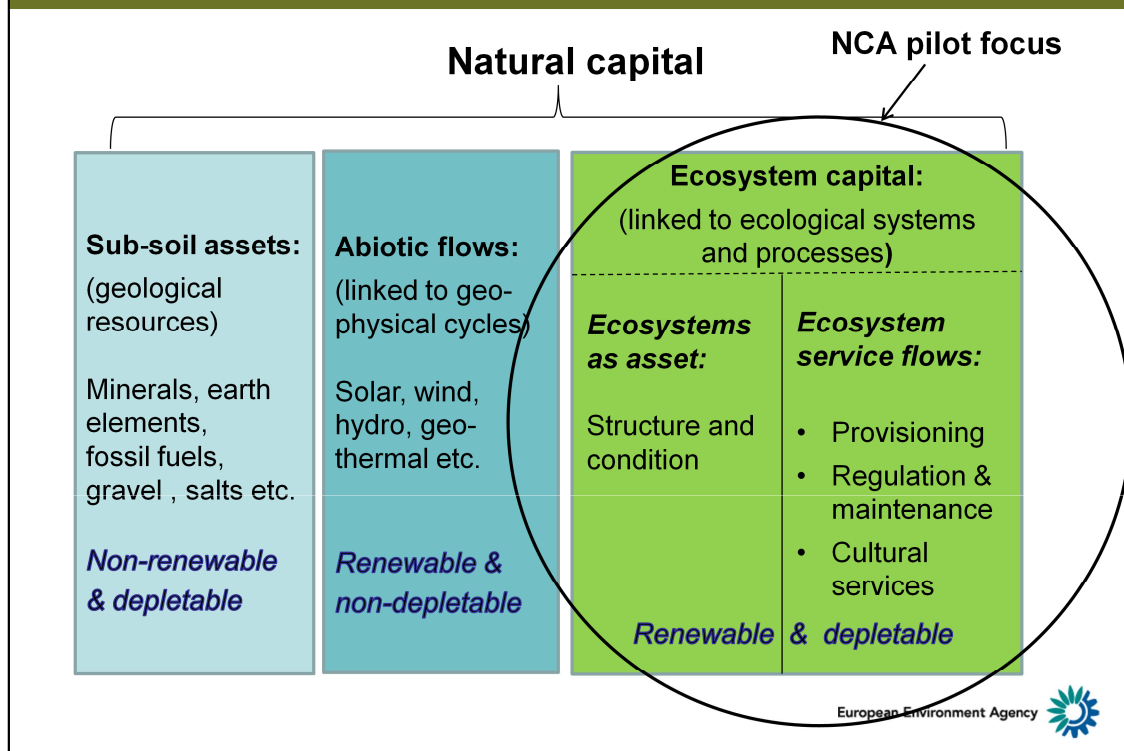
=> Come up with a concrete methodological guidance that acts as reference document for implementation in EU MS

## Managing our natural capital better - key steps

- 1) Understand the components of natural capital
- 2) Track their status - in quantity and quality
- 3) Identify key impacts from human activity and/or use
- 4) Analyse the key drivers behind these impacts
- 5) Review which policy or societal levers exist to manage or change these impacts
- 6) Develop adequate analytical and policy tools

This represents a simplified approach for the purpose of this presentation.

