Ecological Transition Cluster Paper on the EU nature restoration law
Greens/EFA - November 2021

The biodiversity crisis is upon us. One million species are threatened with extinction and the vast majority will be affected within the current human generation[1]. The UN Decade for Ecosystem Restoration started on 5 June 2021, acknowledging that the global sustainable development goals can only be met by 2030 if the global destruction of ecosystems is stopped, their conservation is ensured and their restoration is initiated. A global target for the restoration of degraded ecosystems is envisaged to be adopted at the COP15 international conference on biodiversity in Kunming in 2022.

To achieve the international targets, an ambitious European contribution is essential. On the one hand, because we obviously are in an economically favourable position, on the other hand, because we are an enormous driver of species extinction. After India, Europe is the region with the least-intact biodiversity according to the IPBES. This is without even taking into account that our consumption habits fuel ecosystem destruction on other continents.

In addition to the intrinsic value of nature, the linear relationship between biodiversity decline and the deterioration of ecosystem services has been clearly demonstrated. A turnaround is therefore an advantage in securing livelihoods and economies by protecting the basic necessities for human existence: clean air, drinkable water, fertile soils, healthy oceans.

To this end, one key element of the EU Biodiversity Strategy for 2030 is the commitment by the European Commission to lay down legally binding EU nature restoration targets. The analysis of the European Environment Agency (EEA)'s report on the State of the Nature clearly shows that the targets of the EU Biodiversity Strategy to 2020 have not been achieved[2]. In fact, not only are improvements missing at large scale, but populations and habitats are in free fall. This is particularly dramatic for formerly common species like farmland birds, but also for marine species and almost all habitat types except rocky habitats. The urgency raised by various scientific analyses cannot be ignored: measures and prospects must reflect the intensity of the problem.

This is the first real nature legislation since more than two decades. We call on the European Commission to present an ambitious proposal to ensure that the biodiversity crisis can be tackled effectively. To put biodiversity on the path to recovery by 2030, we need to step up the protection and restoration of nature. This should be done by improving and widening our network of protected areas and by developing an ambitious EU Nature Restoration Plan.

This paper will focus on the following key aspects for the upcoming legislation:

I. A clear definition of restoration
II. Ambitious binding targets for the restoration law
III. Supporting measures to achieve our goal
IV. Financing for the restoration objectives

[1] IPBES Report 2019: https://ipbes.net/global-assessment

[2] https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020

I. The need for a clear definition of restoration

What does restoration mean?
Restoration is a complex task, which requires deep knowledge of ecosystems and biodiversity. The Commission should take advantage of the knowledge of the EEA, which can provide good definitions and scientific advice. According to the Commission, their upcoming nature restoration plan 'will help improve the health of existing and new protected areas, and bring diverse and resilient nature back to all landscapes and ecosystems' by 'reducing pressures on habitats and species and ensuring all use of ecosystems is sustainable. It also means supporting the recovery of nature, limiting soil sealing and urban sprawl, and tackling pollution and invasive alien species.' In addition to implementing and enforcing the protection targets in the 2030 Biodiversity Strategy[3], the degradation of marine and terrestrial area outside of protected areas (including Nature 2000 areas) will also need to be prevented.

According to the Society for Ecological Restoration[4], ecological restoration is a '*solutions-based approach that engages communities, scientists, policymakers, and land managers to repair ecological damage and rebuild a healthier relationship between people and the rest of nature*'. It can contribute to protecting biodiversity, improving human health and wellbeing, increase food and water security, deliver goods, services, and economic prosperity and supports climate change mitigation, resilience, and adaptation and is a complementary approach to both conservation and the sustainable management of ecosystems.

It is essential that the upcoming restoration targets are additional to existing obligations under the relevant EU Directives (mainly the Habitats Directive, the Birds Directive, the Water Framework Directive and the Marine Strategy Framework Directive) whilst, at the same time, implementation and enforcement of existing legislation must be simultaneously improved. Furthermore, restoration measures should not be used to offset ecosystem degradation or habitat loss taking place elsewhere.

