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

**EU Biodiversity Strategy for 2030** 

Bringing nature back into our lives

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

From rainforests to private gardens, from the blue whale to microscopic fungi, biodiversity is the extraordinary variety of life on Earth. We humans are part of it and fully dependent on this web of being – it gives us the food we eat, filters the water we drink and supplies the air we breathe. Nature is our shared living heritage and it is as important for our mental and physical wellbeing as it is for our society's ability to cope with global change, health threats and disasters. We need nature in our lives.

The risk of disease outbreaks, including pandemics, increases as nature is destroyed.<sup>2</sup> The recent outbreak of the COVID-19 pandemic has raised awareness on the interrelations between our health, food, supply chains, consumption patterns and planetary boundaries. While the exact origin of the outbreak is being investigated, scientists link the increasing frequency of emergence of infectious disease outbreaks, including COVID-19, SARS, avian influenza and Ebola to interference with wildlife due to biodiversity loss, in particular deforestation<sup>3</sup>, habitats loss and fragmentation, and illegal wildlife trade. Around two thirds of known human infectious diseases are zoonotic, i.e. they normally exist in animals before being transmitted to humans. The emergence of many of these diseases results from human encroachment into previously untouched nature. When the ecosystem loses its balance, infectious diseases can spread more easily. Protecting and restoring biodiversity and well-functioning ecosystems is therefore key in helping to prevent the spread of infectious diseases. The case for ambitious action is clearer than ever: to have healthy and resilient societies we need to give nature the space it needs.

Keeping nature healthy is good for people and the planet, but is also critical for the economy, both directly and indirectly. Businesses rely on genes, species, and ecosystem services as critical inputs into their production processes, including medicines production.<sup>4</sup> Almost half of global GDP − some €40 trillion − depends on nature and the services it provides.<sup>5</sup> The three largest economic sectors, namely construction, agriculture, and food and drink, are all highly dependent on nature, and together generate close to €7.3 trillion in the economy.<sup>6</sup> Research suggests that potential direct economic benefits from biodiversity conservation for various sectors in terms of increased annual corporate profits range from €49 billion in the seafood industry to €3.9 trillion in the insurance industry.<sup>7</sup> The overall benefit/cost ratio of an effective global programme for the conservation of remaining wild nature worldwide is estimated to be at least 100 to 1.<sup>8</sup> Besides being directly at the centre of many economic activities, a healthy biodiverse planet is an absolute precondition for businesses to grow and for the economy to recover following a crisis such as the COVID-19 one.

**But nature is in crisis.** As a result of land and sea use changes, overexploitation of resources and organisms, climate change, pollution and invasive alien species - the **five main direct drivers of biodiversity loss**<sup>9</sup> - nature is disappearing from our lives right in front of our eyes.

<sup>&</sup>lt;sup>1</sup> Including the variety of genes, species and ecosystems.

<sup>&</sup>lt;sup>2</sup> Keesing et al. <u>Impacts of biodiversity on the emergence and transmission of infectious diseases</u>. (Nature, 2010).

<sup>&</sup>lt;sup>3</sup> UNEP's Frontiers 2016 Report on Emerging Issues of Environment Concern.

<sup>&</sup>lt;sup>4</sup> IFC World Bank Group. The relationship of business to biodiversity.

<sup>&</sup>lt;sup>5</sup> World Economic Forum (2020) <u>Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and</u> the Economy.

<sup>&</sup>lt;sup>6</sup> Idem.

<sup>&</sup>lt;sup>7</sup> Barbier et al. <u>How to pay for saving biodiversity</u>. (Science, 2018).

<sup>&</sup>lt;sup>8</sup> Balmford et al. Economic reasons for conserving wild nature (Science, 2002).

<sup>&</sup>lt;sup>9</sup> Global assessment of biodiversity and ecosystem services by the Intergovernmental Science-Policy Platform on

Concrete replaces green, wilderness goes missing while more species risk extinction than at any point in human history. Over the last 40 years alone, global wildlife populations fell by 60% on average as a result of human activities. Almost 75% of the Earth's surface has been altered<sup>10</sup>, squeezing wildlife and nature into an ever-smaller corner of the planet and, with that, endangering human health and wellbeing.

The biodiversity crisis is intrinsically linked to the climate crisis. Climate change is accelerating the destruction of the natural world through droughts, flooding and wildfires, while the loss of nature and its unsustainable exploitation are key drivers of climate change. At the same time, healthy nature can be our strongest ally in the fight against climate change. Nature-based solutions<sup>11</sup> such as protecting and restoring wetlands peatlands or sustainably managing forests, grasslands and agricultural soils, will be essential to reduce harmful emissions and adapt to climate change. Planting trees and deploying other green infrastructure<sup>12</sup>, such as roof gardens in cities, will also help us cool urban areas and prevent and reduce the impacts of natural disasters.

Biodiversity loss and ecosystem collapse are among the three biggest threats humanity faces in the next decade. Without turning the tide, it will be impossible to reach the UN 2030 Agenda for Sustainable Development with its 17 Sustainable Development Goals, and the Paris Agreement on Climate Change – our globally agreed plans to overcome the biggest challenges of our time. **Transformative change is urgently required** to reverse the trend of biodiversity loss in the EU and worldwide, bring nature back into our lives and create regenerative economic growth that gives back to the planet more than it takes.

Global efforts to tackle the biodiversity crisis under the United Nations Convention on Biological Diversity have been insufficient to halt the loss of the world's biodiversity. In the EU, legal frameworks<sup>14</sup>, strategies<sup>15</sup> and action plans<sup>16</sup> have been put in place to protect nature and restore habitats and species. But protection has been incomplete, restoration has been small-scale, and the implementation and enforcement of legislation has been insufficient.<sup>17</sup> At the 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity, a new global framework post-2020 will be negotiated. In that context, and as announced in the Political Guidelines of the President of the European Commission and in the European Green Deal<sup>18</sup>, the EU is ready to show ambition and blaze the trail globally.

This strategy proposes a transformative plan to tackle the biodiversity crisis by protecting and restoring nature, enabling transformative change and taking the lead in the world. It addresses the five main drivers of biodiversity loss and outlines an enhanced governance

<sup>11</sup> I.e. solutions inspired and supported by nature which are cost-effective, simultaneously provide environmental, social and economic benefits, help build resilience and bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes. (See <u>EU R&I policy agenda for Nature-Based Solutions</u>).

<sup>&</sup>lt;u>Biodiversity and Ecosystem Services</u> (IPBES, 2019); <u>The European environment – state and outlook 2020</u> (European Environment Agency 2019).

<sup>10</sup> Idem.

<sup>&</sup>lt;sup>12</sup> Ecosystem services and Green Infrastructure (COM(2013) 249).

<sup>&</sup>lt;sup>13</sup> See footnote 4.

<sup>&</sup>lt;sup>14</sup> Including the <u>EU Habitats Directive</u> (92/43/EEC), <u>Birds Directive</u> (2009/147/EC), <u>Water Framework Directive</u> (2000/60/EC) and <u>Marine Strategy Framework Directive</u> (2008/56/EC).

<sup>15</sup> Our life insurance, our natural capital: an EU Biodiversity Strategy to 2020 (COM(2011) 244).

<sup>&</sup>lt;sup>16</sup> Action Plan for nature, people and the economy (COM(2017) 198).

<sup>&</sup>lt;sup>17</sup> Mid-term review of the EU Biodiversity Strategy to 2020 (COM(2015) 478) and (SWD(2016) 472); <u>Fitness</u> Check of the Nature Directives (SWD(2016) 472).

<sup>&</sup>lt;sup>18</sup> The European Green Deal (COM(2019) 640).

framework to fill remaining gaps, ensure the full implementation of existing EU legislation, and pull together all efforts to reach our new objectives. It works in tandem with all other Green Deal initiatives and serves as a compass and a frame to the EU's green economic transition, including the industrial, energy, circular economy and sustainable food transitions. The strategy is built around a simple headline commitment: by 2030, Europe's biodiversity is on the path to recovery for the benefit of people, the planet, the climate and our economy.

This strategy proposes a more holistic approach to biodiversity policy. It is enterprising in spirit and in action. Protecting and restoring nature cannot solely be imposed by regulation. Farmers, fishers, foresters, land owners and users are at the heart of this strategy: they are key actors in protecting biodiversity, while directly benefiting from it. Equally important is participation across society, with the active involvement of citizens, businesses, social partners and the research and knowledge community, and with strong partnerships and close cooperation between cities, rural areas, national governments and the EU.

Adopted in the heart of the COVID-19 pandemic, this strategy will also be a **central element of the EU's recovery plan**. Reconciling economic development with biodiversity needs and restoring and better protecting nature, together with reinforced regulation of wildlife trade, are crucial to both prevent and build resilience to future zoonosis outbreaks.

## 2. PROTECTING AND RESTORING NATURE IN EUROPE

To put EU's biodiversity on the path to recovery by 2030, it is necessary to step up the protection and restoration of nature. This should be done by improving and widening the existing network of protected areas and by developing an ambitious EU Nature Restoration Plan for ecosystems across land and sea.

# 2.1. A truly coherent network of protected areas

**Biodiversity fares better in protected areas**. However, the current network of legally protected areas, including those under strict protection, is not sufficiently large to safeguard biodiversity and all ecosystem services. Not only other parts of the world, but also the **EU needs to do better for its nature and build a truly coherent Trans-European Nature Network.** Scientific evidence shows that the existing targets defined under the Convention on Biological diversity are largely insufficient to adequately protect nature and ensure its restoration.<sup>19</sup>

Enlarging protected areas is also an **economic imperative**. For example, studies on marine systems estimate that every euro invested in marine protected areas would generate a return of at least €3 in economic output<sup>20</sup> and, given the right conditions, the net present value of a notake marine protected area can be between 4 and 12 times greater than if such area is not protected.<sup>21</sup>

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<sup>&</sup>lt;sup>19</sup> The Global <u>Aichi biodiversity targets</u>, set in the <u>Strategic Plan for Biodiversity 2011-2020</u>, are 17% on land and 10% at sea, while scientific studies' figures range from 30% to 70%: See e.g. <u>IPBES 2019</u>; O'Leary et al. (2016) <u>Effective Coverage Targets for Ocean Protection</u>; Castro et a. (2015) <u>Do protected areas networks ensure the supply of ecosystem services?</u>; Noss et al. (2012) <u>Bolder Thinking for Conservation</u>; IUCN World Conservation Congress (2016) <u>Resolution on increasing marine protected areas coverage</u>.

