

## **EUROPEAN COMMISSION**

Brussels, 3.5.2011 SEC(2011) 541 final

## **COMMISSION STAFF WORKING PAPER**

## SUMMARY OF THE IMPACT ASSESSMENT

Accompanying document to the

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Our life insurance, our natural capital: an EU biodiversity strategy to 2020

{COM(2011) 244 final} {SEC(2011) 540 final}

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#### 1. Introduction

In March 2010, the European Council adopted an ambitious new headline target for biodiversity to replace the expiring 2010 target. The new headline target calls for halting the loss of biodiversity and the degradation of ecosystem services by 2020 and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

The current biodiversity policy framework will not enable the EU to reach its 2020 headline target. The Council therefore called on the Commission to develop a new strategy, which should include targets as well as necessary, feasible and cost-effective measures and actions to reach them. The Council requested that the strategy reflect the eventual outcomes of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD CoP10), which took place in Nagoya, Japan in October 2010, and that it be completed as soon as possible after that meeting.

## 2. PROBLEM DEFINITION

The 2010 EU biodiversity baseline shows that on average only 17% of assessed habitats are in favourable conservation status and up to 25% of animal species in the EU face the risk of extinction. Most ecosystem services are no longer able to deliver the optimal quality and quantity of basic services such as crop pollination, clean air and water, and control of floods or erosion that underpin many economic activities.

Europe's biodiversity remains under severe threat from habitat loss due to land use change and fragmentation; pollution; overexploitation/unsustainable use of resources; invasive species and climate change. These pressures are all either constant or increasing in intensity. The situation is similar at global level. The pressures are underpinned by indirect drivers that relate for instance to demographic and cultural/lifestyle choices, market failures, and economic structure, size and growth.

This degradation and loss have significant environmental, economic and social consequences within the EU and at the global level. For example the loss of riparian wetlands has an impact on society at large, through reduced flood control services, lower water purification, reduced recreational and amenity services and lower carbon storage. Some business sectors are particularly affected, as they depend on biodiversity and ecosystem services, either directly or indirectly. Biodiversity loss also has impacts on jobs, since one in six jobs in Europe is somehow linked to the environment and biodiversity, whether directly or indirectly. It also limits the delivery of several ecosystem services essential to maintain a healthy population, from the provisioning of food and potable water to clean air and medicine. In addition, it has a strong bearing on the EU's territorial cohesion, since biodiversity and ecosystems cement the social fabric and identity of many European regions.

Actions proposed in this paper are those where the EU has most value-added and leverage. However, it is clear that without parallel action at Member State level, they will not be sufficient to deliver the target of halting biodiversity loss. Success in delivering the 2020 headline target will depend on a mixture of EU and national, regional or local measures, in line with the principle of subsidiarity. Actions may need to vary across Member States and from regions.

## 3. OBJECTIVES AND TARGETS

The general objective is the EU 2020 biodiversity target and its three components. Achieving the 2020 headline target is also seen as an intermediary step towards attaining the objective set out in the 2050 vision, and a means of meeting the EU's commitment to the global 2020 biodiversity targets.

Specific objectives are identified, taking into account the factors that led to the failure of the EU in meeting its 2010 target and the need to reflect the global biodiversity targets agreed at CBD CoP10. An assessment of existing EU policy and legislation shows that two of the direct drivers of biodiversity loss — climate change and pollution — do not constitute major policy gaps. Conversely, land use change; overexploitation/unsustainable use of resources; and invasive alien species constitute significant gaps. As a result, three specific objectives focus on addressing these drivers. The remaining three specific objectives respond to the 2050 vision and 2020 headline target call to maintain and enhance biodiversity and ecosystem services in the EU (both within and beyond the Natura 2000 network of protected areas), and at global level.

Options for operational targets and different levels of ambition were then considered based on their potential to efficiently build on the baseline to 2020 to deliver the overall target and vision. Six operational targets were (Table 1).