# 1) Components of Natural Capital



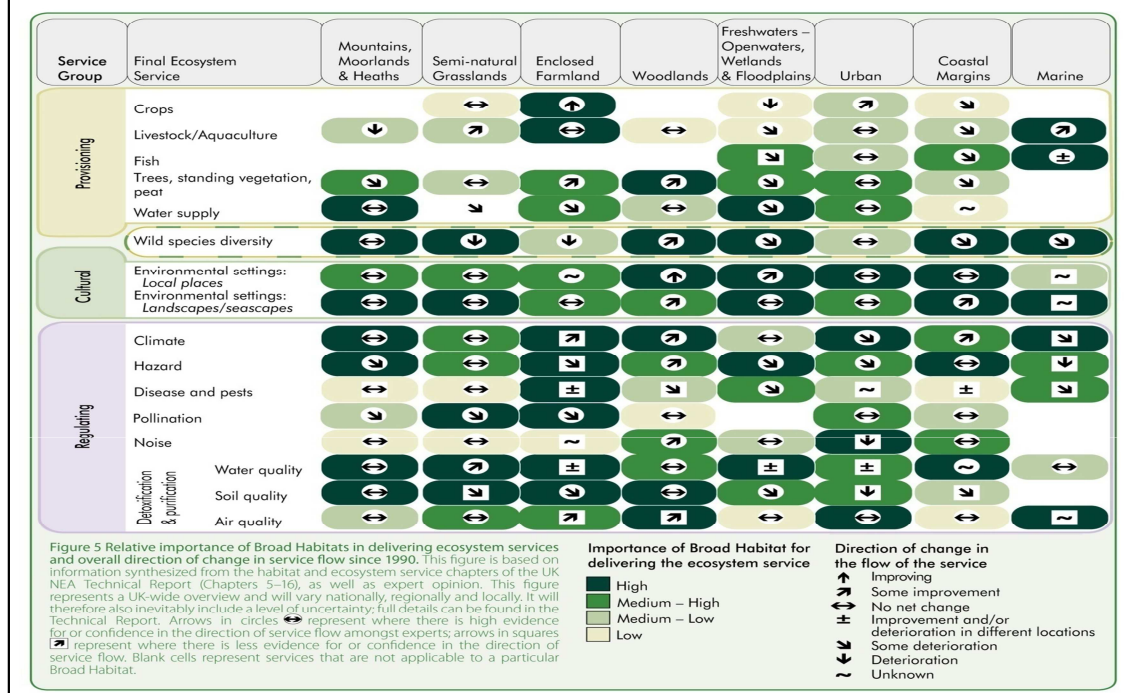
Taken from the first EU guidance document under the MAES process; see: ...

## 2) Key challenges in mapping ecosystems and their services in an accounting approach

- Develop a suitable conceptual framework (e.g. CICES, SEEA - Vol. 2 on exp. ecosystem accounting)
- Consider stocks ('capital') and flows ('service')
- Avoid double counting - between ecosystems and between different service categories
- Organise data framework / data sets so that accounts can be developed at relevant spatial & temporal level
- Consider policy use of ecosystem accounts & valuation of ecosystems and their services



# Matrix used in UK national ecosystem assessment on ecosystem service trends by habitat



Just an example to show that we are aiming to analyse and represent very complex relationships and systems.

### 3) Key human activities with ecosystem impact

- a) The primary sectors (agriculture, forestry, fishing)
- b) Energy, transport, manufacturing, ..
- c) Household consumption, tourism, ..
- d) Research and innovation, trade policy, 'development' policy, ..

A simplified overview to show the range of policy areas that need to be considered in an ecosystem management perspective.

## 4) What are the key drivers ?

- 1) Economics
- 2) Innovation
- 3) Public policy
- 4) Societal change

This lists focuses on key processes or trends that drive change in the human-environment interaction; the order implies a certain ranking but this ranking is not absolute and relative importance will vary depending on the type of phenomenon or the time span of the process to be analysed.

## 5) Policy options

- 1) Regulation & standard setting
- 2) Market incentives (taxes, PES ..)
- 3) Subsidies & innovation support
- 4) Spatial planning
- 5) Targeted advice and training
- 6) Education & awareness raising

This represents an illustrative list of policy options developed for the purpose of this presentation.

## 6) Knowledge needs & analytical tools

Analytical issues :	Accounting approaches	Monitoring & indicators	Bio-phys. research	Modelling & policy analysis	Participant research
Nat. capital & ESS flows	XXX	XX	XX	X	XX
Resilience / ecological boundaries	?	X	XXX	XX	?
Main uses / impacts	XX	XX	XX	XX	XX
Key drivers of change	XX	X	X	XXX	XX
Policy options & levers	X	X	?	XXX	XX
Policy outcomes	XX	XX	XX	XX	XX

This overview is a first personal assessment of what different monitoring, assessment and research approaches can contribute to developing a better information basis for key analytical issues. It is intended to stimulate debate rather than considered a final perspective on this question.

‘ESS’ stands for ‘ecosystem service’.

## Natural capital accounting & the policy mix

Natural capital is influenced by a great mix of policies !

In terms of use, impacts, drivers & responses - so we need:

- Policy coherence / integration / mainstreaming
- Policy mix is inevitable and necessary!

However, we need to consider:

**KISS** and **TAC**

'KISS' stands for 'Keep it simple, scientist' and 'TAC' refers to transaction costs. These two acronyms aim to make the point that any system that aims to provide input and/or guidance to policy decisions and implementation should not be overly complex.

## In summary: what can accounts deliver ?

- Identifying and tracking our natural capital assets
- Creating awareness and understanding
- A framework for considering trade-offs
- An alternative or complementary measure of welfare
- Possibility for monetary valuation

Thank you for your attention.

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Further information on EU natural capital pilot:

<http://biodiversity.europa.eu/ecosystem-assessments/events-1/eureca-meetings/natural-capital-accounting-2013/>