<sup>&</sup>lt;sup>20</sup> Brander et al. (2020) <u>The global costs and benefits of expanding Marine Protected Areas</u>; WWF (2015) <u>Marine Protected Areas</u>; Smart Investments in Ocean Health.

<sup>&</sup>lt;sup>21</sup> Sala et al. (2016) Fish banks: an economic model to scale marine conservation.

Similarly, the Nature Fitness Check<sup>22</sup> showed that for a cost of  $\[ \in \]$ 6 billion per year the value of the benefits of Natura 2000 network amount to about  $\[ \in \]$ 200 -  $\[ \in \]$ 300 billion per year. Overall, the activities undertaken in Natura 2000 sites are estimated to have supported about 12 million full-time jobs each year in 2006-2008, i.e. about 6% of total employment in the EU.<sup>23</sup> Full implementation of the Natura 2000 network has been estimated to support 174 000 direct and indirect jobs in protected areas management and conservation activities.<sup>24</sup> According to the latest assessment<sup>25</sup>, the investment needs of the network have almost tripled and it can be expected that this would support as many as half a million jobs, offering a great investment opportunity also in the context of the EU economic recovery from Covid19 outbreak.

A greater surface area – at least 30% of the land and 30% of the sea – will have to be protected in the EU, in line with what has also been proposed as the post-2020 global biodiversity framework objective, which the EU should fully support (see section 5).

Today 26% of EU's land area is already protected, 18% as part of Natura 2000 and 8% under national schemes. Of EU seas, 11% are protected, 8% in Natura 2000 and 3% under additional national protection. <sup>26</sup> In order to match scientific findings, guarantee the long-term viability of its habitats and species, respect its commitment to lead globally, and reap the economic and job creation benefits, the EU should protect and effectively manage - at a minimum - an extra 4% for land and 19% for sea areas compared to the protected areas in place today. <sup>27</sup>

In addition, **areas of very high biodiversity value** or potential, and most vulnerable to climate change, should be granted special care in the form of **strict protection**. Strict protection aims at leaving natural processes essentially undisturbed to respect the area's ecological requirements.<sup>28</sup> Several species and habitat types protected under the EU nature legislation would greatly benefit from strict protection including non-intervention measures.<sup>29</sup>

It is particularly important to strictly protect the EU's remaining **primary and old-growth forests**. These are the richest forest ecosystems and keep removing carbon from the atmosphere, while storing significant carbon stocks, including in forest soils. It is also important to strictly protect other carbon-rich ecosystems such as peatlands, grassland, wetlands and marine ecosystems, taking into account projected shifts in vegetation zones. Today, only 3% of land and less than 1% of marine areas are strictly protected in the EU. <sup>30</sup> The ambition level must be increased and at least **one third of the whole network of protected areas – representing 10% of EU land and 10% of EU sea – should be covered by strict protection, in line with the suggested international ambition.<sup>31</sup>** 

<sup>&</sup>lt;sup>22</sup> Fitness check of the EU Nature Directives (SWD(2016) 472 final).

<sup>&</sup>lt;sup>23</sup> BIO Intelligence Service (2011). <u>Estimating the economic value of the benefits provided by the tourism/recreation and Employment supported by Natura 2000.</u>

<sup>&</sup>lt;sup>24</sup> Ten Brink et al. (2017). Natura 2000 and Jobs: scoping the evidence.

<sup>&</sup>lt;sup>25</sup> Member States' Prioritised Action Frameworks 2020.

<sup>&</sup>lt;sup>26</sup> Latest EU-27 statistics based on CDDA (<u>European database of nationally designated protected areas</u>) v. 2019, and <u>Natura 2000 dataset "end 2018"</u>.

<sup>&</sup>lt;sup>27</sup> In view of the decisive role of offshore wind for reaching EU's carbon neutrality goals, within the 30% protected sea areas, offshore wind projects will be possible, if and as long as these projects are in compliance with relevant EU and national environmental and nature protection legislation.

<sup>&</sup>lt;sup>28</sup> In an EU context, strict protection means a level of protection which is not necessarily no-go, but that allows no significant disturbance of natural ecological processes.

<sup>&</sup>lt;sup>29</sup> See Guidelines on Wilderness in Natura 2000. European Union (2013).

<sup>&</sup>lt;sup>30</sup> As defined in the IUCN Protected Area Categories Ia and Ib, and reported by the Member States to the EEA.

<sup>&</sup>lt;sup>31</sup> On the effectiveness of strict protected areas see, e.g. Sala E., Giakoumi S. (ICES Journal of Marine Science, 2018). No-take marine reserves are the most effective protected areas in the ocean.

The designations of additional protected areas, including the strictly protected areas, will be a Member State responsibility.<sup>32</sup> All protected areas will need to have clearly defined conservation objectives and measures.

The Commission, working with Member States and the European Environment Agency, will put forward in 2020, **criteria and guidance for the identification and designation** of additional areas. Among other things, the Commission will explain how other effective areabased conservation measures<sup>33</sup> that achieve the same goals as protected areas may be counted for the achievement of the proposed targets<sup>34</sup>, and under which conditions the greening of the cities can contribute to the target. The Commission will also put forward **criteria for the adequate management planning and for the legal protection** of the areas, including a definition of strict protection.

Every Member State will have to do its share of the effort. Member States have different abundance and quality of biodiversity and the efforts required should be based on objective ecological criteria. The targets relate to the EU as a whole and could be broken down according to the EU bio-geographical regions and sea basins or at a more local level. Because of their exceptionally high biodiversity value, particular focus will have to be given to the protection and restoration of tropical and sub-tropical marine and terrestrial ecosystems in the EU outermost regions.

In addition, in order to reach a truly coherent and resilient **Trans European Nature Network**, it will be important to identify and agree upon **ecological corridors** to be set up, that will either be included in protected areas or will connect them. Ecological corridors prevent genetic isolation, allow for species migration and maintain and enhance the delivery of a range of services from healthy ecosystems to climate change adaptation and mitigation. Investing in green and blue infrastructure will be essential to achieve this.<sup>35</sup>

The Commission will aim to reach an agreement with the Member States on the criteria and the related guidance for additional designations in 2021. **Member States will have until the end of 2023 to demonstrate significant progress in legally designating the required new protected areas and integrating ecological corridors**. The Commission will then assess whether this process has proved sufficient to reach the EU-wide targets or whether an EU legislative proposal is needed to reach them.

Finally, the **Overseas Countries and Territories** also host important biodiversity hotspots, which are not governed by EU environmental rules. The Commission encourages relevant Member States to consider promoting the same or equivalent rules for these countries and territories.

# Nature protection: key commitments by 2030

<sup>&</sup>lt;sup>32</sup> The additional designations under Natura 2000 will be achieved by implementation support through EU funds and enforcement as appropriate.

<sup>&</sup>lt;sup>33</sup> See <u>definition of "other effective area-based conservation measures"</u> under the Convention on Biological Diversity.

<sup>&</sup>lt;sup>34</sup> This includes those originally protected for other purposes, such as defence activities or fish stock recovery.

<sup>&</sup>lt;sup>35</sup> This coherent approach is set out in the <u>EU Guidance document on strategic EU-level green and blue infrastructure</u> (SWD(2019) 193).

- Legally protect a minimum of 30% of the EU land area and 30% of the EU sea area and integrate ecological corridors, to build a coherent, resilient and ecologically representative Trans European Nature Network.
- Strictly protect at least 1/3 of the EU protected areas (10% on land and 10% at sea), covering areas of very high biodiversity value or potential on land and at sea, including define, map, monitor and strictly protect all remaining EU primary and old-growth forests.
- **Effectively manage all protected areas**, defining clear conservation objectives and measures, and monitoring them appropriately.

# 2.2. An EU Nature Restoration Plan: restoring ecosystems across land and sea

Creating areas where nature is protected is not enough. To reverse biodiversity loss, the world needs to embark on an ambitious journey of nature restoration. And the EU shall lead the way.

This strategy sets up a new **EU Nature Restoration Plan** to improve the health of existing and new protected areas, and bring a diverse and resilient nature back to all landscapes, including agricultural and rural areas, seas, coasts and urban spaces. This means improving the condition of all ecosystems by reducing pressures on habitats and species and ensuring all use of ecosystems is sustainable, supporting the recovery of nature where needed, and tackling pollution and invasive alien species. The actions foreseen will create jobs, support reconciling EU economic development with biodiversity needs and help ensure the long-term productivity and value of our natural capital.

# 2.2.1. Broadening and increasing the effectiveness of the EU legal nature restoration framework

In the EU, restoration efforts by Member States are already required by existing legislation, such as the Habitats and Birds Directives, the Marine Strategy Framework Directive, the Floods Directive and the Water Framework Directive.

However, **important regulatory gaps hinder nature restoration**. There is, for example, no requirement under existing EU legislation for Member States to have comprehensive, strategic biodiversity restoration plans, with clearly verifiable targets and binding timelines to achieve favourable conservation status of habitats and species. Moreover, only a subset of EU's ecosystems are covered by the existing legal framework. There is no definition and criteria to determine what sustainable use of ecosystems and ecosystem restoration mean, and no requirement to map, monitor and assess ecosystem services, ecosystem health and ecosystem restoration efforts, including to enhance climate mitigation and adaptation.

