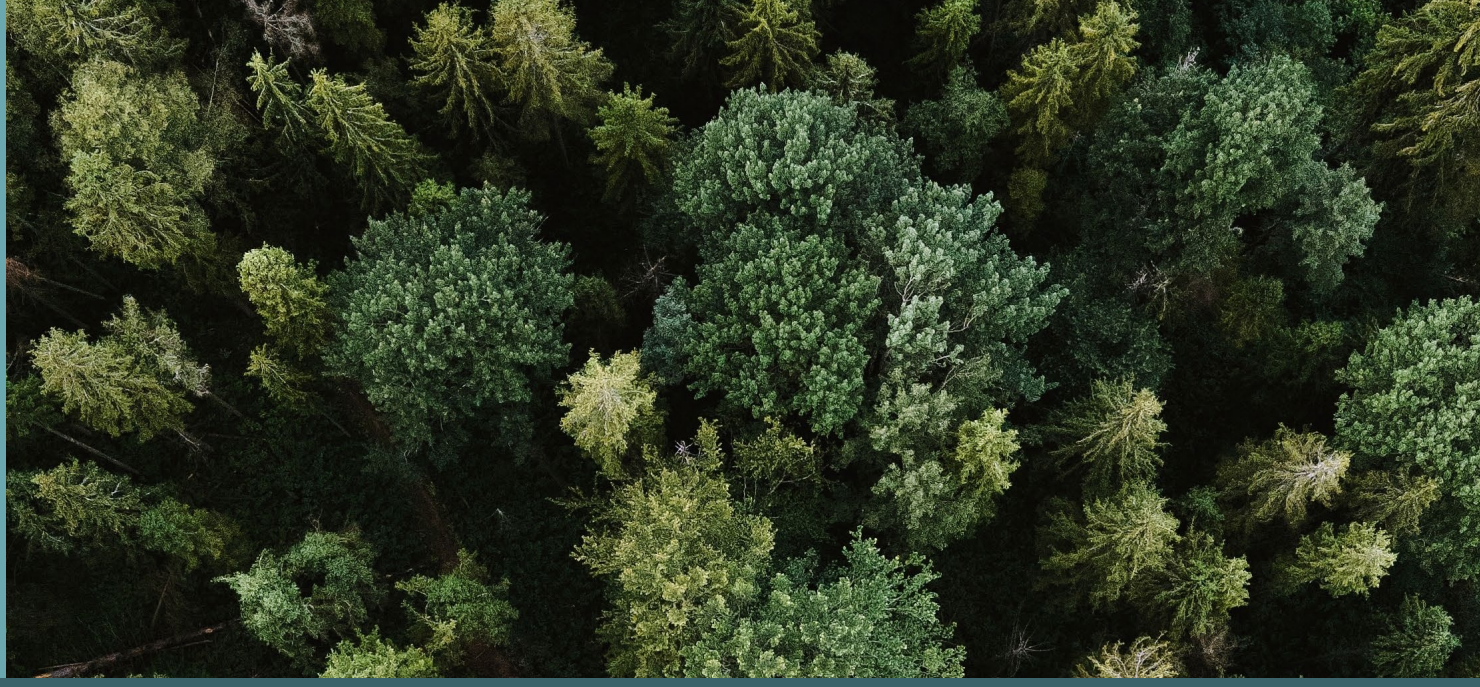
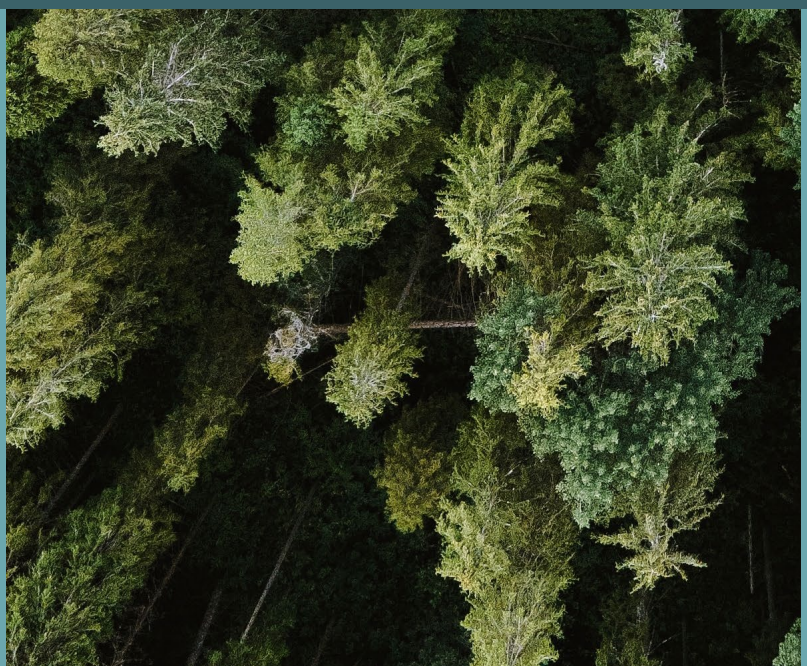


BUILDING SYNERGIES BETWEEN CLIMATE & BIODIVERSITY GOVERNANCE: **A PRIMER FOR COP28**

SEPTEMBER 2023



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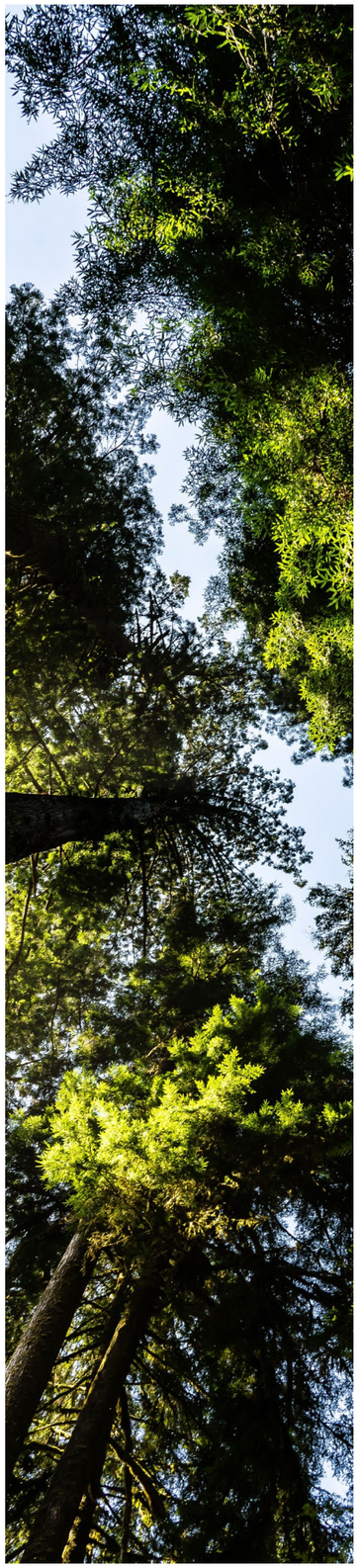

OUTLINE

This primer, prepared for the United Nations Resident Coordinator Office in the United Arab Emirates, provides an introduction to the ways in which the challenges of climate change and biodiversity interact and the potential for international policy processes to create joined up responses. Its aim is to provide a reference and further resources for those interested in considering how this endeavour can be strengthened through the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC), to be held in the UAE in November 2023.

It provides an overview of the interaction between climate change and biodiversity loss and the emergence of nature-based solutions as a potential response (Section 1) and the history and processes of the Convention on Biodiversity (Section 2), setting out its key features and the major developments that took place in the run up to the Global Biodiversity Agreement reached at the 15th Conference of the Parties (COP15) in Montreal, December 2022 as well as the core goals and targets agreed. It then considers how climate change and biodiversity policy and action are being aligned both through the formal processes of the UNFCCC and the CBD as well as through the growing momentum of initiatives developed by non-state actors and subnational governments (Section 3).

The primer concludes with some of the key issues emerging at the interface of climate and biodiversity policy, identifying ten areas where concrete progress could be made through COP28 to generate more transformative action for both agendas (Section 4).

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ACKNOWLEDGEMENTS

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GLOSSARY OF KEY TERMS

Ad Hoc Working Group Ad hoc working groups assist the work of the Convention by addressing specific themes (e.g. Protected Areas) and reviewing the implementation of these programmes and reporting to the Conference of Parties (COP).

Agriculture, Forestry, and Other Land Use (AFOLU) AFOLU refers to terrestrial land use composed of agriculture, forestry and other land uses. AFOLU is often referred to in the context of climate mitigation and biodiversity strategies, due to its significant contribution to global GHG emissions and biodiversity loss.

Biodiversity Biodiversity is the diversity of life from the level of gene through to the level of ecosystem.

Climate Adaptation Interventions which adapt to climate effects and reduce harmful outcomes or generate beneficial outcomes.

Climate Mitigation Interventions which diminish the release of sources of GHG emissions or enhance the sinks of emissions.

Convention on Biological Diversity (CBD) Adopted in 1992, the CBD aims to foster "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources" and is ratified by 196 Parties.

Conference of Parties (COP) COP is the supreme decision-making body of the Conventions on Biodiversity and Climate Change. All states that are Parties to the Convention are represented at the COP, and during its periodic meetings it reviews its implementation, adopts decisions required to enhance the implementation of the Convention, including institutional and administrative arrangements. The COP on Climate Change meets every year, while the COP on Biodiversity gathers every other year.

Global Biodiversity Framework (GBF) or the 'Kunming-Montreal' Global Biodiversity Framework (GBF) entered into force in December 2022, with its core mission to "halt and reverse biodiversity loss" and to "put nature on a path to recovery for the benefit of people".

Indigenous Peoples and Local Communities (IPLC) IPLC is a term commonly referred to as "individuals and groups who self-identify as indigenous or as members of distinct local communities".

Intergovernmental Panel of Climate Change (IPCC) IPCC is an independent intergovernmental body established in 1988 which produces and publishes comprehensive scientific assessment reports every five to seven years on climate change. The latest synthesis assessment report was launched in March 2023. The secretariat is located in Geneva, Switzerland.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Established in 2012, IPBES is an independent intergovernmental body with the aim to enhance the science-policy interface for biodiversity and ecosystem services. They provide comprehensive scientific assessment reports on the state of knowledge regarding the conservation and sustainable use of biodiversity, long-term human wellbeing and sustainable development, with the latest assessment report launched in July 2022. The secretariat is located in Bonn, Germany.

Loss and Damage Loss and damage refers to harmful effects associated with climate change and biodiversity loss, such as extreme weather events and loss of ecosystems' resilience. Loss and Damage finance is integral to the Conventions on biodiversity and climate to compensate countries who are in particular vulnerable to detrimental outcomes.

Marrakech Partnership for Global Climate Action Under the leadership of the High-Level Champions, the Marrakech Partnership aims to foster the implementation of the Paris Agreement by strengthening collaboration between governments and key stakeholders.

National Biodiversity Strategy and Action Plans (NBSAP) NBSAP include national strategies, plans or programmes which specify the integration and consideration of the conservation and sustainable use of biological resources. These plans should reflect on the measures set out in the Convention and specify the steps which will be taken to meet these goals.

Nature Positive The objective 'Nature Positive' is achieved when nature losses are reversed by 2030 to attain a net positive improvement by 2030 (i.e. more biodiversity than we have today) and full recovery by 2050 (i.e. large scale restoration of nature).[1]

Nature-Based Solutions (NbS) Nature-based solutions are defined as actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.

Nature's Contributions to People (NCP) Building on its precursor "ecosystem services", NCP refers to all contributions of nature - positive and negative - that people attain from nature, while acknowledging other worldviews on human-nature relationships and embedding other knowledge systems such as Indigenous and local knowledge.[2]

Net Zero The objective Net Zero emissions or "net zero" will be attained when all anthropogenic emissions of greenhouse gases are counterbalanced by removing anthropogenic carbon from the atmosphere.

Paris Agreement Adopted in 2015, the Paris Agreement is a legally binding international treaty which aims to halt global warming below 2ºC, preferably to 1.5ºC compared to pre-industrial levels. The agreement requires all signatory countries to combat climate change through their Nationally Determined Contributions (NDCs).

Parties A state or regional integration organisation (e.g. European Union) that has agreed to a treaty which entered into force. Each Party to the Convention is represented by a national delegation at the Convention.

