



**Friends of
the Earth
Europe**



Friends of the Earth Europe Biodiversity position paper

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Biodiversity position paper

Friends of the Earth Europe's position on biodiversity

Executive Summary

It is an understatement to say that biodiversity is important to Friends of the Earth Europe, one of the continent's largest grassroots environmental NGO networks. Our members have a long tradition of working to conserve and restore biodiversity. This paper brings together FoEE's existing views and its new thinking on biodiversity and related policies in a common position.

After briefly introducing what biodiversity is, and what it means to FoEE, the document gives views on the three fundamental "indirect" drivers of biodiversity loss: population growth, individual consumption and resource use inefficiency. Clearly, all of these must decrease.

From there, the paper gives an overview of what needs to be done to reduce the five "direct drivers" of biodiversity loss as classified by the Millennium Assessment Report¹: overexploitation, land use/land use change, climate change, pollution and invasive alien species. The use of natural resources should be sustainable; that means no resource should be used more than to the extent that it can be completely regenerated in the short term. As this level is often surpassed, the intensity of some resource use must be downgraded – including to zero use to allow the restoration of ecosystems in some areas. This chapter explains how this can be done in many different sectors where humans and biodiversity interact.

These direct drivers of biodiversity loss do not appear by themselves – human behaviour is behind every one of them. There has not been, up to now, enough political will to change our behavioural patterns, be it the search for short-term profit, the lack of awareness, the fact that biodiversity is not valued, lack of funding, a failure to integrate biodiversity-related policies into other sectoral policies, a lack of implementation or a lack of equity (equal rights). As long as these root causes remain, the direct drivers will prevail and it will not be possible to change the mechanisms which are responsible for biodiversity loss. FoEE therefore considers it necessary to overcome the root causes of these direct drivers in order to protect biodiversity.

The paper concludes by pinpointing the main fields of action which must be dealt with, and by identifying upcoming opportunities in the coming months and years to save biodiversity, our most important natural resource.

¹ Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC. – p.49 ff; <http://www.maweb.org/documents/document.354.aspx.pdf>

1. Introduction

Biodiversity – the diversity of and within species and habitats – is life. Scientists estimate that there are almost 9 million species on the planet². The diversity and richness of species is essential for the foundation of human existence and provides us with food, fibres and fuel, as well as a myriad of educational, spiritual and aesthetic values.

In spite of this human dependence on biodiversity for basic survival, we are witnessing the worst species extinction ever seen since the dinosaurs disappeared, 65 million years ago. Species are disappearing at 100-1000 times faster than before man appeared³. This decline has been caused by human behaviour and, along with climate change, is our most pressing environmental problem. Action is urgently needed to preserve our forests, our marine environment, our grasslands and other natural habitats to ensure their contribution to human well-being.

Friends of the Earth Europe values natural and cultural diversity and is engaged in the protection of life on Earth both politically and through active conservation work. Preserving and increasing biodiversity is one of the main concerns of the FoEE network.

Numerous European FoE groups are involved in initiatives and campaigns to protect and enhance nature and natural resources. The work that FoEE groups devote to biodiversity includes:

- Promoting the implementation of international biodiversity agreements,
- Raising awareness about over-consumption in Europe and about the impacts of European policies on biodiversity internationally,
- Cross-national and international ecological networks, and the creation and management of protected areas,
- Forest protection and sustainable forest management,
- Protection of large predators and anti-poaching activities,
- Promoting ecologically and socially sustainable agriculture,
- Resisting the release of GMOs into the environment,
- Protecting marine ecosystems and promoting sustainable fisheries,
- Advocating for a just distribution of biodiversity benefits, respecting people's rights globally,
- Combat the 'commodification' of nature,
- Safeguarding urban, green public spaces...and more...

The activities of our member groups range from practical field work and political lobbying to awareness raising and environmental education.

However, these activities need to be supported by governments, the economy and society at the European and global level. FoEE engages in ongoing discussions to strengthen biodiversity protection and advocates the full implementation of the Aichi targets adopted by the Convention of Biological Diversity in Nagoya 2010 and the implementation of the EU

² Mora et al. (2011): How Many Species Are There on Earth and in the Ocean? PLoS Biology 9(8): e1001127 <http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1001127>

³ Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC., Fig.1, p.4

Biodiversity Strategy to 2020 everywhere in Europe. This paper explains FoEE's views on what is driving biodiversity loss and outlines what must be done to preserve and extend it to support and sustain life itself and do so within our planet's carrying capacity.

2. Root causes: the indirect drivers

The reasons for biodiversity loss are as manifold and complex as biodiversity itself. But they all have one thing in common: in one way or another, they are caused by humans. Be it land use or climate change, lack of finance or a failure to integrate the value of biodiversity into the economy, every (direct) cause of biodiversity loss is influenced by at least one of three things which have been identified as indirect drivers or root causes: human population, individual consumption and resource (in-)efficiency⁴. The combined impact of these three parameters (population x individual consumption x resource inefficiency) results in a demand that exceeds what the planet can regenerate. In short, we are currently living beyond Earth's ecological capacity.

2.1 Population growth

Global population numbers tripled from 1950 to 2011 from 2.53 billion to 7 billion people and it is expected this number will peak at 9-10 billion in 2050. The impact of the human population depends on levels of individual consumption and resource (in-)efficiency, which vary by a factor of up to 100 times between industrialized and least developed countries. Also, the world's population is very unevenly distributed across the globe.

But wherever they are, humans use space and other resources, and change land use, which is affecting biodiversity. Any increase in the number of people means an increased demand for these resources, which in turn increases pressure on biodiversity. While some ecosystems and species – such as nitrogen-loving plants and sparrows – tolerate human influence, others such as peatlands, grouse and large carnivores are extremely sensitive to human impacts.

Stabilising population growth would reduce the pressure on biodiversity. The UN suggests⁵ the following measures to achieve this:

- strengthening women's rights and self-determination
- education
- poverty reduction
- securing land rights
- reliable provision for old age

⁴ Ehrlich, P.R. & Holden, J.P. (1974). "Human Population and the global environment." *American Scientist* 62(3): 282–292. - This formula, also known as the IPAT model (Environmental Impact = Population * Affluence (individual consumption) * Technology) looks at the total impact on the environment, or resource use in general, but is equally applicable to every part of the environment and every resource, such as biodiversity

⁵ Report of the International Conference on Population and Development, Cairo, 5-13 September 1994 (United Nations publication, Sales No. E.95.XIII.18), chap. I, resolution 1, annex.; see <http://www.un.org/popin/icpd/conference/offeng/poa.html>

2.2 Consumption

The world's resources have limits which can only supply so many people. This quite simple discovery was voiced by the Club of Rome as early as 1972⁶, and since then the implications have been widely discussed and refined, leading inter alia to the concept of the “global footprint”. These limits are being exceeded. Quite simply, the world's carrying capacity is less than that which humanity consumes. Today humanity uses the equivalent of 1.5 planets to provide the resources we use and to absorb our waste⁷. This means it now takes the Earth a year and a half to regenerate the resources we use in a year.

As a consequence, there is no more room to grow except at the expense of others. If we do not want this, there is only one solution, and that must be an end to the belief in everlasting, ever-increasing economic growth which relies on unsustainable environmental damage.

Statistically, every person on the planet consumes 1.5 x as much in a given time period as will be replaced in the same time. In reality, however, the consumption per person (specific consumption) varies widely around on the globe, from less than 0.5 to over 5 times the world's capacity, or more specifically, its biocapacity⁸. While millions of people in the least developed countries do not have enough to eat, over-eating and obesity are a big and growing problem in many industrialized countries. The situation is similar for other resources, from water to energy sources, from materials to space to live, from waste production to greenhouse gas emissions.

FoEE believes in global environmental justice and the existence of environmental debt⁹. While overall resource use must be reduced globally, this has to be done primarily in industrialized countries. Developing countries must have the opportunity to improve their standard of living and be allowed a moderate increase in consumption – anything else would be unjust. Being supported to do so in sustainable ways is the way forward.

2.3 Resource (in-)efficiency

Another important parameter is how efficiently we use our resources, meaning how well we use them. For example, ten times as much energy is gained from the same plants if they are eaten rather than being fed to animals which are then eaten for their meat. This is due to the loss of energy from one trophic level to the next¹⁰. The efficient use of scarce resources has considerable potential to reduce human impact on biodiversity. FoEE welcomes the EU's commitment to improve Europe's resource efficiency¹¹. Ultimately, Europe's resource use should not go beyond its carrying capacity. As a first step, it is important to start measuring Europe's levels of resource use and using this in decision and policy making. FoEE calls for the EU to lead in the field of resource use and start measuring its global land, material, water and carbon footprints in order to set targets within two years. The Commission needs to

⁶ Donella H. Meadows, Dennis L. Meadows, Jørgen Randers & William W. Behrens III: The Limits to Growth. Universe Books, 1972

⁷ http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/

⁸ http://www.footprintnetwork.org/images/uploads/Ecological_Footprint_Atlas_2010.pdf

⁹ The concept is explained at

<http://www.foei.org/en/resources/publications/miscellaneous/clashes/ecologicaldebt.html/?searchterm=ecologicaldebt>

¹⁰ Only a fraction of the energy available at one trophic level is transferred to the next trophic level; the fractions can vary between 1-15%, with an average value of 10% - see

http://www.globalchange.umich.edu/gctext/Inquiries/Inquiries_by_Unit/Unit_4_files/image006.jpg

¹¹ European Commission (2011) A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy (COM(2011) 21); http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf

commit to setting effective indicator(s) for biodiversity within two years, to have measurable biodiversity targets within the strategy¹².

3. Direct drivers and challenges to biodiversity loss

3.1. Direct drivers and solutions

The impact of humans is reflected in the causes of biodiversity loss as listed by the Millennium Assessment Report. These drivers are classed in five groups: **overexploitation, land use/habitat change, climate change, pollution and invasive alien species**¹³. Below, FoEE examines each of these causes and their effects and puts forward solutions to these problems.

3.1.1 Overexploitation

Overexploitation of biodiversity is relevant to the following major issues:

- 1.) Legal hunting
- 2.) Fishing
- 3.) Illegal hunting (poaching)
- 4.) Excessive collecting of plants and fungi
- 5.) International trade with endangered species

Background

Humans have always hunted, caught or collected animals, fungi and plants – be it for food, fibre, fuel or for pure enjoyment. This exploitation can be but has not always been sustainable. Since pre-historic times, gathering plants and hunting animals have led to the decrease and often extinction of species – from wild cattle to the moa, the dodo, the great auk, the European wild horse, the passenger pigeon¹⁴ and the Zanzibar leopard in 1996. Many more species have retreated into much reduced territory, such as sea turtles (*Chelonia mydas*, *Caretta caretta*) and monk seals (*Monachus monachus*). In large parts of Europe, large predators such as bears, wolves, lynx and wildcats have been systematically eradicated. According to recent studies¹⁵, this eradication has had severe consequences for ecosystems, leading to an increase in the large predators' prey and subsequent decrease in biodiversity.