General objectives	Specific objectives	Operational targets	
Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020	Fully implement the Birds and Habitats Directives	T1 - To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.	
Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity*		T3a - By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement(*) in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU 2010 Baseline, thus contributing to enhance sustainable management.	
	T3b - By 2020, Forest Management Plans or equival with Sustainable Forest Management (SFM¹), are in are publicly owned and for forest holdings above a defined by the Member States or regions and composed Development Programmes) that receive funding Development Programme, so as to bring a measurable conservation status of species and habitats that dependence forestry and in the provision of related ecosystem ser EU 2010 Baseline.		
		(*) For both targets, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under Target 2.	
		(**) For smaller forest holdings, Member States may provide additional incentives to encourage the adoption of Management Plans or equivalent	

As defined in SEC(2006) 748

		instruments that are in line with SFM.
	Ensure the sustainable use of fisheries resources	T4 - Achieve Maximum Sustainable Yield (MSY) <sup>2</sup> by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.
	Combat invasive alien species	T5 - By 2020, invasive alien species (IAS) and their pathways are identified and prioritized, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.
Restoring ecosystem services in so far as feasible	Maintain and restore ecosystems and their services	T2 - By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.
Stepping up the EU contribution to averting global biodiversity loss	Help avert global biodiversity loss	T6 - By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

**Table 1:** General and specific objectives and operational targets

#### 4. MEASURES AND RELATED IMPACTS

For each target, a coherent set of complementary measures needed to achieve it is proposed. The likely impacts of these measures are analysed against environmental, economic and social criteria, differentiating by type of measure when appropriate.

As many of the measures will be further elaborated and analysed in the context of impact assessments to be undertaken in the context of other policy proposals in the pipeline, impacts are mostly assessed in a qualitative way (Table 2). Orders of magnitude of aggregated quantitative impacts are given where possible, and examples of specific cases usually at project level are also provided for illustrative purposes. The distribution of impacts within the EU and the expected international impacts are also assessed, where relevant.

		Environmental	Economic	Social
Т1	+	Increased biodiversity and ecosystem services from Natura 2000 sites, better resilience to stressors such as climate change. Synergies with WFD and MSFD.	Increased benefits from ecosystem services. Limited private business opportunities in Natura 2000.	Increased employment in rural areas in the medium term.
	-		Fraction of total management costs of €5.8 billion per year.	Possible short term job losses due to restricted access to resources.

The EU signed up to a target of achieving MSY levels by 2015 at the World Summit on Sustainable Development in 2002 and to the new 2020 fisheries target adopted at CBD CoP10.

Т2	+	Maintained and enhanced ecosystems and services, such as clean air and water, carbon storage and natural disaster control. Increased ecosystem resilience and reduced vulnerability to climate change. Synergies with WFD and MSFD.	Increased benefits from ecosystem services. No aggregated estimates of benefits, but project-based evidence of benefit-cost ratios in the range of 3 to 75. New investment opportunities for businesses and innovation potential. Climate mitigation benefits.	Multiple social benefits, both in urban and rural areas, such as positive impacts on health and quality of life, aesthetical and psychological benefits, reduced exposure to natural disasters, new job opportunities in restoration and conservation.
	-		Costs in the order of several billions per year, but GI costs could substitute for more costly grey infrastructure investment.	
Т3	+	Maintaining and enhancing agriculture and forest ecosystems and their services, including carbon storage, erosion prevention, pollution control and water purification. Synergies with WFD.	New possibilities created for agricultural sector diversification; improving farmers income in Natura 2000 and HNV areas; increased competitiveness and diversification of the forestry sector.	Contribution to rural development in less favoured areas; new jobs.
	1		Costs related to funding from pillar 1 and pillar 2 measures, which would partly contribute to costs of managing Natura 2000 and HNV areas. Likely to be change of spending priorities rather than net costs. Forest management plans administrative costs more than compensated by rural development payments.	
T4	+	Increased and more sustainable levels of fish populations, maintained and enhanced marine ecosystems & services. Synergies with MSFD.	Positive long-run impact on fisheries income. Increased efficiency of public spending.	Prevent negative effect on employment in case of a collapse in fish stocks.
	1		Negative short term impacts on fisheries income. Higher management costs to avoid adverse impacts on ecosystems.	Short term social cost of scaling down of fleet in the fishing sector.
T5	+	Reduced pressure on species and habitats from IAS. Strong synergy effects with other targets e.g. ecosystem restoration.	Reduced economic damage. Rough estimates show benefits in terms of avoided damage costs of €1-9 billion / year.	Reduced adverse impacts on human health, avoided negative employment consequences, enhanced cultural services and recreational activities.
	-		€40 million–190 million / year.	
Т6	+	Improved global biodiversity especially in developing countries, Increased ecosystem services such as carbon storage, water provision, purification and retention. Some improvements also in the EU.	Economic benefits from biodiversity & ecosystem services, e.g. climate mitigation, increased crop yields through pollination in developing countries. Genetic diversity benefits EU & developing countries (cosmetics & medication). ABS protocol provides legal certainty of access to resources for EU companies.	Poverty alleviation. Decreased risk of social impacts of natural disasters. Health benefits. Improved livelihood of indigenous communities through sharing of traditional knowledge benefits.
	-		EU contribution to financing global biodiversity to increase by 2020; cost of ABS protocol to EU industry.	