Race To Resilience (RtR) Launched at the Climate Adaptation Summit in 2021, the high-profile campaign "Race To Resilience" under the leadership of the High-Level Climate Champion aims to gather non-state actors to increase climate resilience across urban, rural and coastal areas.

Race To Zero (RtZ) Launched at the Climate Action Summit in 2019, the high-profile campaign "Race To Zero" under the leadership of the High-Level Climate Champion aims to gather non-state actors to take action to halve global emission by 2030.

Resilience The capacity of systems to cope and restore from disturbances.

Safeguards Measure that is designed to ensure that interventions realise their designed outcomes.

Sustainable Development Goals (SDGs) Adopted by United Nations Member states in 2015, the 17 SDGs form the heart of the 2030 Agenda for Sustainable Development, calling for action on these goals and their related thematic issues "to promote prosperity while protecting the planet".

Secretariat The offices responsible for the smooth operation of the different Conventions (e.g. UNFCCC Convention) by arranging meetings, preparing reports and coordinating with other intergovernmental organisations.

Sharm El-Sheikh to Kunming and Montreal Action Agenda for Nature and People Launched in 2018, the Action Agenda is a platform which aims to complement governmental efforts with the productive efforts of nonstate and subnational actors in attaining beneficial outcomes for both nature and people.

Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA) The SBSTTA is an intergovernmental scientific advisory body which assists the Convention on Biological Diversity by providing advice and assessments regarding the progress of implementation.

Synergies Situations in which the increased provision of one goal or benefit results in improvement in another goal.

Trade-offs Situations in which one goal or benefit increases and another one decreases.

Transformative Change - "fundamental, society-wide reorganization across technological, economic and social factors and structures, including paradigms, goals and values".[3]

United Nations Framework Convention on Climate Change (UNFCCC) Adopted in 1992 at the Earth Summit, the UNFCCC aims "to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system, in a time frame which allows ecosystems to adapt naturally and enables sustainable development" and is ratified by 199 Parties. The objectives of the 'parent treaty' are implemented by the Paris Agreement and its precursor, the Kyoto Agreement.

Whole of Society Acknowledges and promotes a society-wide mobilisation of actors, from Indigenous Peoples and Local Communities, NGOs, business and financial actors to youth and women.

Whole of Government Acknowledges and promotes the mobilisation of government authorities on all levels.

1. CLIMATE CHANGE & BIODIVERSITY: UNPACKING THE CONNECTIONS

1.1 RECOGNISING THE INTERLINKAGES BETWEEN BIODIVERSITY AND CLIMATE

Biodiversity, the diversity of life from the level of gene to the level of ecosystem, is rapidly declining across the globe, on land and in the sea. In the 2019 Global Assessment of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) estimated that 25% of plant and animal species are at risk of extinction by the end of the century, while 47% of natural ecosystems have decreased in their extent and condition. This loss of biodiversity presents huge risks to human health and planetary wellbeing globally. This is because, as a property of nature, biodiversity secures the flow of the countless ways in which nature supports humanity, protects us from climate change impacts, enhances food and water security, while supporting local livelihoods and rights. The more connected and biodiverse an ecosystem, the more able it is to support these benefits especially in a warming world.

Similarly, the latest Intergovernmental Panel on Climate Change's (IPCC) AR6 WGII report recognises the interactions among the coupled systems climate, ecosystems (including their biodiversity) and human society. The report highlights that human-induced climate change has caused widespread adverse impacts and related losses and damages to nature and people, with the most vulnerable communities and ecosystems being disproportionately affected. Global warming, reaching 1.5°C in the near-term, would cause unavoidable increases in multiple climate hazards and present multiple risks to ecosystems and humans. According to current climate change projections, a large proportion of terrestrial species face an increased risk of extinction, with many regions projected to experience increased tree mortality and forest dieback owing to increased temperatures and drought.

The conclusions from this growing weight of scientific evidence are stark. The 2021 joint IPBES-IPCC Co-Sponsored Workshop Report found that neither climate change or biodiversity, "will be successfully resolved unless both are tackled together."[4] There is now a critical opportunity to ensure that this integrated approach is embedded in the outcomes of COP28.

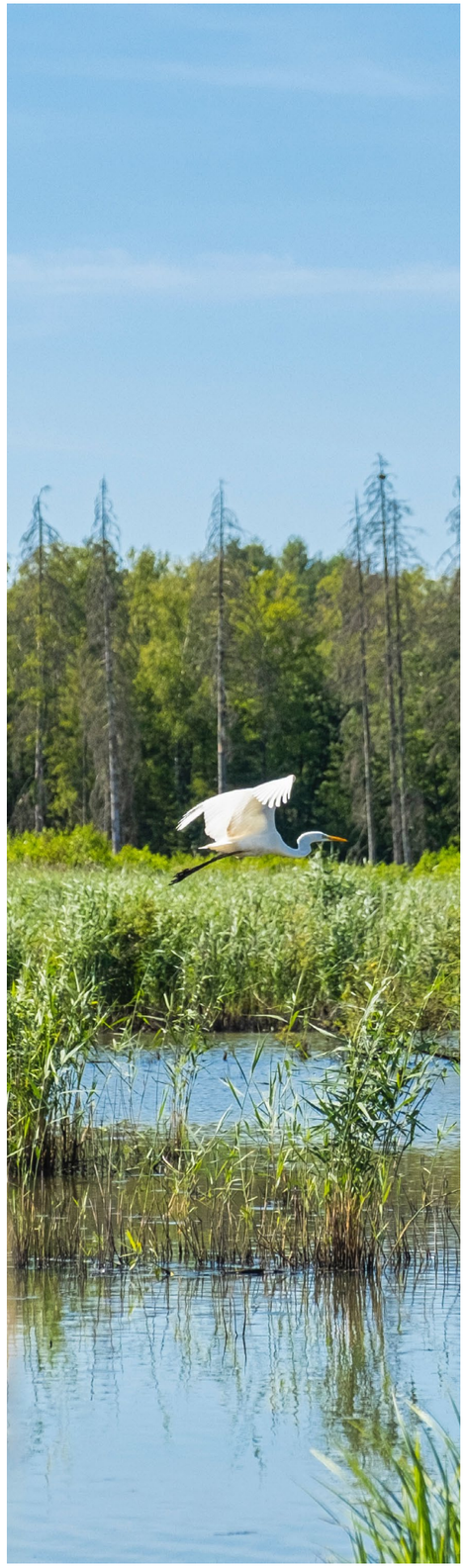
BIODIVERSITY AND CLIMATE MITIGATION

The Earth's biosphere, including its lands and oceans, absorbs carbon and helps to regulate the planet's climate. Biodiverse healthy ecosystems sequester and store carbon, and hence play a critical role in the carbon balance of Earth. Indeed, loss and degradation of land-based natural and semi-natural ecosystems contributes around 23% of GHG emissions, while the careful protection and restoration of these ecosystems, together with the sustainable management of working lands (croplands and timberlands) could absorb up to 27% of annual anthropogenic emissions. This is equivalent to reducing warming by around 0.3 degrees if warming peaks at 2 degrees towards the end of the century.[5] Beyond land-based ecosystems, the oceans harbour an estimated of 80% of Earth's biodiversity with over 230,000 known species and possibly millions yet to be discovered. The oceans act as the planet's primary heat sink stabilizing global temperatures, through absorbing around 93% of excess heat generated by human activities. Moreover, the oceans play a crucial role in the carbon cycle, absorbing approximately 30% of human-caused carbon dioxide (CO2). Oceans also influence weather patterns, atmospheric circulation, and the distribution of moisture, all of which have profound effects on regional and global climates.[6]

All IPCC pathways to 1.5°C rely to different degrees on the Agriculture, Forestry, and Other Land Use (AFOLU) sector to remove carbon dioxide from the atmosphere. Since the industrial revolution, the biosphere has taken up an estimated 56% of human-induced carbon dioxide (CO2) emissions through natural processes, buffering the full effects of human activities on the atmosphere. Today, land-based climate mitigation measures globally have the potential to sequester an estimated 11.5 GtCO2eq yr−1 (8–13.8 GtCO2eq yr−1) between 2020 and 2050.[7] At the same time, scholars call for caution in the use of these global estimates:

> *"Even the most constrained estimates of the contribution of land-based nature-based solutions to global climate change mitigation are highly uncertain. These estimates do not consider the risk of impermanence, as climate change and other anthropogenic stressors can undermine ecosystem health … Nor do they account for the serious problem that scaling up of nature-based solutions in one region can result in the export of ecosystem loss and damage to another (a phenomenon termed "leakage")."*

In addition to uncertainty about the mitigation potential of AFOLU actions, it is important to recognise that any such mitigation potential can only be realised if drastic reductions in greenhouse gas emissions are undertaken. Restoring nature is no substitute for reducing emissions and will not compensate for delays in decarbonising society.[8] Without decarbonisation, the changing climate will turn the biosphere into a net source of greenhouse gas emissions through increased frequency of fires and other climate extremes. In other words, without decarbonisation using nature to mitigate climate change will result in negative outcomes for climate, nature and people. The scientific community and beyond insist on 'safeguards' to ensure that the use of nature for climate mitigation delivers beneficial outcomes for climate, nature and people. To date, these safeguards have not been established across the



Conventions that shape biodiversity and climate governance globally and remain only voluntary.

BIODIVERSITY AND CLIMATE ADAPTATION

There is concrete evidence that protecting and restoring ecosystems and their biodiversity can support human adaptation to climate change.[9,10] First, such actions can reduce exposure to the immediate impacts of climate change. For example, restoring and protecting coastal ecosystems can defend against coastal flooding and storm surges; restoration and protection of forests and wetlands can reduce risk of floods, soil erosion and landslides; and green infrastructure can cool cities during heatwaves and help to abate floods. Second, such actions can also increase resilience to climate impacts by supporting diverse sources of food and income and thereby providing nutritional and financial security when crops or usual sources of income fail during climate extremes. Third, actions to restore ecosystems and their biodiversity can reduce vulnerability to climate impacts by empowering local communities and equipping them with knowledge and other resources to address future climate impacts. Increasing adaptive capacity in these ways can, in turn, enhance stewardship of ecosystems to ensure the continued supply of benefits from nature. Biodiversity underpins the capacity of nature and ecosystems to provide climate adaptation benefits, securing ecosystem resilience to climate events.[11] For example, tree plantations that are more biodiverse have been found to better withstand climate extremes, particularly droughts, compared to low-diversity plantations.[12,13]

THE POTENTIAL OF NATURE-BASED SOLUTIONS (NBS)

With the growing recognition of the interconnections between addressing the challenges of climate change and those of biodiversity loss has come a growing interest in interventions that can tackle both of these challenges at once and especially on Nature-based Solutions (NbS). While NbS are often associated in the media with climate mitigation – for example in terms of the potential of forests and mangroves to sequester and store carbon – they are much broader. NbS are defined by the UN as:[14]

> *"actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits."*

As this definition makes clear, NbS – centred on the conservation, restoration and management of the world's ecosystems – can make a critical contribution towards both climate change adaptation and mitigation while also supporting biodiversity conservation, health, poverty eradication, food and water security, and other societal objectives agreed to including under the Sustainable Development Goals (SDGs), Paris Agreement, Kunming Montreal Global Biodiversity Framework. NbS can be used to tackle a wide range of social, economic and environmental challenges – from air and water pollution, to health and wellbeing, economic regeneration and the development of new forms of economic activity. They can involve the protection, restoration or management of natural and semi-natural ecosystems; the sustainable management of aquatic systems and working lands such as croplands or timberlands; or the creation of novel ecosystems in and around cities. NbS have been increasingly used to address sustainable development challenges because of their potential to be multi-functional, addressing key challenges together.[15]

The interlinkages between addressing climate change and the loss of biodiversity have generated significant interest in deploying NbS that can work for both these goals. Such efforts are not new, for example the REDD+ mechanism within the UNFCCC has sought to deliver carbon sequestration and storage through forestry projects, while ecosystem-based adaptation, deployed for example by the World Bank, has been used for over a decade. What makes the growing focus on NbS significant is the specific focus on ensuring that such actions are underpinned by a biodiversity-positive approach and, where relevant, designed and implemented with the full engagement and consent of local communities and Indigenous Peoples.[16] This marks a decisive shift in the potential of working with nature to address climate change – moving from a singular, climate-first approach to one that ensures that NbS work for climate, nature and people.

