



CEEweb Academy on Preserving Europe's Ecosystems and Natural Capital – Tools and Processes in Theory and Practice

7-8 October 2013, Alfa Art Hotel, Budapest, Hungary

Background document

Introduction

According to the EU Biodiversity Strategy 2020, most of Europe's ecosystems are assessed to be degraded. By losing ecosystems and their services, we undermine the very basics of our existence. The cumulative loss of biodiversity and related ecosystem services between 2000 and 2050 will be equivalent to 7 per cent of the world Gross Domestic Product (GDP) in 2050. To halt the degradation and loss of ecosystems, there are already existing or to be implemented policy tools, which aim for mapping, restoring and connecting ecosystems and enhancing our natural capital as well as offsetting its loss. With this CEEweb Academy, we wish to raise awareness on these policies and their elements, the tools of implementations and their potential practical realization at all levels. We also wish to create an enabling environment for stakeholders from different sectors (EC, MSs and other national and local authorities, NGOs, private sector, academia, etc.) to find a common platform to cooperate for more effective nature policies and their implementations.

"The services that nature provides us with, like clean water, clean air, fertile soil, food, are not only crucial for the well-being of human kind, they also represent an astronomical economic value. According to economists, each year we lose 3% of GDP due to the loss of biodiversity. That costs the EU €450 billion year after year. "

(Rapporteur Gerbrandy for EU Commission, 2012)

Policy Background

The European Commission has adopted an ambitious [new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020](#). There are six main targets and 20 actions to help Europe reach its goal. Biodiversity loss is an enormous challenge in the EU with around one in four species currently threatened with extinction and 88% of fish stocks over-exploited or significantly depleted.

The six targets covered by the EU strategy focus on:

1. The full implementation of the EU nature legislation;
2. Better protection and restoration of ecosystems and the services they provide, and greater use of green infrastructure;
3. More sustainable agriculture and forestry;
4. Better management of EU fish stocks and more sustainable fisheries;
5. Tighter controls on Invasive Alien Species; and
6. A greater EU contribution to averting global biodiversity loss.

During the CEEweb Academy, focus will be on Target 2, which requires that *'by 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.'* To reach this target, a number of actions was announced by the European Commission, among which the followings will be addressed during the conference:

Action 5 Improve knowledge of ecosystems and their services in the EU

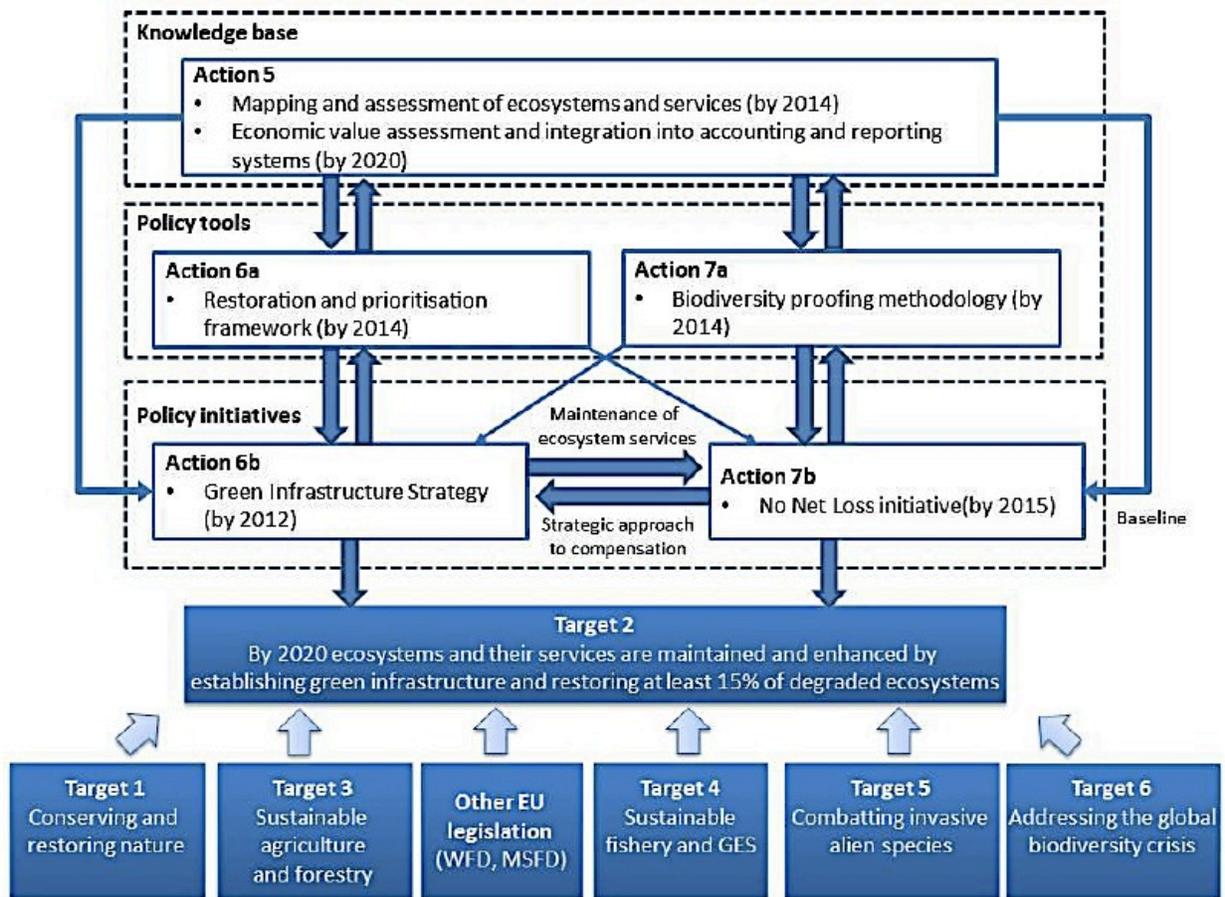
5) Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national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

