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#### 1. BIODIVERSITY – THE NEED FOR URGENT ACTION

Biodiversity is all life on Earth – animals, plants, fungi, and micro-organisms. We humans are a part of it and we depend on it. Nature has an own intrinsic value but also provides us with food, materials, medicines, recreation, health and wellbeing. Healthy ecosystems filter air and water, absorb carbon, keep the climate in balance, convert waste back into resources, pollinate and fertilise crops. Around half the world's total Gross Domestic Product – approximately €40 trillion – is dependent on nature and the service it provides¹. Nature and biodiversity are our life support system.

As a result of human action, biodiversity is being lost and ecosystems are degrading at an alarming rate<sup>2</sup>. Species are threatened with unprecedented extinction. Around 75% of terrestrial and 40% of marine environments are severely altered. Yet, competition for land-use and land-use changes, overexploitation of natural resources, pollution, are accelerating. Biodiversity loss and ecosystem collapse is considered one of the top five threats humanity faces in the next ten years<sup>3</sup>.

Climate crisis and biodiversity loss are intrinsically linked. Climate change impacts are accelerating the destruction of the natural world, through droughts, flooding and wildfires, in Europe and many parts of the globe, while the loss of natural environment and unsustainable exploitation of natural resources is a key driver of climate change. At 2°C increase, all coral reefs could disappear<sup>4</sup>, and with them a quarter of all marine species.

Nature-based solutions<sup>5</sup> can provide over a third of the needed mitigation efforts and are crucial for adaptation. The protection and restoration of carbon sinks such as wetlands, peatlands, sustainably managed forests and agricultural soils play a critical role for climate change mitigation. Restoring nature and ecosystems, including in urban areas, can dramatically reduce the impacts of intense rainfall, floods, heat waves and droughts. As a Party to the United Nations Convention on Biological Diversity, the EU and its Member States have adopted strategies<sup>6</sup>, action plans and legal frameworks to protect, restore and sustainably manage habitats, species<sup>7</sup>, freshwater<sup>8</sup> and marine ecosystems<sup>9</sup>, and measures to integrate biodiversity goals across EU policies and funding instruments. Yet, protection has been incomplete, restoration has been small-scale, implementation and enforcement of legislation has been inadequate<sup>10</sup>, integration of biodiversity objectives into other policies has not been successful, and funding in sufficient.

<sup>8</sup> Directive 2000/60/EC establishing a framework for the Community action in the field of water policy (Water Framework Directive).

<sup>&</sup>lt;sup>1</sup> Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy (World Economic Forum 2020).

<sup>&</sup>lt;sup>2</sup> State of the European Environment Report 2020 (European Environment Agency 2019). Global Assessment of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES, 2019)

<sup>3</sup> Idem 1:

<sup>&</sup>lt;sup>4</sup> Intergovernmental Panel on Climate Change (IPCC): Special report on Global Warming of 1.5° (2018), Special Report on Climate Change and Land (SRCCL, 2018), Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC, 2019)

<sup>&</sup>lt;sup>5</sup> 'Nature-Based Solutions' are as solutions that are inspired and supported by nature, that enrich biodiversity. <sup>6</sup> Our life insurance, our natural capital: an EU Biodiversity Strategy to 2020 COM (2011) 244.

<sup>&</sup>lt;sup>7</sup> (Birds Directive)

<sup>&</sup>lt;sup>9</sup> Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

<sup>&</sup>lt;sup>10</sup> Mid-term review of the EU Biodiversity Strategy to 2020 (COM/2015/0478 final) and Fitness Check of the Nature Directives (SWD(2016) 472 final).

Learning from the past successes and failures, the Commission is proposing a **new** approach to biodiversity as part of the European Green Deal, to curtail biodiversity loss and to lead by example. We have robust knowledge and evidence of the problem, and we understand the means to address it<sup>11</sup>. We have a clear political mandate<sup>12/13</sup>, strong societal expectations<sup>14</sup>, and the innovation potential to turn the urgent challenges of the biodiversity and climate crisis into a unique opportunity to put the EU on a sustainability path.

More than ever, the EU remains committed to the global vision of **living in harmony with nature by 2050** adopted under the Convention on Biological Diversity, and the corresponding EU vision that by 2050 **biodiversity and the benefits it provides to people will be protected, valued and restored**. This 2030 Strategy is the EU's contribution to the Global Biodiversity Framework to be adopted at the 2020 summit of COP15, and lays out what needs to be done for the EU by 2030 to lead by example.

2. PROTECTING AND RESTORING EUROPE'S NATURE - EU COMMITMENTS TO LEAD BY EXAMPLE

## **EU headline commitments**

Biodiversity is on the path to recovery for the benefit of people and the planet<sup>15</sup> and a significant area of degraded and of carbon-rich ecosystems across land and sea have been restored

Europe's nature is not doing well, with 60% of EU protected species and 77% of habitats in unfavourable conservation status, and downward trends in populations of formally widespread species, such as birds and butterflies<sup>16</sup>. Nearly all our ecosystem types, both within and outside protected areas, have continued to degrade despite the past commitments to restore nature<sup>17</sup>.

To achieve this renewed headline commitment, **implementation and enforcement** of the EU's environment and nature protection legislation have to dramatically be stepped up. However, the EU will need to do more to curtail the climate and biodiversity crisis. The EU needs to **restore a significant area of its degraded and carbon-rich ecosystems across land and sea.** 

Some restoration efforts of Member States are supported by the requirements of EU Habitats and Birds Directives, the Marine Strategy and the Water Framework Directives, however there are gaps that prevent their full effectiveness. The Commission will conduct a thorough impact assessment with a view to proposing in 2021 an EU legal framework to support the implement of the restoration objectives presented under this strategy including through legally binding EU restoration targets.

