



Greening the European Cohesion Policy

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BIODIVERSITY AND NATURE



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About EEB

The European Environmental Bureau (EEB) is a federation of over 140 environmental citizens' organisations based in most EU Member States, most candidate and potential candidate countries as well as in a few neighbouring countries. These organisations range from local and national, to European and international. EEB's aim is to protect and improve the environment by influencing EU policy, promoting sustainable development objectives and ensuring that Europe's citizens can play a part in achieving these goals. EEB stands for environmental justice and participatory democracy. Our office in Brussels was established in 1974 to provide a focal point for our members to monitor and respond to the EU's emerging environmental policy.

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Why greening the Cohesion Policy?

Cohesion Policy will represent over one third of the Budget of the European Union between 2014-2020. The main goal of Cohesion Policy under this new budget is to contribute to the objectives of the Europe 2020 Strategy, which is to develop smart, sustainable and inclusive growth. Investing in nature and ecosystems, our natural capital base, is indispensable to achieving these objectives.

Intelligently investing cohesion funds can help restore the environment, create employment and rejuvenate the local economy at the same time. EU Cohesion Policy (2007-2013) already provides a range of supportive measures to invest in green infrastructure. The examples outlined in this publication have been supported by the Cohesion Policy. Building on this experience, the future Cohesion Policy (2014-2020) should significantly increase the opportunity for regions to strategically spend on ecosystems, green infrastructure and Natura 2000.

Investments in Green infrastructure

Green infrastructure offers nature-based solutions to economic, environmental and societal challenges, by providing valuable and measurable services through the sustainable functioning of ecosystems, while also making a significant contribution to the restoration and preservation of biological diversity.

Ecosystem-based solutions are often cheaper than man-made fixes, for example because their maintenance costs are lower. Also, developing green infrastructure can provide a wide range of additional benefits that grey infrastructure does not, such as biodiversity protection, recreation and tourism. This way it can effectively contribute to the implementation of EU environmental legislation, especially the Water Framework Directive and Natura 2000.

As green infrastructure projects require significant construction works to get them off the ground, they provide jobs and income for local and regional enterprises just as much as the grey infrastructure does.

#1 Example: Natural flood protection and subsequent benefits

The Scheldt River

The Scheldt River stretches over 350km, originating in France, crossing Belgium and flowing into the North Sea in the Netherlands. After the river flooded heavily in 1976, the Belgian authorities decided to act to prevent future flooding. A cost-benefit analysis of the different available alternatives showed that the payback period of floodplains combined with dykes is only 14 years. This is a much more cost-efficient option than regular storm surge barriers which would have had a payback period of 41 years. Floodplains work by allowing water to flow into a designated Flood Control Area (FCA) when the storm tide is high. A ring dyke around the FCA ensures that the water remains within the designated area. This decreases flood levels, protecting surrounding villages and cities further downstream. When the tide is low, water flows back to the river through locks, thus emptying the emergency basin. Authorities are now investing in restoring 5000 ha of floodplains along the river.

Info from:
Website of Flood Control Area Kruibeke-Bazel-Rupelmonde and the Sigmoplan. http://www.gogkbr.be/index.php?page=gog-kbr&hl=en_US <http://www.sigmoplan.be>

Main Benefit

Flood protection at low cost

Additional benefits

(not provided by grey infrastructure)

Water purification

The enlarged wetland and tidal area in the FCAs increases the natural water-purification capacity of the river. This saves water treatment costs and helps to implement the EU Water Framework Directive.

Recreation/Eco-tourism

Hiking, biking and fishing thrive in and around the newly created green areas. Income generated and jobs created from tourism and recreational opportunities for locals all contribute to the local economy.

Job creation

Farmers who had to sell their farmland due to the designation of an FCA in their area can still use the area for grazing cattle and mowing the grasslands. Additionally, new jobs are created because of increasing tourism and infrastructure works.

Climate change resilience

increased flood levels are anticipated as the effects of climate change accelerate. FCAs are expected to provide a solution where traditional dykes would fail.