Bringing a new focus on the potential for interventions to work for climate, nature and people is critical in order to address reported trade-offs – in which tackling one challenge comes at the expense of another. For example, simply planting non-native trees for their carbon storage capacity could negatively affect species habitats creating a trade-off between climate and nature goals. At the same time, a focus on natural carbon storage could lead to reduced focus on efforts to limit greenhouse gas emissions through decarbonisation, which, as demonstrated above, may have the unintended effect of turning forests into sources of carbon in the atmosphere in turn exacerbating climate change. Equally, fast-growing plantations can compromise water supplies and hence adaptation to climate change, resulting in maladaptation. Compared to native forests, plantations store less carbon, have lower water availability, prevent erosion less effectively, and support lower biodiversity. In other words, they can compromise efforts to address climate change adaptation and mitigation. Plantations also cause net harm when they distract from the imperative of effectively protecting remaining intact ecosystems. Developing NbS that are focused on both climate change and biodiversity can guard against such outcomes. At the same time, it is essential that efforts to address climate change through NbS respect local rights, voices, values, and knowledge. Ensuring empowerment of local communities, including local and Indigenous knowledge, are vital for NbS resilience and the ability of such interventions to sustain its multiple benefits over time.[17] To ensure that NbS realise their importance for

climate, nature and people it is crucial that safe-guards are developed and used consistently across the key UN Conventions that shape climate and biodiversity governance and across the 'whole of government' and 'whole of society' actors engaged in enabling global policy goals to be met.

The Nature-based Solutions Initiative (NbSI) at the University of Oxford has led the development of guidelines for good NbS, along with a consortium of organizations as signatories. The four guidelines for NbS are:

1. NbS are not a substitute for the rapid phase-out of fossil fuels and must not delay urgent action to decarbonize our economies.

2. NbS should involve the protection, restoration and/or management of a wide range of natural and semi-natural ecosystems on land and in the sea; the sustainable management of aquatic systems and working lands; or the creation of novel ecosystems in and around cities or across the wider landscape. Rather than solely focusing on trees and forests, NbS should also be equally considered for grasslands, marine, coastal and freshwater ecosystems, as well as urban environments, among others.

3. NbS must be designed, implemented, managed and monitored by or in partnership with Indigenous Peoples and local communities through a process that fully respects and champions local rights and knowledge, and generates local benefits.

4. NbS must support or enhance biodiversity, that is, the diversity of life from the level of the gene to the level of the ecosystem. Successful, sustainable NbS are explicitly designed and adaptively managed to provide measurable benefits for biodiversity and ecosystem health.

These four guidelines are intended to be complementary to the more detailed IUCN Global Standard for Nature-based Solutions, which can serve to provide the basis for the development of safe-guards for NbS in the UNFCCC. The standard aims to foster NBS design and implementation over time by focusing on eight criteria, such as the need to foster inclusive, transparent and empowering governance processes and to equitably balance trade-offs as well as to recognise the importance of local and traditional knowledge. Furthermore, the United Nations Environment Programme (UNEP) is currently leading an intergovernmental consultation process with Parties on NbS, following from the UNEA-5 resolution which defined NbS and mandated such consultations, out of which further guidelines and standards for NbS may develop in the near future.

TEXTBOX 1: THE POTENTIAL FOR BLUE NBS IN NATIONALLY CLIMATE POLICY

Within the growing application of blue carbon in Nationally Determined Contributions (NDCs) and other national strategies, three particular ecosystems are at the forefront – mangroves, seagrasses and saltmarshes. Several NDCs include "blue carbon" ecosystems in their NDCs as part of their mitigation strategies. However, only a limited number of countries currently include these ecosystems as part of their national GHG reporting according to the IPCC guidelines provided in the IPCC wetlands supplement. By helping communities adapt to a changing climate, safeguarding biodiversity and supporting resilient livelihoods, the contribution of coastal wetlands to growing interest in other marine NBS extends far beyond their capacity to store blue carbon.

1.2 THE IMPORTANCE OF TACKLING COMMON AND INDIRECT DRIVERS

Developing interventions that tackle the challenges of climate change and biodiversity loss simultaneously – and specifically using NbS for this purpose – is a necessary step to make progress towards the 2030 and 2050 goals set by Parties to the UNFCCC and CBD but it is not sufficient. We also need to tackle the root causes or key drivers of climate change and biodiversity loss. A key finding from recent global scientific assessments is that these issues share many of the same drivers and affect one another in critical ways. Climate change has been found to be the third most important driver of biodiversity, while degrading biodiversity negatively affects climate change goals due to the degradation of the contribution that nature makes to both mitigation (e.g. carbon storage) and adaptation (e.g. flood and drought regulation).

When it comes to the plural and common direct and indirect drivers which must be tackled to solve these crises (Figure 1) there are important commonalities. For example, land use change driven by commercial forestry and agriculture is one of the biggest sources of greenhouse gases, producing around 23% of GHG emissions, and is the primary driver (30%) of biodiversity loss on land. More sustainable management of our working lands could therefore both slow climate change and halt biodiversity loss in terrestrial ecosystems. In the oceans, interlinked drivers include warming, ocean acidification, deoxygenation, sea level rise, changes in wave direction, increasing severity of storms, pollution (particularly plastic and agricultural run-off), overfishing, noise pollution, among others that cause unprecedented stress on oceans and their biodiversity.
Climate-resilient marine spatial planning is therefore imperative in addressing these multiple drivers.

Equally tackling the indirect drivers of (over) consumption and waste and finding more sustainable options, for example in terms of food, plastic, steel and sand, has the potential to create beneficial outcomes for both climate change and biodiversity loss. Such action requires co-ordination across these different policy domains and recognition that there are important time lags involved between the full impact of drivers as well as the spatial variation of these underlying drivers, where impacts in one place may be the result of indirect drivers somewhere else – for example in terms of the impacts of consumption which tend to take place at a distance from where goods and services are consumed and to impact those who have contributed least to the problem.[18]

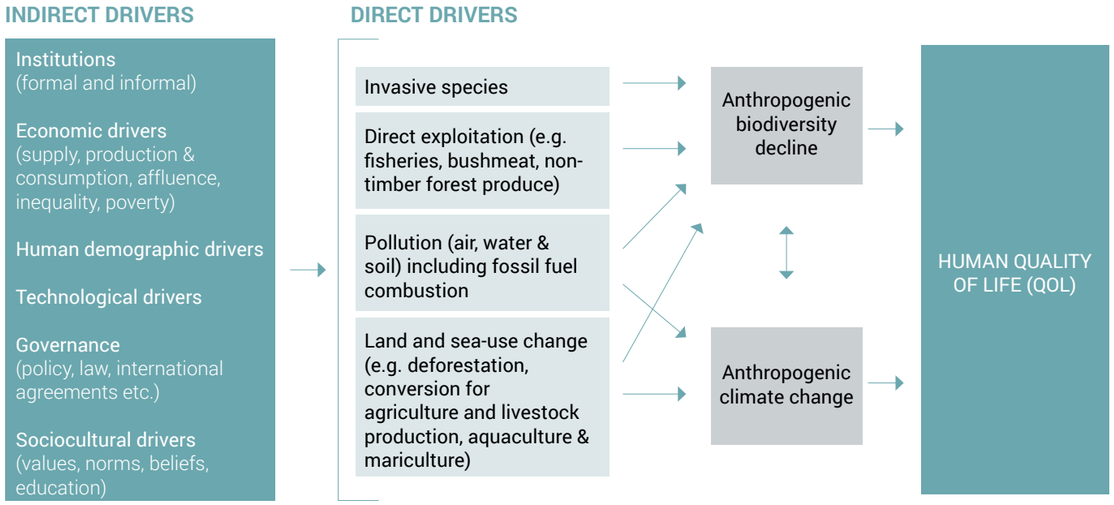


Figure 1 3 Indirect and direct drivers of biodiversity loss and climate change due to human activities
Climate change and biodiversity loss share common underlying drivers, and both impact (mostly in negative ways) people's quality of life.

Figure 1: IPBES-IPCC Co-Sponsored Workshop Report outcome on common indirect and direct drivers of biodiversity loss and climate change

1.3 A NEW AGENDA: NATURE FOR PEOPLE AND PLANET

As the sections above demonstrate, the connections between climate and nature are such that tackling one issue without the other is likely to lead to failure. Equally significantly, without making people part of the equation the robustness and resilience of any intervention is likely to be lost and important opportunities for realising Sustainable Development Goals (SDGs) and to ensure the multiple values that nature holds for diverse communities are respected and enhanced may be lost.

Moving towards this approach will require that we go beyond the current focus on how nature can support Parties to the UNFCCC and actors across the 'whole of government' and 'whole of society' to meet their 'net zero' commitments. NbS can of course play an important role in climate mitigation, but they can only contribute where decarbonisation is being actively pursued. Equally important is the imperative of making sure that NbS undertaken in the name of climate change do not harm biodiversity and our chances of meeting 2030 and 2050 targets for its protection and restoration, or take place without the active participation of relevant communities and the generation of benefits that support their well-being and sustainable economic development. A narrow focus on 'net zero' also downplays the critical role that NbS can play in reducing vulnerability through increasing resilience and adaptive capacity. As the summary report of the 6th IPCC Assessment made clear, climate adaptation is no longer an option but will need to be undertaken at scale to ensure the viability of social and natural systems. It is now a matter of urgency to ensure that the potential of NbS to address climate adaption is recognised within the UNFCCC, as it has been in the Global Biodiversity Framework agreed at the CBD COP15.

Moving beyond a purely 'net zero' approach to consider the wider potential of working with nature for climate mitigation and adaptation while ensuring that biodiversity itself is safeguarded is a critical first step towards an agenda that secures nature for people and planet. Climate action also needs to support a 'nature positive' approach – ensuring that action to address climate change itself does not limit the potential for realising the protection and restoration of nature towards the 2030 and 2050 goals set within the CBD. Explicitly engaging with the direct and indirect drivers that generate climate change and biodiversity loss in a co-ordinated manner can support ambitious action across both these key challenges.

At the same time, it will be vital to ensure that nature's contributions to people are also protected and enhanced and that space is created for community participation in, and contestation over, policies and interventions intended to deliver benefits for climate, nature and people. Given the multiple values associated with nature, and the diverse and contested interests that are associated with its protection, restoration and creation, alongside ongoing struggles over how and by whom climate action should be taken, we can expect that even those interventions that are undertaken with the best intentions will generate political protest. Ensuring that policies, plans and interventions are undertaken with inclusive and deliberative processes on the one hand, whilst also adopting a proactive approach to resistance can be a means through which to support the transformative change needed for a new agenda that works with nature for people and planet. In the remainder of this Primer, we provide further background on the evolution of global biodiversity governance, including the increasingly important role being played by 'whole of government' and 'whole of society' actors, the outcomes of COP15 and their significance for advancing transformative action on climate change and biodiversity.

2. THE CONVENTION ON BIOLOGICAL DIVERSITY & OUTCOMES FROM COP15, MONTREAL

2.1 THE 1992 CONVENTION ON BIOLOGICAL DIVERSITY

While the twentieth century saw multiple international conservation agreements, it was the adoption of the Convention of Biological Diversity (CBD) as one of the three 1992 Rio Conventions that signalled a new concern with the global scale of the challenge of biodiversity loss. The CBD was created as an 'umbrella convention' on biodiversity and embedded in the broader concern to realise sustainable development. The intention was to create a framework that could co-ordinate and fill in the gaps between biodiversity-related conventions[19] and a set of organizations addressing environmental, agricultural, cultural or trade and economic issues: the UNFCCC, the convention on desertification (UNCCD), the chemical and waste conventions (Basel, Rotterdam and Stockholm Conventions), the Food and Agriculture Organization (FAO), and the World Trade Organization (WTO). The complex structure of the CBD, with multiple goals, targets, decisions and actions can be seen as partly a result of its original purpose as an 'umbrella' convention and the diverse organisations and international agreements for which it serves as a reference point.