Examples of restoration
Examples of specific restoration actions include removing or blocking drainage to restore peatlands and wetlands, removing barriers from rivers to restore fish migration, allowing forests to mature towards becoming old-growth forests and allowing the development of multi-species forests, restoring seagrass meadows, restoring intensive grassland or arable land into biodiversity rich grassland by removing nutrient rich soil, planting locally characteristic varieties and adopting biodiversity-focused grazing/mowing regimes.

The issue of soft restoration
The full restoration of nature should always be the overarching target. However, in some cases, full restoration cannot be achieved due to legal and other restraints. It is neither possible nor in all cases desirable to expropriate land owners that have farmed the land in question for centuries or tear down infrastructure that has been erected. For agricultural use, different forms of soft restoration should be considered; some landscapes even require a form of soft cultivation (e.g. sheep grazing) to maintain their species diversity. Of course there is no one size fits all solution for all different habitats in the EU. These softer measures should be restricted to defined circumstances and any land use must be extensive only. Areas thatare used under soft restoration should only fully count towards the restoration target if the indicator species corresponding to the habitat show a clear recovery in the area. The Commission should apply a different weight when taking these areas into account.

The Commission should already look at the incoming national strategic CAP plans through the lens of the nature restoration perspective and emphasize any forms of soft restoration opportunities (e.g organic agriculture & room for biodiversity). For peatlands, paludiculture without disturbance of the organic soil is a viable option that restores vital ecosystem services and functions such as climate change mitigation

[3] The Commission's EU Biodiversity Strategy for 2030 set out the goal of legally protecting at least 30% of the EU's land and sea, with 10% of the EU's land and sea being strictly protected, including all remaining EU primary and old-growth forests
[4] https://cdn.ymaws.com/www.ser.org/resource/resmgr/docs/standards_2nd_ed_summary.pdf

and adaptation even if the land is used for e.g. sphagnum production or extensive grazing by water buffalos[5].
Member States should be encouraged to introduce paludiculture in their national CAP plans as well as in their nature restoration plans as an eco-scheme or as rural development programmes, linked to stewardship commitments and payments for public goods. It is vital though that these soils are not ploughed, and this should be made mandatory.

II. Ambitious binding targets for the restoration law

A 30% target by 2040
We call on the European Commission to ensure that the proposed targets in the upcoming restoration law are binding and ambitious: 30% of European terrestrial, marine and freshwater areas should be restored by 2040 with an intermediate target of 15 % by 2030. This should be accompanied by a target of 30% of terrestrial, marine and freshwater areas to be restored by 2040 with an intermediate target of 15 % by 2030 for each Member State of the EU.

The selection of areas and measures should be the responsibility of the Member States; but in order to ensure coherence and quality, a corresponding plan and eventually evaluation of the measures taken must be regularly submitted to the Commission. The Commission should monitor the compliance with the EU wide target as the sum of the measures taken by the Member States.

Targets should be set against a 2020 baseline, meaning that restoration activities carried out as of 2020 should count towards these targets to avoid disincentivising timely action. After restoration, no ecosystem degradation should be allowed and progress on the restoration goals must be regularly assessed at both the Member State and EU levels. A trajectory to the 2030 and 2040 targets with intermediate milestones to be achieved should be accompanied by a monitoring mechanism which would trigger actions (financial and/or regulatory) if intermediate goals are not met.

The lessons of the failed biodiversity strategy for 2020 showed that it is more important to have simple indicators and targets with which you can start right away. Approaching the target from “a particular percent of degraded ecosystems” perspective would raise questions concerning how to define the "unknown status” of ecosystems (which could make up one third of all ecosystems) and whether they should be seen as "good" or "bad". Rather than losing precious time by finding an agreement possibly years after the actual legislation has entered into force, a simple area target provides a better starting position for an ambitious law. Additionally by referring to all land and sea areas, Member States who took care of their nature have a lower burden as they would more easily meet the target. For those who degraded their territory, the effort would be higher.

In addition to the overarching targets for marine, terrestrial and freshwater areas, ecosystem-specific targets should be set, with a focus on rare and carbon-rich ecosystems. The biotope network should be strengthened through additional protection of connecting features, creating a coherent Trans-European Network for Nature.