In addition, there are **clear implementation gaps** that prevent the existing legislation from achieving the restoration objective. Stronger implementation support and enforcement action is required.<sup>36</sup>

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<sup>&</sup>lt;sup>36</sup> See <u>Fitness Check of the Nature Directives</u> (SWD(2016) 472) and <u>Fitness Check of Water Legislation</u> (SWD(2019) 439). See below section 3.1.2.

To ensure that significant areas of degraded and carbon-rich ecosystems across land and sea are restored, further regulatory and non-regulatory action is needed. This strategy sets up **two** main overarching actions in that context:

• The Commission will present in 2021 **binding EU nature restorations targets** to restore healthy and resilient ecosystems, including the most-carbon-rich ones such as seagrass meadows, wetlands, peatlands, bogs and marshes, as well as semi-natural grassland and old-growth and primary forests. The underlying impact assessment will identify the appropriate level of and conditions for the targets, as well as the most effective measures to reach these targets.

The impact assessment will also explore the possibility to establish an EU-wide **legally binding methodology and provisions** to map, assess and achieve good condition of ecosystems' in view of safeguarding their capacity to deliver services and provide benefits such as climate regulation, water regulation, soil health and pollination.

• As for the **Habitats and Birds Directives**, Member States are required to achieve favourable conservation status but there is **no deadline for this goal**. Consequently, implementation has been lagging behind what is needed to reverse damaging negative trends of some habitats and species.

The Commission will ask Member States to raise the level of implementation ambition and commit to **no deterioration in conservation trends and status** of all habitats and species protected under the Habitats and Birds Directives. In addition, **Member States will be asked to commit to ensuring that at least 30% of species and habitats which are not in favourable status will achieve such status by 2030 or at least show a strong positive trend.** 

The Commission will request **Member States to present by 2021** which species and habitats not in favourable conservation status they plan to cover and the implementing measures they plan to undertake to reach the 30% minimum target. To support Member States in the selection of the species and habitats to prioritise, the Commission will, in 2020, provide guidance in the framework of the Nature Directives Expert Group and with the assistance of the European Environmental Agency.

The lasting success of restoration will importantly also depend on reconciling socio-economic and environmental objectives through the sustainable use of land, waters and forests. Therefore, as part of, or closely interlinked with the overarching legal obligations for nature restoration, targeted eco-system specific actions, outlined in the following section, will be critical too.

# 2.2.2. Bringing nature back to agricultural land

As the key guardians of our land, farmers and foresters play a vital role in preserving the EU's biodiversity. Farmers are among the first to feel the consequences of biodiversity loss but they are also among the first to reap the benefits of biodiversity restoration on land. Yet, certain agricultural practices are the key driver of biodiversity decline. This is why it is important to work with farmers to support their transition to fully environment-friendly practices while ensuring that they continue to thrive. Improving the condition and diversity of agroecosystems will increase the sector's resilience to climate change, environmental risks and socio-economic shocks, while creating new jobs, for example in organic farming or in rural tourism and recreation.

**Farmland birds** and **insects**, particularly **pollinators**, are key indicators of the health of agroecosystems. They are vital for agricultural production and food security. Their alarming decline must be stopped and reversed. To this end, the Commission will take actions to reduce by 50% the use and risk of chemical pesticides by 2030 and reduce by 50% the risk entailed by of high-risk pesticides by 2030.<sup>37</sup>

Additional crucial action will be the full implementation and the review of the **EU pollinators'** initiative by the end of 2020.<sup>38</sup> On the basis of the review, the Commission will propose additional measures if and where necessary.

In order to provide space for wild animals, plants, pollinators and natural pest regulators, there is an urgent need to bring back at least 10% of utilised agricultural area under high-diversity landscapes, like buffer strips, rotational or non-rotational fallow land, or landscape features (hedges, non-productive trees, terrace walls, ponds, etc.). These features and areas are multi-functional: they contribute to agricultural productivity, enhance carbon sequestration, prevent soil erosion and depletion, filter air and water and support climate adaptation. In consequence, the increased levels of biodiversity often contribute to increased agricultural productivity. While the target is set at the EU level, it would need to be translated by Member States at a lower geographical scale in order to ensure connectivity among habitats, including through the implementation of the Habitats Directive and the Common Agricultural Policy's instruments.<sup>39</sup>

Agroecology brings natural processes and ecological principles into farming practices and must be encouraged. It can provide a supply of healthy food while maintaining productivity, increase soil fertility and biodiversity, and reduce the footprint of food production. Organic farming is the best known and best regulated agro-ecological practice. It is a sector with positive employment trends that attracts also younger workers in a general context of very low generation renewal in farming, provides 10-20 % more jobs per land area than conventional farms, and creates added value for agricultural products. For these socio-economic and environmental reasons, at least 25% of the EU's agricultural land must be under organic farming by 2030. The future Commission Action Plan on organic farming will include measures to increase demand for organic products.

**Agroforestry** - where trees are managed together with crops or with animal production - should also be increasingly supported<sup>42</sup> as it has a great potential in enhancing biodiversity, providing multiple ecosystem services and mitigate climate change.<sup>43</sup> Agroforestry is already currently supported by the CAP through rural development but not in all Member States and with not enough uptake.

The decline of **genetic diversity** must be also be reversed, including through facilitating the use of traditional varieties of breeds and crops. This can also bring health benefits because of

<sup>&</sup>lt;sup>37</sup> See also <u>Opinion on the authorisation processes of plant protection products</u> by the <u>Group of Chief Scientific Advisors</u>, Scientific Advice Mechanism 2018.

<sup>&</sup>lt;sup>38</sup> The <u>EU Pollinators initiative</u> (COM(2018) 395) aims at addressing the decline of pollinators in the EU and at contributing to global conservation efforts.

<sup>&</sup>lt;sup>39</sup> Such as through farming practices and standards known as 'Good Agricultural and Environmental Conditions' (GAECs) or other CAP interventions – see environmental objectives of the CAP

<sup>&</sup>lt;sup>40</sup> See <u>Food and Agriculture Organisation Agroecology Knowledge Club.</u>

<sup>&</sup>lt;sup>41</sup> OECD (2016). Farm Management Practices to Foster Green Growth. OECD Green Growth Studies.

<sup>&</sup>lt;sup>42</sup> Food and Agriculture Organisation: Agroforestry.

<sup>&</sup>lt;sup>43</sup> Kay et al. (2019) <u>Agroforestry creates carbon sinks whilst enhancing the environment in agricultural landscapes in Europe</u>. *Land Use Policy*, *83*, 581-593.

more varied and more nutritious diets. The Commission is considering the revision of marketing rules for traditional crop varieties in order to contribute to their conservation and sustainable use.

This strategy will work in tandem with the new **Farm-to-Fork Strategy** and the revised **Common Agricultural Policy**, including through the promotion of eco-schemes and result-based payment schemes and they will share a monitoring and reporting systems. The Commission will ensure that the Common Agricultural Policy strategic plans are assessed against robust climate and environmental criteria. These plans should lead to the use of sustainable practices such as precision agriculture, organic farming, agro-ecology, agro-forestry and stricter animal welfare standards and thus contribute to the implementation of the objectives under this strategy.

# 2.2.3. Addressing land take and restoring soil ecosystems

Soil is one of the most complex and diverse ecosystems, underpinning terrestrial biodiversity and climate mitigation and adaptation. It is a habitat in its own right, home to an incredible diversity of organisms that together regulate and control key ecosystem services such as soil fertility, nutrient cycling and climate regulation. Soil is a hugely important non-renewable resource, vital for human health, wellbeing and economy, including providing food and new medications such as antibiotics.

In the EU, soil is being degraded by a wide range of factors, and this has considerable environmental and economic consequences. Poor land management, such as deforestation, overgrazing, unsustainable farming and forestry practices, construction activities and land sealing are among the main causes of this situation. <sup>44</sup> Despite recent reductions in the pace of soil sealing, **fertile soils continue to be lost to land take**. When compounded by climate change, the effects of erosion and losses of soil organic carbon are becoming increasingly apparent. And desertification is a growing threat in the EU. <sup>45</sup>

The longer Europe waits to combat land degradation, the more difficult and costly it becomes. <sup>46</sup> It is therefore time to step up efforts to protect soil fertility, reduce soil erosion and increase soil organic matter. This can be achieved through the adoption of sustainable soil management practices, including through the Common Agricultural Policy, making significant progress on the identification and restoration of contaminated soil sites, **restoring degraded soils**, defining the conditions for their good ecological status, introducing restoration objectives, and improving the monitoring of soil quality, possibly as part of the new EU legal framework for the restoration of healthy ecosystems.

To that end, the Commission will **update the EU Soil Thematic Strategy**<sup>47</sup> in 2021 to achieve EU and international commitments on land degradation neutrality. Soil contamination, prevention and remediation will also be addressed as part of the **Zero Pollution Action Plan for air, water and soil,** to be adopted by the Commission in 2021. The **Common Agricultural** 

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<sup>&</sup>lt;sup>44</sup> EEA Signals 2019: Land and Soil in Europe: Why we need to use these vital and finite resources sustainably. European Environment Agency (2019).

<sup>&</sup>lt;sup>45</sup> Combating desertification in the EU: a growing threat in need of more action, Special Report of the European Court of Auditors n°33/2018.

<sup>&</sup>lt;sup>46</sup> <u>Assessment report on land degradation and restoration</u> of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 2018).

<sup>&</sup>lt;sup>47</sup> Thematic Strategy for Soil Protection (COM(2006) 231).

**Policy** will in addition have a key role to play by encouraging farming practices that maintain soil fertility.

2.2.4. Increasing the quantity of forests and improving their health and resilience

Forests are hugely important for biodiversity, while also delivering multiple services such as climate and water regulation, the provision of food, medicines and materials, carbon sequestration and storage, soil stabilisation that prevent landslides and avalanches, air and water purification as well as opportunities for recreation and interaction with nature. Foresters of both public and private forests have a key responsibility and role to play in ensuring sustainable forest management and restoring and sustaining biodiversity in forests.