As with climate change, the negotiations leading to the final text of the CBD were troubled by disagreements between developed and developing countries. While developed countries focused primarily on the need for conservation, developing countries emphasized the importance of their access to land and equitable sharing of resources which they considered were at risk from the objectives of the proposed Convention. Developing countries also argued that in order to meet the Convention's aims, financial support, capacity building and development, scientific and technical cooperation, and technology transfer would be needed. The negotiations also triggered debate on the rights of Indigenous Peoples and local communities and how these should be taken into account. Despite these challenges, a final text was agreed with three main objectives (as set out in Article 1):

- the conservation of biological diversity;
- the sustainable use of its components;
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The Convention on Biological Diversity includes 42 articles and three annexes. It established a governing body, the Conference of the Parties (COP), a supporting Secretariat and a Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). The Conference of the Parties (COP) is the operational body of the Convention (Article 22) and meets every two years. It defines its rules of procedures, decides upon amendments of the text or of the Protocols and approves the Convention's budget. The COP guides the work of the Secretariat, which in turn supports the work of the Conference. The Secretariat is managed by UNEP and is based in Montreal, Canada. A specific Subsidiary Body for Implementation (SBI) was set up in 2014, replacing the Ad Hoc Open-ended Working Group on the Review of Implementation of the Convention (WGRI), which was established in 2004 to support the COP in monitoring and reviewing the implementation of the Convention.

Importantly, in contrast to the UNFCCC where scientific evidence in the form of the global assessments of the IPCC have provided the basis for decision-making since its inception, it was not until 2012 that a similar organisation - the Intergovernmental Panel on Biodiversity and Ecosystems Services (IPBES) was established. Until that point, the evidence used to underpin the CBD was provided primarily through the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). IPBES filled a significant gap by bringing together a wider range of global experts and also including Indigenous Peoples and Local Communities as important sources of knowledge and expertise for policy-making. It is now recognized as an indispensable reference in assessing and understanding the state of biodiversity and ecosystems around the world and providing recommendations to halt and reverse biodiversity loss through its special reports and global assessments.

As is the case with other international treaties, the adoption of the CBD in 1992 is not in itself a complete response to biodiversity loss but rather a convention that lays the foundations for subsequent protocols, annexes, decisions or obligations. It provides guidelines and leaves the implementation of its objectives to the Parties. Major articles include:

- Article 2 which defines biodiversity ('biological diversity') as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part" and three types of biological diversity: within species, between species, and of ecosystems.
- Article 3 which states principles of sovereignty over national resources, but also "responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".
- Article 6 which states that Parties shall develop national strategies, plans and programmes to reflect the measures adopted by the Convention, and integrate conservation and sustainable use into sectoral or cross-sectoral plans and policies and the closely related Article 16 which establishes that Parties have to submit a national report on implementation
- Articles 8 and 17 which states that Parties need to respect and preserve knowledge and practices from Indigenous Peoples and Local Communities
- Article 16 states that Parties shall facilitate access and transfer of technology, consistent with the protection of intellectual property rights
- Articles 20 and 21 which created a resource mobilization framework, with particular attention on the need to support developing countries to implement the Convention

Since 1992, two additional specific protocols were signed: the Cartagena Protocol on Biosafety to safeguard the handling, transport and use of living modified organisms resulting from biotechnology which entered into force in 2003, and the 2014 Nayoga Protocol on Access and Benefit-Sharing to share the benefits from using genetic resources in equitable and fair ways.

2.2 FROM AICHI 2010 TO MONTREAL 2023

A decade after it was formally adopted, in 2002 Parties to the CBD adopted a global strategic plan for the conservation of biodiversity setting a goal "to achieve by 2010 a significant reduction in the rate of biodiversity loss" (COP6, Decision 26). Yet by 2010 progress towards this end was still limited and at COP10, in Nagoya (Aichi prefecture, Japan), Parties adopted a more detailed strategic framework. During the preparation work for COP10 the Secretariat proposed the creation of a new "ambitious but realistic" objective, containing a long-term vision and a set of strategic goals and targets to be achieved by 2020. The resulting Strategic Plan on Biodiversity 2011-2020, which included 20 Aichi targets (Table 1), recognised that biodiversity is shaped by multiple factors. Specifically, the Aichi Targets were structured to reflect five main types of actions: addressing underlying drivers; reducing direct pressures; safeguarding ecosystems and species; enhancing benefits; and fostering implementation.

The Strategic Plan and its Aichi targets have supported policies to protect biodiversity and ecosystems - e.g. Sustainable Development Goals (SDGs) 14 and 15 - and there is evidence that they have supported implementation of the Convention with progress on Target 11 on protected areas. At the same time the loss of biodiversity has not been halted and reversed. Some suggest that the targets themselves were limited because they were too ambiguous, lacked quantifiable elements, and generated many complexities and redundancies – in short, they were not SMART (specific, measurable, achievable, relevant and time-bound). Equally, others argue that the implementation of the Aichi targets also suffered from weak mechanisms and processes, such as the lack of funding and strategic resource mobilization, flawed monitoring, planning, reporting and review processes, and poor biodiversity mainstreaming. With the successful adaption of the Paris Agreement in 2015 and growing attention being paid to the SDGs, progress in addressing biodiversity loss seemed to be falling behind.

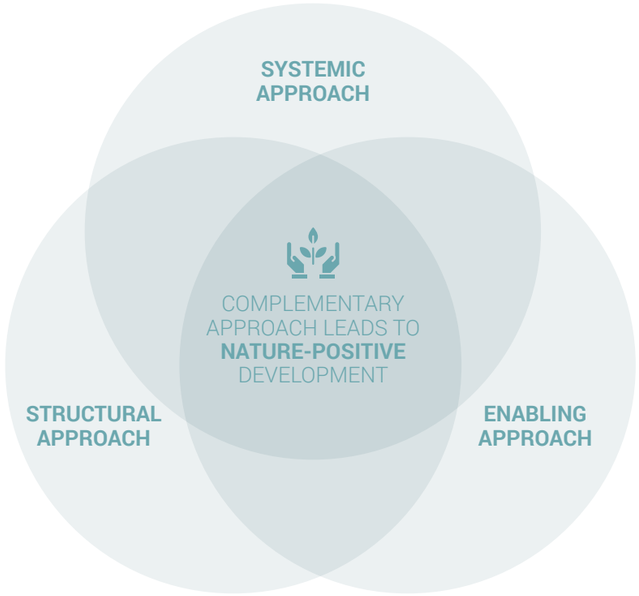
Table 1: Overview of the Aichi targets (Visseren-Hamakers & Kok, 2022)

STRATEGIC GOAL	TARGET
A. Addressing the underlying causes of biodiversity loss	1. Raising awareness 2. Integration of biodiversity values into national development policies 3. Elimination of harmful incentives and development of positive incentives 4. Sustainable production and consumption
B. Reducing the direct pressures on biodiversity	5. Loss of natural habitat 6. Sustainable fish harvesting 7. Sustainable agriculture, aquaculture and forestry 8. Pollution 9. Invasive species 10. Coral reefs and other vulnerable ecosystems
C. Safeguarding ecosystems, species and genetic biodiversity	11. Protected areas 12. Threatened species 13. Genetic diversity of cultivated plants and farmed animals
D. Enhancing benefits	14. Ecosystem services 15. Conservation and restoration of carbon stocks 16. Nagoya Protocol
E. Enhancing implementation	17. NBSAPs 18. Indigenous and local communities 19. Knowledge, science base and technologies 20. Financial resources

In 2018 COP14, held in Sharm-el-Sheikh (Egypt), officially launched the preparation and negotiation process of the "post-2020 global biodiversity framework" for adoption at COP15 (Decision 14/34). COP14 underlined the importance of tackling "systemic and structural issues related to biodiversity loss" based on science. In 2019, IPBES published the Global Assessment Report on Biodiversity and Ecosystem Services - paving the way for improved understanding of both the state of biodiversity worldwide and the importance of **"transformative change"** to reverse biodiversity loss. Although it remains an essentially contested term, transformative change can be defined as requiring "fundamental, society-wide reorganization across technological, economic and social factors and structures, including paradigms, goals and values."[20] More broadly, this implies "systemic and structural change and enabling"[21] approaches through which transformative change can take place (Textbox 2) and principles for their adoption (Table 2).

TEXTBOX 2: TRANSFORMATIVE CHANGE – STRUCTURAL, SYSTEMIC AND ENABLING APPROACHES

There are different ways of understanding transformative change, but we can distinguish structural, systemic and enabling approaches. These three distinct yet complementary lenses can be used together to realise "nature-positive development" and halt biodiversity loss (Figure 2). While structural approaches stress the need for changes in underlying societal structures of power, economy, culture and institutions, systemic approaches tend to focus on how to achieve systemic change, e.g. in terms of the efficiency or intensity of different production processes. Enabling approaches, on the other hand, focus on fostering human agency, such as supporting and empowering historically marginalised groups. Building on these three complementary approaches is necessary to avoid a too narrowly focused approach risking trade-offs. For instance, solely focusing on systemic drivers may overlook historical and current power inequalities.



Source: PBL

Figure 2: A complementary approach combining structural, systemic and enabling approaches is needed for nature positive development (Kok et al., 2022)

Table 2: Principles of Transformative Change (derived from Bulkeley et al., 2020)

PRINCIPLES OF TRANSFORMATIVE CHANGE	EXPLANATION
Address Root Causes	The pursuit of transformative change requires that the root causes and underlying/indirect drivers of the problem in question are addressed
Take Multiple Paths	Transformative change cannot be achieved through 'silver bullet' solutions or blueprint plans. Multiple efforts will be required, through diverse development pathways that are compatible with biodiversity goals
Expand Action Arena	Transformative change for biodiversity cannot be achieved through action which is confined to traditional action arenas, but needs to be expanded to encompass multiple areas of the economy and society
Realise Diverse Co-Benefits	Efforts to generate transformative change generate multiple trade-offs and co-benefits. Harnessing positive co-benefits can enable greater traction for ambitious biodiversity action and also achieve other societal goals
Design Deliberative & Inclusive Processes	As well as necessarily taking place through inclusive processes, transformative change will generate disagreements and contestation which require space to be heard and in-depth consideration
Adopt Proactive Approach to Resistance	Resistance is an inevitable part of transformative change and approaches need to be designed to ensure that appropriate account of how to ensure 'just transitions' whilst also overcoming those with a vested interest in the status quo

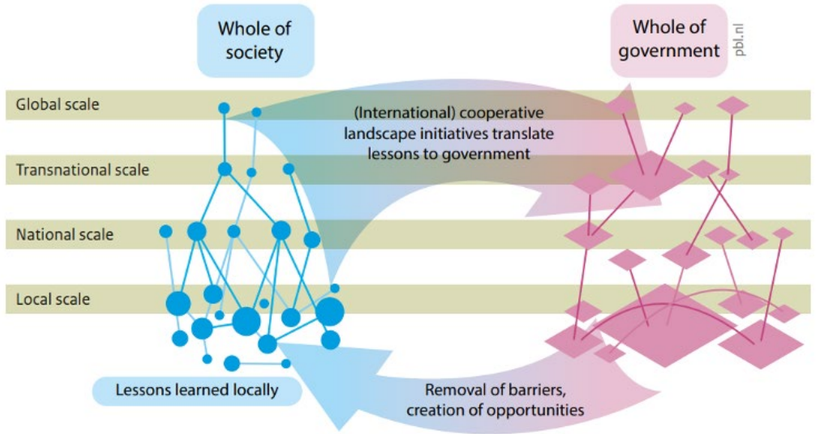
Bulkeley, H., Kok, M., van Dijk, J., Forsyth, T., Nagy, G. and Villasante, S. (2020). Harnessing the Potential of the Post-2020 Global Biodiversity Framework. Report prepared by an Eklipse Expert Working Group. UK Centre for Ecology & Hydrology, Wallingford, United Kingdom.

In placing transformative change at its heart, the development of the post-2020 global biodiversity framework proposed a **new theory of change**. The first detailed draft underlines that urgent strategic action at global, regional and national levels is necessary to transform economic, social and financial models in a way that the loss of biodiversity stabilizes by 2030, to enable the recovery of ecosystems over the next twenty years to achieve the 2050 vision of "living in harmony with nature". The proposed actions and measures required to meet this overarching aim are divided in three types: reduce threats to biodiversity, ensure sustainable use to meet the needs of populations, and establish the necessary implementation tools and solutions. These in turn are seen as requiring support through adequate means of implementation, enabling conditions, transparency and responsibility processes which involve sufficient monitoring and reporting, as well as an inclusive and 'whole of society' approach that includes Indigenous Peoples and Local Communities, NGOs, business and financial actors, youth and women's groups not only in the development of the framework and its implementation, but as important actors for biodiversity in their own right.