Extinction has been increasingly recognized as a problem during the 20th century. Due to the personal engagement of committed scientists and activists, as well as nature conservation organisations, species previously hunted to near extinction such as the European bison (*Bison bonasus*) and the Alpine ibex (*Capra ibex*) have been preserved and even successfully reintroduced to parts of their original range. Friends of the Earth Europe's

¹² http://www.foeeurope.org/activities/waste_management/April2011_position_paper_Resource_efficiency_roadmap.php

¹³ Millennium Assessment Synthesis Reports (2005), <http://www.greenfacts.org/en/ecosystems/figtableboxes/figure4-3-drivers-ecosystems.htm>

¹⁴ http://www.stanford.edu/group/stanfordbirds/text/essays/Passenger_Pigeon.html and also at <http://www.eco-action.org/dt/pigeon.html>

¹⁵ James A. Estes, John Terborgh, Justin S. Brashares, Mary E. Power, Joel Berger, William J. Bond, Stephen R. Carpenter, Timothy E. Essington, Robert D. Holt, Jeremy B. C. Jackson, Robert J. Marquis, Lauri Oksanen, Tarja Oksanen, Robert T. Paine, Ellen K. Pickett, William J. Ripple, Stuart A. Sandin, Marten Scheffer, Thomas W. Schoener, Jonathan B. Shurin, Anthony R. E. Sinclair, Michael E. Soulé, Risto Virtanen, and David A. Wardle - Trophic Downgrading of Planet Earth; Science 15 July 2011: 301-306

member groups have successfully contributed to the return of the ibex, the beaver (*Castor fiber*), the European wildcat (*Felis silvestris silvestris*), the lynx (*Lynx lynx*), the Cyprus mouflon (*Ovis musimon orientalis*) and others.

3.1.1.1 Legal hunting

Situation

Many restrictions on hunting and collecting at a national and European level have been established, including the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), the EU's Birds Directive (1979) and the EU's Habitats Directive (1992)¹⁶. These include regulations on the species and numbers which can be legally hunted, as well as which methods can be used. The legal overexploitation of species on land – especially threatened species – has been reduced, and extinction of European species by legal hunting is no longer likely. In fact, reduced pressure from hunting has enabled the species named above and others such as the cormorant, the grey heron and the raven to increase their populations and return to many parts of their former geographic range.

The return of large predators and fish-eating birds is, however, not appreciated by many farmers and fisher-folk, who are concerned about their livestock, and also by hunters and hobby anglers who dislike competitors for their hobby.

FoEE Position:

FoEE sees all wild animals historically present in Europe as part of its rich biodiversity and natural heritage. All member states with suitable habitats for large animals should maintain or re-establish viable, self-reproductive populations that allow for genetic exchange with other populations. Their populations should be allowed to reach favourable conservation status¹⁷. Conflicts with humans or other aims of nature conservation which can occur need to be minimized by wildlife management. This also applies to fish-eating birds and other animals. FoEE believes this is compatible with a living countryside and sustainable farming in Europe. This target should be achieved by applying the existing regulations in the Bern and Bonn Conventions, as well as the Birds and the Habitats Directives – i.e.:

- protecting livestock by suitable means – e.g. fencing or protecting by herd protection dogs, or putting nets above fish ponds where necessary
- refunding livestock losses caused by predators. According to the principle “public money for public goods”, governments must refund protection measures and livestock losses caused by predators.
- allowing derogations from these regulations, such as intended killing of individuals of strictly protected species, only if the species is in a favourable condition, there is no acceptable alternative and one of the reasons listed in Art. 9 Bern Convention¹⁸ or Art. 16 Habitats Directive is evident.

Hunters and anglers alike often claim that predators reduce the amount of kill to which they are entitled. However, hunting and angling now only provide a marginal contribution to feeding the population, and have largely become a leisure activity. The damage done by

¹⁶ This is a success story, due to provisions of the Bern Convention (1979), the EU's Birds Directive (1979) and the Habitats Directive (1992) and their strict implementation.

¹⁷ For the EU, this is a legal requirement laid down in the Habitats Directive. As a matter of coherence, this Concept, refined in DG ENV's note to the habitats committee ((DocHab-04-03/03 rev.3, http://www2.mnhn.fr/evaluation/aide/guide_annexe_I-IV.pdf) should be applied to all European states. For the Berne convention, similar targets must be reached.

¹⁸ See T-PVS/Inf (2011) 23

predators to wild animal and fish stocks of common, unprotected species such as roe deer is not a reason to reduce the number of predators and fish-eating animals and does not entitle anyone to derogations or refunds. Locally reducing predator stocks, however, may be a necessary management measure to save endangered species and is a derogation reason foreseen by art. 9 of the Berne Convention and subsequent EU legislation.

3.1.1.2 Overfishing

Situation

Man's ever-increasing hunger for fish, combined with the increasing 'efficiency' of fishing ships, which are nowadays often floating factories, has led to the general collapse of fish populations and a global overexploitation of stocks. Several fishing practices, such as the use of bottom trawlers and driftnets and the discarding of fish and shark finning, exacerbate the situation and are now back-firing on us.

If intensive fishing continues, a complete breakdown of fish stocks and marine ecosystems will occur within a decade. In Europe, 45% of assessed fish stocks are already fished beyond safe biological limits advised by scientists¹⁹.

On a global level, fishing fleets from Europe and fleets selling on the European market are reducing fish stocks, reducing the catch and food supply for local fisher-folk.

FoEE Position:

FoEE requires that urgent action is taken to end over-fishing both in European waters and in waters used for the European market, and to abolish unsustainable and cruel fishing practices. The CBD strategic plan²⁰, in target 6, demands that by 2020, all fish stocks are managed sustainably and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. The EU Biodiversity strategy's target 4²¹ applies to all areas where EU fishing fleet operate. It requires that the fishing of stocks comply with Maximum Sustainable Yield criteria by 2015, and under the legal requirements of the EU Marine Strategy Framework Directive 2008/56/C, which applies to all commercial fish and shellfish stocks, Good Environmental Status requires that these stocks be within safe biological limits and exhibiting an age and size profile indicative of a healthy stock by 2020.

FoEE wholeheartedly supports these targets and related actions, asks for their strict implementation and application in and by all European states and stresses the need of reducing consumption levels of fish. The Common Fisheries Policy (CFP) and national fishery policies must be reformed accordingly to meet these legal obligations, and must be reformed so that they deliver Food Security with fish stocks being restored and managed to the maximum levels of abundance that current ecological conditions will permit, rather than just be sustained at their currently seriously depleted levels which, due to over-fishing, can no longer deliver food security. In addition, the CFP must create areas closed to fishing centred on the spawning and nursery grounds of the stocks under pressure so that stocks levels can be restored to their maximum potential, and displaced fishermen and their vessels must be re-employed under the CFP as the managers of these closed areas so that they have a financial stake in a new-conservation based CFP which will then be able to restore the fishing industry to health, repair damaged marine ecosystems, and once again

¹⁹ EEA (2009): Progress towards the European 2010 biodiversity target – EEA Report No. 4/2009, ISSN 1725-9177, pp. 38-39, <http://www.eea.europa.eu/publications/progress-towards-the-european-2010-biodiversity-target>

²⁰ Decision X/3, <http://www.cbd.int/decisions/?id=12268>

²¹ EU Biodiversity strategy (COM(2011)244 final, p.14-15; <http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm>

deliver food security for the whole EU population. Subsidies to support industrial fishing must be removed, and reallocated to the CFP's new conservation-based management policies. Further action must also be taken to raise consumer awareness to enable consumers to make informed choices through transparent food labelling.

FoEE furthermore supports local and regional small scale and traditional fishing as a way of life for many communities both in Europe and abroad which can only be sustained if fish stocks are not depleted by industrial fishing.

Another important measure is the creation of Marine Protected Areas and their inclusion in the Natura 2000 or Emerald Network. According to target 11 of the CBD strategic plan, by 2020, 10% of coastal and marine areas must be protected in a Network of Marine Reserves and Marine Protection Areas.

3.1.1.3 Poaching

Situation

Most cases of illegal animal killing (poaching) in Europe are related to protected species of birds. This is illegal both under the Bern convention and the Birds Directive and most subsequent national legislation in EU member states. As recent surveys show²², illegal killing and taking of birds, either for leisure or for consumption as a delicacy, is widespread in many European countries, particularly in Mediterranean and countries in south east Europe, such as France, Malta, Cyprus and the Balkan countries. Illegal shooting of birds and non-selective trapping (with lime sticks, mist nets, sound devices, bow traps, etc) is often seen as a “tradition” that is socially accepted, but it can have severe impacts on bird populations, especially along important bird migratory routes, as in Cyprus and Malta. It has led to the regional extinction of bird species and a reduction in the number of migratory birds.

FoEE Position:

FoEE condemns poaching and illegal killing of birds. Strict enforcement of existing legislation and a “zero tolerance” policy at every level is needed, to include:

- clear positioning of governments and communities against illegal and non-selective bird trapping and killing,
- strengthening of both financial and human resources to be able to control poaching and prosecute poachers,
- public awareness raising about the ecological and social impacts of the problem, and
- appropriate monitoring, with close cooperation between law enforcement agencies and civil society organizations

FoEE supports the Council of Europe’s Larnaca declaration²³ and all the measures included therein.

3.1.1.4. Excessive collecting of plants and fungi

Just as hunting has affected animals and fishing reduces fish stocks, collecting plants and fungi (by picking or uprooting them) can lead, and has led, to their reduction and extermination.

²² <https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=1959997&SecMode=1&DocId=1762044&Usage=2>

²³ <https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=1960735&SecMode=1&DocId=1806244&Usage=2>

FoEE Position:

FoEE is against overuse of individual plant and fungi species, i.e. against use leading to a decrease of stocks. FoEE demands strict protection and management of endangered species and their habitats by national law and enforcement of relevant legislation.

3.1.1.5 International trade in protected species**Situation**

International trade in endangered species can greatly increase the pressure on endangered species by creating economic incentives for hunting. Demand for ivory has greatly threatened the African Elephant, demand for furs and skins has imperilled large cats and led to the extinction of some sub-species.

Since 1974, the international trade in endangered species has been subject to the Conference on International Trade of Endangered Species (CITES²⁴) agreement. This international treaty ensures that trade does not threaten endangered species by regulating the number of certain species that can be traded, and by prohibiting the trade of other endangered species or parts thereof completely.

FoEE Position:

FoEE supports this policy and demands the consequent application and national implementation of CITES regulations. Additional species, such as bluefin tuna and some whale species, must be included in CITES.