<sup>12</sup> Political guidelines of Commission President Ursula von der Leyen.

<sup>&</sup>lt;sup>11</sup> EEA (2019), SOER

<sup>&</sup>lt;sup>13</sup> European Council new strategic agenda 2019-2024

<sup>&</sup>lt;sup>14</sup> Eurobarometer survey of European's attitudes to biodiversity (2019).

<sup>&</sup>lt;sup>15</sup> Unless otherwise specified, all commitments proposed in this strategy are for 2030

<sup>&</sup>lt;sup>16</sup> EEA (2019), The European environment — state and outlook 2020, Knowledge for transition to a sustainable Europe p.75. <a href="https://www.eea.europa.eu/publications/soer-2020">https://www.eea.europa.eu/publications/soer-2020</a>. (SOER)

<sup>&</sup>lt;sup>17</sup> Biodiversity Strategy to 2020, COM (ref), Target 2: "By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems".

## 2.1. Enhance, connect, restore and effectively manage protected areas

#### EU commitments:

- Cover at least 30% of land and 30% of sea area by an EU wide network of ecologically representative, legally protected areas, and/or other area-based effective conservation measures<sup>18</sup>.
- Strictly protect at least 1/3 of this network that is of very high biodiversity value or potential, covering terrestrial, marine and freshwater habitats.
- Define, map, monitor and strictly protect all remaining EU primary and old-growth forests.
- Effectively and equitably manage all areas included in this network, defining clear objectives and measures, and monitor them with a view to maximizing their contribution to nature conservation, including through restoration.
- Ensure that none of the habitats and species protected under the Habitats and Birds Directives show a deteriorating trend, and that at least [30%] of them show an improvement.
- Establish national and EU green and blue infrastructure networks to ensure connectivity between protected areas.

Today in the EU, 18.4%<sup>19</sup> of land and 8.1% of sea are covered by Natura 2000<sup>20</sup>, and an additional 7.3% of land and 3% of sea by various forms of national protected areas. Within this, around 3% of land and less than 1% of marine areas are currently strictly protected<sup>21</sup>. In addition, a substantial proportion of all Natura 2000 sites do not yet have management plans with conservation objectives and measures<sup>22</sup>.

Furthermore, the current surface of protected areas, including those under strict protection, is insufficient to safeguard biodiversity and ecosystem services<sup>23</sup>. We need more legally protected areas – at least 30% of land and 30% of sea, meaning an increase by 4% in land area (including urban) and by 19% in sea area.

By 2021, the Commission, with the support of the European Environmental Agency, will assess how these additional designations and legal protection can be ensured at national level<sup>24</sup>.

Latest EU 27 (-UK) statistics on coverage of Natura 2000, based on the <u>European database of nationally</u> designated protected areas (CDDA) version 2019, and the Natura 2000 dataset "end 2018".

Strict protection means a level of protection which is not necessarily no-go, but that allows no significant disturbance of natural ecological processes.

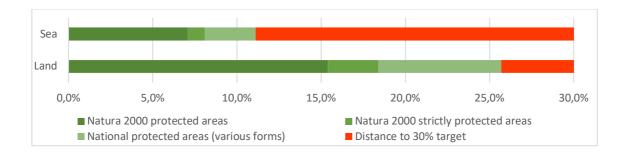
For instance, https://conbio.onlinelibrary.wiley.com/doi/epdf/10.1111/conl.12247

https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf

Natura 2000 is almost complete on land; it is estimated that it could reach around 15% of EU sea area. More is possible with the Marine Strategy Framework Directive.

Around 70% of terrestrial and 60% of marine protected areas have management plans in place or under preparation.

The above targets are for the whole EU and could be broken down according to the EU biogeographical regions and sea basins or at a lower level.



**Figure**: current levels of protection at land and sea in Europe versus the 30% target proposed by this strategy.

To stop the deterioration of the **species and habitats protected under the EU Habitats and Birds Directives** and bring more of them to a favourable conservation status, the Commission will invite Member States to put forward, before October 2020, a commitment to ensure that, by 2030, there is no deterioration in the conservation trends or status of any habitats and species protected under those Directives, at least 30% of them improve, and the knowledge gaps are filled.

To reduce habitat fragmentation, increase the connectivity of protected areas and increase natural features in the landscape, the deployment of **green and blue infrastructure**<sup>25</sup> must be enhanced. The Natura 2000 network constitutes the backbone of the EU green and blue infrastructure. The Commission will further assess how support to investments in EU-level GI projects can be scaled-up to maximise the benefits provided

## 2.2. Restore nature and ecosystems across land and sea

## 2.2.1. Agricultural land

#### EU commitments:

- Halt and reverse the decline in pollinators.

- Ensure that at least [10%] of agricultural land either consists of 'landscape features' and/or is set aside for nature (i.e. non-productive).
- Significantly increase the uptake of agro-ecological practices and ensure that [at least 30%] of agricultural land is under organic farming.
- Maintain and enhance High Nature Value farmland.
- Increase in-situ and ex-situ conservation and sustainable use of genetic biodiversity and the knowledge and use of genetic pools.
- Control and reverse over-abstraction of water and its impacts on terrestrial and aquatic ecosystems, and reduce water abstraction in agriculture by shifting to less water-intensive crops.