Action 6 Set priorities to restore and promote the use of green infrastructure

6a) By 2014, Member States, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level.

Action 7 Ensure no net loss of biodiversity and ecosystem services

The Commission will carry out further work with a view to proposing by 2015 an initiative to ensure there is no net loss of ecosystems and their services (e.g. through compensation or offsetting schemes).



Targets of the EU Biodiversity Strategy 2020 and the structure of Target 2's actions (European Commission 2013)

Action 5 - Mapping and Assessing Ecosystem Services (MAES)

Our ecosystems provide us with services and benefits essential to our society and economy including food, water, protection against natural calamities and aesthetic values. However, many of these ecosystems are severely degraded, which results in the reduction of their abilities to provide these services. Often, the role of these ecosystems and their services are not recognized along with the financial loss this could induce. As a result of this failure of recognition, their actual value and their vital functions are not adequately addressed in decision and policy-making.

Action 5 of the EU Biodiversity Strategy to 2020 requires Member States to map and assess the state of ecosystems and their services in their territory with the assistance of the European Commission. The initial methodological work on biophysical mapping and assessment is to be delivered by 2014. The MAES work will contribute to the assessment of the economic value of ecosystem services and promote the integration of these values into accounting and reporting

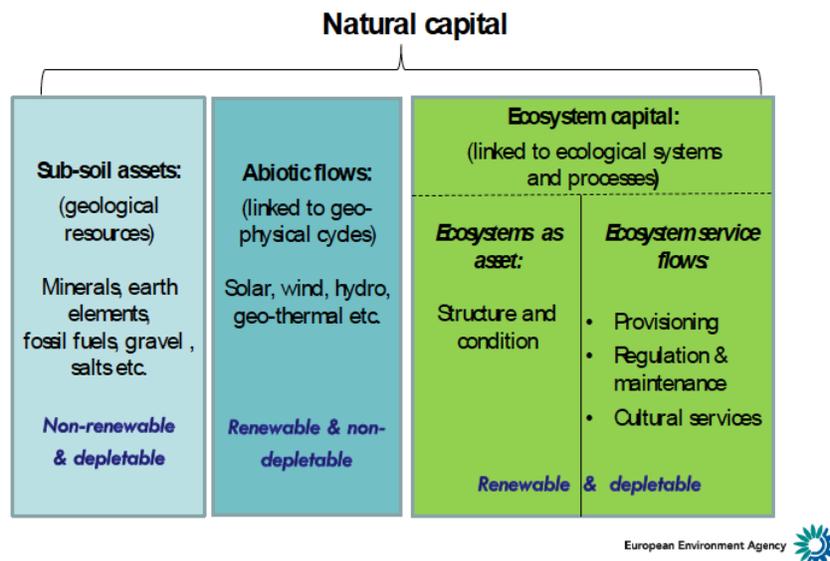
systems at EU and national level by 2020.

The outcomes will be employed to inform policy decisions and implementation directly in areas, such as nature and biodiversity, agriculture, forestry and fisheries with relevance on transport, energy and territorial policies. Action 5 has also its importance in mapping our natural capital and identifying regions, where measures are to produce lucrative solutions towards the biodiversity conservation and ecosystem services targets prescribed by the Biodiversity Strategy.