Strengthening the biotope network
In order to improve the status and trends of migratory animals and of plant species, and also to effectively protect the catchment areas of ecosystems, biotopes should be better connected. Systematic designation of buffer zones and corridors between strictly protected areas and around Natura 2000 sites should ensure the stability of protected areas and support restoration efforts. A lighthouse project is the European Green Belt, spanning from the Barents Sea in northern Finland to the Black Sea in Bulgaria, where nature found a refuge during the Cold War and where restoration activities could achieve huge benefits.

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5 https://www.greifswaldmoor.de/files/dokumente/Infopapiere_Briefings/202102_paludiculture_CAP_definition_final.pdf

Ecosystem-specific targets

Naturally, not every ecosystem occurs in every Member State in the same proportion. Moreover, there are habitat types that are much easier to restore than others. In order to guarantee the success of restoration, the area targets should be supplemented by ecosystem-specific targets for the habitat groups, making sure that all habitat types are adequately restored at the European level. To ensure fairness, all Member States should have comparably ambitious restoration goals to reach. It is necessary that all habitat types are restored and that the necessary efforts in terms of financial expenditure and difficulty of restoration are fairly distributed, which should therefore be part of the monitoring.

The targets should focus on particularly degraded or depleted ecosystems as well as protecting ecosystems that are particularly relevant in the light of climate change mitigation and adaptation. Ideally, both objectives should be pursued.

The role of natural carbon sinks in achieving carbon neutrality will be addressed in the LULUCF legislation. Nevertheless, the restoration law should include an ambitious EU 2030 target for the removal and storage of greenhouse gas emissions by natural carbon sinks, consistent with the Biodiversity Strategy, whilst recalling that the swift reduction of emissions must remain the priority. It is obvious that we need to address both climate chance and biodiversity decline, which are the two of the most pressing issues of the Anthropocene[6]. Both issues are inter-connected but in practice are addressed separately by decision-makers. Such fragmented approach prevents synergies and can even undermine the impact of measures in one or the other areas. The Commission should ensure strong links and complementarity between its different pieces of legislation.

Which specific eco-systems are we talking about?

Rivers

The nature restoration law must have a specific target for the restoration of free flowing rivers. Existing inventories and studies show that the future nature restoration law can show more ambition than the existing 25.000 km target. It should therefore be raised to the restoration of 15% of the EU's rivers' length until 2030. It is important to focus not only on longitudinal, but also on horizontal and vertical connectivity, so that the restored river ecosystem can exhibit its full benefits. Barriers in our rivers and brooks should be closely scrutinized. Not only obsolete barriers, such as weirs whose mills are long gone, but also small hydro power plants which often have more deteriorating effects on biodiversity than could be offset by the clean energy produced, should be on trial.

Peatland

The nature restoration law must set specific legally binding targets for the restoration of wetlands and peatlands in the EU, related to the individual situation in each Member State and broken down for every Member State. The protection of complete peatland bodies and catchment areas is necessary. The law shall also provide approaches for spill-over effects (e.g., endangered species now living on drained peatland because their original habitat was destroyed). While many endangered species live in bogs and mires, their added value lies in the immense amount of carbon that is stored in the black soil and the buffering effect both for heat waves and extreme rains. Peatlands must play a special role due to their huge significance for climate change mitigation and adaptation and accordingly, the targets for peatlands should be higher and be reached more quickly.

(Old growth) forests

The nature restoration law must set specific legally binding procedures for the restoration of old-growth forests in the EU. Old-growth forests follow a natural dynamic and are extraordinarily valuable for our efforts in the fight against the climate crisis and biodiversity loss. These forests offer home to a wide diversity of species, including many species that do not occur anywhere else, and due to the stored deadwood, they offer great potential as CO2 sinks. Compared to managed forests, which in average have 300 to 600 m^3 of wood per hectare (and store carbon accordingly), old-growth and primary forests can have up to 1600 m^3 of wood per hectare. This corresponds to up to a four times higher carbon storage.