**Farmland birds** and **insects**, particularly **pollinators**, are key indicators of the health of agroecosystems - their alarming decline must be stopped and reversed. There is an urgent need to bring **landscape features** and **non-productive areas** (e.g. hedges, flower strips, trees, stone walls, non-rotational set aside areas) back to farms and rural areas, to provide space to thrive for wild animals and plants, including pollinators and natural pest regulators that contribute to agricultural productivity. These features and areas will also enhance carbon sequestration, prevent soil erosion and depletion, and filter air and water. For

<sup>&</sup>lt;sup>25</sup> https://ec.europa.eu/environment/nature/ecosystems/index en.htm

pollinators, the minimum requirement is the full implementation and reinforcement of the **EU pollinators' initiative**.

**Agro-ecology**<sup>26</sup> is about bringing natural processes and ecological principles into farming practices. Evidence shows that it can provide a supply of healthy food, maintaining productivity, while at the same time reducing food footprint and leading to a 40% reduction in GHG emissions from the agricultural sector<sup>27</sup>. Organic farming, the best known and best regulated agro-ecological practice, contributes to soil fertility and biodiversity.

Much can be achieved through the revised **Common Agricultural Policy,** including through the promotion of result-based payment schemes. The future Commission **Action Plan on organic farming** will also include measures to increase demand for organic products through green public procurement and education.

The Commission will develop with Member States a methodology to define and map **High Nature Value Farmland** and better enforce the prohibition to plough-up permanent grasslands in Natura 2000 sites. The trend of erosion of **genetic variety** must be reversed to build resilience and contribute to food security.

#### 2.2.2. Forests areas

- Significantly increase the share of forest areas covered with management plans including biodiversity-friendly practices such as closer-to-nature-forestry.
- Plant an additional [2-3 billion] trees per year in Europe, fully respecting ecological principles favourable to biodiversity and forest resilience.

The EU must improve the quality and increase the quantity of its **forests**. Commitments will be supported by an **EU Forest Strategy** building on this biodiversity strategy. The Commission will develop guidelines on biodiversity friendly afforestation and closer-to-nature-forestry practices<sup>28</sup>. These actions will enhance biodiversity in forests and improve the resilience to fire and other threats, while securing economic returns.

**Afforestation** and **tree planting** to support biodiversity and ecosystem restoration will be promoted in the context of the Common Agricultural Policy Strategic Plans, the Cohesion and Regional Development Funds, and through a preparatory action under the LIFE programme to set up mechanisms for urban tree planting together with cities and their mayors.

The Commission, with other data providers, will further develop the **Forest Information System for Europe** to produce up-to-date assessments of the condition of the European forests.

## 2.2.1. Energy land-use

- Fully integrate biodiversity protection and restoration objectives into the production of renewable energy and the development of energy infrastructure.

Decarbonising the **energy** system is critical to reach the EU's climate objectives. The EU must develop a power sector that is largely based on renewable sources and lives up to the green oath of "do no harm" for climate change and biodiversity loss. The Commission further will assess the potential land-use conflicts and synergies of bioenergy with biodiversity and climate objectives. Results will feed in the revision of the Renewable

<sup>&</sup>lt;sup>26</sup> http://www.fao.org/agroecology/home/en/

<sup>&</sup>lt;sup>27</sup> Agroecology and carbon neutrality: what are the issues? Issue Brief Nr 5, April 2019

<sup>&</sup>lt;sup>28</sup> www.prosilva.org

Energy Directive, ETS and LULUCF foreseen in 2021. Refocusing the use of biomass residues and waste instead of whole crops and trees would allow to substitute high energy-intensive products as cement, steel or plastic with wood, thus reducing CO<sub>2</sub> emissions. The EU should also foster win-win solutions such as ocean energy allowing for fish stock regeneration, or solar panel farms providing biodiversity-friendly soil cover.

## 2.2.2. Land take and soil ecosystems

- Protect soil functions, particularly fertility, and achieve land degradation neutrality in the EU, by addressing specific drivers that reduce soil biodiversity and carbon storage, and by promoting sustainable soil management practices.
- *Progress significantly in the identification and remediation of contaminated soil sites.*
- Substantially increase efforts to reduce soil erosion and increase soil organic matter, and to enhance the integration of land use aspects into decision-making at all levels, supported by the adoption of targets on soil and on land
  - Ensure that the rate of land take is well on track to achieve no net land take by 2050.

Despite recent reductions in soil sealing pace, fertile soils and their biodiversity continue to be lost to land take. The effects of erosion and losses of soil organic carbon are becoming increasingly visible under climate change<sup>29</sup>. Combating land degradation will become increasingly difficult and costly over time<sup>30</sup>. We need to step up efforts to restore degraded soils - define the conditions for their good ecological status, introduce restoration objectives, and improve the monitoring of soil quality<sup>31</sup>. The Commission will update the EU Soil Thematic Strategy<sup>32</sup> to achieve the EU's and international commitments on land degradation neutrality while the Zero Pollution Action Plan for air, water and soil will address aspects of soil contamination prevention and remediation.