3.1.2 Land use and land use change**Background**

Land use and land use change is an equally prominent and visible driver of biodiversity loss. Most of the planet's land is used in some way by man, be it as farmland, as managed forest or plantations, or for habitation, tourism, traffic or energy supplies. Compared with other continents, land in Europe is heavily used, with only 1% of the land area unmanaged. In Russia and North America, more than 20% of forest land is still wild²⁵. Land use change can be abrupt – i.e. through the conversion of forests into arable land (or plantations), or gradual – e.g. by increasing the frequency of mowing meadows, by putting more and heavier animals on farmland, or by gradually removing small features from the landscape, such as bushes, ponds and stones. These changes may increase the short-term productivity of the land, but they reduce the structural diversity, and with it the biological variety, of used areas. Land use change does not only concern the quality of the affected areas; it also often leads to the disruption of ecological connectivity, e.g. by roads, canals or large monocultures. According to the CBD strategic plan, target 7, all areas under agriculture, aquaculture and forestry are to be managed sustainably, ensuring conservation of biodiversity by 2020 at the latest.

3.1.2.1 Agriculture**Situation**

Agriculture - in the form of the extensive cultivation of meadows and fields by a large number of small-scale peasant farmers – has historically produced diverse habitats for many plant and animal species, both in the fields themselves and in the surrounding structures, such as hedgerows and dry stone walls. Since the 20th century, however, intensification and mechanisation of cultivation – including the removal of field boundaries, larger fields, more

²⁴ <http://www.cites.org>

²⁵ Jari Parviainen, Organisation Metla, Presentation at Regional Forest Information Week, Geneva, 21.3.2011, slide 4; <http://www.unece.org.unecedev.colo.iway.ch/fileadmin/DAM/timber/meetings/20110321/Parviainen.pdf>

frequent human intervention, and the excessive use of chemical fertilizers and pesticides, have led to monocultures, nutrient loading (where excessive levels of nutrients build up), pollution and to a decrease in biodiversity. In many parts of Europe, large-scale factory farms and industrial agriculture now dominate, producing large monotonous landscapes. Small, isolated or steep fields are seen as unproductive/unattractive and are no longer managed or far harder to manage, also causing a loss of biodiversity. In both cases, the (re-) establishment and maintenance of species-rich habitats requires restrictions or active management measures, which must be undertaken for the sake of biodiversity and, indeed, better farming practice. Rich biodiversity is not a by-product of today's intensive farming practices.

Extra efforts are therefore necessary to maintain and extend biodiverse areas, as well as increase biodiversity on farmed land. Agricultural subsidies for farmers in Europe are already conditional to basic practices to protect biodiversity. Additional funding is provided for specific or enhanced measures protecting the environment, such as the so called "agri-environmental measures".

However, the preconditions are often not strict, are not thought through enough or are not adequately implemented. A recent study²⁶ has shown that, at EU level, there is only roughly a third of the necessary money available to make land management sustainable in terms of biodiversity. Far greater efforts are needed to achieve the CBD strategic plan's target 7 to make all land use in Europe sustainable²⁷.

FoEE Position

FoEE sees Europe's future farmers as producers of food, as the main actors to achieve food sovereignty in Europe, and as being responsible for maintaining and enhancing a biodiverse landscape. Based on the principle "Public money for public goods", farmers must receive funds only if their farming practices respect the environment and preserve and increase biodiversity. This means:

- Agricultural policies must be reformed to **provide the right framework** for truly sustaining and enhancing biodiversity. The **environmental standards of farming must be raised** in the form of well defined environmental measures, and **compliance with these standards** must be a **prerequisite** for receiving any funding:
 - Farmers **fully must respect relevant environmental, animal welfare, plant and animal health legislation** ("Cross compliance" in the EU)
 - On every farm, there should be '**biodiversity preference**' or 'ecological focus areas' covering 10% of the total area (no use of fertilizer or pesticides; flower strips, saving or planting hedges, puddles, rock piles etc).
 - Any land use change of **permanent grasslands** must be halted.
 - Farmers should not be allowed to plant the same crop year after year but practice real **crop rotation** (including increased **legume** production on their fields).

- Agricultural funding has a key role to play in **financing** the necessary measures in high nature value (HNV) farmlands and protected areas which have a high level of **biodiversity**. On top of compliance with minimum environmental standards, sufficient **additional incentives** should be provided for this and for environmentally-friendly

²⁶ IEEP, July 2011: Costs of delivering environmental benefits through agriculture and forestry management, <http://www.ieep.eu/topics/agriculture-and-land-management/high-nature-value-farming/2011/07/costs-of-delivering-environmental-benefits-through-agriculture-and-forestry-management>

²⁷ Exact wording of target 7 of the CBD Strategic plan: "By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity."

practices such as **agri-environmental measures**, measures for implementing Natura 2000 and Water Framework directive, and for organic farming. This means that the funds available for this purpose must be raised. In the EU, at least 50% of the CAP's rural development funds must be foreseen for agri-environmental measures and other measures to enhance biodiversity in every member state.

- In order to be efficient, payments for biodiversity-related measures should be **results-based**²⁸ and subject to delivery.
- **Funding levels for each single biodiversity related incentive measure** must be sufficiently increased to incentivize farmers to implement them, and to increase the area under those measures.
- **Small-scale farming** should be encouraged to ensure more diversity in the landscape, e.g. by limiting payments per farm, and supporting local and regional economies. (For the EU, see FoEE's position on the future of the CAP²⁹).
- **Imports of agricultural products** that lead to land use change in developing countries, notably for animal feed (soy), should be reduced substantially by 2020 in order to reduce pressure on biodiversity and rural communities, as well as mitigate against climate change.

3.1.2.2 Genetically Modified Organisms (GMOs)

Situation

One of the biggest threats to biodiversity pushed by the agro-industry is the cultivation of genetically modified (GM) crops, in field trials as well as through commercial cultivation. The inadequate assessment of environmental risks, which fail to include a proper assessment of the impact on biodiversity, was criticised by EU environmental ministers in December 2008. Evidence from the main GMO producing countries and from researchers across the globe has affirmed the negative environmental and socioeconomic impacts of GMOs and the uncertainty of their impact on health. They exacerbate the worst part of the agro-industrial model, increasing the use of agrochemicals, promoting monocultures and increasing corporate control of the food chain.

Position

FoEE rejects the release of GMOs into the environment and their use in agriculture. Evidence has shown that they do not provide any of the benefits claimed by the biotech industry. Better, safer and more sustainable alternatives exist for the food and farming sector. FoEE promotes food and farming models based on food sovereignty, small-scale farming and agro-ecological practices, promoting agro-biodiversity and traditional knowledge – all of which have served us well for centuries. To increase transparency about existing GMOs, the 'Clearing house mechanism' in the Cartagena Protocol should be extended with a database of all GMOs that have ever been trialled or cultivated – whether they have been authorised or not. Governments must ensure that farmers can buy GMO-free seeds.³⁰

²⁸ As already practiced in some German Länder, such as Baden-Württemberg and Thuringia

²⁹ A New Food and Agriculture Policy for the European Union – FoEE Position Paper on the 2013 Reform of the Common Agricultural Policy, http://www.foeeurope.org/agriculture/CAP_PP_full_final.pdf and our CAP background paper: http://www.foeeurope.org/sites/default/files/press_releases/background_brief_cap_proposals2011-12_0.pdf

³⁰ <http://www.ekah.ch/fileadmin/ekah->

dateien/dokumentation/gutachten/EKAH_Ethische_Anforderungen_an_Freisetzen_D_111202.pdf

3.1.2.3 Forests

Situation

32 per cent of Europe's land area is covered by forests and plantations. Forests are the natural vegetation in Europe – over 80% of Europe³¹ would be covered by them had humans not intervened. Forests are widely perceived as wild, yet they are managed to a large extent. Monoculture tree plantations and age-class stands with limited structure are widespread; less than 1 per cent is untouched and left to itself – in North America and Russia, this percentage is around 20%³². The EU Biodiversity strategy sets out the need for forest management plans for the sustainable forest management of all publicly-owned forests and for larger forests that receive EU funding.

FoEE Position

FoEE wants to increase biodiversity in Europe's forests, while still enabling them to produce sufficient wood for European demand. FoEE envisages a different multifunctional use of European forests. Plantations are not forests. Managed forests should be managed sustainably – including in terms of biodiversity. This means:

- They should be composed of mixed stands of native species adapted to the site (no monocultures, no aliens such as Douglas-fir (*Pseudotsuga menziesii*) Eucalyptus (*Eucalyptus* spp.), Acacia (*Acacia salina*) and no GM trees
- They should contain sufficient deadwood and old-growth trees
- No clear-cutting at all in temperate or Mediterranean forests, and no clear-cutting of more than 1 ha in Scandinavian nemoral and boreonemoral forests. In boreal forest the clear-cuts might be larger in size - the important thing is that they should be designed based on local ecological conditions and natural forest dynamics.
- Management of forests must support endangered species and protected area targets.
- Sustainable forest management must be clearly defined, notably in terms of biodiversity. The definition currently used in Europe³³ is still very broad, addresses only maintenance (status quo) of biodiversity and needs further clarification and indicators in order to reliably support biodiversity
- Any forest management must be fully accountable /open to the public and civil society and take their opinion into account. It should not only be based on what the forest sector itself wants
- Management plans are necessary for all managed forest areas, taking these principles into account.
- Afforestation in grasslands with a high level of biodiversity should be avoided – EU and national subsidies should be refocused on restoration of forests that increase biodiversity and are crucial for climate change adaptation, such as floodplain forests.

³¹ <http://www.fao.org/DOCREP/003/X6953E/X6953E05.htm>, Chapter "History"

³² Presentation of Jari Parviainen, Organisation Metla, presented at the UNECE timber Committee, Geneva, March 2011 - <http://www.unece.org/fileadmin/DAM/timber/meetings/20110321/Parviainen.pdf>, Slide 4

³³ The term sustainable forest management (SFM) was defined by the Ministerial Conference for Protection of Forests in Europe in Helsinki 1993 and adopted by the EU Forestry Strategy of 1998: "[sustainable forest management means:] the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems".

- Many plants, fungi and animals depend on old-growth, undisturbed forests for their existence. A representative European network of unmanaged forests (wilderness) must be established, encompassing 17% of forest area in all countries and eco-regions³⁴.

These principles and demands must be integrated into the current policy processes, such as the legally binding instrument on forests, the EU and national biodiversity strategies, and EU rural subsidies. This must be done with legal requirements. Certification of forests has unfortunately in many cases failed to ensure sustainable management – especially in an international context, where plantations, clear-cutting and the destruction of native vegetation, as well as human rights abuses, occur despite certification.

3.1.2.4 Europe's impact on forests worldwide

Forests are endangered, particularly in tropical countries. Globally, they are declining by 13 million ha every year³⁵. Most of this is due to demand for land for agriculture or for other purposes (see below: Land grabbing), but some of it also for wood and timber – be it legally or illegally harvested.