In addition to strictly protecting all remaining EU primary and old growth forests, the EU must **increase the quantity and improve the quality as well as the resilience** of its forests against fires, droughts, pest diseases and other threats, many of which are likely to increase with climate change. It is also essential to secure the socio-economic role of forests in providing materials, products and services, which are key for the circular bio-economy as called for in the European Green Deal.

The path to these objectives, in full respect of the wider ambitions for biodiversity and climate neutrality, will be developed in the upcoming EU Forest Strategy. In this context, a roadmap will be established for planting at least 3 billion additional trees in the EU by 2030, compared to current projections, in full respect with ecological principles favourable to biodiversity and forest resilience. This initiative will provide substantial up-front job opportunities linked to the collecting and cultivating of seeds, planting seedlings, and ensuring their development. Tree planting is particularly favourable in cities, where the co-benefits of green infrastructure are multiple, including human health benefits from better air quality, recreation possibilities, cooling and noise mitigation, and increased value of housing/land. In rural context it can be synergetic with agroforestry, landscape features and increased carbon sequestration.

Afforestation, reforestation and tree planting to support biodiversity and ecosystem restoration will be promoted through the Common Agricultural Policy Strategic Plans, the Cohesion Policy funds, and through the European Urban Greening Platform to be established with cities and mayors to, among other things, set up mechanisms for urban tree planting under the LIFE programme. The share of forest areas covered with management plans including biodiversity-friendly practices such as closer-to-nature-forestry should expand to cover all managed public forests and significantly increase in private forests. Building on existing policy experience and knowledge, the Commission will present, together with the upcoming EU Forest Strategy, guidelines on biodiversity-friendly afforestation, reforestation and closer-to-nature-forestry practices as part of sustainable forest management.

In addition, the Commission, together with other data providers, will further develop the **Forest Information System for Europe** to produce up-to-date assessments of the condition of European forests and to link all EU forest data web-platforms. These include the European Forest Fire Information System, which supports Member States' prevention and preparedness efforts, and the EU Observatory on Deforestation and Forest Degradation, which develops new methodologies for assessing the drivers and impacts of forest degradation worldwide. The **new EU forest data and information architecture** will be presented in the upcoming EU Forest Strategy.

# 2.2.5. Win-win solutions for energy generation

**Decarbonising the energy system** is critical for the EU to reach its climate objectives. The EU needs more sustainably sourced renewable energy to lead the fight against climate change and biodiversity loss.

The EU will **prioritise and foster win-win solutions** such as ocean energy, including offshore wind, which also allows for fish stock recovery, and solar panel farms that provide biodiversityfriendly soil cover.

Bioenergy, too, is set to play a role in a climate neutral economy. Due to the need to mitigate climate and biodiversity risks that an increasing use of certain sources for bioenergy creates, the revised Renewable Energy Directive<sup>48</sup> includes strengthened sustainability criteria and promotes the shift towards advanced biofuels based on residues and non-reusable and nonrecyclable waste. This transformative approach should continue for all bioenergy forms, and the use of whole trees, and food and feed crops, whether produced in the EU or imported, for energy production should be minimised.

To be able to monitor and mitigate potential risks and ensure that EU biomass-related policies are sustainable, the Commission is continuously assessing<sup>49</sup> the EU's and global biomass supply and demand and its sustainability. Given the increased climate and biodiversity ambitions as announced in the European Green Deal, by the end of 2020, the Commission will publish the results of this work with regard to the sustainability of bioenergy, especially the use of forest biomass for energy production.

These results will inform the Commission's policy-making, including the 2021 review of the data on biofuels with high indirect land use change risk and the establishment of a trajectory for their gradual phase out by 2030; the 2021 operational guidance on the new sustainability criteria on forest biomass for energy<sup>50</sup>; and the review and revision, where necessary, of the level of ambition of the Renewable Energy Directive, the Emissions Trading Scheme, and the Regulation on land use, land use change and forestry (LULUCF), also foreseen for 2021. The overall objective is to ensure that EU regulatory framework on bioenergy is in line with the increased climate and biodiversity ambition set out by the European Green Deal.

# 2.2.6. Restoring the good environmental status of marine ecosystems

Restored and properly protected marine ecosystems such as coastal wetlands, seagrass meadows, mangroves and coral reefs bring substantial socio-economic benefits, notably to all those who rely on the sea for a living. Stronger efforts are even more justified as marine and coastal ecosystem biodiversity loss will be exacerbated by projected significant and unprecedented global warming impacts like deoxygenation, acidification, ocean warming, marine heatwaves or sea level rise.<sup>51</sup>

Achieving 'good environmental status' of marine ecosystems, including through the establishment of strictly protected areas, must include the restoration of carbon-rich ecosystems as well as important fish spawning and nursery areas. Some of today's sea uses are recognised

<sup>&</sup>lt;sup>48</sup> Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources.

<sup>&</sup>lt;sup>49</sup> JRC Biomass Assessment Study.

<sup>&</sup>lt;sup>50</sup> Art. 29 of Directive (EU) 2018/2001.

<sup>&</sup>lt;sup>51</sup> IPCC (2018) Special Report on Global Warming of 1.5°C; IPCC (2019) Special Report On Oceans and the Cryosphere and IPCC (2020) Special Report on Climate change and Land.

to endanger food security, fishers' livelihoods, and fishery and seafood sectors. Globally, 90% of the marine fish stocks are fully fished or overfished, amounting to annual lost economic benefits of approximately €77 billion.<sup>52</sup> Marine resources must be harvested sustainably, and there must be zero-tolerance to illegal practices.

The full implementation of the EU's Common Fisheries Policy, the Marine Strategy Framework Directive, and the Birds and Habitats Directives will deliver an important part of these objectives and benefits.

The application of an **ecosystem-based management** approach under the Common Fisheries Policy, the Marine Strategy Framework Directive and the Maritime Spatial Planning Directive, will reduce adverse impacts of fishing, extraction and other human activities on marine ecosystems, especially on sensitive species and seabed habitats. In this regard, it will be key that the national maritime spatial plans delivered by the Member States by 2021 are supported across all maritime sectors and include area-based conservation management measures, such as marine protected areas and measures for their effective management. The Commission will report on the implementation of the maritime spatial planning Directive by March 2022 at the latest including the application of the ecosystem based management.

Furthermore, the Commission will develop a **new action plan by 2021** to protect marine ecosystems and conserve fisheries resources. Where necessary, measures will be introduced to limit the use of fishing gear most harmful to biodiversity, including on the seabed. In this context particular attention will be paid to the possibilities to reconcile, in a socio-economically just way, the use of the bottom-contacting fishing gear with the biodiversity objectives, as it is currently the most extensively damaging activity to the seabed across the EU and beyond. The support for fishers' transition to the more selective and less damaging fishing techniques should be provided under the EMFF.

It is imperative to **maintain or reduce fishing mortality to or under Maximum Sustainable Yield levels.** This will help achieve a healthy population age and size distribution for all populations currently fished. In addition, it is necessary to eliminate, or reduce to a level that allows full recovery, the **by-catch** of species threatened with extinction, such as dolphins and porpoises, as well as those in bad conservation status, or not in good environmental status.<sup>53</sup> Furthermore, the by-catch of populations of other species<sup>54</sup> has to be eliminated or, where not possible, minimised, so that it does not threaten their conservation status. To achieve this, data on by-catch for all sensitive species need to be effectively collected, as required under the Birds and Habitats Directives and the Common Fisheries Policy which need to be effectively implemented and enforced.

In addition, fisheries management measures must be established in all marine protected areas according to clearly defined conservation objectives on the basis of the best available scientific advice.

As part of the wider restoration agenda, investments in restoring coastal and marine ecosystems will provide essential benefits and nature-based solutions, for example through improving

<sup>&</sup>lt;sup>52</sup> World Bank (2017). The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries.

<sup>&</sup>lt;sup>53</sup> As reported under the Birds and Habitats Directives (Favourable Conservation Status) or the Marine Strategy Framework Directive (Good Environmental Status).

<sup>&</sup>lt;sup>54</sup> Protected by international and European law.

storm protection, fisheries recovery, sustainable tourism and related local jobs and income opportunities.

# 2.2.7. Restoring freshwater ecosystems

The **EU's legal framework on water** has the right level of ambition<sup>55</sup> to achieve the good status or potential of freshwater, transitional and coastal waters, however implementation and enforcement must be stepped up.

Greater efforts are required to restore freshwater ecosystems affected by pollution and hydro-morphological alterations. This includes restoring the natural functions of rivers by removing barriers that prevent the passage of migrating fish, improving the flow of water and sediments. It also means restoring riparian areas, wetlands and floodplains. At least 25,000 km of rivers will be restored into free-flowing rivers<sup>56</sup> through the removal of barriers and the restoration of floodplains. Member States' authorities should review water abstraction and impoundment permits to restore ecological flows in order to of achieve good status or potential of all surface waters and good status of all groundwater by 2027 at the latest. These measures should be planned in the 3<sup>rd</sup> River Basin Management Plans to be adopted by Member States in 2021, under the Water Framework Directive.

Large-scale river and floodplain restoration investments<sup>57</sup> can provide a major economic boost for the restoration sector<sup>58</sup>,<sup>59</sup> and for local socio-economic activities such as tourism and recreation, while at the same time enhancing ecosystem services such as water regulation, flood protection, fish nursery habitats and the removal of nutrient pollution.<sup>60</sup>

# 2.2.8. Greening urban and peri-urban areas

**Green urban spaces**, from parks and gardens to green roofs and urban farms, provide a wide range of benefits for people as well as a refuge for nature. They help cities to fight climate change and adapt to its impacts. They improve quality of life in cities, create new business opportunities, provide protection from flooding, droughts and heat waves, reduce air pollution, water pollution and noise, and maintain a connection between humans and nature. Fair access to green areas is essential for health, recreation and social interaction. The recent lockdowns due to the COVID-19 pandemic also demonstrate how important access to green urban spaces is for human physical and psychological well-being.