## 2.2.3. Freshwater and marine ecosystems

#### EU commitments:

- Maintain or reduce fishing mortality to or under FMSY33, leading to a healthy population age and size distribution for all exploited populations.
- *Eliminate, or reduce to a level that allows full recovery, the by-catch of populations* of species threatened with extinction, in bad conservation status, or not in good environmental status 34.
- Minimise and, where possible, eliminate the by-catch of populations of other species, so that it does not threaten their conservation status, effectively collect data on bycatch for all sensitive species as required under the Birds and Habitats Directives and the common fisheries policy.
- Address adverse impacts on sensitive habitats, including on seabed, through fishing practices, to achieve good environmental status under the Marine Strategy Framework Directive.
- Add something on

 $<sup>^{29}</sup>$  EEA (2019): The European environment – state and outlook 2020: knowledge for transition to a sustainable

<sup>&</sup>lt;sup>30</sup> IPBES (2018): Summary for policymakers of the assessment report on land degradation and restoration of the Intergovernmental SciencePolicy Platform on Biodiversity and Ecosystem Services

<sup>&</sup>lt;sup>31</sup> As part of the new EU legal framework for the restoration of healthy ecosystems.

<sup>&</sup>lt;sup>33</sup> Fishing mortality keeping fish populations above levels which can produce the maximum sustainable yield

<sup>&</sup>lt;sup>34</sup> As reported under Birds and Habitats Directives (FCS) or the MSFD (GES).

- Establish fisheries management measures in all marine protected areas according to clearly defined conservation objectives on the basis of the best available scientific advice.
- Achieve good status for all its rivers, lakes, transitional and coastal waters, and groundwater, by the mandatory deadlines set by the Water Framework Directive, ensure their sustainable use to prevent further deterioration.
- Ensure, through the implementation of the integrated maritime policy, that maritime spatial planning and the Marine Strategy Framework Directive continue to apply the ecosystem-based approach, ensuring that cumulative impacts of human activities affecting the marine environment are not compromising the achievement of the good environmental status
- Restore the continuity of EU rivers in line with the Water Framework Directive's objectives in order to enable upstream and downstream fish migration and ensure natural sediment and hydrological dynamics; and restore [at least 25,000 km of] free-flowing rivers through the removal of barriers and the restoration of floodplain
- Possibility to include the Ballast Water Convention in the Annex of the PSC Directive when we revise it, so that we can ensure its proper enforcement in EU ports
- Possible revision of the ship-source pollution and implementation of the PRF directive
- Possibility to update the SWD/guidelines on biodiversity in ports, estuaries and costal zones as well as the guidance eon sustainable inland waterway development

The above commitments can be achieved through a full implementation of the **EU's** common fisheries policy and the Marine Strategy Framework Directive, and the Nature Directives.

An **ecosystem-based management** approach under the common fisheries policy is essential to reduce adverse impacts of fishing activities on marine ecosystems, especially on sensitive species and seabed habitats. Marine resources need to be harvested sustainably, and there must be zero-tolerance to illegal practices.

An **action plan** will be developed for the conservation of fisheries resources and the protection of marine ecosystems, including changes, where necessary, in the use of fishing gear, through technical measures.

Restored and properly protected **marine ecosystems** will bring substantial socio-economic benefits. Their restoration to 'good environmental status', primarily through the establishment of no-take or replenishment areas, must include carbon-rich ecosystems as well as important fish spawning and nursery areas.

Despite an improvement in the status of European waters since the adoption of the Water Framework Directive, we need to do more to restore **freshwater ecosystems**, bring back natural functions of rivers by removing barriers to enable the free passage of migrating fish, the free flow of sediments, and the restoration of riparian areas and floodplains. The EU's legal framework on water has the right level of ambition<sup>35</sup> to achieve the good ecological status of rivers, lakes, transitional and coastal waters, but implementation and enforcement need to be stepped up.

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<sup>&</sup>lt;sup>35</sup> Fitness Check of water legislation (SWD(2019) 439) and the evaluation of the Urban Waste Water Treatment Directive (add ref)

## 2.2.4. Greening urban and peri-urban areas

#### EU commitments:

- Significantly increase the levels of green infrastructure in European cities to deliver a range of benefits to citizens and to reconnect urban and peri-urban green areas.
- Ensure that all EU citizens have fair and easy access to high quality natural green spaces.
- Ensure that new urban infrastructure projects have a net-positive contribution to climate and biodiversity objectives.
- Phase out of the use of pesticides in urban green areas.
- Prevent the introduction and spread of invasive alien species in urban areas.

Green urban spaces, from forests to parks and gardens, from urban farms to green-roofs and tree-lined streets, urban meadows and hedges, are enormously beneficial for the well-being of citizens. They also provide a wide range of benefits: a refuge for nature; help in fight against climate change, and adapt to its impacts, protection from flooding, droughts and heat waves; and reduced air pollution, water pollution and noise<sup>36</sup>.

However, with the number of people living in EU cities at more than 75% and rising, all too often it is the green space that loses out with the competition for land, being built upon, degraded or polluted. While progress has been made protecting some urban green spaces – including through many Natura 2000 sites within, or partly within, cities<sup>37</sup> – urban sprawl is increasing on average in the EU by around 2% a year<sup>38</sup>.

We need to halt the loss of green urban ecosystems and to enhance them. The promotion of healthy ecosystems and nature-based solutions should be *systematically* integrated into urban planning, including in the design of new buildings and infrastructure.

To underpin the above commitments, cities must establish biodiversity strategies and action plans. The Commission will support Member States, and local and regional authorities, in achieving this through **technical guidance** and support to mobilize **funding** and capacity building, and **work with the Covenant of Mayors to build a movement towards nature and biodiversity actions and strategies under a new 'Green City Accord'**.