Privatization increases the pressure on forest biodiversity due to increased interest in maximizing profits for timber production, both in Europe and globally.

Initiatives to maintain and enhance the contribution of forests to climate change mitigation under the UNFCCC climate convention (Reducing Emissions from Deforestation and forest Degradation, REDD+) can contribute to forest conservation if necessary principles and safeguards are adhered to. But REDD+ also risks destroying biodiversity and violating peoples' rights. Additionally, if implemented as a market-based mechanism, it will shift responsibility for climate change mitigation away from industrialized countries, rather than strengthening overall mitigation efforts.

FoEE position:

FoEE demands:

- transparent declaration of origin for all sources of timber and paper pulp,
- public procurement to use recycled paper,
- an import ban on timber and pulp from countries whose natural forest area is further declining through human clearing,
- a strict application of Forest Law Enforcement, Governance (and Trade)(FLEG (-T)) legislation to stop illegal logging³⁶,
- a total abandonment of international market mechanisms and privatization policies for forests,
- an approach to reducing emissions from deforestation and forest degradation which takes into account all the functions of the forest (such as biodiversity, livelihoods, adaptation benefits etc), rather than looking at carbon exclusively. REDD+ must be rejected if it is market-based and can be used for offsetting industrialized countries' emissions, or if strict biodiversity and social safeguards are not met.

³⁴ CBD Strategic plan has, in its target 11, decided to protect a representative 17% on land – this logically applies to all forests. In order to ensure appropriate development, these forests should be able to develop naturally.

³⁵ FAO Global Forestry Resources Assessment, <http://www.fao.org/forestry/fra/fra2010/en/>

³⁶ Forest Law Enforcement, Governance (and Trade) Rules aim at reducing illegal logging by the need to declare from which source introduced wood comes from (e.g. Declaration obligation in Switzerland) and sanctioning imports of illegally harvested timber - see for EU: http://ec.europa.eu/environment/forests/illegal_logging.htm

3.1.2.5 Energy production and use

Situation

Energy use has a significant impact on the environment. The use of fossil fuels leads to higher atmospheric carbon levels and accelerates climate change, and thus affects both humans and biodiversity. Nuclear energy bears immense dangers for people and biodiversity. FoEE has consistently asked for these to be phased out, both by reducing energy consumption and by replacing the remaining supply with renewable sources. European policy is partly following these demands – in consequence, the demand for renewable energy sources is rising. However, these can also cause negative impacts on nature:

- Hydropower dams block watercourses and keep fish and other migratory species from moving freely.
- Wind farms can cause fatalities to birds and bats, although they do so to a considerably lesser extent than fossil fuel plants, cars, cats and buildings³⁷.
- Demand for woody biomass for large scale electricity generation or for use as agrofuel, driven by EU renewable energy targets, is contributing to increasing exploitation of forests/rates of deforestation in Europe and globally.
- Industrially produced biomass and solar energy farms compete with other land uses, such as food production and biodiversity.

FoEE position:

Friends of the Earth groups around Europe are calling for binding EU energy saving targets, and strong and social policies at the local and national level to ensure that every country contributes to saving energy³⁸. In addition to this, the extension of renewable energy sources – such as wind, solar and wave energy – is important for phasing out false energy solutions, such as nuclear energy, agrofuels and fossil fuels (coal, oil and natural gas). In doing this, however, biodiversity concerns must be respected:

- The additional potential for hydropower is small in Europe. Existing dams should be made permeable for fish by fish passes that really work. Where smaller dams do not contribute much to energy, but still constitute major barriers for fish and other aquatic animals, they should be removed. FoEE calls for Europe's rivers to be allowed to flow freely so that salmon, eels and other migratory fish can once more reach their spawning grounds. Turbines should be designed and constructed to keep fish mortalities low.
- Wind energy turbines should be concentrated and built on sites with relatively little impact on birds, bats and threatened species – spatial planning and ecological impact assessments (EIA) can assist in this and should be a prerequisite.
- Solar energy should be extended, but should avoid encroaching on fields used for other purposes (e.g. prime agricultural land and nature protection areas). There is still a lot of space on Europe's roofs in towns and cities where most of the energy is needed. Solar energy can also be developed in some dry and hot areas with non-arable land with limited impact on biodiversity
- Biomass can be used to supply some energy and heating at a small local level, but must be seen as a limited resource that needs to be used in sustainable quantities (balanced with competing uses), harvested in ways that do not disrupt ecosystems, and only for the most efficient uses (e.g. combined heat and power). Reliance on biomass from other continents should be prohibited and the true environmental, social

³⁷ http://en.wikipedia.org/wiki/Environmental_impact_of_wind_power - see chapter "birds"

³⁸ <http://www.foeeurope.org/energy-savings>

and climate impacts must be considered before any public support or subsidy is made available.

- Agrofuels – produced by converting biomass into liquid fuels - creates considerable demand for new land, fuelling rapid land use change and the conversion of natural habitats into agricultural land. Other knock-on impacts include rising food prices and rising poverty and hunger. The indirect impacts of expanding agriculture massively increases biodiversity loss and greenhouse gas emissions, rendering agrofuels counterproductive and inappropriate in addressing climate change. FoEE calls for a halt to mandatory targets and incentives that support the increased use of agrofuels³⁹.

3.1.2.6 Infrastructure

Situation

Land use change can have an impact not only the area concerned through the direct loss of habitats and the impact on biodiversity, but also by disrupting ecological connectivity – especially as a result of fragmentation by new roads and settlements, and as a result of intensively cultivated agricultural areas.

FoEE position:

Increasing pressure on the landscape demands an efficient integrated approach to satisfy different demands – through legislation and spatial planning. This should:

- Stop landscape destruction and freeze urban sprawl by restricting areas for building at the current level and incentivising the reuse of existing urban space and buildings
- Reduce incentives for traffic.
- Implement existing concepts such as the Pan-European Ecological Network (PEEN) and use an integrated approach to provide additional ecological corridors and hubs as green infrastructure.
- Create connections between key biodiversity areas, including “green bridges” and amphibian tunnels under roads, railways etc.
- Integrate these into spatial planning.
- If new transport infrastructure is developed, railways should be prioritised, as they tend to have less environmental impact per person travelling.

3.1.2.7 Protected areas and other area-based instruments

Situation

Protected area status and similar area-based instruments are important for protecting particularly valuable and biodiversity-rich parts of the landscape from land-use change, from hunting, gathering and collecting, and from other causes of biodiversity loss. They provide cornerstones to prevent greater biodiversity loss, but in themselves are not enough to support biodiversity and ecological restoration.

FoEE Position:

The CBD’s Strategic Plan target 11 calls for the protection of 17% of the total land area and of 10% of sea through an effective and equitably managed system of connected protected areas by 2020. FoEE demands that all European countries comply with these targets, ensuring local stakeholders are involved and that the system comprising of Natura 2000,

³⁹ <http://www.foeeurope.org/node/593> and

http://www.foeeurope.org/sites/default/files/press_releases/bad_business_biofuels_February2012.pdf

Emerald and other areas of IUCN Categories I-IV as well as 5% of wilderness areas is completed and fully operational by 2020 at the latest.

Key instruments to get there are:

- Implementation of existing legislation at the European level (Bern Convention, Natura 2000, Environmental Liability Directive) and at the national level (National Parks, Protected areas, protected habitats, Inventories...). This includes:
 - Finalisation of the Natura 2000 network by 2012 and of the Emerald Network by 2015; with site designation approved in a biogeographical process involving experts and stakeholders.
 - Management plans are in place for all protected areas three years after their designation at the latest, based on a process involving all stakeholders. Management includes maintenance, non-management or – in order to improve conservation status – restoration of degraded ecosystems such as peatlands and forests.
 - The relevant species and habitats are regularly monitored on every site
 - All designated sites (European and national) must be efficiently and indefinitely protected by national law.
- There must be adequate finance and incentives (through the CAP and other sources, see above) to fulfil the targets of the Bern Convention and Natura 2000. The annual costs of implementing the Natura 2000 network are estimated as €5.8 billion per year for the EU-27⁴⁰, of which only 20% are presently financed⁴¹. This and other recent findings show that funding must be increased 5-10 fold to achieve Favourable Conservation status by 2020⁴².
- A representative network of wilderness areas is selected and designated in a systematic fashion.

If these measures are properly and fully applied, they will also contribute substantially to the fulfilment of CBD strategic plan target 5 (loss of natural habitats is close to zero), 14 (ecosystems that provide essential services are restored and safeguarded) and 15 (restoration of at least 15% of degraded ecosystems as contribution to climate change mitigation).

3.1.2.8 Impact of Europe on land use change overseas

Situation

How we live in Europe triggers massive land use change in other parts of the world. Demand for animal feed (soy), meat, prawns, palm oil and agrofuels has created a massive increase in demand for agricultural land. As the agricultural frontier expands, land is grabbed and forests are felled. Twenty million ha outside of Europe are used for producing animal feed for Europe; 78 percent of animal feed is imported⁴³. This demand also has an indirect impact, with for example, users of vegetable oils being forced to switch to palm oil and soy because of the use of oilseeds for agrofuels in Europe. This triggers indirect land use change (ILUC) involving land grabbing, habitat destruction and substantial greenhouse gas emissions. A report by the European Commission's Joint Research Centre (JRC) estimates that 85 per cent of biodiversity will be damaged across 17,000 square kilometres of natural habitat that

⁴⁰ http://ec.europa.eu/environment/nature/natura2000/financing/docs/natura2000_costs_benefits.pdf

⁴¹ http://ec.europa.eu/environment/nature/natura2000/financing/docs/financing_natura2000.pdf

⁴² <http://www.ieep.eu/topics/biodiversity/financing-biodiversity/2011/03/financing-natura-2000>

⁴³ <http://www.agrarkoordination.de/lobbybriefaktion.html>

is at risk of being converted to farmland as a result of EU biofuel targets⁴⁴. Similarly, setting aside forest areas for carbon offsetting (CDM, REDD+) can have similar impacts on biodiversity and local people.

FoEE Position

The impact of European consumption must be reduced, by:

- Reducing overall demand by consuming less overall but consuming more European products.
- Reducing the daily consumption of animal products, especially meat and dairy.
- Closed production cycles - i.e. by recycling, efficiently using raw materials and avoiding imports, for example by growing feedstocks in Europe and ensuring crop rotations.
- Cutting carbon emissions at home by at least 40% by 2020.⁴⁵
- Abolishing targets that encourage the use of agrofuels and ensuring all indirect land use change impacts are taken into consideration.
- Avoid market mechanisms that incentivise land grabbing, e.g. CDM, a “green development mechanism” or market-based REDD+.
- Ensure the full and effective participation of local and indigenous peoples, including their free, prior, informed consent as laid down in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), in all mechanisms and processes involving their land, including CDM, REDD+, ABS and designation and management of protected areas.