As the share of the population living in urban areas continues to rise, **green spaces often lose out in the competition for land**. Green areas are built upon, degraded and polluted. While

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<sup>&</sup>lt;sup>55</sup> <u>Fitness Check of water legislation</u> (SWD(2019) 439) and <u>Evaluation of the Urban Waste Water Treatment</u> Directive (SWD(2019) 700).

<sup>&</sup>lt;sup>56</sup> The target of 25,000 km is based on Commission's assessment of what is achievable across the EU, within the timeframe of this Strategy.

<sup>&</sup>lt;sup>57</sup> Staff Working Document accompanying the Water Fitness Check SWD(2019) 439.

<sup>&</sup>lt;sup>58</sup> Broekx et al. (2011). Designing a long-term flood risk management plan for the Scheldt estuary using a risk-based approach', Natural Hazards, 57 (2): 245-266.

<sup>&</sup>lt;sup>59</sup> Gerner et al. (2018) <u>Large-scale river restoration pays off:</u> A case study of ecosystem service valuation for the <u>Emscher restoration generation project</u>, Ecosystem Services 30, 327 – 338; Floodplain restoration along the <u>Lower Danube Green Corridor</u>, EEA (2017).

<sup>&</sup>lt;sup>60</sup> Russi et al (2013). <u>The Economics of Ecosystems and Biodiversity (TEEB) for Water and Wetlands; Green Infrastructure and Flood Management: Promoting cost-efficient flood risk reduction via green infrastructure solutions, EEA (2017).</u>

<sup>&</sup>lt;sup>61</sup> See EnRoute project.

protection of some urban green spaces has increased, and many cities now contain Natura 2000 sites<sup>62</sup>, urban sprawl is increasing by around 2% a year in the EU.<sup>63</sup>

This strategy aims to reverse these trends, halting the loss of green urban ecosystems and improving them instead. The promotion of healthy ecosystems, green infrastructure and nature-based solutions should be systematically integrated into urban planning, including in the design of buildings and their surroundings, public spaces and infrastructure.

To underpin these commitments, bring nature back to cities and reward community action, the Commission calls on European cities of at least 20.000 inhabitants<sup>64</sup> to develop by the end of 2021 ambitious Urban Greening Plans. These plans should include, among other things, measures and actions to create a significant number of biodiverse urban forests, parks and gardens, urban farms, green roofs, green walls and tree-lined streets, urban meadows and hedges, establish connections between green spaces, eliminate the use of pesticides in urban green spaces and limit biodiversity-harmful practices, such as the use of leaf blowers and excessive mowing of urban green spaces. To facilitate and coordinate this work, in close coordination with the European Covenant of Mayors, the Commission, under a new 'Green City Accord<sup>65</sup> with cities and mayors, will establish an EU Urban Greening Platform. The Urban Greening Plans will be presented to the Platform and will have a central role in the Rules of Contest and eligibility criteria for European Green Capital 2023 and European Green Leaf 2022.

To inform the process outlined in section 2.1 of this strategy and achieve a truly coherent Trans-European Nature Network, Member States are encouraged to work with cities to determine how they can contribute to the additional designation of land protected areas. Member States are also encouraged to cooperate with cities to establish how they can promote the use of nature-based solutions in urban and peri-urban environments, making use of financial and regulatory frameworks. Planting 3 billion new trees in the EU by 2030 will also in part be carried out in urban areas. In the upcoming programming period for cohesion policy in 2021-2027, nature-based solutions should be the preferred option wherever possible.

The Commission will support Member States, local and regional authorities in their efforts through technical guidance and help to mobilize funding and capacity building. It will also reflect these objectives in the preparation of the European Climate Pact.

# 2.2.9. Reducing pollution

**Pollution**<sup>66</sup> is a key driver of biodiversity loss. While the EU has a solid legal framework in place to reduce pollution<sup>67</sup>, greater efforts are still required. Biodiversity is suffering in particular from the release of nutrients, pesticides, pharmaceuticals, hazardous chemicals, urban and industrial wastewater, and other waste including litter and plastics. All of these pressures must be reduced. In addition, air pollution and weakened ecosystems facilitate

<sup>&</sup>lt;sup>62</sup> There are 11,000 Natura 2000 sites within, or partly within, cities, representing 15% of the total area of the Natura 2000 network.

<sup>&</sup>lt;sup>63</sup> Urban sprawl in Europe, EEA-FOEN (2016).

<sup>&</sup>lt;sup>64</sup> A 'city' is understood to be an urban area, including metropolitan areas, as an administrative unit governed by a city council or another form of democratically elected body.

<sup>65</sup> The Green City Accord

<sup>&</sup>lt;sup>66</sup> Including pesticides, biocides, pharmaceuticals, industrial and consumer chemicals, plastics and micro-plastics, mineral fertilisers, reactive nitrogen and phosphorus, sewage, noise and waste/marine litter.

<sup>&</sup>lt;sup>67</sup> Industrial Emissions Directive (2010/75/EU), Nitrates Directive (Council Directive 91/676/EEC), REACH Regulation (EC/1907/2006), UWWD Directive (91/271/EEC), air and water quality legislation.

disease outbreaks and may increase virus transmissions and vulnerability as it is emerging from studies from the COVID-19 pandemic.<sup>68</sup>

This goal will be supported by the adoption, under the Zero pollution ambition for a toxic-free environment, of an EU Chemicals Strategy for Sustainability, and a Zero Pollution Action Plan for Air, Water and Soil. The Commission will promote the goal of zero pollution from nitrogen and phosphorus flows from fertilisers through reducing nutrient losses by at least 50%. This target will also result in the reduction of use of fertilisers by at least 20%. This will be achieved by applying balanced fertilisation and sustainable nutrient management. To this end, the Commission will develop an Integrated Nutrient Management Action Plan in 2022.

The new **Farm-to-Fork strategy** will address the reduction of the use and risk of **pesticides** and support wider implementation of Integrated Pest Management.<sup>69</sup> The environmental risk assessment of pesticides will be strengthened. The pressure from **plastics**, including microplastics and single-use plastics, is addressed through the implementation of the European Strategy for Plastics<sup>70</sup> and the new **Circular Economy Action Plan**.<sup>71</sup> The Commission will also work towards minimising pollution caused by the use of fertilisers contaminated with hazardous chemicals.

The Commission will develop a **dedicated indicator set** for the progressive reduction of pollution, and will establish baselines to help monitoring progress. Pressures from **marine litter and underwater noise** are already being addressed under the Marine Strategy Framework Directive.

# 2.2.10. Addressing invasive alien species

**Invasive alien species** can significantly undermine efforts to protect and restore nature. Besides inflicting major damage to nature and the economy, many invasive alien species also facilitate the outbreak and spread of infectious diseases posing threat to humans and wildlife.<sup>72</sup> The rate of their intentional<sup>73</sup> and unintentional<sup>74</sup> release has increased in recent years, and of the 1872 species now considered threatened in Europe, 354 are under threat from invasive alien species.<sup>75</sup> Without effective control measures, the rate of invasion will continue to rise, and in conjunction with the effects of climate change, the risks for nature, human health and the economy will grow.

The full implementation of the EU Invasive Alien Species Regulation, as well as of other existing legislation and international agreements addressing the pathways of introduction of alien species<sup>76</sup>, must therefore be stepped up. This should aim to minimise, and where possible,

<sup>&</sup>lt;sup>68</sup> Exposure to air pollution and COVID-19 mortality in the United States, Harvard University 2020; <u>Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy?</u> (April 2020)

<sup>&</sup>lt;sup>69</sup> Sustainable Use of Pesticides Directive (2009/128/EC).

<sup>&</sup>lt;sup>70</sup> European Strategy for Plastics in a Circular Economy (COM(2018) 28).

<sup>&</sup>lt;sup>71</sup> A new Circular Economy Action Plan for a cleaner and more competitive Europe (COM(2020) 98).

Hulme P. (2014). <u>Invasive species challenge the global response to emerging diseases</u>. <u>Trends in parasitology</u> (2014) Vol. 30, Issue 6; Duscher et al. (2017). <u>The raccoon dog (Nyctereutes procyonoides) and the raccoon (Procyon lotor)—their role and impact of maintaining and transmitting zoonotic diseases in Austria, Central Europe</u>. <u>Parasitology Research</u> (2017) 116(4); Schaffner F. et al. (2013). <u>Public health significance of invasive mosquitoes in Europe</u>. <u>Clinical microbiology and infection</u> (2013) Vol. 19, Issue 8.

<sup>&</sup>lt;sup>73</sup> E.g. pets, horticulture, biological pest control.

<sup>&</sup>lt;sup>74</sup> E.g. ship ballast water, contaminated grain, plant protection and animal health.

<sup>75</sup> Red List of the International Union for the Conservation of Nature (IUCN).

<sup>&</sup>lt;sup>76</sup> For instance International Convention for the control and management of ships' ballast water and sediments

eliminate the introduction and establishment of alien species in the European environment, manage established invasive alien species, and decrease by 50% the number of Red List species they threaten.<sup>77</sup>

# EU Nature Restoration Plan: key commitments by 2030

- 1. Binding EU nature restoration targets are proposed in 2021 and significant areas of degraded and carbon-rich ecosystems across land and sea are restored.
- 2. Habitats and species under the Habitats and Birds Directives show no deterioration in conservation trends and status. At least 30% of those which are not in favourable conservation status will reach such status or at least show a positive trend.
- 3. The decline in pollinators is reversed.
- 4. The risk and use of chemical pesticides is reduced by 50% and the use of high-risk pesticides is reduced by 50%.
- 5. At least 10% of utilised agricultural area is under high-diversity landscapes, like buffer strips, rotational or non-rotational fallow land, or landscape features (hedges, nonproductive trees, terrace walls, ponds, etc.).
- 6. The uptake of agro-ecological practices is significantly increased and at least 25% of agricultural land is under organic farming management.
- 7. Three billion new trees are planted in the EU, in full respect with ecological principles favourable to biodiversity and forest resilience.
- 8. Significant progress has been made in the identification and remediation of contaminated soil sites.
- 9. At least 25 000 km of free-flowing rivers are restored.
- 10. The introduction of invasive alien species is significantly limited and there is a 50% reduction in the Red List species threatened by invasive alien species.
- 11. The losses of nutrients from fertilisers to the environment are reduced by 50% and nitrogen use is reduced by 20%.
- 12. All cities with at least 20.000 inhabitants have an ambitious Urban Greening Plan with concrete measures and actions.
- 13. No chemical pesticides are used in sensitive areas <sup>78</sup> such as EU urban green areas.
- 14. The negative impacts on sensitive species and habitats, including on seabed through fishing and mineral extraction activities are reduced to achieve good environmental status as defined in the Marine Strategy Framework Directive.
- 15. The by-catch of populations of species threatened with extinction or in bad conservation or environmental status, is eliminated or reduced to a level that allows full recovery; the bycatch of populations of other species is eliminated or, where not possible, minimised, so that it does not threaten their conservation status.