Establishment of flood control area along the Scheldt

1

Before

Kruikebe, Bazel and Rupelmonde municipalities were not well protected from flood before



2

After

The Flood Control Area Kruikebe-Bazel-Rupelmonde with emergency sluices and a ring-dyke was therefore established



3

Flooded

This increases flood-security at high tide and provides many additional benefits



#2 Example: Peatland restoration to increase carbon storage

Peatlands

Peatlands in North-western Europe represent a huge carbon store. Failure to protect Europe's major peatlands would result in the release of carbon dioxide equivalent to introducing an additional 40 million cars to Europe's roads. This being said the carbon storing capacity that has been lost through damage in the past can be partially restored.*

The use of more than 930.000 ha of peatland in Germany for agricultural production causes emissions of around 20 million tonnes of CO₂-equivalent per year amounting up to a total cost of damage of €1.4 billion. Nearly 97% of the peatlands in Mecklenburg-Vorpommern were drained prior to 1990. Between 2000 and 2008 action was taken to restore ca. 30.000 ha. Approximately 10% of the drained peatland in the area have now been restored.

This has resulted in up to 300 000 tonnes of CO₂ emissions reductions per year, or the equivalent of avoiding €21.7 million of damage per year. The average cost of the measure was 30-50 €/t CO₂ which compares very favourably to the average 40-120 €/t CO₂ of industrial CO₂ abatement cost**.

Info from:
TEEB – The Economics of Ecosystems and Biodiversity
for National and International Policy Makers –
Summary: Responding to the Value of Nature 2009
Konzept zum Schutz und zur Nutzung der Moore. Mecklenburg
Vorpommern Ministerium für Landwirtschaft, Umwelt und
Verbraucherschutz

Main Benefit

**Climate change mitigation
at low cost**

Additional benefits

(not provided by grey infrastructure)

Higher income for farmers

Alternative land uses on the restored peatlands generate higher incomes for the local communities. Conventional animal feed production on the once drained peatland would only generate €585/ha while reed production on restored peatland can provide €805/ha and alder forest between €1225-1750/ha.

Water quality

Surrounding communities, which are located near the 30.000 ha of restored peatlands, now benefits from water filtering and water storage by the peatlands.

Nature conservation/biodiversity

Peatlands normally harbour a wide range of rare, threatened or declining habitats, plants and animals. With the restoration of the peatlands, hope rises for the return of these threatened habitats and species. Restoration also contributes to the implementation of Natura 2000 and the German Biodiversity Strategy.

*Peat (turf) is formed by the accumulation of partially decayed vegetation matter, resulting in a brown, soil-like material. It is sometimes used as a source of fuel. It is very valuable as it grows at a rate of only 1 mm per year. Peatland only covers 3% of the earth's surface but stores 16-24% of its soil carbon. Peat is a natural reservoir for carbon.

** On average, the abatement cost for gas industry project is 40 €/t CO₂, for coal-gas fuelled switch 70 €/t CO₂, and for CCS 70-120 €/t CO₂.

*Peatlands don't look very
exciting but store a large
amount of carbon...*

*...and harbour a wide
range of rare plants
and animals*



Epipactis palustris
Photo by John Devries Cumberland

Expanding green infrastructure in Europe

EU regional policy has shown that it can achieve a lot for people and ecosystems with the limited funding available for green infrastructure projects. However, the uptake of these projects needs to be reinforced. Increased uptake of available funds relies on the development of a sound policy for the coming budgeting period 2014-2020, but also on the correct choices being made at national level.

There are many examples of where organisations have drafted plans, programmes and projects which are waiting for financing from Member States and EU co-financing. These plans are often not considered as a priority and grey infrastructure works receive the majority of funding.