2.3 MOBILISING THE WHOLE OF SOCIETY

Alongside urgent national action for biodiversity to be undertaken by Parties to the Convention, the CBD has increasingly acknowledged the importance of a 'whole of government' approach, including subnational and local authorities, as well as the major role played by non-state actors for achieving biodiversity objectives: the whole of society approach. In 2018, China and Egypt jointly launched the Sharm El-Sheikh to Kunming and Montreal Action Agenda for Nature and People at CBD COP14 to mobilize all actors on the road to COP15. Non-state actor initiatives for biodiversity governance include those which are established by private actors, such as NGOs, corporations or philanthropic organisations, as well as those which are created by public actors such as government agencies, multi-lateral development banks, subnational governments and donor organisations either cooperating with other public actors or in partnership with private actors.

While non-state actor initiatives have grown significantly in the climate realm, their presence in the biodiversity governance arena has been more recent and COP14 marked the first formal acknowledgement of the role that they can play in contributing to the aims and ambitions of the Parties to the CBD. Some non-state actor initiatives have a strategic dimension with the goal of strengthening the ambition within multilateral discussions. Others serve to provide a means through which biodiversity can be governed directly in ways that are often more ambitious or innovative in terms of the goals to be realised and the means through which this can be achieved than that which it is possible to agree by all Parties to the Convention acting in unison. Such "productive linkages" between 'whole of government' and 'whole of society' approaches are increasingly seen as necessary pathway to reverse and halt biodiversity loss (Figure 3).



Source: PBL

Figure 3: Transformative Change for Biodiversity requires productive links between 'whole of society' and 'whole of government'[22]

Realising this 'groundswell of action' for both nature and people in turn calls for a Complementary, Catalytic, Collaborative, Comprehensive and Credible Action Agenda[23]. Embedding these 5C's requires mobilising and catalysing a diversity of nonstate and subnational actors, collaborating with UN conventions and initiatives beyond the biodiversity realm, evaluating and tracking actions to ensure synergetic outcomes for biodiversity, climate and people while avoiding trade-offs.

2.4 COP15 AND THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK

After four years of negotiations, disrupted by the Covid-19 pandemic, intense discussions at COP15 led to the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) in Montreal on December 19, 2022. Its core mission is to "halt and reverse biodiversity loss by 2030" and to "put nature on a path to recovery for the benefit of people". The Kunming-Montreal "package" comprises six core COP decisions on:

- The Kunming-Montreal Global Biodiversity Framework (see Table 3 for a condensed overview)
- A monitoring framework including headline, global-level, component and complementary indicators
- The strategy for Resource mobilization "to enable quick-start resource mobilization"
- Mechanisms for planning, monitoring, reporting and review for revised NBSAPs to be presented at COP16 taking place in Turkey 2024, to be reviewed at COP17 (2026) and COP19 (2030).
- Digital Sequence Information on genetic resources stating the need for fair and equitable sharing of the benefits arising from their utilization
- Capacity Building and Development and technical and scientific cooperation

Besides these 'core' decisions, the intention to include a decision on Biodiversity and Climate Change was significant because it recognises "the critical role of biodiversity and ecosystem functions and services for climate change adaptation, mitigation and disaster risk reduction". However, limited agreement was reached on this decision at COP15 with several commentators suggesting that the CBD had failed to take this opportunity to generate a meaningful link between the two Conventions. At the same time, the inclusion of Nature-Based Solutions (NbS) in the final text (i.e. Target 8 and 11) - similar to the Sharm-El Sheikh Implementation Plan of COP27 - has been considered important as a means in fostering policy coherence in tackling these intertwined crises. The inclusion of NbS in all three Rio Conventions closely follows the adoption of a multilaterally agreed-upon definition of NbS within the United Nations Environment Assembly (UNEA), which allows for a mutual understanding of what NbS involve.

While the GBF is a major step forward and provides a basis for enhanced implementation and biodiversity mainstreaming, there are concerns regarding its (weakened) ambition and its implementation. Despite progress in responding to calls by the scientific community and beyond for goals and targets to be "ambitious, specific and measurable" - such as the 30 x 30 Target requiring a network of protected areas covering 30% of land and 30% of sea by 2030 - many quantitative objectives were removed from the goals and targets. For instance, while Goal A first referred to extending the "area of natural ecosystems by 5 per cent by 2030 and by 20 per cent by 2050" was replaced by "substantially increasing the area of natural ecosystems by 2050". This watering down of the text was prevalent in other Targets, such as Target 16 from "halve the global footprint of consumption" was substituted with "reduce it" and the word "mandatory" was left out of Target 15 to "encourage and enable" business to disclose their risks, dependencies and impacts on nature.

Regarding finance, for some the mobilisation of at least 200 billion dollars per year and 30 billion dollars in international help were seen as a historic accomplishment, while others argue that this is not sufficient to resolve the 700 billion dollars biodiversity finance gap. At the same time, the agreement to redirect 500 billion dollars of harmful subsidies is considered significant progress, yet it does not meet the estimated 1.8 trillion dollars of subsidies which harm nature. Moreover, disagreement about a new ad hoc fund for biodiversity besides the already existing Global Environmental Facility (GEF) has caused upheaval. The Democratic Republic of the Congo (DRC) argued that it could not support the agreement without installing such a new fund. Yet, despite DRC's objection, the final agreement was confirmed. In the end, during the closing plenary, this disapproval was resolved and the "historic agreement" entered into force.

Table 3: Summary of the Kunming-Montreal Global Biodiversity Framework goals and targets (NB not official language)

BY 2050, BIODIVERSITY IS VALUED, CONSERVED, RESTORED AND WISELY USED, MAINTAINING ECOSYSTEM SERVICES, SUSTAINING A HEALTHY PLANET AND DELIVERING BENEFITS ESSENTIAL FOR ALL PEOPLE

2030 mission towards the 2050 vision: To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation

2050 GOALS	
Goal A	Integrity, connectivity and resilience of ecosystems: significantly increase the area of natural ecosystems; halt the extinction of threatened species, reduce tenfold extinction risk and increase abundance of native wild species; maintain genetic diversity
Goal B	Sustainable use and management of biodiversity; value, maintain and enhance nature's contributions to people
Goal C	Fair and equitable sharing of benefits from the utilization of genetic resources and digital sequence information, protection of traditional knowledge
Goal D	Secure adequate means of implementation, especially to developing countries, and close the 700 billion dollars per year biodiversity finance gap, align financial flows with the GBF
2030 ACTION TARGETS	
REDUCING THREATS TO BIODIVERSITY	
Target 1	Ensure participatory integrated biodiversity inclusive spatial planning and management processes, to bring the loss of areas of high biodiversity importance close to zero by 2030 while respecting the rights of IPLCs.
Target 2	Ensure that at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration
Target 3	Ensure & enable at least 30 per cent of terrestrial, inland water, & of coastal & marine areas, are conserved & managed through systems of protected areas & other effective area-based conservation measures while ensuring that any sustainable use is consistent with conservation outcomes, recognizing and respecting the rights of IPLCs, including over their traditional territories
Target 4	Ensure urgent management actions, to halt human induced extinction of known threatened species and for the recovery and conservation of species, to maintain and restore the genetic diversity, and manage human-wildlife interactions to minimize human-wildlife conflict for coexistence
Target 5	Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal while respecting and protecting customary sustainable use by IPLCs.
Target 6	Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services
Target 7	Reduce pollution risks and the negative impact of pollution from all sources
Target 8	Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions
MEETINGS PEOPLE'S NEEDS THROUGH SUSTAINABLE USE AND BENEFIT-SHARING	
Target 9	Ensure that the management & use of wild species are sustainable providing social, economic & environmental benefits for people, especially those in vulnerable situations & those most dependent on biodiversity, protecting & encouraging customary sustainable use by IPLCs.
Target 10	Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services
Target 11	Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.
Target 12	Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably
Target 13	Take effective legal, policy, administrative and capacity-building measures at all levels to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources & from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources
TOOLS AND SOLUTIONS FOR IMPLEMENTATION AND MAINSTREAMING	
Target 14	Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, within and across all levels of government and across all sectors
Target 15	Take legal, administrative or policy measures to encourage and enable business to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.
Target 16	Ensure that people are encouraged and enabled to make sustainable consumption choices, reduce the global footprint of consumption in an equitable manner, halve global food waste, significantly reduce overconsumption and substantially reduce waste generation
Target 17	Establish, strengthen capacity for, and implement in all countries, biosafety measures as specified in the CBD.
Target 18	Identify by 2025, and eliminate, phase out or reform incentives, including subsidies harmful for biodiversity

Target 19	Substantially and progressively increase the level of financial resources from all sources, by 2030 mobilizing at least 200 billion dollars per year
Target 20	Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation
Target 21	Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance
Target 22	Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by Indigenous Peoples and local communities
Target 23	Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity

The international community has eight years to achieve the goals and targets set for 2030 (Figure 4). This requires Parties to prepare National Biodiversity Strategies and Action Plans (NBSAPs) aligned with the Kunming-Montreal GBF. Besides contributions of the Parties, the GBF encourages the involvement of local and subnational governments in the revision, development and implementation of the NBSAPs - while calling for Parties to support subnational and local governments in strengthening their capacities. The COP decision (15/6) on mechanisms for planning, monitoring, reporting and review emphasizes in its guidance for NBSAPs that the revision or update process should involve all governmental sectors, all levels of governance, and all stakeholders. NBSAPs are considered the "main vehicle for implementation", promoting and supporting increased efforts and actions. The development of National Biodiversity Finance Plans (NBFPs) is also underlined, to be based on an assessment of expenditures and needs and NBSAPs.

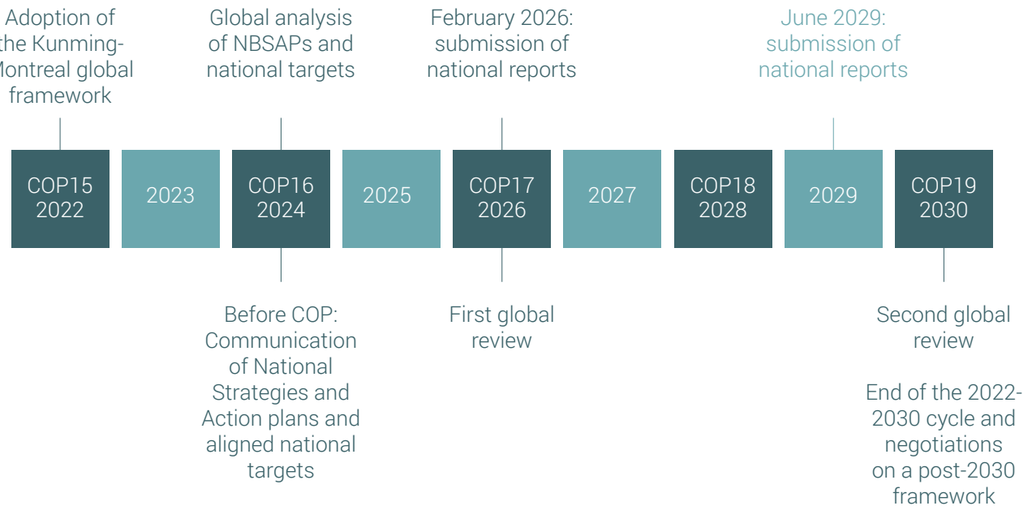


Figure 4: Planning 2022-2030 cycle Kunming-Montreal GBF (IDDRI, 2022)

Alongside developing new strategies at the national level, the finance required to implement action will need to be mobilised during this short window of implementation. In addition to the funding already earmarked for rapid implementation of the GBF, the GEF will need to approve the creation of a dedicated biodiversity fund and put in place the necessary institutional arrangements to allow it to be matched by various sources. More broadly, the resource mobilization strategy adopted in Montreal will have to be implemented, notably through the mobilization of multilateral development banks and financial institutions. International organizations will also have an essential role to play as they will have to implement the GBF in the various sectors concerned. Sectoral organizations, both global and regional, will also need to develop work programs dedicated to the implementation of the various goals and targets if these are to be realised within the allotted time frame.