#### 2.3. Invasive alien species

- Minimise, and where possible eliminate, the intentional and unintentional introduction and establishment of alien species in the European environment and manage established invasive alien species, and decrease by [50%] the number of Red List species they threaten.

**Invasive alien species** can significantly undermine protection and restoration efforts. The annual rate of introduction of alien plant and animal species in the EU has increased in recent years as a result of their intentional<sup>39</sup> and unintentional<sup>40</sup> introduction. Of the

<sup>&</sup>lt;sup>36</sup> See EnRoute project: <a href="https://oppla.eu/groups/enroute/publications-and-deliverables">https://oppla.eu/groups/enroute/publications-and-deliverables</a>

<sup>&</sup>lt;sup>37</sup> There are 11,000 Natura 2000 sites within, or partly within, cities, and representing 15% of the total area of the Natura 2000 network.

<sup>&</sup>lt;sup>38</sup> Urban sprawl in Europe: <a href="https://www.eea.europa.eu/publications/urban-sprawl-in-europe">https://www.eea.europa.eu/publications/urban-sprawl-in-europe</a>

<sup>&</sup>lt;sup>39</sup> E.g. pets, horticulture, biological pest control.

<sup>&</sup>lt;sup>40</sup> E.g. ship ballast water, contaminated grain.

1872 species considered threatened in Europe, 354 are under threat as a result of invasive alien species<sup>41</sup>. In the absence of effective control measures the rate of invasion will keep rising, and in conjunction with the effects of climate change, the risks for nature and the economy will grow. The full implementation of the EU Invasive Alien Species Regulation remains essential and must be stepped up.

## 2.4. Reduce pollution

#### EU commitments:

- Prevent or, where not possible, minimise the negative impacts of pollutants on ecosystem functions and biodiversity.
- Ensure zero pollution from nitrogen and phosphorus flows from fertilisers through an effective reduction of use and an elimination of excess use by 2030, and the application of a balanced fertilisation and a more integrated and sustainable nutrient management.
- Reduce the risk and use of chemical pesticides [by 50%] in the EU and drastically increase the uptake of Integrated Pest Management methods and bio-control.

**Pollution**<sup>42</sup> is a key driver of biodiversity loss and must be prevented. While the EU has a solid legal framework to reduce pollution<sup>43</sup>, more needs to be done. In particular, we must significantly reduce the release of nutrients, pesticides, pharmaceuticals, hazardous chemicals, urban and industrial wastewater, other waste including litter and plastics. These commitments will be supported by the adoption of under the Zero pollution ambition for a toxic-free environment of a EU Chemicals Strategy for Sustainability, a Zero Pollution Action Plan for Air, Water and Soil and an Integrated Nutrient Management Action Plan (foreseen for 2022).

The **Farm-to-Fork strategy** will address the use of pesticides and support wider implementation of Integrated Pest Management<sup>44</sup>. In addition, a revision of the authorisation procedures for pesticides should ensure that their risk assessment covers all relevant groups of organisms that could be affected pesticides, and addresses sublethal and chronic effects and cocktail effects from multiple substances.

The **Circular Economy Action Plan** will tackle plastics, including micro-plastics and single-use plastics.

The Commission will develop a new monitoring framework, which will allow for the establishment of baselines, and for the monitoring of progress, towards a progressive reduction of pollution. The monitoring framework will cover, at least, pollution from nutrients, ozone, pesticides, antimicrobials, persistent organic pollutants and heavy metals. Progress is already underway on marine litter and underwater noise under the Marine Strategy Framework Directive.

<sup>&</sup>lt;sup>41</sup> The Red List of the International Union for the Conservation of Nature.

<sup>&</sup>lt;sup>42</sup> Including pesticides, biocides, pharmaceuticals, industrial and consumer chemicals, plastics and microplastics, mineral fertilisers, reactive nitrogen and phosphorus, sewage, noise and waste/marine litter.

<sup>&</sup>lt;sup>43</sup> IED Directive, Nitrates Directive, REACH, UWWD Directive, air and water quality legislation.

<sup>&</sup>lt;sup>44</sup> Sustainable Use of Pesticides Directive 2009/128/EC

#### 3. ENABLING TRANSFORMATIVE CHANGE

#### 3.1. Biodiversity matters: an enhanced governance and legal framework

#### EU commitments:

- Fully implement and step up enforce the EU Nature Directives and related legislation.
- Regularly monitor, report, and ratchet-up EU biodiversity commitments, as part of a new biodiversity governance framework.
- Enshrine commitment and objectives and new biodiversity governance into EU's legal framework
- Strengthen inspections, access to justice and liability regimes against environmental damage and environmental crime

The implementation and enforcement of EU environmental legislation<sup>45</sup> needs to shift to a higher gear. This will require political support, and increased financial and human resources. While implementation of EU law is mainly a responsibility of the Member States, the Commission will redouble its **enforcement action** for the Nature Directives, by: (i) completing the Natura 2000 network and ensuring effective protection and management of all sites; (ii) enforcing the species protection provisions of the Habitats and Birds Directives; (iii) targeting species and habitats that show declining trends. This will be supported by the use of earth observation and other spatial information.