Future Green Infrastructure Projects

One of the plans that could be realised with Cohesion policy support is floodplain restoration along the Lower Danube. In 2000, the governments of Bulgaria, Romania, Ukraine and Moldova pledged to cooperate in order to establish a green corridor along the entire length of the Lower Danube. About 70% of the floodplains there have been lost due to farming and other human activities on the land, causing increased risk of flooding.

WWF estimates that the restoration of 2,236 ha of floodplains along the Lower Danube would cost €50 million, while the flood protection, water purification and tourism benefits would reach an estimated €112 million.

In 2005 a flood killed 34 people, displaced 2000, flooded 690 km² and caused €396 million in damages in Hungary, Romania, Bulgaria and Moldova. The economic damage from floods in Europe are estimated at 6,4 billion €/year for the period 2006-2010.*

The flood plain restoration opportunities and needs along the Lower Danube have been comprehensively mapped out and work has already been done to restore some of these areas. More funding and effort is needed but long-term projects such as the floodplain restoration along the Lower Danube are often discarded.

All info from: Assessment of the restoration potential along the Danube and main tributaries, WWF, Vienna, July 2010 and Valuing and conserving ecosystem services: a scoping case study in the Danube Basin, Institute for European Environmental Policy and WWF, 2010

*Impact Assessment to the Commission Communication a Blueprint to Safeguard Europe's Waters

Floodplain restoration areas - implemented, planned and proposed along the Danube and major tributaries



Graphic: Institute for European Environmental Policy and WWF

Recommendations for national decision makers

- 1 Move from a grey to green infrastructure approach: utilise nature's forces whenever possible instead of building costly man-made infrastructure
- 2 In the Partnership Agreements, choose environment as a thematic objective
- 3 Establish a coherent strategy between the various funding mechanisms such as the Rural Development Fund, the Regional Development Funds and LIFE, to enable streamlined investments
- 4 Use ecosystem-based approaches in climate change mitigation and adaptation and disaster prevention
- 5 Enhance transparency and the involvement of affected stakeholders in the planning and implementation of the Cohesion Policy
- 6 Stop supporting projects which further deteriorate biodiversity and the functioning of ecosystems: ensure that the Cohesion Policy spending meets the objectives of environmental policies

Specific recommendations to be taken into account in the Cohesion Policy reform

Member States should support:

- the addition of the environment thematic objective to the package of thematic concentration in developed and less developed regions
- the explicit inclusion of Natura 2000 (the cornerstone of EU biodiversity policy) in the scope of the Cohesion Fund.
- biodiversity proofing of projects
- the protection and restoration of biodiversity. Restoring degraded EU ecosystems is necessary over large parts of Europe to bring back their functionality
- an integrated approach to climate and environment
- eco-system based adaptation to climate change and eco-system based disaster management systems
- land based climate change mitigation and adaptation possibilities under the low-carbon investment priority
- the partnership principle and the European Code of Conduct
- public consultation on the Partnership Contract and the Operational Programmes

Member States should oppose:

- Weakening of environmental conditionalities of Cohesion Funds: the ex ante conditionalities are justified by the serious need to improve the quality of spending and reduce useless or even harmful projects. They should be implemented in a stringent way. Additionally, the adequate thematic ex ante conditionalities on biodiversity should be supported.



Interested? Further examples and information....

See the EEB website

Building Green Infrastructure For Europe: Special report (EEB)
Biodiversity investments a smart contribution to reach EU 2020 objectives (BirdLife, EEB and WWF)
Green Infrastructure: Sustainable Investments for the Benefit of Both People and Nature (Surf nature)

Publications

Green Infrastructure: Sustainable Investments for the Benefit of Both People and Nature (Surf nature)
Investment Tips for High Returns: Making the EU Budget Deliver for People and Nature (BirdLife, NABU)
The Economics of Ecosystems and Biodiversity (TEEB) Study, The Bank of Natural Capital
Commission Staff Working Paper SEC(2011) 1573 final Financing Natura 2000 Investing in Natura 2000: Delivering benefits for nature and people
Investing for the future: more jobs out of a greener EU budget, Coalition of NGOs



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