Beyond national policy and the mobilisation of finance, and as noted at COP14, it will also be necessary to mobilise the 'whole of society' in pursuit of the GBF. In the lead up to COP15, various actors reiterated the necessity to go beyond narrowly targeted audiences, including the scientific community and have called for a society-wide engagement to complement governmental efforts. In parallel to commitments made by national governments, initiatives were established before and during COP15 by business, financial institutions, cities and sub-national governments, civil society and NGOs to protect and restore biodiversity (Table 4). While these commitments are largely voluntary – albeit that cities and subnational governments can formally adopt and implement legal obligations and other actors are often undertaking action that is partly driven by regulation from different levels of government – they signal an important and growing momentum across diverse organisations to put biodiversity loss on their agendas.

At the same time, there is a growing effort to generate mechanisms through which non-state actors can be held accountable for the pledges and commitments made. For instance, in the months before COP15, Business for Nature launched a campaign to require business and financial institutions to assess and disclose their risks, impacts and dependencies in Target 15 and #MakeItMandatory. Despite these efforts, the word 'mandatory' was in the end excluded from the final text agreed by Parties. Nonetheless, non-state actors continue to establish their own reporting mechanisms, including the CitiesWithNature and RegionsWithNature platforms for sub-national government which are recognised by the CBD Secretariat as the means through which these actors can contribute to the GBF and platforms such as the Science Based Targets Network and the CDP (formerly known as Carbon Disclosure Project) that seek to make the commitments of business to nature comparable and transparent. The importance of this 'whole of society' approach was formally acknowledged in references to subnational and local governments in a range of COP15 decisions and in particular in the decision recalling the promotion of the engagement with subnational governments, cities and other local authorities. The decision also includes a comprehensive Plan of Action on subnational governments, cities and other local authorities for biodiversity (2023-2030) to enhance the implementation of the GBF.

Table 4: Non-State Actor Pledges & Platforms before and at COP15

NON-STATE ACTOR PLEDGES & PLATFORMS	TARGETED AUDIENCE	BIODIVERSITY AIMS	IMPACT
Commitments for Nature Platform	Non-State Actors	Conservation	212 commitments
Sharm El-Sheikh to Kunming and Montreal Action Agenda for Nature and People: Make a Pledge	Non-State Actors	Halt & reverse biodiversity loss	713 pledges, 274 partnership initiatives
Nature Positive: Non-State Actor's Call to Action	Non-State Actors	Halt & reverse biodiversity loss	Over 360 organisations signed
One Trillion Trees Pledge	Business	Conserve, restore & create forests	81 companies
Nature is Everyone's Business" Call to Action	Business	Protect, restore & sustainably use nature	More than 1,100 companies
Nature Action 100	Business	Reverse nature & biodiversity loss by 2030	-
Finance for biodiversity pledge	Financial institutions	Protect & restore biodiversity	126 financial institutions signed
'Moving together on nature': statement from the private financial sector to the CBD COP	Financial Institutions	Protect & restore biodiversity and ecosystems	150 financial institutions
Montréal Pledge: Call for COP15 launched to world's cities	Cities	Reduce threats to biodiversity & share its benefits	47 cities committed
Edinburgh Declaration on post-2020 global biodiversity framework	Cities, subnational governments & local authorities	Conserving, restoring & reducing threats to biodiversity	273 signatories
CitieswithNature Action platform	Cities	Protect & restore nature; Use nature sustainably	206 actions, 17 participating cities
RegionsWithNature Action platform	Regional & subnational governments	Conservation & restoration	21 regions
Berlin Urban Nature Pact	Cities	Protect & Restore & Use Nature Sustainably	-
Development, humanitarian and Indigenous Peoples groups COP15 statement	NGOs	Reverse biodiversity loss & improve the state of nature by 2030	8 organisations

Source: Nature and Climate Cooperative Initiatives Databases (N-CID/C-CID). Radboud University and German Institute of Development and Sustainability (IDOS), with thanks to Andrew Deneault (IDOS) for the analysis that underpins this figure.

3. ALIGNING CLIMATE & BIODIVERSITY ACTION

3.1 COMPLEMENTARITIES & SYNERGIES BETWEEN UNFCCC & CBD COMMITMENTS FOR CLIMATE & NATURE

Over the past 30 years since the Rio Earth Summit various attempts – with varying levels of success – have been made to build bridges across the three Rio Conventions. Since 2019, these efforts have gathered momentum especially in terms of the UNFCCC and CBD partly influenced by greater scientific evidence of the interconnected nature of the climate and biodiversity crises and by the momentum created by the Sustainable Development Goals (SDGs) for action that addresses multiple challenges by non-state actors.

Turning first to the UNFCCC, COP26 under the UK Presidency put significant emphasis on the importance of aligning action for climate change with global goals for nature and biodiversity. The Glasgow Climate Pact, a decision of the Parties that included various issues not on the formal intergovernmental agenda, emphasises in Paragraph 38 "the importance of protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal, including through forests and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases and by protecting biodiversity, while ensuring social and environmental safeguards." At COP27 the Sharm el-Sheikh Implementation Plan (the COP27 Cover Decision) further emphasised this link, explicitly underlining the "urgent need to address, in a comprehensive and synergetic manner" both issues "in the broader context of achieving the SDGs, as well as the vital importance of protecting, conserving, restoring and sustainably using nature and ecosystems for effective and sustainable climate action." The Sharm el-Sheikh Implementation Plan also reemphasised the importance of "protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal", echoing the Glasgow Pact, and encouraged Parties to consider "as appropriate, ocean-based action in their national climate goals and in the implementation of these goals." Significantly, the Plan also encouraged Parties to "consider, as appropriate, nature-based solutions or ecosystem-based approaches, taking into consideration United Nations Environment Assembly resolution 5/5 for their mitigation and adaptation action while ensuring relevant social and environmental safeguards", marking the first use of the concept of Nature-based Solutions within the UNFCCC albeit that this was confined to the particular section on forests. The emphasis on the importance of "protecting, conserving and restoring water and water-related ecosystems, including river basins, aquifers and lakes" and the need for Parties to "further integrate water into adaptation efforts" also marked the first time that the significance of natural systems in supporting societal resilience and as worthy of protection from the impact of climate change in their own right has been acknowledged by the UNFCCC. Yet beyond these high level political statements, neither COP26 nor COP27 made progress in integrating climate and biodiversity action within the formal mechanisms of the UNFCCC.

Beyond the formal intergovernmental processes, COP26 and COP27 have provided important platforms for establishing voluntary coalitions of states committed to action for climate change and biodiversity. In terms of forests, the UK spurred the development of the at Glasgow Leaders' Declaration on Forests and Land Use, in which 130 countries pledged to "halt and reverse forest loss and land degradation by 2030." Subsequently at COP27 the Forest and Climate Leaders Partnership (FCLP) of 26 countries and the EU, which account for over 33% of the world's forests and nearly 60% of the world's GDP, was launched with the ambition of leveraging finance and accelerating action towards the goal of the Glasgow Leaders' Declaration. Initially launched at the Our Ocean Conference in Palau by the United States, the Ocean Conservation Pledge which commits countries to pledging to conserve or protect at least 30% of ocean waters in their jurisdiction by 2030 was signed by 16 countries at COP27.

COP26 also witnessed the launch of the Breakthrough Agenda by 45 world leaders, intended as a framework to strengthen action and build momentum by countries, businesses and civil society in key emitting sectors. While initially established as an initiative to promote investment and innovation in clean technology, the development of breakthrough targets and actions for the agriculture sector includes reference to the use of agro-ecological practices while non-state and subnational actors have a designated a 2030 Breakthrough Goal for NbS where "10GT CO2e must be mitigated per year through nature-based solutions, achieving net zero by 2030" including through securing "indigenous and local community rights, [protecting] 45Mha, [restoring] 350Mha of degraded land and sustainably [managing] forests and other terrestrial biomes" and "climate-resilient, sustainable agriculture is the most attractive and widely adopted option for farmers everywhere and 2BHa of land is sustainably managed."

TEXTBOX 3: NATURE BASED SOLUTIONS IN NATIONALLY DETERMINED CONTRIBUTIONS AND NATIONAL ADAPTATION PLANS

As part of NDCs and NAPs, Parties have recognised a number of NbS approaches including

- Carbon sequestration e.g. blue carbon
- Flood risk reduction
- Ecologically connected landscapes
- Better urban environments
- Creating seed banks to preserve duplicate samples of a variety of plant seeds;
- Developing and cultivating stress-tolerant crops and livestock breeds;
- Restoring ecological systems through e.g. rainwater harvesting and sustainable agriculture
- Establishing e.g. biodiversity and tourism as the pillars for their national adaptation strategies

As per **UNFCCC's latest update,** an increasing number of Parties (40 per cent) are targeting ocean-based climate action. Some Parties (26 per cent) include an ocean-based climate target, policy or measure. Ocean-related measures reported in the NDCs relate more often to adaptation than to mitigation. Some (32 per cent) adaptation components outlined efforts to adapt ocean ecosystems to promote sustainable development while safeguarding oceans. Measures are focused on investing in ocean-related measures and the blue economy and protecting marine and coastal ecosystems, with a focus on coral reefs, and seagrass and mangrove restoration and conservation. To support these measures, Parties identified steps to establish or strengthen related monitoring, surveillance and assessment systems and programmes. Furthermore, a significant number of NDCs incorporate NbS as a means of adapting to the impacts of climate change, where 82 out of 155 NDCs include information on NbS within the context of adaptation. These include utilizing the power of ecosystems, biodiversity, and natural resources to enhance resilience and reduce vulnerabilities.

Furthermore, the Egyptian COP27 Presidency, the Government of Germany and the International Union for Conservation of Nature (IUCN) developed and launched a new initiative called Enhancing Nature-based Solutions for an Accelerated Climate Transformation (ENACT). Amongst other activities, ENACT aims to produce a yearly 'State of NbS' report, which will be published in time for each UNFCCC COP. The first edition of the report, launched for COP28, will be an important synthesis of the current state of NbS research and practice, and can serve to complement this Primer in informing COP28 decisions. At the same time, COP27 drew attention to the potential risks of the emerging focus on land-based carbon dioxide removal being undertaken by Parties to meet net zero goals, with the Land Gap Report finding that the scale of action being pledged posed significant risks for ecosystem conservation, local livelihoods, and human rights.

Under the Nairobi work programme, the UNFCCC knowledge-to-action hub on adaptation and resilience, the recent report of the biodiversity expert group provides technical support to the NAP process and includes case studies showcasing how biodiversity and climate change adaptation are already being integrated at national levels. The ocean expert group report enhancing resilience of oceans, coastal areas and ecosystems through collaborative partnerships details solutions and good practice for building resilience of oceans and coastal areas including through NbS. Furthermore, discussions under the SBSTA ocean dialogue have clearly indicated the importance of NbS as an important element to climate resilient marine spatial planning. NbS will be one of the topics at the Ocean and Climate Change Dialogue 2023, an annual process that establishes the key challenges and opportunities for action in advance of the COP.

When it comes to the CBD, the Kunming-Montreal Global Biodiversity Framework agreed at COP15 notes that part of its purpose is to promote "coherence, complementarity and cooperation between the Convention on Biological Diversity and its Protocols, other biodiversity related conventions, and other relevant multilateral agreements" though it stops short of explicitly referring to the UNFCCC. While the Glasgow Pact and Sharm el-Sheikh Implementation Plan address the protection, conservation and restoration of biodiversity as a framework condition for climate action, the Global Biodiversity Framework embeds climate change within specific targets for action. Table 6 in the Appendix provides an overview of the synergies and complementarities between biodiversity and climate change within the Global Biodiversity Framework identifying five key dynamics:

a. Climate change is explicitly identified as an issue to be jointly tackled with Biodiversity (Targets 8 &11)
b. Biodiversity action will contribute directly to addressing climate mitigation and/or adaptation (Targets 1, 2, 3, 6 & 12)
c. Targeted action will contribute to the underlying causes of both biodiversity and climate change (7, 10, 12, 15, 16 & 18)
d. Financing action on biodiversity has potential consequences for financing action on climate change (Target 19)
e. Mainstreaming action on biodiversity presents both opportunities and challenges for climate action (Targets 14, 22, 23).