To ensure the **implementation of this strategy**, the Commission will put in place a new dedicated **governance framework**, requiring Member States to include the EU commitments in their national biodiversity strategies and action plans, and other relevant policies. It will provide a monitoring and review mechanism to regularly assess progress and take corrective action if necessary. It will aim to ensure the **ownership and responsibility** of key actors in the public and in the private domain. It will support administrative capacity building, increased transparency, stakeholder dialogue and participatory **governance** at different levels. The Commission will also introduce a common methodology for **mapping and assessing ecosystems and their capacity to deliver services**, such as climate regulation, water regulation, soil fertility and pollination, in support of restoration targets.

The Commission will strengthen biodiversity criteria in its **regulatory impact assessment**, and will promote measures to better reflect biodiversity and ecosystems at the **European Semester**.

The Commission will work with Member States and networks of inspectors, prosecutors, police, and judges to improve **compliance assurance** through awareness raising, training, best practice exchange and guidance. It will also support the compliance watchdog role of civil society by giving priority to enforcement action and access to justice in environmental matters.

There is also room for improvement regarding the **Environmental Liability Directive**. The recent evaluation shows that the transposition has not resulted in a common understanding and level playing field, but in a patchwork of liability systems. There is a need to redefine or clarify key concepts such as environmental damage and significance thresholds to ensure that the polluter pays principle is fully respected.

<sup>&</sup>lt;sup>45</sup> Birds and Habitats Directives, the Water and Marine Strategy Framework Directives, and other legislation such as on Invasive Alien Species and Environmental Impact Assessment.

## 3.2. Nature Restoration Financing Plan

#### EU commitments:

- Finance the implementation of this Strategy by significantly increase the share of EU funding dedicated to nature and mobilize national and private funding, through a combination of EU funds under the 2021-2027 Multiannual Financial Framework including the Common Agriculture Policy, Regional and Cohesion Funds, Horizon Europe, the European Marine and Fisheries Fund, LIFE and external action funds as well as co-financing by Member States and private funds, leveraged through a dedicated natural capital investment instrument established under Invest-EU.
- Ensure that all EU funding supports biodiversity-friendly investments, in particular through biodiversity proofing and application of the mitigation hierarchy.

Significant investments will be needed to tackle biodiversity loss and restore ecosystems, as recognised in the Sustainable Europe Investment Plan<sup>46</sup>. Biodiversity protection and climate action need to become an integral priority of *all* EU programmes and financing instruments to accompany a just transition towards a more biodiversity friendly society. The funding dedicated to nature should increase to at least €20 billion euro/year<sup>47</sup>, to reflect the needs of the strategy including investment priorities for Natura 2000, restoration activities and green infrastructure identified in Prioritised Action Frameworks of Member States.

As nature restoration has the potential to provide a major contribution to climate objectives, a significant part of the 25% of the EU budget dedicated to climate action will also contribute to biodiversity and nature based solutions. Under **InvestEU**, a dedicated natural capital and circular economy investment instrument in the range of EUR 10 billion will be established based on public/private blended finance.

Biodiversity standards will also be developed for **sustainable finance** including through the **taxonomy** under development. The Commission will explore how these standards could be mainstreamed in public financing including EU programmes.

## 3.3. Reducing the EU's environmental footprint

#### EU commitments:

- Bring the EU's environmental footprint (including on biodiversity) to within its fair share of the Earth's carrying capacity.

- Significantly reduce the negative impacts of production and consumption on biodiversity.
- Ensure that the business sector better understand and quantify their true dependency on nature, and that the impacts of their activities on nature are integrated into their decision-making processes.

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<sup>&</sup>lt;sup>46</sup> COM(2020) 21 final

<sup>&</sup>lt;sup>47</sup> The cost estimate is based on the 2018 Impact Assessment of the LIFE Regulation, a study on the costs of implementing the current Biodiversity Strategy (including restoration of 15% of degraded ecosystems as per Target 2 of the current Strategy), and data submitted by 16 Member States under Art 8(1) of Directive 92/43/EEC estimating the EU co-financing which they consider necessary to establish the necessary conservation measures for special areas of conservation designated in their territory. The Commission will provide an updated EU level aggregated estimate of the financial needs based inter alia on the Prioritised Action Frameworks developed by the Member States according to Art 8 of the EU Habitats Directive.

We need an economy that works for climate, people and the planet. The "European green oath: do no harm" will act as a guiding principle for policies to drive transformative change in the ways we produce and consume. Biodiversity-thinking needs to merge into the values, standards and norms of the new economy emerging under the Green Deal. New **standards** will integrate biodiversity and ecosystems criteria into economic and trade policies and into business decision-making. They will be developed to: (i) measure the environmental **footprint** of products, organisations, and EU/citizen consumption; (ii) build on **natural capital accounting**, to better account for the impacts and dependencies of business activities on natural capital, ecosystems and biodiversity, and related risks; (iii) reflect a diversity of **values** (monetary and non-monetary)<sup>48</sup>, apply the mitigation hierarchy<sup>49</sup>, and define sustainable use, regenerative capacity, and multifunctional

The Commission will explore regulatory approaches making use of such standards to ensure that **commodities or products** placed on the EU market will comply with EU obligations, and also "**duty of care/due diligence**" regulatory approaches for businesses across the value chain<sup>51</sup>. The Commission will also propose regulatory measures to avoid or minimize the placing on the EU market of products associated with **deforestation or forest degradation**<sup>52</sup>.

services<sup>50</sup>. These will be developed at EU and at international level.