Action 5 has strong linkages with the [Millennium Ecosystem Assessment \(MA\)](#) and [The Economics of Ecosystems and Biodiversity \(TEEB\)](#) works and explores the synergies of additional international processes including the [Intergovernmental Platform on Biodiversity and Ecosystem Services \(IPBES\)](#), [System of Environmental and Economic Accounting \(SEEA\)](#), [Wealth Accounting and Valuation of Ecosystem Services \(WAVES\) Partnership](#) and the [Natural Capital Declaration](#).

Action 5 will also be built on the outcomes of Member States' reporting obligations under EU environmental legislation (i.e. ecological status of water bodies, conservation status of protected species and habitat types and environmental status of the marine environment) and abiotic environmental conditions such as air quality including greenhouse gas emissions, surface water, groundwater and marine water quantity and physico-chemical quality.

To aid the MAES process, the European Commission produced a [working paper](#), which sets the policy background of the process and also proposes a typology of ecosystems to be assessed and mapped with the use of the Common International Classification of Ecosystem Services (CICES) worked out for the purpose of environmental accounting.



Components of Natural Capital (European Commission 2013)

Some of the key issues for the successful implementation of MAES and ecosystem services assessment are adequate data identification and collection as well as the detection and incorporation of synergies among the existing and new initiatives. Thus, one of the most important issues for participants to consider is **how stakeholders can contribute to data collection and mapping exercises at various levels as well as ecosystem services assessment.**

Action 6a- Restoration Prioritization Framework

Action 6a incorporates the global target agreed by EU Member States and the EU in Nagoya to restore 15% of degraded ecosystems by 2020. The CBD definition of restoration is “*The process of actively managing the recovery of an ecosystem that has been degraded, damaged or destroyed as a means of sustaining ecosystem resilience and conserving biodiversity*”.

To implement Action 6a of the EU Biodiversity Strategy 2020, there is an ongoing EU working group, Green Infrastructure and Restoration Prioritization Framework Working Group (GI/RPF WG) involving several stakeholders, which aims to define the adequate steps and terminology to aid the restoration processes.

Among many of its tasks, there is a need for defining a clear common understanding of definitions, in particular regarding what is to be considered as degraded and non-degraded ecosystem, and as a result how ‘restoration’ in fact should be determined. Besides, there are questions about the 15% target per se as it is applied to the whole EU – however, there are different options on how to define this target at national level.

Once these restoration targets are set by the Member States, there is a need to prioritize measures to achieve these targets including for instance, which ecosystems to restore, location and type of restoration measures, etc. Potential prioritization criteria can include for instance conservation criteria, ecosystem services criteria, economic criteria, policy related criteria, etc. For effective target setting as well as monitoring, adequate indicators will also be needed.

Actual implementation of restoration measures also requires strategic approaches to create stakeholders acceptability and requires additional funding. Member States should consider additional possibilities apart from the EU and national ‘traditional’ funding mechanisms including innovative financial mechanisms, such as Payment for Ecosystem Services, additional taxations, private sources inclusion, etc. The European Commission also considers biodiversity offsetting and habitat banking as one of the potential source for implementing the restoration target.

Some of the key issues to consider for participants are how **different stakeholders can aid Member States and contribute to reach the restoration target** and **what kind of innovative financing mechanisms are already in place and could contribute** to achieving the 15% targets.

Action 7 - Ensure no net loss of biodiversity and ecosystem services

Halting the loss of biodiversity is among the most important tasks of the European Union, and it is the aim to reach that status by 2020. Beside the ‘traditional’ tools, the Commission seeks innovative new mechanisms to support achieving the target efficiently. The No Net Loss initiative launched by the Commission is intended to be such a tool. The initiative focuses on the issue of providing systematically for compensation for damages to biodiversity in the wider countryside outside Natura 2000.

According to Rayment (2013) ‘compensation should be considered in the context of the ‘mitigation hierarchy’, which prioritises the avoidance of adverse impacts on biodiversity, calls for reduction of those impacts which cannot be avoided, and supports the use of offsets or compensation only for residual impacts that cannot be avoided or minimized. The mitigation hierarchy can and should also require that measures are taken to rehabilitate or restore affected areas before compensation is considered, although this is not always explicitly included in EU references to the mitigation hierarchy.