3.1.3. Climate change

Situation

Biodiversity is affected by climate change: warmer and drier areas are moving northward and up the mountains. While warmth-loving species such as the Scarlet dragonfly (*Crocothemis erythraea*)⁴⁶ and butterflies can extend their range north or move to higher altitudes⁴⁷, species which prefer cool and humid climates such as other dragonfly species suffer and vanish^{48,49}. Plant species and vegetation takes longer to adapt, if at all. Biodiversity not only changes as a result of climate change; it can also play a role in reducing it (mitigation). Biodiversity loss therefore exacerbates the catastrophic impacts of climate change and removes some of the solutions to climate change – both adaptation and mitigation. Ecosystems store considerable amounts of carbon and other greenhouse gases such as methane, which can cause additional carbon emissions and accelerate climate change when they are released. Forests, wetlands and peatlands have a particularly key role to play

⁴⁴ http://re.jrc.ec.europa.eu/bf-tp/download/Technical_Note_EU24817.pdf, Appendix 2

⁴⁵ see FoEE climate position, <http://www.sei-international.org/-news-archive/1794>

⁴⁶ Ott, J. (2007) The expansion of *Crocothemis erythraea* (Brullé, 1832) in Germany – an indicator of climatic changes. in: B. K. Tyagi (Ed.) (2007): Odonata - Biology of Dragonflies. Scientific Publishers (India), pp. 210-222.

⁴⁷ Wilson, R.J., Gutiérrez, D., Gutiérrez, J., Martínez, D., Agudo, R. & Monserrat, V.J. (2005) Changes to the elevational limits and extent of species ranges associated with climate change. *Ecol. Lett.* 8, 1138-1146, http://www.escet.urjc.es/biodiversos/publica/Wilson_et_al_EcolLett_8.pdf;

For Overview, see Berne Convention document T-PVS/Inf(2009)08revE, p. 8f.,

<https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=1573870&SecMode=1&DocId=1478896&Usage=2>

⁴⁸ Ott, J. (2007): Does the NATURA 2000 web still function? The effects of climatic changes on dystrophic waters and their dragonfly fauna in the biosphere reserve “Pfälzerwald”. pp. 921-922 in: Bunce, R.G.H., Jongman, R.H.G., Hojas, L. & S. Weel (2007): 25 Years of Landscape Ecology: Scientific Principles in Practice, Proceedings of the 7th IALE World Congress, Wageningen

⁴⁹ Settele, J., Penev, L., Georgiev, T., Grabau, R., Grobelnik, V., Hammen, V., Klotz, S., Kotarac, M. & I. Kühn (Eds) (2009): Atlas of Biodiversity Risk. Pensoft Publishers, Sofia-Moscow, 280 pp.

here⁵⁰. Studies are showing that our marine environment is particularly vulnerable to climate change with marine ecosystems changing (warming and acidifying) faster than terrestrial environments.

FoEE Position

The priority measure for reducing the impacts of climate change is to radically cutting carbon emissions and phase-out fossil fuels⁵¹. Unfortunately, even if achieved, the atmosphere will need many years to react and stabilise. It is therefore important to make ecosystems more resilient, including species at risk from climate change.

- To make vulnerable ecosystems more resilient, other pressures must be removed and adequate water provision must be ensured.
- Habitats must be connected (with high quality green infrastructure) to strengthen species by genetic exchange and to enable species to migrate to more suitable habitats.
- Marine environments require greater protection though the sustainable management of fish stock and protection of marine environment to help them recover and be more resilient to climate changes.
- Ecosystems that play a role as carbon sinks, especially forests, wetlands and peatlands, must be maintained in terms of both area and quality, and, as target 15 of the CBD Strategic Plan asks, restored by 15% by 2020.
- These measures should be applied in every country to help keep climate change within limits. These measures should not contribute to greenhouse gas emission targets, or used to offset fossil carbon emissions in other countries for false solutions such as CDM or market-based REDD+. Every country should cut its own domestic carbon emissions.
- Geo-engineering of the atmosphere, the seas and earth's surface is an even more dangerous "false solution" to reduce climate change and a distraction from taking the necessary actions mentioned above. The idea is to cool the atmosphere e.g. by releasing sulphur aerosols (Solar radiation management, SRM) or to manipulate the natural environment to sequester carbon by fertilizing the oceans, causing algae to bloom, (which then take up carbon and sequester it on the ocean floor when they die). These changes are hard to control and are likely to have significant impacts on ecosystems and on biodiversity, for example endangering organisms that thrive in nutrient-poor environments. FoEE strongly opposes such manipulation of nature and calls for strict implementation of the CBD decision to restrict geo-engineering⁵².

⁵⁰ Berne Convention Recommendation No. 143 (2009) of the Standing Committee, adopted on 26 November 2009, on further guidance for Parties on biodiversity and climate change

⁵¹ This would also reduce ocean acidification, which is caused by CO₂ directly, and endangers coral reefs and other vulnerable marine habitats

⁵² CBD decision X/33.paras w and x read:

“(w)Ensure, in line and consistent with decision IX/16 C, on ocean fertilization and biodiversity and climate change, in the absence of science based, global, transparent and effective control and regulatory mechanisms for geo-engineering, and in accordance with the precautionary approach and Article 14 of the Convention, that no climate-related geo-engineering activities⁷⁶ that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts, with the exception of small scale scientific research studies that would be conducted in a controlled setting in accordance with Article 3 of the Convention, and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment;

(x)Make sure that ocean fertilization activities are addressed in accordance with decision IX/16 C, acknowledging the work of the London Convention/London Protocol”

3.1.4. Pollution & nutrient loading

Situation

Despite great achievements in reducing or banning the release of harmful substances into the environment, pollution is still an important threat to the environment. Highly toxic substances such as DDT are now banned, pollution from phosphates has been abolished by using different detergents and even acid rain is being reduced by filters. However emissions from traffic and agricultural fertilizers and pesticides such as the newly introduced neonicotinoids remain a key cause of biodiversity loss in vulnerable habitats, such as peatlands, wetlands, heaths, grasslands and forests. In most parts of Europe, nitrogen and ammonia levels are far above the levels which can be supported by the soil and ecosystems (critical load)⁵³, causing eutrophication of habitats and water, and loss of species adapted to low nitrogen levels. The use of chemical pesticides directly kills species and contaminates groundwater and other bodies of water. According to the CBD's strategic plan (target 8) pollution, including from excess nutrients, must be brought to levels that are not detrimental to ecosystem function and biodiversity by 2020.

FoEE Position

Nutrient loading and pesticides should be reduced to sustainable levels (i.e. levels not exceeding critical loads⁵⁴) as soon as possible. For this, the following measures should be implemented:

- The CBD Strategic plan target 8 must be strictly implemented, as well as related National and EU legislation, e.g. the EU nitrates directive (91/676/EEC) and the directive NEC (National Emission Ceilings, 2001/81/EG) which aims to reduce ammoniac emissions, more than 90% of which originate from livestock.
- Nutrient cycles should be closed by compulsory crop rotation with a minimum of three different cultures and 20% protein crops including clover grass. This serves to protect the climate (humus balance), biodiversity, water, resources and increases the supply of home grown protein crops.
- Reduce additional feeds from outside farms in order to achieve an equalised nitrogen balance at farm level.
- Support for sustainable protein crops:
 - Development and expansion of sustainable protein crops in the EU, which will also lead to a reduction in nitrogen imports (e.g. soy). Reducing negative impacts on water, climate, and social conditions in third countries is of key importance here.
 - Incentives for farmers to change to grassland meat and dairy production
 - Incentives for consumers to change their consumption habits (e.g. tax on animal proteins and sugar)
 - Promote sustainable models of agriculture based in agroecological practices.
- Strict implementation of the Basel Convention on Waste and the Rotterdam and Stockholm Conventions on pesticides.

3.1.5. Invasive Alien Species

Situation

Invasive Alien Species (IAS) are species that have been introduced to regions of the world where they did not previously occur; they are among the greatest threats to biodiversity on

⁵³ EEA (2009): Progress towards the European 2010 biodiversity target – EEA Report No. 4/2009, ISSN 1725-9177, p. 26; <http://www.eea.europa.eu/publications/progress-towards-the-european-2010-biodiversity-target>

⁵⁴ "a quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge" (UNECE, 2008)

islands and can cause a complete change to ecosystems as they upset the ecological balance. In Europe, invasive alien species also change ecosystems. While their rate of establishment in terrestrial and freshwater ecosystems is levelling off, the number of alien species is steadily growing in Europe's marine and estuarine systems⁵⁵. Target 9 of the CBD strategic plan says that invasive alien species and pathways must be identified and prioritized, priority species must be controlled or eradicated, and measures must be in place to manage pathways to prevent their introduction and establishment.

FoEE Position:

FoEE agrees with the CBD target. In order to achieve this:

- priority IAS's must be controlled or eradicated, especially within protected areas
- pathways (such as via hull fouling or being carried in ballast water, spread by bird feed, release of pets, spreading from gardens ...) must be identified and managed to prevent the introduction and establishment of new IAS.
- FoEE welcomes the EU Biodiversity Strategy's Measure (action 16) to develop a dedicated legislative instrument to combat IAS by 2012.

3.2. The challenges of protecting biodiversity

Overexploitation, land use and land use change, climate change, pollution and invasive alien species are all the consequences the way we live. Our current economic model fails to work within ecological or environment limits, putting nature conservation on a direct collision course with short-term economic growth. The market economy, coupled with lax regulation of corporations' behaviour and liability, too often leads to the destruction of habitats and a failure to prioritise the protection of ecosystems – the very basis of our existence in the first place.

This chapter explains these problems and presents our demands for change.

3.2.1 Lack of public and political awareness

Situation

According to recent opinion polls, the number of people who know what biodiversity is, is increasing, but the number of Europeans that think it is endangered in their home country is falling^{56,57}. Around half do not think they will be personally affected, and 78% have never heard of Natura 2000. While biodiversity is generally seen as being worth caring about and of positive value, when it comes to specific examples, protecting biodiversity is seen as less important when there is an apparent clash with economic issues. For example, none of the complaints filed on the infringement of Natura 2000 rules have as yet resulted in any projects being dropped (although some have led to improvements)⁵⁸. In too many cases, nature conservation was seen as a secondary concern to major infrastructure plans⁵⁹.

⁵⁵ The European environment – state and outlook 2010 (SOER 2010), Chapter 3, p. 53; <http://www.eea.europa.eu/soer/synthesis/synthesis/chapter3.xhtml>

⁵⁶ <http://www.gfsbern.ch/News/tabid/177/itemid/346/amid/1151/wahrnehmung-und-einstellung-zur-biodiversitt.aspx>

⁵⁷ http://ec.europa.eu/public_opinion/flash/fl_290_en.pdf

⁵⁸ e.g. the route of a motorway planned in Hesse (Germany) was changed because it would have destroyed the region's largest population of Crested Newt (*Triturus cristatus*). The new route not only avoided this, but was considerably cheaper.