[6] See IPBES report: https://ipbes.net/sites/default/files/2021-06/20210609_workshop_report_embargo_3pm_CEST_10_june_0.pdf

The development of old forest structures takes decades (or even centuries), so new old-growth forests cannot 'just be created' but need a long-term vision and smart forest planning. The strict protection of remaining primary and old-growth forests, focusing on the expansion and connectivity of long-pristine forests and the creation of old-growth and deadwood islands, is therefore absolutely essential for the recovery of species living in primary and old-growth forests. To this end, old-growth forests and especially primary forests should be considered and protected as natural global commons, and their ecosystems should be granted a legal status[7].

Oceans

The nature restoration law must give special focus to the restoration of marine habitats. While oceans are a source of incredibly rich biodiversity and play an important role in climate mitigation, efforts in marine restoration lag behind terrestrial restoration projects. Yet, the oceans form the largest carbon sink on the planet and hold an immense potential for both adaptation and mitigation measures. Since the majority of the marine environment remains unexplored, the EU should invest more funding into research and applied projects on marine restoration, as well as capacity-building and technology necessary to implement such projects. These efforts should complement EU's actions to improve marine protection and reduce impact of human activities at sea and on land that degrade marine ecosystems. The most destructive human activities must not continue in any EU marine protected area and 10% of these areas have to be under strict protection.

Soil restoration

Soil is one of the most complex of all ecosystems and it provides vital ecosystem services and functions. The degradation of soil brings considerable environmental and economic consequences with it. Together with the legislative proposal on soil health to be published by 2023, the nature restoration law should therefore provide the necessary toolkit to, for example:

- restore soil organic carbon (SOC) in all soils and reverse current losses on agricultural soil
- address the main soil threats, including loss of soil biodiversity, loss of soil organic matter, contamination, salinisation, acidification, desertification, erosion and soil sealing
- facilitate sustainable management and incentives for practices like sustainable forest harvesting and agricultural methods that are less damaging for soils

III. Supporting measures to achieve our goal

Broad public participation

The local population must be involved in the restoration projects. Good examples for building community support can be found in the European Natura 2000 awards. The IUCN Green List approach provides a blueprint for a possible stakeholder involvement mechanism. Involvement in planning and management as well as realisation of the actual tasks by the local population alongside to the expertise of scientists can be a valuable part of every package of measures.

High-quality nature as a goal of the restoration law

The restoration law should not merely improve the existing Natura 2000 legislation and try to fill gaps therein. Neither should it be used to only repair ecosystems that were poorly managed although being protected. The goal of this unique law should be high quality nature and revitalisation of ecosystem services and functions. The law should therefore be ambitious (in scale) as well as comprehensive. Nevertheless, previous efforts in protecting ecosystems should be strengthened alongside to additional incentives for action.

Governance

Nature restoration faces difficulties from different angles. We use our environment in various ways, be it for agriculture, settlements, roads or industry; only a very small part still is in a natural state. Restoring nature can therefore lead to conflicts of interest. That is why a good governance structure is needed

[7] European Parliament resolution of 22 October 2020 with recommendations to the Commission on an EU legal framework to halt and reverse EU-driven global deforestation (2020/2006(INL)) https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2006(INL).

alongside to public participation and ownership. Unfortunately, since the establishment of the EU nature-related legislation (Birds and Habitats Directive, Water Framework Directive, Marine Strategy Framework Directive, etc.) we have witnessed that implementation is not always fully achieved and management plans for protected areas are still not complete in all Member States - 30 years after the adoption of the Habitats Directive.

In order not to let the Nature Restoration Law share the same fate, we propose the following framework: Member States should be required to draft national restoration plans, based on scientific assessments of the ecosystem inventory. These plans should be subject to public participation, from scientists, civil society and local stakeholders and citizens.

The aim of the plans should be the provision of clear quantitative targets in terms of areas, locations, types of ecosystems to be restored and also clarification concerning financial tools to be used, deadlines and public involvement.