#### 3. ENABLING TRANSFORMATIVE CHANGE

3.1. A new Governance Framework

In the EU there is currently no governance framework, which would enable to identify and ensure the full, coherent and coordinated implementation of all biodiversity-related obligations

<sup>&</sup>lt;sup>77</sup> Red List of the International Union for the Conservation of Nature (IUCN).

<sup>&</sup>lt;sup>78</sup> According to the Sustainable Use of Pesticides Directive, sensitive areas, include Natura 2000 sites and places such as public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds, and in the close vicinity of healthcare facilities, the risks from exposure to pesticides are high.

and commitments, agreed at national, EU and international level, in particular under the Convention on Biological Diversity. To address the gap, the Commission will put in place a **new biodiversity governance framework,** to map these obligations and commitments, and to set out a roadmap for and guide their implementation.

As part of this new Framework, a monitoring and review mechanism, established and coordinated by the Commission<sup>79</sup>, and based on a clear set of agreed indicators, will regularly assess progress and indicate corrective action if necessary. This mechanism will feed the Environmental Implementation Review and contribute to increased focus on natural capital, biodiversity and ecosystem services of the European Semester.

**Partnerships** will be an essential element of the Framework that will aim to give all relevant actors a sense of ownership and responsibility in meeting the EU biodiversity commitments. The new Framework will support administrative capacity building, transparency, stakeholder dialogue and participatory governance at different levels.

Taking into account the results of the framework's cooperation-based approach as well as the post-2020 global biodiversity framework including its governance aspects, the Commission will assess in 2023 whether a legally-binding approach to the EU biodiversity governance framework is needed and if so, will present proposals to that effect by 2024.

#### Stepping up implementation and enforcement of EU environmental **3.2.** legislation

Proper implementation and enforcement of the relevant EU environmental acquis is an essential step in halting the biodiversity loss. Over the last 30 years, the EU has put in place a solid legislative framework to protect and restore its natural capital, with at its core the Birds and Habitats Directive, the Water Framework Directive, the Marine Strategy Framework Directive and the Invasive Alien Species Regulation. However, recent evaluations have shown that although legislation is fit for purpose, implementation on the ground is lagging behind<sup>80</sup>, with disastrous consequences on biodiversity and with a very high economic cost.81The implementation and enforcement of the EU environmental legislation must therefore be stepped up.

The Commission's increased efforts to address breaches of EU law, will concern, as a priority, the core biodiversity-related legislation mentioned above. As regards the Birds and Habitat Directives, enforcement will focus on completing the Natura 2000 network, the effective management of all sites, the species protection provisions and the species and habitats that show declining trends. These efforts will be supported by the use of earth observation and other spatial information. The Commission will also ensure that relevant environment-related legislation with an impact on biodiversity, such as the directives on environmental impact assessment, on strategic environmental assessment, on environmental liability<sup>82</sup> and on

<sup>&</sup>lt;sup>79</sup> Including joint reporting and shared monitoring systems, building on the <u>European Interoperability Framework</u> - Implementation Strategy (COM(2017) 134). The work of the Biodiversity Knowledge Centre will also provide continuous input to the monitoring and review mechanism.

<sup>&</sup>lt;sup>80</sup> The 2015 State of Nature in the EU report (COM (2015) 219) revealed that only 52% birds had a secure population in the EU and only 23% and 16% of the biogeographical level assessments for non-bird species and habitats of Community interest respectively were favourable in the period 2007-2012.

<sup>&</sup>lt;sup>81</sup> The costs of non-implementation are estimated at 50 EUR billion per year.

<sup>82</sup> Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage.

environmental crime<sup>83</sup> will be better implemented, enforced and, as necessary, reviewed and revised.

Improving implementation and enforcement will require political support and increased financial and human resources, both at EU and national levels. Working with Member States and European networks of environmental agencies, inspectors, auditors, police, prosecutors and judges, the Commission will strive to improve compliance assurance in line with the Action Plan on environmental compliance and governance. In addition, it will support civil society's role as a compliance watchdog, by improving access to national courts in environmental matters through the upcoming revised Aarhus Regulation. Es

# 3.3. Building on an integrated and whole of society approach

# 3.3.1. Business for biodiversity

In the partnership spirit of this strategy, all parts of the economy and society will have to play their role. The business community, in particular, has its own impact on nature but is also the home to many of the innovations, partnerships and people that can help address biodiversity loss.

Companies should be encouraged to act on their corporate social responsibility requirements or use their staff engagement programmes to invest in nature. These could be small-scale measures such as planting trees in the local community or they could be more significant, such as financing or providing manpower for larger projects. Through its exiting platform<sup>86</sup>, the Commission will help to build a **European Business for Biodiversity movement**, taking inspiration of recent initiatives<sup>87</sup> and making it an integral part of the European Climate Pact.

In addition, the Commission launched in 2020 a **review of the reporting obligations of businesses under the non-financial reporting directive,** with a view to integrating environmental and biodiversity criteria. Furthermore, the forthcoming initiative on sustainable corporate governance will encourage the integration of sustainability criteria into business strategies by improving the corporate governance framework. Duty of care/due diligence approaches will be considered for businesses across different economic value chains. These approaches should contribute to measures that need to be undertaken to avoid damage to biodiversity induced by EU companies outside the EU territory.

# 3.3.2. Investments, pricing and taxation

Tackling biodiversity loss and restoring ecosystems will require **significant investments**. <sup>89</sup> For a just transition to a more biodiversity-friendly society, biodiversity protection and restoration and climate action need to become an integral part of all relevant EU programmes and financing instruments for all Member States. The Commission will strengthen its biodiversity proofing

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<sup>&</sup>lt;sup>83</sup> <u>Directive 2008/99/EC on the protection of the environment through criminal law.</u>

<sup>&</sup>lt;sup>84</sup> Environmental compliance assurance describes the the ways in which public authorities promote, monitor and enforce compliance with the rules established to provide society with environmental benefits that include clean water, breathable air and a healthy nature.

<sup>85</sup> EU implementation of the Aarhus Convention.

<sup>&</sup>lt;sup>86</sup> EU Business @ Biodiversity Platform (B@B).

<sup>&</sup>lt;sup>87</sup> E.g. Business for Nature or One Planet Business for Biodiversity.

<sup>&</sup>lt;sup>88</sup> Study on due diligence requirements through the supply chain – Final Report.

<sup>&</sup>lt;sup>89</sup> Sustainable Europe Investment Plan (COM(2020) 21).

framework<sup>90</sup> in order to ensure that all EU funding will support biodiversity-friendly investments. It will further promote the application of the mitigation hierarchy<sup>91</sup> to limit potential negative impacts of EU funded projects on biodiversity.

To meet the needs of this strategy including investment priorities for Natura 2000 and green infrastructure identified in Member States' Prioritised Action Frameworks, at least €20 billion euro/year<sup>92</sup> should be unlocked to be spent on nature.

It will be necessary to **mobilise public funding** - including the European Agricultural Guarantee Fund and European Agricultural Fund for Rural Development, Regional and Cohesion Funds, Horizon Europe, the European Maritime and Fisheries Fund, LIFE, the European Social Fund and external action funds –, **private funding** as well as co-financing by Member States.

Nature restoration has the potential to make a major contribution to climate objectives. A significant proportion of the 25% of the EU budget dedicated to climate action will therefore also contribute to biodiversity and nature-based solutions, while a substantial share of the €20 billion/year to be spent on nature will contribute to climate mitigation and adaptation'. Under Invest EU, a dedicated natural capital and circular economy initiative in the range of €10 billion over the next ten years will be established, based on public/private blended finance. Nature and biodiversity is also a priority for the European Green Deal Investment Plan.

The Commission will adopt in 2021 a delegated act under the Regulation on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation)<sup>93</sup> to establish a common classification system of economic activities that substantially contribute to the protection and restoration of biodiversity and ecosystems.

The Commission will further promote **tax systems and pricing to reflect real environmental costs**, **including the cost of biodiversity loss**. This should involve encouraging changes in fiscal systems so that Member States shift the tax burden from labour to pollution, under-priced resources and other environmental externalities. The "**user pays**" and "polluter pays" principles have to be applied to prevent and correct environmental degradation.

## 3.3.3. Measuring and integrating the value of nature

Biodiversity considerations need to be better integrated into public and business decision-making at all levels. Building on the Commission's Guidance on integrating ecosystems and their services into decision-making<sup>94</sup>, the Commission will develop methods, criteria and

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<sup>&</sup>lt;sup>90</sup> See Common framework and guidance documents for biodiversity proofing of the EU budget.

<sup>&</sup>lt;sup>91</sup> The mitigation hierarchy is based on a series of steps to ensure no overall negative impact on biodiversity: 1. Avoidance, 2 Minimisation, 3. Restoration and 4. Compensation of unavoidable residual damage.