Biodiversity standards will also be developed for **sustainable finance** including through the **taxonomy** under development and the reporting obligations for business under the **non-financial reporting** directive. To incentivise demand, obligations to increase **Green Public Procurement** (such as for organic products) as well as other market-based instruments will be developed in the context of the revised European Semester. The Commission will further promote **sustainable tax reforms**, shifting the tax burden to stimulate the reduction of impacts on the environment. Together, these actions will ensure that companies, commodities and products will increasingly comply with EU biodiversity standards.

## 3.4. Knowledge and Education

#### EU commitments:

- Improve the monitoring and regularly map and assess species' populations, ecosystems and their services to fully integrate them into policy, planning and investment decisions.
- Establish a monitoring framework for the review of the implementation of the Strategy, based on agreed indicators.
- *Mobilise EU research and innovation.*
- Enhance awareness, education and skills of Europeans of all ages.

Sound science, knowledge, monitoring, reporting and assessment must underpin progress. Data on biodiversity and indicators will be improved through better monitoring and the digital transformation. Citizen science will contribute data and knowledge to complement monitoring, reporting and policy making. The Commission will (i) establish, in close cooperation with the EEA, a **Biodiversity Knowledge Centre** to track and assess

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<sup>48</sup> https://www.sciencedirect.com/science/article/pii/S1877343517300040

<sup>&</sup>lt;sup>49</sup> EU guidance on integrating ecosystems and their services into decision-making, SWD(2019) 305.

<sup>&</sup>lt;sup>50</sup> This will build on the work of the INCA project and other methods and decision-making frameworks.

<sup>&</sup>lt;sup>51</sup> To be addressed as part of the commission Initiative "Empowering the consumer for the green transition"

<sup>&</sup>lt;sup>52</sup> In line with the Commission Communication COM(2019) 352

progress and to underpin further policy, (ii) set a strategic research agenda for biodiversity and enhance funding for biodiversity under Horizon Europe, (iii) strengthen cooperation between climate and biodiversity scientists to promote integrated approaches and models, and (iv) continue with Member States to contribute to the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services.

The Commission and Member States will aim to integrate biodiversity and ecosystems into **school and higher education curricula**. This will aim to improve scientific knowledge as well as the appreciation of nature and a heightened responsibility towards the natural world. Education programmes will provide guidance for schools and teachers on biodiversity. **Professional training** in key areas will provide the needed skills for new jobs and new livelihoods. Biodiversity projects will be promoted through the Erasmus+programme, the European Solidarity Corps, and others.

## 4. TACKLING THE GLOBAL BIODIVERSITY CHALLENGE POST-2020

## 4.1. Raising the level of ambition and commitment at the global scale

To address the global ecological and climate crisis<sup>53</sup> and put biodiversity on a path to recovery and achieve healthy and resilient ecosystems by 2050 at the latest, EU must show leadership at the 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity (CBD COP 15) in October 2020 and prompt governments and stakeholders across the globe to significantly step up action.

Both the Council<sup>54</sup> and the European Parliament<sup>55</sup> have called for EU leadership and an ambitious outcome. The Commission will press for a new and ambitious Global Biodiversity Framework that fosters lasting political commitments paving the way towards the adoption of a globally binding agreement for protection of biodiversity throughout the United Nations.

Based on the zero draft  $^{56/57}$ , the Commission proposes that the EU supports inter alia the following elements:

- One or several overarching long-term goals for biodiversity similar as the 1.5 degrees target for climate change. In line with the 2050 Vision<sup>58</sup>, such (a) goal(s) should ensure that by 2050 at the latest: ecosystems are healthy, resilient to climate change, and deliver a whole range of services essential to the prosperity and the well-being of citizens; there are no human-induced extinctions; and the global ecological footprint does not exceed earth's capacity.
- **Ambitious 2030 targets** in line with the EU commitments proposed in this strategy, adapted to the global situation, formulated where feasible in Specific,

<sup>&</sup>lt;sup>53</sup>IPBES Land Degradation and Restoration Assessment, IPBES Global Assessment and IPCC Special Reports (IPCC SR1.5; IPCC Special Report On Oceans and the Cryosphere and IPCC Special Report on CCL)

<sup>&</sup>lt;sup>54</sup> "Preparation of the post-2020 global biodiversity framework, Convention on Biological Diversity (CBD)", Council conclusions of 19 December 2019.

 $<sup>\</sup>frac{\text{https://www.europarl.europa.eu/meetdocs/2014}}{02/1189143EN.pdf} \underline{2019/plmrep/COMMITTEES/ENVI/RE/2019/12-02/1189143EN.pdf}$ 

<sup>&</sup>lt;sup>56</sup> https://www.cbd.int/doc/c/efb0/1f84/a892b98d2982a829962b6371/wg2020-02-03-en.pdf.

<sup>&</sup>lt;sup>57</sup> https://www.cbd.int/conferences/post2020.

The 2050 Vision, 'Living in harmony with nature', is part of the current Strategic Plan and stipulates: "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystems services, sustaining a healthy planet and delivering benefits essential for all people."

Measurable, Actionable, Relevant and Time-bound (SMART) manner, and clearly addressing the drivers of biodiversity loss.