The plans shall be published and then assessed by the Commission against a clear set of criteria such as:

- fulfilment of the nature restoration targets
- contribution to connectivity of the Natura 2000 and wider protected area network
- achievement of the 10 % target of the EU´s land and sea area to be strictly protected
- climate change adaptation and mitigation
- improvement of living conditions for wild pollinators
- improvement of the habitat quality of farmland birds habitats
- measures to ensure the long-term protection of the restored habitats

In light of the various previous failures to achieve legislative targets and objectives decades after they were adopted, and given the urgency of biodiversity restoration, a monitoring process should be enshrined. This would include setting intermediate targets towards 2030 that are being monitored, e.g. biannually. If at some point these targets are not achieved, pre-agreed financial and regulatory measures are triggered to improve the trajectory and ensure that the 2030 and 2040 targets are achieved. Without such a provision, the implementation of these restoration targets and objectives will also suffer from a lack of ambition and will not be achieved by 2030 and 2040.

Stakeholder involvement should not be limited to the drafting phase of the national plans, but continue throughout the whole process: implementation, monitoring and review. A specific procedure for stakeholder involvement shall be established, ideally based on existing requirements for public participation, including access to justice and access to information under the Aarhus Convention and the EU implementation thereof.

It is vital to integrate safeguards in the Restoration Law in order to prevent misuse of the law, e.g. framing reforestation after a clear cut as “restoration effort”, by defining clear baselines and ensuring sustainable restoration so that no deterioration happens after restoration.

Member States should also be required to provide an overview of the funding methods they will use from EU, national and private sources in their national plans.

Access to justice

To ensure the application and respect of the principles and measures mentioned below, it is essential to adapt access to justice at the European level by recognising the intrinsic value of ecosystems and their right to effective protection and by allowing for prevention, compensation and redress for pure environmental prejudice[8].

[8] European Parliament resolution of 20 May 2021 on the liability of companies for environmental damage (2020/2027(INI))
https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2027(INI).

Acknowledging the interdependence of the rights of people, including future generations, with the rights to nature is essential to achieve these ecosystem-specific targets. In application of the Aarhus Convention on access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, it is hence relevant to grant rights to nature[9].
Recognising the rights of nature means recognising its rights to regenerate at a natural rate, to a habitat and the right to fulfil its role in the Earth's renewal cycles but also to allow them to have their own interests defended before the law by designed guardians of nature and its own interests.

IV. Financing for the restoration objectives

Restoration does not come for free. Therefore, it is important to meet the agreed biodiversity-spending targets of the 2021-2027 Multi-annual Financial Framework (7.5% of annual spending under the MFF to biodiversity objectives in 2024 and 10% of annual spending under the MFF in 2026 and 2027) and significant efforts should be made to reach at least 10 % annual spending on biodiversity under the MFF as soon as possible from 2021 onwards.

The EU Biodiversity Strategy states the need for substantial funding. 20 billion Euro per year are called for to cover the much-needed investments into Natura 2000, green infrastructure, and other vital parts of the strategy. In order to mobilize the “private and public funding at national and EU level” which the strategy sees as requirement, supporting policies at national level as well as participation of the private sector are needed.

Given the only recent adoption of the Multiannual Financial Framework (MFF), the creation of a dedicated budget line for nature restoration might not be the fastest solution. Instead, the LIFE programme and especially its nature and biodiversity sub-programme should receive a massive boost in funding.

The Commission should grasp the opportunity to influence the operational programmes of the Member States which will be adopted soon and provide specific guidance on how to use the European structural and investment funds (ESIF) for restoration of nature. It is regrettable that less than 1% of National Recovery and Resilience Plans (NRRPs) was allocated to nature-based solutions. This mistake should not be repeated.

In order to support the European Commission and Member States and to provide sufficient expertise and technical assistance in the different phases of framing, implementation and monitoring of the law, the European Environment Agency should receive further resources in terms of funding and more staff.

[9] European Parliament resolution of 6 October 2021 on the role of development policy in the response to biodiversity loss in developing countries, in the context of the achievement of the 2030 Agenda (2020/2274(INI)) https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2020/2274(INI)