The term ‘compensation’ is sometimes used interchangeably with ‘offsets’, although the latter involve more formalised arrangements for delivering compensation designed to achieve a minimum of ‘no net loss’ (NNL)...Compensation involves general recompense for loss, and can involve a range of different measures (e.g. payments or conservation actions). Compensation does not necessarily achieve, or seek to achieve no net loss. A biodiversity offset on the other hand, can be seen as a type of compensation activity: a measurable conservation outcome which specifically seeks to achieve no net loss and preferably a net biodiversity gain on the ground’.

Compensation is majorly implemented on Natura 2000 areas, and for certain development types (e.g. linear transport construction). However, certain Member States are advanced in using compensatory measures and offsetting schemes additionally. The most advanced policies are found in Germany, France, UK and Sweden, nevertheless concerns raised by various stakeholders about the actual efficiency of those programmes.

The Commission's No Net Loss initiative considers compensation and offsetting practices already in place. There are concerns, however, that mitigation hierarchy can be applied insufficiently, and avoidance as the most efficient way to conserve biodiversity does not have enough weight in the proposal. Instead, offsetting is highlighted as the solution to halt the loss of biodiversity outside the Natura 2000 sites.

Some of the key issues to consider for participants are whether they are **aware of any offsetting/compensation mechanisms** in place along with its benefits and disadvantages, whether in their views offsetting and compensation mechanisms could operate adequately reducing biodiversity loss and what **potential challenges** such an initiative could incorporate.



Further references and additional readings

Braat, L. and ten Brink, P. 2008. The Cost of Policy Inaction: The case of not meeting the 2010 biodiversity target.
[http://www.globio.info/downloads/85/Report%20-%20Braat%20&%20ten%20Brink%20eds%20\(2008\)%20The%20Cost%20of%20Policy%20Ina.pdf](http://www.globio.info/downloads/85/Report%20-%20Braat%20&%20ten%20Brink%20eds%20(2008)%20The%20Cost%20of%20Policy%20Ina.pdf)

CBD. TARGET 15 - Technical Rationale extended (provided in document COP/10/INF/12/Rev.1) <https://www.cbd.int/sp/targets/rationale/target-15/>

CEEweb for Biodiversity. 2012. Benefits and minimizing risks of the 'No Net Loss Initiative'.
http://www.ceeweb.org/wp-content/uploads/2012/02/NNL_study2.pdf

CEEweb for Biodiversity. 2012. Borrowing services from nature – Methodologies to evaluate ecosystem services focusing on Hungarian case studies.
http://www.ceeweb.org/wp-content/uploads/2011/12/ES_ceeweb_web.pdf

European Commission. 2011. Our life insurance, our natural capital: an EU biodiversity strategy to 2020. COM(2011)
[http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7\[1\].pdf](http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7[1].pdf)

European Commission. 2013. Mapping and Assessment of Ecosystem Services. Discussion paper.
http://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/MAESWorkingPaper2013.pdf

European Commission. 2013. 1st Workshop on the Restoration Prioritisation Framework 29 -30 May 2013. Workshop materials.
<https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>

IPBES. Online Publication List. <http://ipbes.unepwcmc-004.vm.brightbox.net>

Millennium Ecosystem Assessment. 2005 Ecosystems and Human Well-being: General Synthesis.
<http://www.unep.org/maweb/documents/document.356.aspx.pdf>

Mowat, H. et al. 2013. Critical review of Biodiversity Offset track record.



http://www.ceeweb.org/wp-content/uploads/2011/12/Critical-review-of-biodiversity-offsets_for-IEEP_Final.pdf

Rayment, M. 2013. Exploring potential demand for and supply of habitat banking in the EU and appropriate design elements for a habitat banking scheme. Executive Summary.
http://ec.europa.eu/environment/enveco/taxation/pdf/Habitat_banking_Report.pdf

Stanford Woods Institute for the Environment, The Nature Conservancy, WWF and Institute on the Environment. The Natural Capital Project. Online Publication List.
<http://www.naturalcapitalproject.org/publications.html>

The Economics of Ecosystems and Biodiversity. Online Publication List.
<http://www.teebweb.org/our-publications/all-publications-2/#.UkLgm5WKi1J>

UK National Ecosystem Assessment (NEA). 2011. Synthesis of Key Findings.
<http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>

UNEP, GCP and GVCES. 2013. The Natural Capital Declaration.
<http://www.naturalcapitaldeclaration.org/wp-content/uploads/2012/04/NaturalCapitalDeclaration.pdf>

Waves. Online Publication List. <http://www.wavespartnership.org/waves/publications>

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