Despite the significant inclusion of climate change as an issue that needs to be addressed because it both contributes to biodiversity loss and can be tackled through biodiversity action, negotiations on formally aligning the two issues within the CBD remained fraught. At COP15, the Agenda Item 23 decision on Biodiversity and Climate Change ended as a disappointment to many, as agreement could not be found on the text and negotiations broke down, resulting in a largely empty text and pushing back this decision to COP16 in 2024.

3.2 COMPLEMENTARITIES & SYNERGIES BETWEEN NON-STATE ACTOR COMMITMENTS FOR CLIMATE & NATURE

Both climate and nature governance increasingly converge on the engagement of non-state and subnational action, in addition to governmental efforts e.g., through NBSAPs and NDCs. Both the UNFCCC and the CBD have devised action agendas to mobilise cities, regions, businesses, investors, and civil society organisations. A CBD action agenda has taken shape in 2018 since the launch of the 'Sharm El-Sheikh to Kunming and Montreal Action Agenda for Nature and People', which has to date generated over 700 commitments to action. The CBD action agenda, however, is comparatively modest in scope and compared to the action agenda and campaigns that have emerged in the context of the UNFCCC. UN climate conferences and dedicated climate summits have been launching non-state and subnational climate actions for almost a decade. In 2014, the Non-State Actor Zone for Climate Action portal (NAZCA, currently: Global Climate Action Portal) was established, a UNFCCC administered repository which currently records more than 30,000 non-state and subnational commitments and actions.

Given their number and prominence, potential synergies between climate and nature benefits will largely depend on the effective steering of non-state and subnational climate actions towards complementarities and synergies with nature and biodiversity governance. The inclusion of appropriate criteria is particularly important in international non-state and subnational mobilisation campaigns and standard setting, both in the context of the UNFCCC and beyond.

High-profile campaigns have been launched under the leadership of the High-Level Climate Champions, who have been appointed successively since 2016 by governments presiding over the UNFCCC. The most prominent of which are Race to Zero (RtZ) and Race to Resilience (RtR), which respectively aim to achieve net zero emissions by mid-century, and build the climate resilience of 4 billion people. Both campaigns have begun to highlight the importance of protecting and recovering nature to reach agreed climate targets. As the RtZ data explorer shows, particularly the RtZ has seen an enormous growth of participants. Between RtZ's launch in January 2021 and September 2022, 8,307 companies, 595 financial institutions, 1,136 cities, 52 states and regions, 1,125 educational institutions and 65 healthcare institutions have joined. In addition, under the leadership of the High-Level Champions, the Marrakech Partnership for Global Climate Action was launched in 2016 at COP22. The partnership aims to foster climate ambition in plural ways, including the strengthening of the RtZ and RtR campaigns.

While the RtR campaign features a strong focus on nature in its metrics framework, this was not the case with RtZ. In 2022, RtZ updated its membership criteria after an international consultation process to include a focus on nature, responding to growing concerns over possible greenwashing and the need for accelerated mitigation[24]. Continued strengthening of criteria will be vital to achieve more equitable and synergic outcomes between nature and climate action.

Further alignment of criteria for nonstate and subnational climate action also took place beyond the UNFCCC. For instance, the International Organization for Standardization (ISO) launched its ISO guidelines on net zero at COP27 which offer specific recommendations on nature conservation and restoration. Organisations that commit to net-zero emissions must prioritise environmental integrity, nature protection, and enhancement, such as ending deforestation and protecting biodiversity, while avoiding any adverse impacts. The guidelines stress that net zero targets should establish additional and distinct targets to have a neutral or positive effect on nature, such as a biodiversity net gain target and enhanced land regeneration. Organisations must also apply environmental and social safeguards to ensure that net zero actions do not have any negative environmental and social impacts and should strive to enhance environmental and social benefits.

In November 2022, the High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities (HLEG) convened by the United Nations Secretary General published findings and recommendations to prevent any false claims, ambiguity, and greenwashing in the net zero commitments of non-state and subnational actors. One set of recommendations specifically addressed People and Nature in the Just Transition. Net zero plans must ensure that supply chains do not convert remaining natural ecosystems and align with eliminating deforestation and peatland loss by 2025 and the conversion of other natural ecosystems by 2030. Financial institutions are also called upon to adopt policies to cease investing in businesses linked to deforestation and to eliminate investments and credit portfolios associated with agricultural commodity-driven deforestation by 2025. Businesses are also encouraged to invest in the protection and restoration of biodiversity, with the report stating that payments for ecosystem services "including the purchase and retirement of high-integrity carbon credits" is allowable, provided this is not used to offset emissions and is therefore additional to their decarbonisation efforts.

These developments show that recent years have not only seen growing convergence on the inclusion of non-state and subnational actors in climate and biodiversity governance, but also an increasing understanding of the need to address negative impacts and recognise synergies between climate and nature action, as seen by the growing inclusion of criteria and the development of standards in climate initiatives. Yet, important opportunities exist to increase synergies and complementarities. The RtZ and the RtR need specific criteria and guidance on high-impact projects such as underwater 'blue carbon' projects and coastal biodiversity; criteria and standards should be regularly reviewed to deal with changing biodiversity and climate dynamics; recommendations should be made on conflict resolution - especially in large-scale mitigation and adaptation strategies; and, tracking and assessments of climate action still show a bias towards (large-scale) mitigation.

At the same time, the importance of a 'groundswell of action' beyond governmental efforts is increasingly acknowledged in the biodiversity and climate arena. Non-state initiatives for nature have been initiated at both COP15 and COP27 that go beyond the traditional forest sector, such as oceans and mangroves (Table 5). The launched Sharm El-Sheikh to Kunming and Montreal Action Agenda for Nature and People at CBD COP14 marks the first formal recognition of the contributions of non-state actor initiatives in fostering the ambitions of the Parties of the CBD. Such a 'whole of society' approach is now formally acknowledged in the Kunming-Montreal Global Biodiversity Framework (GBF), stating that "this is a framework for all - for the whole of government and the whole of society. Its success requires political will and recognition at the highest level of government, and relies on action and cooperation by all levels of government and by all actors of society" (Article 10). Fostering these non-state action agendas requires ongoing efforts in enhancing "productive linkages" between both nature and climate agendas, 'whole of government' and 'whole of society'.

Table 5: Examples of Non-State Initiatives for nature launched at COP15 & COP27[25]

DOMAINS	COP15 & COP27
Forests	One Trillion Trees Pledge; Forest, People, Climate
Oceans	GFCR's REEF+ platform
Mangrove	The Mangrove Breakthrough; the Mangrove Alliance for Climate (MAC)
Soil & Agriculture	Global Soil Biodiversity Observatory; Food and Agriculture For Sustainable Transformation Initiative (FAST)
Cities	Montréal Pledge: Call for COP15 launched to world's cities; Berlin Urban Nature Pact; Beat the Heat: Nature for Cool Cities Challenge; Sustainable Urban Resilience for the Next Generation (SURGe) Initiative

3.3 ALIGNING FINANCE FOR CLIMATE AND NATURE: EXISTING COMMITMENTS AND FUTURE POTENTIAL

Finance – the amount, type and conditions attached – has proven to be a critical issue in the negotiations for both the climate and biodiversity conventions and to realising outcomes on the ground. First and foremost are the issues of how much investment is needed – and how much subsidy needs to be removed – in order to make progress. Estimates suggest that there is a 700-billion USD financing gap for biodiversity, accounting for the essential reduction of harmful subsidies and incentives (500 billion USD per year) as well as additional resources to finance biodiversity (200 billion USD per year). The 2022 report of the independent High-Level Expert Group (IHLEG) on Climate Finance suggests that investment needs for climate action per year by 2030 will need to reach between 2 and 2.8 trillion USD, combining additional investments and "reformed" investments aligning with climate goals. It reveals that finance flows for climate action have reached between 653 billion USD and 803 billion USD in 2019-2020. The UNFCCC Standing Committee on Finance stressed the amount of 892 billion USD per year (2019-2020) in fossil fuel investments that require action. The Glasgow Climate Pact (COP26) calls on Parties to phase down fossil-fuel subsidies, standing at 450 billion USD annually in 2019-2020 (see fossil fuel subsidy tracker). Simply increasing the amount of investment in biodiversity and climate change action without reforming public and private finance that sustains the loss of nature and the fossil fuel economy will then be insufficient to make progress.

TEXTBOX 4: MOBILISING INTERNATIONAL FINANCE FOR NBS

Examples of the international community's mobilisation in support of this convergence include the Climate Investment Fund's (CIF) investment pledge of 350$ million dollars to nature-based solutions to address the climate crisis in Egypt, the Dominican Republic, Fiji, Kenya, and Africa's Zambezi River Basin Region, cutting across Zambia, Malawi, Mozambique, Namibia, and Tanzania. A key component of the financing is CIF's approach is enabling Indigenous and local communities to lead on the work locally, through direct financing.

The question of North-South flows is particularly crucial to support developing countries and achieve low-carbon, climate-resilient and nature-positive pathways and has been a significant issue during the negotiations. In 2020, the 100 billion USD per year commitment from developed countries, negotiated at UNFCCC COP15, was not met. The OECD (2022) demonstrated that total climate finance mobilised by developed countries reached 83.3 billion USD in 2020 and emphasized several challenges such as poor predictability, an inadequate focus on adaptation and poor and vulnerable countries, difficulties regarding accessibility, and a low share of grants compared to loans. Out of the 2 to 2.8 trillion USD investments needs per year, the Independent High-Level Expert Group (IHLEG) suggests a roadmap to mobilise 1 trillion per year by 2030 for

emerging markets and developing countries, mobilising public finance but also the private sector, Multilateral Development Banks (MDBs), and International Financial Institutions (IFIs). According to the authors, this roadmap includes mitigation, adaptation, loss and damage, as well as transforming agricultural systems, and protecting and restoring ecosystems. Parties to the UNFCCC are now discussing a post-2025 climate finance target, which must include the aforementioned challenges including Loss and Damage finance. As for CBD objectives, negotiations at COP15 led to the adoption of a sub-target on international biodiversity finance from developed to developing countries (target 19.a), with an increase to 20 billion USD per year by 2025, and 30 billion USD per year by 2030.

Despite the similar challenges facing both climate and biodiversity when it comes to investment, there has to date been only limited effort to explicitly align financing across these domains. There are very real concerns amongst developing countries that any such effort would be an attempt to water down commitments by developed countries to support their actions. At the same time, it is imperative that investments for climate change do not work to undo progress on biodiversity and vice versa. Recognising this, Article 2.1c of the Paris Agreement requests that effort is made in "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development" and goal D of the GBF aims at "progressively closing the biodiversity finance gap of 700 billion dollars per year and aligning financial flows" with the biodiversity objectives, further elaborated in Target 19.

Beyond the needs ('how much'), efficient instruments and mechanisms (disbursement channels) are fundamental to aligning financial flows, reducing the risks they pose, and raising their benefits for Climate and Nature. The international Climate and Nature finance architecture comprises both specialized and non-specialized funds and mechanisms disbursing funds in the form of various instruments (grants, concessional or non-concessional loans, blended finance, etc.). The most important specialized climate funds are the Green Climate Fund (GCF), the main UNFCCC financial mechanism, and the Global Environmental Facility (GEF) with its two special funds (Special Climate Change Fund and Least Developed Countries Fund), as well as the Adaptation Fund. The GEF already supports ocean-climate action and further investment is being made available to support sustainable blue economies using a whole of society approach. Following the "Glasgow dialogue" launched at COP26 on Loss and Damage finance, developing countries, especially vulnerable countries hit by the consequences of climate change, advocated for the establishment of a new dedicated fund for Loss and Damage. At COP27, Parties agreed to create a financial mechanism as a recognition that Loss and Damage requires more resources. A transitional committee has received the task to make recommendations for its operationalization at COP28. It will consider the definition of "vulnerable countries" and thus recipient countries, the nature of donors, the governance of the Fund, and the modalities of distribution and disbursement, among others.

The international biodiversity architecture follows another approach, with the GEF being the sole CBD financial mechanism. In 2022 however, creating ad hoc funds represented a sticking point of the negotiations. Most developing countries underlined several challenges in existing funds, especially accessibility, predictability, and timely flow of funds, and the fact that increasing North-South flows demand new structures, while most developed countries posed themselves against the fragmentation of mechanisms and funds. Following long discussions over the relevance of creating a new ad hoc fund for biodiversity, independent from the GEF, as its operationalization would have taken many years and would not have provided enough support to the implementation of the GBF's 2030 action targets, COP15 agreed to a compromise and established a special funding window - a Trust Fund under the supervision of the GEF - the GBF Fund. Nevertheless, the debate over the creation of another independent "global biodiversity fund" remains open for COP16.