<sup>&</sup>lt;sup>92</sup> The cost estimate is based on the 2018 Impact Assessment of the LIFE Regulation (SWD(2018) 292), a <u>Study on the costs of implementing the Target 2 of the EU Biodiversity Strategy to 2020</u> (including restoration of 15% of degraded ecosystems), and data submitted by 16 Member States under Art 8(1) of the Habitats Directive estimating the EU co-financing needed 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 under Art 8 of the Habitats Directive.

<sup>&</sup>lt;sup>93</sup> The Regulation is planned for adoption before the summer 2020. The framework will establish a common classification system of economic activities that substantially contribute to meeting one or more of the environmental objectives.

<sup>&</sup>lt;sup>94</sup> SWD(2019) 305.

**standards** to describe the essential features of biodiversity, its services, values, and sustainable use.

These will include the measuring the impacts (*footprint*) of products and organisations on the environment, including using life cycle approaches<sup>95</sup>, as well as **natural capital accounting**, a methodology for the quantitative measurement of ecosystems and their services and values, and their incorporation into accounting and reporting systems used by business and the public sector. In this context, the Commission will also support the establishment of an international natural capital accounting initiative and support focused public and private initiatives both in the EU and internationally.

These approaches can help transform the way products are designed and produced across value chains, can complement financial reporting, and can be integrated into future relevant legislation.

# 3.3.4. Improving knowledge, education and skills

The fight against biodiversity loss must be underpinned by **sound science**. Data and indicators on biodiversity need to be improved through better monitoring<sup>96</sup>, digital technology and citizen science.<sup>97</sup> Enhancement of research and development, innovations, exchange of knowledge and of best practices will be key to identify the best nature-based solutions and ways to address biodiversity loss.

A long-term **strategic research agenda** for biodiversity will be set under Horizon Europe<sup>98</sup> with increased funding, including for large-scale demonstration of nature-based solutions, testing of governance approaches, and financing and business models that can enable a transformative change. **Horizon Europe**'s **Missions**<sup>99</sup> will significantly contribute to fill in knowledge gaps and finding solutions to improve the health of ecosystems and their contribution to human health. In parallel, biodiversity-relevant partnerships including a dedicated **Biodiversity Partnership** will make the bridge between researchers and practitioners thus making nature-based solutions a reality on the ground.

The Commission will establish a **new Knowledge Centre for Biodiversity**, in close cooperation with the European Environment Agency. The Centre will track and assess progress, foster cooperation and underpin further policy development for the EU and its partners. Cooperation between climate and biodiversity scientists will be improved and together with the Member States, the Commission will increase its contributions to the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services.

The Commission calls on Member States to integrate biodiversity and ecosystems into **school**, **higher education curricula** and **professional training**. The Commission will propose in 2021, a Council Recommendation on education for environmental sustainability together with an accompanying competence framework, to provide guidance for schools and teachers on

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<sup>&</sup>lt;sup>95</sup> See European Platform on Life Cycle Assessment.

<sup>&</sup>lt;sup>96</sup> Including through the use of the European Earth Observation capabilities to better understand natural and anthropogenic pressures on biodiversity and their link to ecosystem condition and safe planetary boundaries.

<sup>&</sup>lt;sup>97</sup> Citizen science is the non-professional involvement of volunteers in the scientific process, whether in the data collection phase or in other phases of the research.

<sup>&</sup>lt;sup>98</sup> Horizon Europe is the next EU research and innovation investment programme (2021 – 2027).

<sup>&</sup>lt;sup>99</sup> Missions on Adaptation to climate change including societal transformation, on Healthy oceans, seas coastal and inland waters, on Climate-neutral and smart cities, and on Soil health and food

biodiversity, and help develop and assess knowledge, skills and attitudes on climate change and sustainable development. It will also provide support materials 100 and facilitate the exchange of good practices in EU networks of teacher-training programmes.

The Commission will promote biodiversity projects through EU programmes such as the Erasmus+ programme and the European Solidarity Corps. Professional training and reskilling will be encouraged across relevant sectors, in line with the updated Skills Agenda<sup>101</sup>, including through opportunities under the European Social Fund+ and other funding instruments.

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

#### 4.1. Raising the level of ambition and commitment worldwide

The decade leading to 2030 will be decisive for global biodiversity and nature and the world needs to adopt a robust biodiversity framework in the course of the next year. With this strategy, the EU is making a statement of its intent to lead the world in addressing the global ecological and climate crisis<sup>102</sup>, putting sustainability, well-being and the achievement of the SDGs at the heart of policymaking.

The EU is determined to show leadership at the 15th Conference of the Parties to the Convention on Biological Diversity. It will bring its own ambitious commitments to the table and support governments and stakeholders across the globe to significantly step up their action. Both the European Parliament<sup>103</sup> and the Council<sup>104</sup> have called for EU leadership and an ambitious outcome.

To show Europe's ambition, the Commission proposes that the EU helps to broker at least the following elements:

- One or several overarching long-term goals for biodiversity similar to the 1.5°C target for climate change. This should ensure that, by no later than 2050, ecosystems are healthy and resilient and capable of delivering a full range of services essential to prosperity and wellbeing, in line with the Convention on Biological Diversity's 2050 Vision agenda item of "living" in harmony with nature". It should also ensure that there are no unavoidable, human-induced extinctions of species and that humanity's global ecological footprint does not exceed the bio capacity of the Earth.
- **Ambitious global 2030 targets** in line with the EU commitments proposed in this strategy. These should be formulated, where feasible, in a specific, measurable, actionable, relevant and time-bound manner, and they should clearly address the drivers of biodiversity loss.
- Improved means of implementation in areas such as finance, capacity, research and know-how and technology, with better supporting tools and mechanisms.

A new skills Agenda for Europe - Working together to strengthen human capital, employability and competitiveness (COM(2016) 381).

<sup>&</sup>lt;sup>100</sup> E.g. educational materials such as the Global Soil Biodiversity Atlas.

<sup>102</sup> IPBES (2018) Assessment Report on Land Degradation and Restoration, IPBES (2019) Global Assessment, IPCC (2018) Special Report: Global Warming of 1.5°C; IPCC (2019) Special Report On Oceans and the Cryosphere and IPCC (2020) Special Report on Climate change and Land.

European Parliament Resolution on CBD COP 15 (2019/2824 (RSP).

<sup>&</sup>lt;sup>104</sup> Council Conclusions (15272/19) on preparation of the global post-2020 biodiversity framework (CBD).

- A much stronger implementation, monitoring and review process. Parties would revise their National Biodiversity Strategies and Action Plans by 2021, or at least submit national commitments for the most important targets. This should also include committing to a regular cycle for reviewing implementation of the agreed actions, the rate of progress in reducing the pressures on biodiversity and achieving the targets, and for stepping up implementation if needed ('ratcheting up'). These reviews should be based on an independent science-based gap analysis and foresight process, and headline indicators that are common for all Parties.
- A **fair and equitable share of the benefits** from the utilisation of genetic resources linked to biodiversity.
- Participation of indigenous peoples and local communities and all relevant stakeholders, including women, youth, civil society, local authorities, the private sector, academia and scientific institutions.

# 4.2. Using external action to promote EU's ambition

# 4.2.1. Green Deal Diplomacy

Biodiversity is a priority of the EU's external action and a pillar of integrated action for the SDGs. It should be strengthened and mainstreamed throughout all the EU's bilateral and multilateral engagements. Coherence between the internal and the external dimension of the strategy is necessary to reach objectives within and outside the EU. Through the EU's 'Green Deal diplomacy', and forthcoming green alliances<sup>105</sup>, the Commission and the High Representative will work closely with Member States to mobilise all bilateral and multilateral efforts towards protecting biodiversity and implementing the Green Deal beyond Europe, taking into account the context in partner countries. Green deal diplomacy needs to be closely coordinated with all EU foreign policy tools. In particular, the EU will support political dialogue, policy and regulatory reforms, including on taxation, to promote enabling conditions for biodiversity. It will reinforce engagement with civil society to foster the required 'Whole of Society' approach, and step up action with cities and local authorities to achieve impact at local level, while seeking innovative partnerships with international organizations and international financial institutions.

The EU is actively promoting coalitions of stakeholders worldwide. In March 2020, for example, the Commission launched the **Global Biodiversity Coalition** of national parks, aquariums, botanic gardens, zoos, science and natural history museums national to help raise awareness around the world on the need to protect and nurture biodiversity. The Coalition encourages and invites all to play their part in raising awareness. Over 70 partners worldwide joined at the time of the launch. The Commission will consider launching or joining other High Ambition Coalitions promoting an ambitious post-2020 global biodiversity framework.

#### 4.2.2. International Ocean Governance

In line with the **International Ocean Governance agenda**<sup>106</sup>, the EU will support the conclusion of an ambitious international **legally binding agreement on marine biological** 

<sup>&</sup>lt;sup>105</sup> Green Alliances will focus on cooperation with African and other partner countries to implement the Green Deal.

<sup>&</sup>lt;sup>106</sup> International ocean governance agenda: an agenda for the future (JOIN(2016) 49).

**diversity of areas beyond national jurisdiction** by 2020, which should then be ratified and implemented as quickly as possible. It is essential that such instrument sets clear global procedures for identifying, designating and effectively managing ecologically representative marine protected areas in the high seas.

Work will continue with partner countries and competent regional organisations, such as Regional Fisheries Management Organisations and Regional Sea Conventions to put in place measures to protect and, when relevant, sustainably use sensitive maritime ecosystems and species, including in areas beyond national jurisdiction, with a focus on marine biodiversity hotspots. The EU should assist Small Island Developing States and other relevant partner countries to ensure their participation in meetings of regional and global organisations and bodies, as well as the implementation of international commitments and regulations related to conservation, protection of marine habitats, fisheries management and marine pollution. The EU will apply zero tolerance towards illegal, unreported and unregulated fishing and will combat overfishing, including through WTO negotiations on a global agreement to ban harmful fisheries subsidies. The EU will also support global knowledge on oceans and global monitoring systems, in particular for marine ecosystem health, fisheries and marine protected areas, as well as to better understand and address the impacts of climate change on oceans.