- Improved **means of implementation** (finance, capacity, research and know-how, technology), and on the tools and mechanisms to be used. It is key to learn from experience, improve and scale up existing tools and mechanisms.
- A much stronger implementation and review process, whereby parties revise their National Biodiversity Strategies and Action Plans by 2021, or at least submit national pre-commitments for the most important targets; a regular cycle for reviewing implementation of the agreed actions, the progress in reducing the pressures on biodiversity and achieving the outcome-oriented targets, and for stepping up implementation if needed ('ratcheting up').
- A monitoring framework that includes headline indicators that are common for all Parties and hence allow for an assessment of the contributions to the global targets.
- A clear path towards the conclusion of a globally binding agreement by XXXX

The EU should also support **enhancing the sharing of the benefits arising out of the utilization of genetic resources**, notably in the light of discussions on the use of digital sequence information on genetic resources for the development of new products. An appropriate response, however, must uphold the open science approach and should not unduly burden the exchange of information for scientific purpose, which is a cornerstone for sustainable development.

## 4.2. Green Deal Diplomacy

Biodiversity is a central priority of EU external action and global diplomacy and will be further mainstreamed throughout all diplomatic and multilateral engagements. In the context of the EU's 'green deal diplomacy' and the green alliances, the Commission and the High Representative will work closely with Member States to mobilise bilateral and multilateral diplomatic channels in support of a comprehensive, coherent and more coordinated global transformation agenda.

#### 4.3. Trade policy

The Commission will also deploy measures to ensure that its **trade policies** 'do no harm' to biodiversity. This will be achieved by assessing the impact of future and existing trade agreements on biodiversity and follow-up action to strengthen the biodiversity provisions of **trade agreements**. Full implementation and enforcement of the sustainable development provisions of trade agreements, including through the future EU Chief Trade Enforcement Officer, will be key. The Commission will revise, by 2021, the Action plan against **Wildlife Trafficking** to step up efforts to combat illegal wildlife trade.

# 4.4. Development cooperation, Neighbourhood policy and resource mobilisation

Effective implementation of the future post-2020 global biodiversity framework will require to step up cooperation with partner countries and to increase financing from all sources, including the **phasing out of harmful subsidies**. It is crucial to increase the

contribution to biodiversity from existing interventions and financing by more effectively and systematically mainstreaming biodiversity and applying the "do no harm" principle across sectors and tackling indirect drivers of biodiversity loss in external policies.

The EU and its Member States collectively respected their commitment to double financial flows to developing countries for biodiversity in the last decade<sup>59</sup>. The EU will increase support to partners to measure impacts of policies and investments on biodiversity, identify needs and foster biodiversity financing and investments benefitting nature, support nature-based solutions and provide capacity building. Support to research and innovation and environmental education and skills, coupled with the empowerment of citizens and youth, will be instrumental to achieve lasting impact and strengthen government accountability and business responsibility.

Actions will be scaled up with partner countries in Africa, Asia, Latin America and Pacific to achieve the new global targets for protected areas and other area-based effective conservation measures, to combat environmental crime and to tackle the direct and indirect drivers of biodiversity loss including through "NaturAfrica" and other regional initiatives.

**Sustainable agricultural practices** will be promoted, including climate-smart and conservation agriculture, agro-ecology and integrated landscape management, as well as actions to **protect**, **sustainably use and restore the world's forests**. Green and sustainable investments will be prioritized and the private sector funding catalysed through the external funding instruments, including possible dedicated investment windows. Principles and tools will be developed to incorporate biodiversity standards for sustainable finance and environmental accounting, as well as smart green indicators in budget support.

The EU will promote specific actions in **EU overseas countries and territories** (which are global biodiversity hotspots) and Western Balkans and EU Neighbourhood countries, and support EU candidate countries to comply with the EU biodiversity acquis.

The EU will also reinforce synergies between the social and environmental pillars of sustainable development: including regarding human rights, gender and conflict sensitivity, the rights-based approach, and the role of **indigenous peoples and local communities.** 

On International Ocean Governance<sup>60</sup>, the EU will support the conclusion and implementation of an ambitious international legally binding instrument on marine biological diversity of areas beyond national jurisdiction (BBNJ) by 2020, and ratify and implement it thereafter as soon as possible. In this context, it will be essential to set clear global procedures for identifying, designating and effectively managing ecologically representative marine protected areas in the high seas. Meanwhile, work in Regional Fisheries Management Organisations and Regional Sea Conventions needs to continue unabated to put in place measures for the protection of sensitive maritime ecosystems and species in areas beyond national jurisdiction. Likewise, the EU will apply zero tolerance approach towards illegal, unreported and unregulated fishing for the sake of fighting biodiversity loss.

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<sup>&</sup>lt;sup>59</sup> Including international financing where biodiversity is the main objective and where it is an important secondary objective, in line with CBD CoP11 Decision UNEP/CBD/COP/DEC/XI/4 and EU and Member States financial reports submitted to CBD in 2015 and 2018.

<sup>&</sup>lt;sup>60</sup> Joint Communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions: International ocean governance agenda: an agenda for the future (JOIN(2016)49final)

#### 5. CONCLUSION

Protecting and restoring biodiversity is the only way to preserve the quality and continuity of human life on Earth. The targets and measures proposed in this strategy pave a way for an ambitious, yet necessary change that will ensure present and future generations' wellbeing, economic prosperity, and the health of our environment.

We will work with our global partners to curtail biodiversity loss within the coming years and lead the world at the 2020 Conference of the Parties to the Convention on Biological Diversity.

The Commission invites the Parliament and the Council to endorse the proposed Commitments ahead of the CBD CoP 15 in October. It will engage with the EU Member States in negotiations on the new global biodiversity framework, and will follow in 2021 with specific actions, concrete tools and measures to achieve the targets and commitments laid down in this Strategy, including through their full integration into key EU sector policies and financial instruments.