⁵⁹ e.g. the extension on Frankfurt airport (Germany) led to the destruction of valuable old-growth oak forests protected by Natura 2000, containing several Natura 2000 species. In Győr (Hungary) a car factory was built on a Natura 2000

FoEE position

It is important that to further raise public and political awareness of the threats to biodiversity both globally and in Europe. FoEE supports the CBD SP target 1: “By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.” Individual awareness and respect for biodiversity and its values must be enhanced.

FoEE calls on countries to:

- Develop national and regional CEPA strategies (Communication, Education and Public Awareness) as part of National Biodiversity Strategies.
- Governments must do more to communicate the intrinsic value and meaning of biodiversity to everyone.
- Knowledge of species and habitats must be taught more in schools and universities.
- Nature education by the state and by NGOs must be up-scaled and reliably financed.

3.2.2. Markets without limits, business without rules

Situation

Under the current political and economic system, the market takes precedence over social aspects and environmental concerns and limits. Unrestricted economic growth and corporate power not only fuel over-consumption, but also lead to many of the direct causes of biodiversity loss. Governments with significant fishing industries block agreements to stop over-fishing, industrial farming lobbies and agri-businesses block progress to make agriculture more sustainable, and politicians and business lobbying groups throw their weight behind new roads, building plans and prestige projects. The massive decline in biodiversity is either overlooked, or appears to be accepted as an unfortunate but necessary collateral damage associated with economic growth.

Within the wider context of the urgent need to develop an economic model that respects ecological, social and environmental limits, there exist key mechanisms that can begin to address the short-comings of the current neo-liberal agenda.

FoEE position

FoEE believes that governments have the power, the means and a moral obligation to guide the economy so it serves society and its needs within ecological and environmental limits. A number of principles have already been agreed at the international level and should be immediately implemented:

- Both Decision X/3 and target 3 of the CBD Strategic plan call for the removal and redirection of perverse incentives. According to the TEEB study⁶⁰, subsidies for fossil fuels make up over US\$ 300 billion annually, a third of global subsidies. Subsidies for agricultural overproduction are another important incentive which should be redirected (and not just saved) to reduce pressure on biodiversity and finance its protection.
- FoEE strongly supports the use of positive incentives for biodiversity. This is easier to achieve than calculating values for ecosystem services – what counts is the effect of the incentives. Examples include agri-environmental measures under the CAP, top-

site although other potential sites were available near Győr which were not protected. In Hamburg, Germany's largest freshwater intertidal marshes had to make way for an airplane factory extension.

⁶⁰ The Economics of Ecosystems and Biodiversity for national and international policy makers. Summary: responding to the value of nature, p.5 – <http://www.teebweb.org/ForPolicymakers/tabid/1019/Default.aspx>

ups for farmers who take measures to support biodiversity and the redistribution of tax revenues to communities or farmers who do more for biodiversity.

- Friends of the Earth supports the “polluter pays” principle and its practical application. When someone has damaged the natural environment, he must pay for its restoration. This principle was agreed by the OECD in 1972⁶¹ and as principle 16 in the Rio Declaration on Environment and Development (1992)⁶². It is incorporated in the Environmental Liability directive (2004/35/EC) and articles 6 and 12 to 16 of the Habitats Directive as well as in Art. 9 of the Bern Convention. FoEE calls for strict implementation of the principle and the relevant legislation.

3.2.3. The dangers of commodifying nature

Situation

Given that the real value of biodiversity is rarely taken fully into account, a number of attempts are underway to give biodiversity a financial value. Governments and businesses alike are busy exploring the valuation of nature as a way to address the loss of biodiversity.

One important example is the TEEB (The Economics of Ecosystems and Biodiversity) study, which argues:

“By failing to account for the value of ecosystems and biodiversity, we will make the wrong choices.”⁶³ It goes on to explain that the value of biodiversity and ecosystems is hidden but can be made economically visible by demonstrating the values behind it. European policy makers have taken up this idea and are intensively debating how to assess the exact financial value of ecosystem services and how to integrate them into the economic system and better informed policy- and decision-making. They have commissioned a mapping exercise of Europe’s ecosystems services.

While there may be merit in estimating the economic losses that occur as a result of destroying biodiversity, FoEE sees many dangers if this results in putting a price tag on nature in order for it to be traded as another money-making commodity. Internalising the costs of water pollution from agriculture may be one thing, but putting a simple economic value on incredibly diverse ecosystems which support species that have evolved over thousands of years, is much more problematic.

Friends of the Earth considers that there are a number of problems in exactly assessing and pricing nature’s financial values, including:

- Biodiversity cannot be traded or compared with other products. Each habitat, species or individual is unique. It is impossible to compare one species or habitat with another.
- Nature is more than an economic tool. Not only does it have a clear intrinsic value in its own right, it is also part of a complex inter-dependent web that together sustains life on this planet.
- Calculating the value of biodiversity is incredibly problematic. For example, ecosystem services – which are currently advocated as a proxy for ecosystem value - are only roughly correlated to the biodiversity of an ecosystem. A tree plantation, for example, can be almost as good for providing water retention or purifying the air as a real forest, but in

⁶¹ Organization of Economic Cooperation and Development (OECD). 1972. Recommendation of the council on guiding principles concerning international economic aspects of environmental policies. May. Council Document no. C(72)128. Paris: Organization of Economic Cooperation and Development.

⁶² http://en.wikipedia.org/wiki/Rio_Declaration_on_Environment_and_Development

⁶³ The Economics of Ecosystems and Biodiversity for national and international policy makers. Summary: responding to the value of nature, p.3 – <http://www.teebweb.org/ForPolicymakers/tabid/1019/Default.aspx>

terms of biodiversity the latter is much more valuable. Even if we take other additional values – such as the value of forest fruit - into account – which is not foreseen in mechanisms such as REDD+ - there is still a high chance important values are overlooked.

- The value attached to biodiversity depends very much on alternative uses and what is taken into account⁶⁴. “Willingness to pay” – i.e. hypothetical values – is unsuitable as a way to calculate value. Accurate accounting of biodiversity is very difficult.
- It opens the door to a ‘business-as-usual’ approach. If biodiversity has a price, it can be bought. Then, it can be argued, that business can legitimately continue destroying nature, while either paying for it financially, or paying for nature to be protected or created elsewhere.
- Biodiversity ‘offsets’ often do not take place before the damage has been done. There is therefore little guarantee that the offsetting will be successful. Experiences from Germany, where an offsetting mechanism has been in force for over 30 years, show that while this mechanism has reduced the damage to the local environment by mitigation and compensation, it has not led to an overall no net loss of biodiversity, also due to deficits in its implementation⁶⁵.
- Any legislative agreement creates opportunities for compromise, with get-out clauses and exceptions, for example that offsetting is not needed if the habitat is “minor” or “insignificant”.

FoEE position

FoEE argues that the importance of biodiversity must be better appreciated and given more weight in political decisions and in business development plans.

- However, we oppose putting price tags on biodiversity and making biodiversity a commodity, something that can be traded freely on the market. Each part of biodiversity is unique, has an inherent value and often cannot be replaced. We therefore oppose any trading scheme for nature.
- It is clear that if damage to nature cannot be prevented, this has to be accounted for. However, FoEE does not believe that initiatives to offset or compensation measures for destroying biodiversity will be sufficient to successfully prevent overall biodiversity loss. FoEE strongly believes **avoiding** the damage in the first place must take precedence, and compensation or offsetting should only be accepted after a thorough environmental impact assessment and in exceptional circumstances, i.e. where there is an overriding public interest, where there is no alternative solution and where the impact can indeed be compensated for so that the species and habitats involved are adequately protected.
- To avoid opening the door to the commodification of nature, any new compensation initiative, such as the EU’s “No net loss” initiative currently being discussed, must:
 - be legally binding; be as close as possible geographically, in scale and in function, to the site which they replace; should benefit the same species or habitat which is impaired or destroyed; and should be done before the damage is done so that it is already in place when work begins on the site being damaged. In addition any offsetting should be defined at the lowest geographical/administrative level possible.

⁶⁴ An example is TEEB for policy makers, p. 12 (Box 4 on Mangroves), <http://www.teebweb.org/>

⁶⁵ Fischer-Hüttle, P. (2011): 35 Jahre Eingriffsregelung – eine Bilanz. – NuR (2011), S. 753-758

- be additional to (i.e. outside the scope of) already existing stricter regulations, such as the Berne Convention's Article 9, the EU Habitats Directive and the EU Environmental Liability Directive⁶⁶. These have already strict and clear binding regulations with a very high threshold for any exception from nature conservation provisions as outlined above and must not be amended or watered down.
- The Climate Convention's Clean Development Mechanism (CDM) has not managed to reduce global carbon emissions, and we reject any "green development mechanism" that has the CDM as a blueprint. For the same reasons, we oppose the inclusion of REDD+ in carbon markets. Developed countries must take measures to reduce fossil fuels and to improve the situation within national boundaries, in addition to supporting developing countries to save their forests⁶⁷.
- While interesting exercises in themselves, methods to value nature are no substitute for the business and political leaders demonstrating their will to protect biodiversity.

3.2.4. Lack of funding for conservation

Situation

Due to its perceived lack of political importance, the funding needed to protect and maintain biodiversity is often inadequate to ensure its healthy survival. Funding for conservation is usually far less than funding for continued damaging activity. One of the key results of the CBD's COP 10 in Nagoya was the decision on the resource mobilisation strategy (Decision X/3). Under this decision, its 192 member countries and the EU had to make suggestions on innovative methods to generate additional finance and report on the state of biodiversity funding and its gaps by June 2011 - including information about additional funding needs, the funding provided and the amount of subsidies detrimental to biodiversity. Ultimately the necessary finance must be supplied to implement the CBD strategic plan by 2020 at the latest (CBD SP, target 20). Actions to promote the conservation and sustainable use of biodiversity receive a tiny fraction of funding compared to activities aimed at promoting infrastructure and industrial developments. Currently, much less than 0.1% of EU/national spending is for biodiversity⁶⁸.