The EU's unique diplomatic outreach can help broker agreements to protect the world's precious nature, for instance the proposed designation of three vast **Marine Protected areas** in the Southern Ocean, which, if agreed, would constitute the single biggest legal act of environmental protection in history. The EU is ready to take the lead to find an agreement, by making use of its collective diplomatic influence.

In the negotiations of the mining code at the UN International Seabed Authority (ISA) and in other relevant international fora, the EU should take the position and advocate that **exploitation of marine minerals in the international seabed Area** cannot start before the effects of deepsea mining on the marine environment, biodiversity and human activities have been studied and researched sufficiently, the risks are understood and the exploitation technologies and operational practices are able to demonstrate no serious harm to the environment, including biodiversity – in line with the precautionary principle<sup>107</sup> and the call of the European Parliament. In this context, the EU should also advocate for more transparency in the working methods of international bodies such as the ISA.

The EU has been funding several research projects and will continue to do so in order to improve the understanding of the possible environmental impacts of deep-sea mining activities and how to best mitigate these impacts and develop environmentally friendly technologies. The main findings of these projects show, in line with recent leading scientific publications<sup>109</sup>, that current understanding of ecosystem functioning, recoverability, connectivity and recruitment in the deep sea is limited and that there is considerable uncertainty about the negative and irreversible effects of mining on these processes.<sup>110</sup> In addition, there are concerns as regards

<sup>&</sup>lt;sup>107</sup> Under Article 191.2 TFEU, the Union policy on the environment shall aim at a high level of protection and shall be based on the precautionary principle. On this principle, see also 1992 Rio Declaration on Environment and Development (Principle 15 on the precautionary approach) or the ITLOS 2011 Advisory Opinion no. 17, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, para. 125-135.

<sup>&</sup>lt;sup>108</sup> European Parliament Resolution on international ocean governance (2017/2055(INI)).

<sup>&</sup>lt;sup>109</sup> See Simon-Lledó et al. (2019). Biological effects 26 years after simulated deep-sea mining.

<sup>&</sup>lt;sup>110</sup> Recent EU-funded research (see above footnote) showed that ecological damage of a deep-sea mining test in the Pacific carried out in 1989 was still evident last year.

climate change and emission reductions, including lack of clarity about the amount of disturbance to natural sequestration of CO2 and methane in the deep sea.

# *4.2.3. Trade Policy*

Trade policy can support and be part of the EU's ecological transition. As stated in the European Green Deal, the Commission will take measures to ensure that all relevant EU policies, including its trade policies are sustainable and should live up to a green oath to do no harm, including to biodiversity. All chemicals, materials, food and other products that are placed on the European market must also fully comply with relevant EU regulations and standards as well as international commitments. The Commission will engage with developing countries to ensure a smooth and fair transition and coherence with other development policies. Aid-for-Trade will be mobilised to facilitate implementation and to ensure that partner countries can benefit from biodiversity-friendly trade. Finally, the Commission will use its trade agreements as platforms to promote biodiversity protection with EU's trading partners.

The Commission will ensure **full implementation and enforcement of the biodiversity provisions** in the trade and sustainable development chapters of trade agreements, including through the future EU Chief Trade Enforcement Officer, benefiting from strengthened transparency and monitoring under the CBD and other biodiversity-related Multilateral Environment Agreements and the work of the new Knowledge Centre for Biodiversity. The Commission will also better assess the impact of trade agreements on biodiversity, with follow-up action to strengthen the biodiversity provisions of trade agreements if relevant.

International wildlife trade is estimated to include hundreds of millions of plant and animal specimens. Levels of exploitation of some animal and plant species are high. Trade in these species, combined with habitat loss and other factors, can heavily deplete their populations and lead to extinction. It is estimated that globally 40,000 live primates, 4 million live birds, 640,000 live reptiles, and 350 million live tropical fish are traded illegally each year. Illegal wildlife trade represents the fourth most lucrative black market after drugs, people and arms smuggling, for an estimated value of €20 billion annually. Experts also point to illegal live animal trade as one of the causes to the emergence of zoonotic diseases and threats of pandemics. The Commission will propose a further tightening of the rules of EU ivory trade in 2020. By 2021, it will revise the Action plan against Wildlife Trafficking to step up efforts to combat illegal wildlife trade.

The Commission will consider strengthening the coordinating and investigative capacities of the **European Anti-Fraud Office** (OLAF) to work with Member States and third countries to prevent illicit imports/exports and the entry of illicit products into the Single Market. This will contribute to the enforcement of *inter alia* the Timber and CITES Regulations.<sup>112</sup>

The Commission will also look into a possible revision of the Environmental Crime Directive in order to allow a more effective fight against wildlife crime and offending, including by expanding its substantive scope and by introducing specific provisions for types and levels of criminal sanctions.

<sup>112</sup> EU Timber Regulation (EU) No 995/2010; Council Regulation (EC) 338/97 on the protection of species of wild fauna and flora by regulating trade therein.

<sup>&</sup>lt;sup>111</sup> UNEP 2016 UNEP's Frontiers 2016 Report on Emerging Issues of Environment Concern.

The Commission will further propose regulatory or non-regulatory measures to avoid or minimize the placing of products associated, in particular, with **deforestation or forest degradation** on the EU market. At the same time, EU trade agreements will also aim to facilitate trade in products from deforestation-free supply chains. Such approach will also contribute to preventing outbreaks of pandemics, as there is scientific evidence that forest clearing and conversion to cropland increase the likelihood of new diseases by enabling new contacts between humans and wildlife.

4.2.4. International cooperation, Neighbourhood policy and resource mobilisation

Effective implementation of the future post-2020 global biodiversity framework will require **greater cooperation** with partner countries, and increased financing from all sources, as well as the **phasing out of subsidies harmful to biodiversity**.

Existing measures must be increased, used more effectively, through the systematic mainstreaming of biodiversity. The principle of "do no harm" should be applied across all sectors, and the direct and indirect drivers of biodiversity loss should be tackled more effectively in the EU's external policies.

In the last decade, the EU and its Member States collectively upheld their commitment to double **financial flows to developing countries** for biodiversity. The EU will now **increase support to partners** to measure impacts of policies and investments on biodiversity, identify needs, foster biodiversity financing and investments benefitting nature, supporting **nature-based solutions** and help build capacity.

Sustainable agricultural and fisheries practices will be promoted, including agroecology and agroforestry, climate-resilient and conservation agriculture, agro-biodiversity conservation and use, integrated landscape management, as well as watershed and marine management. Actions to protect, sustainably use and restore the world's forests, including through forest partnerships, will be scaled up. Particular attention will also be paid to sustainable water resources management, the restoration of degraded land, the protection and restoration of wetlands, peatlands, mangroves, coral reefs, seagrass beds and other biodiverse areas with high ecosystem services and climate mitigation potential.

These actions will contribute to prevent and build resilience to possible future pandemic diseases like COVID-19 by better protecting natural ecosystems and reinforcing regulation of wildlife trade and consumption. The EU will enhance its support to global efforts aimed at applying the so-called **One Health approach**<sup>115</sup>, which recognises the intrinsic connection between human health, animal health and healthy resilient nature promoting multi-sectoral responses to food safety hazards, risks from zoonoses, and other public health threats at the human-animal-ecosystem interface.

<sup>&</sup>lt;sup>113</sup> In line with the Commission Communication on <u>Stepping up EU Action to Protect and Restore the World's</u> Forests (COM(2019) 352).

 $<sup>^{114}</sup>$  Including international financing where biodiversity is the principal objective and where it is a significant secondary objective, in line with <u>CBD COP11 Decision XI/4</u> and EU and Member States financial reports submitted to CBD in 2015 and 2018.

<sup>115</sup> hiips://www.who.int/features/qa/one-health/en/

The EU will **support the transition to green and circular economies** that minimise pollution, waste and other negative impacts on biodiversity. Sustainable investments will be prioritised and private sector funding catalysed through the external funding instruments, including possible dedicated investment channels. Principles and tools will be developed to integrate biodiversity standards for sustainable finance and environmental accounting, as well as smart green indicators in budget support.

Support will be given to **research and innovation**, environmental education and skills development, together with the empowerment of people, including the youth. This will help ensure lasting impacts, while also strengthening business responsibility and the accountability of governments.

Actions will be scaled up with partner countries in **Africa**, **Asia**, **Latin America**, **the Caribbean and the 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. In Africa, the EU will launch the "NaturAfrica" initiative to protect wildlife and key ecosystems while offering opportunities in green sectors for local populations. Similar initiatives will be developed in other regions.

The EU will promote specific actions in global biodiversity hotspots in **Overseas Countries** and **Territories**, (including cooperation with their neighbouring EU outermost regions), the **Western Balkans** and EU **Neighbourhood countries**, and support EU candidate countries and potential candidates in their efforts to comply with the biodiversity acquis.

The EU should reinforce synergies between the social and environmental pillars of sustainable development, including the **links between biodiversity protection and human rights**, gender, health, education, conflict sensitivity, the rights-based approach, and the role of indigenous peoples and local communities. This will be done in particular by supporting bilateral programmes on health, education, gender equality and women's empowerment that can embed knowledge across communities and sectors.

## 5. CONCLUSION

Protecting and restoring biodiversity is the only way to preserve the quality and continuity of human life on Earth. The commitments proposed in this strategy pave the way for ambitious and necessary changes — changes that will ensure the wellbeing and economic prosperity of present and future generations, living in a healthy environment that delivers the necessary services. These commitments will require a sense of responsibility and strong joint efforts from the EU, the Member States, stakeholders and citizens.

The Commission invites the European Parliament and the Council to endorse this Strategy and its Commitments ahead of the 15th Conference of the Parties to the Convention on Biological Diversity. The Commission will maintain the political ownership of the strategy by suggesting a standing progress point at the Environment Council and at the European Parliament.