# **Table 2:** Key costs and benefits of reaching targets

The report reviews prioritisation of actions within each target. T2 and T5 kick start policy action in areas which are currently not part of the EU biodiversity policy framework and have good potential for delivering significant and early results. However, improved implementation and integration in sectors is also key to reaching the overall objectives.

#### 5. FUNDING AND GOVERNANCE

As insufficient funding was a key factor in the failure to meet the 2010 EU target, it will be important to ensure adequate and effective funding for the implementation of the 2020 biodiversity strategy. Whilst for some targets, the focus will be more on effective take-up and redistribution of existing resources, existing sources will need to be scaled up and new ones – both public and private – identified and promoted at EU, national and global level.

Within the current programming period and without pre-empting the outcome of the negotiations on the next Multi-annual Financial Framework, this should be achieved by rationalising available resources and maximising co-benefits of various sources of funding, including funding for agriculture and rural development, fisheries, regional policy and climate change. Opportunities offered by ongoing policy reforms (e.g. CAP, CFP and cohesion policy), new policy initiatives (e.g. the Resource Efficiency flagship initiative) and the next financial perspectives should be seized to deliver the target and vision efficiently. The inclusion of biodiversity objectives should be explored as part of the Common Strategic Framework under consideration by the Commission to prioritise funding under the five funding instruments under rural, regional, social and fisheries policies.

Innovative financing mechanisms will also be needed to mobilise funding from both public and private sources, at all levels. At EU and national level, the reform of harmful subsidies could offer opportunities, in line with the 2020 Strategy and the global CBD target. At EU level, Payments for Ecosystem Services (PES) will be further mobilised to reward private and public goods from agricultural, forest and marine ecosystems. Incentives should also be provided to encourage up-front investments in green infrastructure projects and the maintenance of ecosystem services, for example through better targeted EU funding streams and Public Private Partnerships. The potential of biodiversity offsets will be looked into as a way of achieving a 'no net loss' approach.

The shared EU and CBD targets need to be pursued through a mix of sub-national, national and EU-level action. This will require close coordination between all involved in implementation. A common implementation framework is proposed in which each Member State would incorporate the EU targets into its own National Biodiversity Strategy and Action Plan and complement them with national targets as necessary, taking into account also the global targets adopted at COP10. Local and regional authorities, the private sector and civil society would also have important roles to play and their participation in the implementation of the strategy needs to be promoted and facilitated at all levels.

## 6. MONITORING, REVIEW, COMMUNICATION AND WAY FORWARD

The Commission, together with other partners, will develop by 2012 a logical framework to monitor trends and assess progress on the measures and targets in a coherent way, based on the 2010 EU biodiversity baseline and a streamlined set of agreed indicators. Synergies and better integration with existing initiatives will also be sought. The Commission will also continue to address knowledge gaps, in particular concerning the links between biodiversity, ecosystems and their services. At the global level, the EU is supporting efforts to establish an Intergovernmental science policy Platform on Biodiversity and Ecosystem Services (IPBES), to reinforce the science-policy interface.

The Commission, in consultation with the Member States, will develop a reporting system that is streamlined and aligned with the review and reporting obligations under the CBD wherever possible. Finally, efforts will be made to increase public understanding of the importance of biodiversity and the role that all stakeholders can play in conserving biodiversity and ensure its sustainable use.

On the basis of the priorities highlighted above and the targets and actions presented, the Commission will come forward with concrete proposals and initiatives to deliver on the different components of the Strategy, including an initiative on green infrastructure by 2012, a strategy on Invasive Alien Species in 2012; and a legislative proposal to implement the Access and Benefit Sharing Protocol in 2012. These will be accompanied by impact assessments, as appropriate. Ongoing policy reform processes, including those of the CAP, CFP and Cohesion Policy, provide timely opportunities to enhance synergies and maximise coherence with the biodiversity strategy targets and measures.

A mid-term review of the Strategy will be completed in early 2014 at the latest, and a final assessment in 2020. The Commission may review the targets if needed in light of new information and consider further and complementary steps reflecting relevant developments and emerging priorities at national, EU and global level.