FoEE position

- Europe must increase its support for biodiversity and the implementation of the CBD:
 - Biodiversity is a public good. According to the principle "public money for public goods", it is therefore only fair that the state (which represents the public) pays for maintaining biodiversity and the implementation of the CBD strategic plan. Payments

⁶⁶ This is supported by European Parliament (European Parliament resolution of 20 April 2012 on our life insurance, our natural capital: an EU biodiversity strategy to 2020 (2011/2307(INI)), no. 53: "Urges the Commission to develop an effective regulatory framework based on the 'No Net Loss' initiative, taking into account the past experience of the Member States while also utilising the standards applied by the Business and Biodiversity Offsets Programme; notes, in this connection, the importance of applying such an approach to all EU habitats and species not covered by EU legislation;" - <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2012-146>)

⁶⁷ see e.g. <http://www.foei.org/en/resources/publications/pdfs/2008/cop14-position-paper>

⁶⁸ see e.g. <http://jncc.defra.gov.uk/page-4251> for UK. Britain had a GDP of 2.480 bn in 2010, but spent only 560 Million on biodiversity (=0.025%).

for ecosystem services (PES⁶⁹) create problems because they only focus on one service and not on biodiversity itself (see 3.2.3). For example, while payments may be made for the water retention function of a forest, this does not necessarily mean its biodiversity is maintained as water retention can also be fulfilled by a monoculture tree plantation. In this case, additional provisions or safeguards are necessary to maintain biodiversity at the same time. More important, it only works where there is a user that can afford, and is willing to pay the necessary sum.

- Financing gaps for the implementation of the CBD strategic plan in Europe, of the EU biodiversity strategy and for the implementation of Natura 2000 must be determined and filled. As already stated in Chapter 3.1.2.1, recent analyses show that current funding in agriculture must be tripled if the EU's biodiversity targets are to be achieved⁷⁰; Natura 2000 finance must be scaled up by a factor of 5-10⁷¹. In Switzerland, funding for national inventories must be doubled⁷².
- Europe must support biodiversity and the implementation of the CBD in other countries:
 - Depending on the financing needs identified up to 2012⁷³ including those declared in the CBD's "Life Web" Initiative, Europe must increase its financial support for developing countries
 - All developed countries should follow Germany and Japan⁷⁴ by pledging substantial sums for the CBD and its implementation
 - Official development aid (ODA) for developing countries must aim at sustainability – including in biodiversity terms, and must require the conservation of biodiversity when implementing projects. Activities must be compatible with the Country's NBSAP and support the CBD Strategic plan
 - New additional innovative mechanisms, should not be an excuse for industrialized countries not to give more money to developing countries, and refrain from stepping up to their obligations under Art. 20 (2) CBD by introducing ecosystem values.
- In sum, FoEE demands that Europe shows leadership and fulfils its role by meeting its financial obligations under the CBD and its decisions X/2 and X/3.

3.2.5. Lack of integration into other policies, notably trade

Situation

An important reason why biodiversity loss is still occurring is the failure to integrate biodiversity concerns into economic sectors, such as agricultural policy, fisheries policy, traffic, tourism and trade. An important example is EU regional policy which provides structural

⁶⁹ There are many schemes where people get paid for maintaining ecosystem services. Problems include that these payments only focus on certain ecosystem services while ignoring others (like biodiversity as such, e.g. in REDD). An oversight is provided e.g. by "Paying for biodiversity: enhancing the cost effectiveness of payments for ecosystem services", OECD 2010

⁷⁰ IEEP, July 2011: Costs of delivering environmental benefits through agriculture and forestry management, <http://www.ieep.eu/topics/agriculture-and-land-management/high-nature-value-farming/2011/07/costs-of-delivering-environmental-benefits-through-agriculture-and-forestry-management>, p.3 f. 34 Bn EUR/a are necessary for land management, 13.5Bn EUR/a are available.

⁷¹ <http://www.ieep.eu/publications/2011/03/financing-natura-2000>

⁷² http://www.wsl.ch/fe/wisoz/projekte/biotopschutzkosten//index_DE

⁷³ A debate and discussion on financial needs and support will be a key issue at CBD COP 11 in Hyderabad, India, in October 2012. Prior to this, parties are requested to put forward their numbers on finance needs and finances available

⁷⁴ At CBD COP 9 in 2008, Germany pledged EUR 500 million for the protection of forests and ecosystems between 2009 and 2012 and an additional 500 million every year thereafter. At CBD COP 10 in 2010, Japan announced that Japan would provide US\$2 billion to assist partner countries to meet post 2010 targets of the CBD.

funds worth €177bn (2007-2013) for the development of infrastructure which does not take sufficient account of environmental issues. Among the 55 examples currently highlighted by CEE Bankwatch and FoEE are road projects such as the Via Baltica Expressway which was set to cross and destroy a unique Natura 2000 marsh site. Investments in protecting biodiversity would have been destroyed by investments in this traffic project. Similarly, a failure to integrate biodiversity concerns in the CAP – supporting mass production and intensification of agricultural areas – by incentivizing intensive animal production and factory farming, has jeopardized efforts to save habitats and species. In some countries, forest management plans fail to recognise the aims of a site's Natura 2000 status. On the global level, WTO and UNFCCC negotiations all but ignore the decisions of the CBD. Europe-based multinational companies are very powerful and, in the frequent absence of strict regulations and controls, have a huge impact on biodiversity in other countries and continents.

These examples show that there is a need for mainstreaming biodiversity decisions into sectoral policies.

FoEE position:

- For biodiversity measures to be effective, all policies must be coherent, and the CBD strategic plan, the EU and national biodiversity strategies must be reflected in these.
- Any new and upcoming legislation, regulations and plans need to undergo an impact assessment on how they will affect biodiversity, and what they can contribute to improve the situation of biodiversity. Some important examples:
 - Key opportunities to include biodiversity concerns and delete adverse incentives exist in agricultural policy reforms such as the EU CAP reform (see chapter 3.1.2.1).
 - Similarly, the reform of fishery policies needs to remove any incentive for industrial fishing, and only support measures that will help implement the CBD target 6 of restoring marine fish stocks to sustainable levels (reflected in EU target 4).
 - Any funding for forestry must be subject to the provision of forest management plans with integrated biodiversity measures⁷⁵
 - Transport policy must recognise the need for ecological connectivity and green infrastructure in both new and existing infrastructure.
 - Upcoming EU and national budgets must allocate sufficient funding to implement the CBD Strategic plan and the EU Biodiversity strategy.
 - No genetically modified organisms must be released into the environment.
- International trade policy: There is no point in protecting Europe's biodiversity by importing goods from countries which have weaker biodiversity standards, or from multinational companies which have relocated to countries with weaker standards, enabling them to cut costs and produce cheaper goods for export to Europe, at the expense of biodiversity in the exporting countries. This "biodiversity dumping" aggravates environmental problems in other continents. To prevent this, there must be :
 - First, Europe needs to reduce in absolute terms the amount of resources it consumes, especially its dependency on natural resources from abroad
 - Products that are imported into the EU must not lead to biodiversity loss elsewhere. To this end, there must be import regulations and taxes, chain-of-custody mechanisms and impact assessments for products, controls and

⁷⁵ As decided in target 3B of the EU Biodiversity strategy, and its action 12

measures for enforcement. In this context, FoEE supports the EU's FLEG-T legislation and its implementation.

- Biodiversity safeguards must be an integral part of any multinational (WTO) or bilateral free trade agreements (FTA).
- Multinational corporations must be both incentivized and obligated to respect biodiversity and people's rights. "Business and Biodiversity" initiatives and certification schemes are not sufficient and bear the risk of greenwashing. Clear laws and regulations are needed, as well as transparency.
- Multinationals must ensure that their operations abroad meet the same standards as in Europe.
- People concerned by operations of European companies operating overseas must be entitled to take legal proceedings. The rules of the Aarhus Convention must be applicable in the overseas country just as they would be in Europe.
- The OECD guidelines for multinational corporations must be "biodiversity proofed" including detailed requirements for biodiversity and these must be made mandatory⁷⁶.
- Any project which involves finance or Export Risk Insurances in/for third countries must undergo an impact assessment to ensure it is not detrimental to biodiversity.
- European countries must swiftly sign, ratify and fully implement the Nagoya protocol on Access and Benefit Sharing (ABS) as an important element in the fight against biopiracy, providing finance for biodiversity and enhancing its value in developing countries.
- Strict application of the Cartagena Protocol on Biosafety⁷⁷ of the CBD.

3.2.6. Lack of implementation

Situation

The failure to implement decisions and legislation on biodiversity directly reflects the lack of political will to protect biodiversity. Paradoxically, almost all the ideas and regulations which stipulate what should be done already exist:

Biodiversity strategies

- European countries have all committed to halt the loss of biodiversity by 2010, but this has now been replaced by an overall target to do so by 2020⁷⁸.
- The CBD, in October 2010, adopted a (new) global strategic plan up to 2020⁷⁹, which is valid for all European Countries and the EU, replacing the previous version.
- The EU has a biodiversity strategy with six targets⁸⁰, which replaces the EU's 2006 Biodiversity Action Plan.
- Almost all European countries have a national biodiversity and action plan, as set out in Art. 6 CBD

⁷⁶ OECD Watch statement on the update of the OECD Guidelines for Multinational Enterprises (May 2011), http://oecdwatch.org/publications-en/Publication_3675/view

⁷⁷ <http://bch.cbd.int/protocol/text/>

⁷⁸ EU Biodiversity headline target: "THE COUNCIL OF THE EUROPEAN UNION [...] AGREES further on a headline target of halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss"; decided by the EU Environment council in its conclusions on March 15, 2010, <http://register.consilium.europa.eu/pdf/en/10/st07/st07536.en10.pdf>

⁷⁹ CBD Decision X/2, <http://www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.doc>

⁸⁰ COM(2011) 244 final: Our life insurance, our natural capital: an EU biodiversity strategy to 2020 http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7%5b1%5d.pdf

- There is a Pan-European Biological and Landscape Diversity Strategy (PEBLDS) with plans to establish a Pan-European Ecological Network (PEEN), designed to physically link core areas for biodiversity across the continent.

Conventions, directives and laws

- No other region in the world has such a comprehensive set of national and international legislation for conserving biodiversity as Europe. In addition to outstanding national nature conservation and forestry laws, the following European legislation has been adopted:
 - The Berne Convention (Berne Convention on the Conservation of European Wildlife and Natural Habitats of 1979) regulates the protection of endangered species in Europe and provides for the establishment of a Europe-wide network of protected areas (Emerald network). All European Countries except Russia and Belarus are members of the convention.
 - The EU – in fulfilment of its obligations under the Berne Convention – has adopted the Birds Directive (1979) and the Habitats Directive (1992), with the aim of achieving a favourable conservation status for habitats and species of community importance in their natural range.
 - These were, in the EU, joined by a third directive in 2000: the Water Framework Directive (2000/60/EC) which requires states to achieve a clearly defined standard of “good ecological status” for inland waters including structure and typical fauna and flora.
 - Implementation is supported by the Environmental Liability Directive (2004/35/CE)
 - Other relevant conventions and directives include the Bonn convention on Migratory species (CMS), the Stockholm and Rotterdam conventions on pollution, the EU Nitrates directive (91/676/EEC), the National Emission Ceilings Directive (NEC, 2001/81/EEC) and several other directives on pollution.
 - All European states have national laws on nature conservation. Some of them have received wide acclaim by NGOs, such as the Norwegian nature conservation law⁸¹, and some have been finalists in global award competitions for the best laws, such as the Swiss forestry law⁸².

European countries have admitted failing to achieve the 2010 target⁸³, and have failed to implement the old CBD strategic plan, the PEBLDS or the European Biodiversity Action Plan (BAP). The new strategies have yet to be implemented.

The Berne Convention has yet to identify and adopt its Emerald areas. While the Birds and Habitat Directives’ sites have mainly been designated in the EU, the main challenge now is to install a management system that ensures maintenance of the sites and achieves favourable conservation status for all habitats and species of community importance (currently only for 17%). Most European inland waters are still a long way from achieving good ecological status, and despite being transposed into some or all national laws, the other directives are either poorly established (Environmental Liability Directive) or have not yet fulfilled their objectives. Many gaps also exist in implementing other national or sub-national legislation, which is often due to a lack of resources (human and financial), but also to national / subnational priorities.

⁸¹ <http://www.regjeringen.no/en/dep/md/press-centre/Press-releases/2009/new-nature-diversity-act.html?id=553630>

⁸² http://www.worldfuturecouncil.org/future_policy_award0.html

⁸³ <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1303&format=HTML&aged=0&language=EN&guiLanguage=en>

FoEE position

FoEE strongly supports the CBD strategic plan and its targets. These must be fully implemented by 2020. FoEE also supports the EU Biodiversity Strategy, the targets of which must be further refined by an implementation strategy, and contain adequate indicators. The indicators must be regularly monitored to show and trigger process. Both the CBD strategic plan and the EU Biodiversity Strategy must be integrated into new or existing national strategies and action plans (NBSAPs).

The new overall biodiversity target, EU and national targets must be achieved. For this, FoEE calls for full and timely implementation of all relevant laws and regulations, notably for the Berne Convention and the listed EU directives, as well as national legislation related to biodiversity. Their effective implementation will greatly slow down, if not halt biodiversity loss by 2020.

3.2.7. Lack of equity and respect for people's rights**Situation**

Biodiversity protection cannot be achieved without involving the people concerned. It is they who influence biodiversity, across the globe. The full and effective participation of people is a core element of the CBD, as well as a European citizen's right and a necessity if we want foresters, farmers and fisher-folk to help implement the successful management of our natural environment.

FoEE position:

- Use of genetic resources / fight against biopiracy: the Nagoya Protocol on Access and Benefit sharing (ABS) is based on the free, prior and informed consent of the keepers of genetic resources (FPIC), based on mutually agreed terms. These rights must be respected and indigenous and local peoples must be enabled to claim their rights in recipient countries through clearly defined responsible institutions in these countries (checkpoints)⁸⁴.
- The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIPs) must be fully respected, most notably the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired (Art. 26). Art. 10 states: "Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return". This must be respected in any mechanism, such as REDD+, and when establishing plantations or protected areas.
- All people concerned must be involved when deciding management measure for the sake of biodiversity, e.g. when setting up management plans for protected areas, especially farmers and those who manage the land concerned.
- The Aarhus Convention⁸⁵ and its three pillars must be respected wherever the environment is concerned: right of access to information, right to participate in decision-making, and the right to legal redress for the sake of the environment. In most of Europe, non-governmental organisations whose aim is to protect biodiversity often have enhanced rights to participate in environmental matters which do not concern them as a person or owner, but the statutes and aims of their

⁸⁴ As put down in the Nagoya Protocol, Art. 17 (1). <http://www.cbd.int/abs/text/articles/?sec=abs-17>

⁸⁵ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), <http://live.unece.org/env/pp/treatytext.html>

organisation, and also the right to take legal action. These rights must be comprehensively respected and, where they do not exist, should be established in national legislation.

- In addition to the implementation of the Aarhus Convention, FoEE demands the respect of peoples' environmental rights, which also include access to unspoiled natural resources and the right to resist unwanted developments through civilian peaceful and non-violent direct action. FoEE is alarmed by the criminalization and repression of communities and activists who take action to protect their environment, forests and biodiversity. FoEE calls on all European governments to fully respect these rights and adopt all appropriate measures for their implementation.

4. Conclusions - The road ahead

As this paper shows, there are multiple threats to biodiversity and opportunities to protect this core FoEE value, which is the basis of our lives. Biodiversity is at a turning point. The targets to stop biodiversity loss have not been met on a global or a European level. But the analysis of why this has not been achieved has led to clear and measurable targets, which are contained in the CBD strategic plan and the new EU biodiversity strategy.

Friends of the Earth Europe now urges European countries to implement these targets:

- by integrating them into their own targets and policies,
- by ensuring the EU's new headline target of halting biodiversity loss by 2020 is reached
- by fulfilling their legal obligations under the Berne Convention, EU law and other relevant international obligations,
- by adjusting their policies in order to align economical with ecological interests,
- by creating increased public awareness and knowledge, paired with comprehensive public participation, enabling and causing people to act,
- and by supplying the necessary funding for biodiversity conservation in Europe.

Similarly, FoEE demands that countries and the EU step up to their obligations under Art. 20 of the CBD and significantly increase their contribution to the extent needed for achieving the biodiversity targets and averting global biodiversity loss. At the same time, dangerous false solutions, such as GMOs, agrofuels, and the commodification of nature must be avoided. Progress towards the biodiversity targets must be monitored so we always know what has been achieved.

Achieving these targets will not be possible without the proper involvement of the public and respect of their rights; on the protection of biodiversity – such as the right to a sustainable livelihood, the right to a clean and healthy environment, the right to access clean water and sanitation, the right to food sovereignty, the collective rights of local communities and indigenous people, the right to know (access to information), the right to decide (public participation), the right to resist (access to justice in environmental manners). All these must be fully respected by European and national institutions and governments, in order to ensure biodiversity's protection and environmental justice.

There are numerous opportunities where Europe can show its commitment to scaling up its efforts and biodiversity-proofing its policies. These include contributions to global processes such as Rio+20, UNFCCC and the CBD (notably in terms of setting incentives and better finance as well as good national implementation to set a positive example), implementation of Pan-European agreements (Berne Convention with its Emerald Network, PEBLDS⁸⁶) and in the EU utilisation of the resource efficiency flagship initiative, the implementation of the EU biodiversity strategy, the Common Agricultural Policy reform, the structural policy reform, the EU budget reform and the Common Fisheries reform. Further political efforts to recover economically can and should incorporate the necessary measures to protect, restore and extend biodiversity. The opportunity exists to do this as part of creating economic improvement and recovery – there is no point in waiting for the economy to recover.

FoEE calls on Europe – across sectors and administrations - to use these opportunities for the sake of biodiversity, economies, sustainability and our very own future.

⁸⁶ The PEBLDS (Pan European Biodiversity and Landscape Diversity Strategy) has recently adopted a Pan-European 2020 Strategy For Biodiversity (STRA-CO (2011) 2)

5. Glossary of terms

ABS	Access and Benefit sharing, one of the three goals of the → CBD
AGM	Annual General Meeting of → FoEE
Aarhus Convention	UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters
BD	Biological Diversity = Biodiversity
CAP	Common Agricultural Policy of the → EU
Cartagena Protocol	A subsidiary protocol under the → CBD which regulates international trade of living modified organisms (LMO), including → GMOs
CITES	Conference on International Trade of Endangered Species
COP	Conference of the Parties, regular major meetings of international conventions such as the → CBD and the → UNFCCC
CBD	UN Convention on Biological Biodiversity
CDM	Clean Development mechanism, a carbon offsetting mechanism under the → UNFCCC
Critical loads	“a quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge” (UNECE, 2008):
DDT	Dichlorodiphenyltrichloroethane, a powerful pesticide widely used from the 1950s to the 1970s, responsible for the decline of many bird species by causing egg shells to be too thin and to break
EEA	European Environmental Agency, a → EU institution which monitors the environment
EIA	Environmental Impact Assessment
EU	European Union
FAB	Food, Agriculture and Biodiversity programme of → FoEE
FLEG-T	Forest Law Enforcement, Governance and Trade, a EU mechanism to abolish illegal timber trade
FoEE	Friends of the Earth Europe
FoEI	Friends of the Earth International
Food sovereignty	a policy framework to ensure the "right" of peoples to define their own food, agriculture, livestock and fisheries systems, in contrast to having food largely subject to international market forces.
FPIC	Free Prior Informed Consent - a prerequisite needed from indigenous and local people if any agreement concerning their land is to be valid
FTA	Free Trade agreements
GMO	Genetically Modified Organisms
Geo-engineering	Large-scale interventions to change the Earth's natural processes
IAS	Invasive alien species
ILUC	Indirect Land Use Change
IUCN	International Union for Conservation of Nature, a global network of governments, → NGOs and scientists dealing with nature conservation
LULUCF	Land Use, Land Use Change and Forestry, a mechanism under the Kyoto Protocol, part of the → UNFCCC
NBSAP	National Biodiversity Strategies and Action Plan, a key element for the implementation of the → CBD at national level
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
ODA	Official development assistance/aid
PEBLDS	Pan European Biodiversity and Landscape Development Strategy
PEEN	Pan European Ecological Network, agreed by the → PEBLDS
SRM	Solar Radiation management, a form of → geo-engineering
REDD/REDD+	Reducing Emissions from Deforestation and Forest Degradation, a mechanism under the → UNFCCC
TEEB	“The Economics of Ecosystems and Biodiversity”, a report prepared for the CBD and the EU
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organisation



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Czech Republic	Hnutí Duha
Denmark	NOAH
England/Wales	Friends of the Earth
Northern Ireland	Eesti Roheline Liikumine
Estonia	Maan Ystävät Ry
Finland	Les Amis de la Terre
France	Sakharvelos Mtsvaneta Modzraoba
Georgia	Bund für Umwelt und Naturschutz Deutschland (BUND)
Germany	Magyar Természetvédők Szövetsége
Hungary	Friends of the Earth
Ireland	Amici della Terra
Italy	Latvian - Vides Aizsardzibas Klubs
Latvia	Lietuvos Zaliuju Judėjimas
Lithuania	Mouvement Ecologique
Luxembourg	Dvizhenje na Ekologistite na Makedonija
Macedonia	Moviment ghall-Ambjent
Malta	Vereniging Milieudefensie
The Netherlands	Norges Naturvernforbund
Norway	Polski Klub Ekologiczny
Poland	Friends of the Earth Scotland
Scotland	Priatelja Zeme - Slovensko
Slovakia	Amigos de la Tierra
Spain	Jordens Vänner
Sweden	Pro Natura
Switzerland	Zelenyi Svit
Ukraine	

Friends of the Earth Europe campaigns for sustainable and just societies and for the protection of the environment, unites 30 national organisations with thousands of local groups and is part of the world's largest grassroots environmental network, Friends of the Earth International.