Beyond these centralised financing mechanisms, ad hoc climate funding partnerships between developed and a few developing countries to support national transitions to low-carbon and climate-resilient economies have emerged since 2021 via the first agreement signed between South Africa and developed countries at UNFCCC COP26. Just Energy Transition Partnerships (JETPs) now include Indonesia, agreed at the G20 meeting in 2022, and negotiations are underway for India, Vietnam and Senegal. As of today, JETPs involve emerging economies to support their decarbonization, especially by phasing out coal in their energy mix, through priority investments in the electricity sector. This type of partnership aims at restoring trust between Global North and Global South countries with the promise of more concrete and systemic plans to finance middle-income developing countries' medium-term (3 to 5 years) transition like South Africa (8.5 billion USD) and Indonesia (20 billion USD), mostly through loans. JETPs may support the ambition of emerging economies, however, the development of such deals must be pursued as a tool to unlock transitions toward long-term national development pathways. Indeed, in terms of amounts, necessary investments are much higher, and must not ignore the least-developed countries' needs. At COP27, France announced the establishment of Positive Conservation Partnerships (PCPs) as a similar mechanism to protect priority areas for biodiversity and vital reserves of irreplaceable carbon and contribute to the achievement of GBF target 3 (30% protection by 2030). This type of partnership again represents an opportunity to support conservation finance and a component of system-wide nature-positive pathways integrating development, climate, and biodiversity at the national level. Proposals and guidelines are being developed this year, and the first Positive Conservation Partnerships (PCP) is expected to be announced at COP28.

Furthermore, there is increasing pressure on the private sector to assess their impacts and dependencies on the environment and align their activities with Climate and Nature objectives. The Task Force on Climate-Related Financial Disclosures (TCFD) and the more recent Task Force on Nature-Related Financial Disclosures (TNFD) underline the "double materiality", as companies and investors should disclose the risks posed by climate change and biodiversity

loss on the performance of the investments, but also the impacts caused by the investments. Market and non-market mechanisms are increasingly being discussed as a way to attract investors towards productive but non-extractive forms of investments.

The tools and expertise of the Nairobi Work Programme's thematic expert group on the ocean, including the recent NAP Technical Supplement providing guidance on accessing finance for the implementation of coastal and marine nature-based solutions. The Blue Carbon Accelerator Fund (BCAF) supports the development of blue carbon restoration and conservation projects in developing countries and helps pave the way for private sector finance. The Blue Natural Capital Financing Facility is helping to build the business case for investing in blue nature-based solutions by developing the pipeline of bankable projects, and connecting people on the ground with investors. While the Ocean Risk and Resilience Action Alliance (ORRAA), which by 2030 aims to create a new marketplace by driving USD500 million of investment into innovative and scalable finance products that increase coastal resilience and reduce ocean risks for the most vulnerable communities.

Taken together, it is clear that both through the official political processes of the UNFCCC and CBD, the mobilisation of non-state and subnational actors and in the level and structure of financial investment and support for action there is a growing alignment between the climate and biodiversity agendas. At the same time, such alignment remains partial, with a strong focus on climate mitigation efforts through land-based carbon removal projects not all of which are additional to decarbonisation or meet the quality criteria for NbS in terms of a clear focus on biodiversity and ensuring that they are both inclusive in just in design and practice. There are also concerns that much of the alignment taking place remains at the political level and has yet to be fully integrated into the structure and mechanisms of either Convention, and that potentially many of the claims being made by non-state and subnational actors may at best be pledges that have yet to come to fruition and at worst amount to greenwashing. COP28 therefore provides a significant opportunity to ensure not only that the political intention of aligning the climate and biodiversity agendas is realised in a more comprehensive and concrete way, but also that the safe-guards, reporting mechanisms and finance needed to support this being achieved are put in place.

4. LOOKING AHEAD: TEN OPPORTUNITIES FOR COP28 TO ADVANCE ACTION ON CLIMATE, NATURE & SOCIETY

4.1 UNDERPINNING SUCCESS: TACKLING THE ROOT CAUSES AND BUILDING THE RESOURCES AND CAPACITY FOR ACTION

With momentum now established for tackling the underlying causes of climate change and biodiversity loss together and the UNEA resolution making it clear that NbS are a key means through which this can be achieved, ensuring that this potential is advanced and expanded at COP28 is crucial. For example, a key direct driver of climate change and biodiversity loss is land use change and, as stated in GBF Target 10, sustainable management practices (which include NbS) can be used to restore agricultural and forest land, potentially improving economic productivity, carbon storage and biodiversity. NbS can also play a crucial role in reducing emissions of greenhouse gases through providing both insulation and cooling for cities, which account for 70% of the energy-related emissions of greenhouse gases. The IEA estimate that by 2050 the amount of carbon dioxide emissions from the power sector that relate to cooling could almost double from the current level of 8% to 15%. Target 12 of the GBF recognises the value of nature to cities, but there is also an opportunity for the UNFCCC to demonstrate its worth in contributing to cooling and thermal insulation and the subsequent emissions reductions this can generate. Equally, GBF Targets 8 and 11 recognised that NbS have a crucial role to play in addressing underlying factors that make places and people vulnerable to the impacts of climate change, from restoring natural coastline protection, increasing the capacity of river systems to absorb flood waters and storm damage through for example the restoration of wetlands or the use of sustainable urban drainage systems, improving the capacity of soils to retain moisture to enable crops to survive during periods of drought and so forth.

The imperative is deep, rapid and sustained emissions reductions to protect nature, lives and livelihoods. Every degree of warming matters for us and for nature as the IPCC's AR6 confirms. Tackling the direct causes of climate change and biodiversity loss together with the underlying factors that make societies more vulnerable to their impacts by working with nature can also generate additional benefits for people, including improving livelihoods, economic regeneration, employment, health and well-being. Building on the work that has begun in COP15, COP28 has a historic opportunity to ensure that the full potential of NbS as a means for addressing the causes and impacts of climate change and biodiversity are tackled together whilst also ensuring that the benefits that they create for people reach those who need them most. Oceans must not be ignored in this context – whilst climate change is having increasing impacts on ocean biodiversity, the ocean is a vital and relatively unexplored opportunity under the UNFCCC for conservation and action.

At the same time, we know that to put the world on a pathway to a more sustainable footing by 2050 will require deeper action to address the core indirect drivers that generate climate change and biodiversity loss. These indirect drivers are many and complex and interact with one another in multiple ways. Put most simply, they are the institutional, political, economic and cultural factors that serve to sustain a high-carbon, high-resource consumption society – everything from the systems of urban planning that favour individual motorised transport and social norms which see leisure and business travel as flying, to diets that include high levels of meat and dairy to consumer-led lifestyles, what constitutes a return-on-investment for the financial sector and business-as-usual in the manufacturing sectors. COP15 already made some important steps towards recognising the need for action to address these underlying drivers, with Target 15 (which had significant support from business and the finance sector) calling for action to make production and investment practices more sustainable, Target 16 requiring public and private authorities to ensure that "people are encouraged and enabled to make sustainable consumption choices" and Target 18 seeking to "eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way." These Targets provide a significant basis upon which COP28 could build. Not only do they have in-built consequences for climate change policy and action (e.g. given that climate change is harmful to biodiversity, subsidies for fossil fuels fall under the remit of Target 18), but they also show that consensus can be reached across business, civil society and government actors for action that targets the deep drivers of climate change and biodiversity loss. Drawing on the experience of the CBD, COP28 marks a significant moment to integrate these concerns into the UNFCCC.

Setting Targets and Goals is of course one thing, achieving them is another. As we have witnessed throughout the history of the Rio Conventions without building sufficient capacity and resource for action, progress is either slow or non-existent. Equally important, such an investment in capacity-building and resource provision is needed to acknowledge the historical legacies involved in producing the problems of climate change and biodiversity loss and to settle disputes over the rights and responsibilities of taking action. Both the Loss and Damage Fund agreed at COP27 and the GBF Fund require quick operationalisation (by COP28 and the end of 2023 respectively) but each also raise complex issues about how we can ensure that these funds are accessible, respond quickly to the needs of countries in the global South, and strengthen justice and equity which are yet to be resolved and will require significant political leadership. There are also questions about the potential sources and donors to each of these funds, and role that non-state actors could play – with the GBF Fund directly signalling the participation of non-state actors as a crucial part of its constitution. Significant momentum is also being generated around the potential of innovative financial instruments – such as climate and biodiversity credits – to deliver more financial resources at a larger scale and attract investments from the private sector. Yet despite the recent increase in the price of carbon credits, depending on such investments to realise global goals is risky not only because the demand for such credits fluctuates according to the decisions of multiple private actors but also because of the concerns that it raises about the extent to which such credits are being used to avoid tackling the challenge of reducing greenhouse gas emissions or activities that directly contribute to the loss of biodiversity, so that they in the end contribute to making the problem worse rather than improving it. Recent analysis suggests that carbon credits do not provide genuine carbon reductions while pushing local communities out of their livelihoods. In light of these challenges, the Integrity Council for the Voluntary Carbon Market (ICVCM) has announced guidelines for high-integrity carbon credits to hold carbon-credit verifiers, such as Verra and

the Gold Standard, accountable. Installing these 'safe-guards' through quality standards are considered to be essential in delivering credits' climate mitigation promises. COP28 comes at a crucial moment in terms of ensuring that clear signals are sent to businesses and investors concerning what is and is not acceptable in terms of the design and use of carbon and biodiversity offsets.

At the same time, it is clear that securing new investment will be insufficient to address the climate and biodiversity challenges, which will also require shifts in current financial systems. Developing countries have recently been calling for a reform of key international institutions, particularly the World Bank and the International Monetary Fund (IMF), to integrate those concerns and risks posed by climate change and biodiversity loss into their operations. The Bridgetown Initiative, launched by Barbados at COP27, aims at reflecting on such a reform of the IMF and the World Bank. According to the OECD, the 2021 global ODA represents 185.9 billion USD, most of it in bilateral development projects (88.9) and multilateral ODA (52.4). Mobilising Multilateral Development Banks (MDBs) could scale up the provision of funds, better integrate climate and nature targets and then avoid inconsistencies and future costs and risks for development finance. The COP27 Sharm el-Sheikh Implementation Plan therefore calls for MDBs to reform their practices and priorities (Target 37) and increase their climate ambition (Target 38). In addition, the COP15 decision on Resource Mobilisation calls for "fundamental transformation" and "the reform of MDBs and IFIs" to "make them fit for purpose in supporting implementation of the GBF". COP28 could build on the momentum established at COP27 and COP15 to ensure that the need for such reforms remains at the forefront of debate and that those organisations which are pioneering change are recognised.

Beyond the provision of resources, it has long been recognised that advancing action also requires capacity-building. While both the UNFCCC and CBD have focused on mechanisms to increase the capacity of Parties to implement the provisions of the conventions and associated agreements, the CBD has taken an approach which also recognises the importance of an inclusive approach particularly when it comes to youth, gender and the role of IPLCs, as well as other historically marginalised groups. Target 22 of the GBF calls for Parties to "ensure the full, equitable, inclusive, effective & gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by Indigenous Peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders", while Target 23 requests that they "ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention." This approach to building capacity starts from the assumption that by supporting a just and inclusive process, the capacities, knowledge and skills that diverse communities have can be harnessed towards the objectives of the Convention and equally that the benefits that action to address biodiversity loss can have will be more likely to be just in its outcomes.

The importance placed on inclusivity, gender and IPLC rights is also exemplified in the approach taken to the wording of key action Targets. For instance, in the flagship '30x30' target (Target 3) it is expected that protection of land and marine areas will be undertaken "recognizing and respecting the rights of Indigenous Peoples and local communities, including over their traditional territories", while Target 9 includes "protecting and encouraging customary sustainable use by Indigenous Peoples and local communities" and the concept of Free, Prior and Informed Consent (FPIC) is included in Target 21. Future UNFCCC decisions, including ones taken at COP28, could build on the work of the CBD towards developing a more diverse and inclusive approach to capacity-building by, for example, including stronger wording on IPLC rights as well as the involvement of youth and women where relevant, particularly but not exclusively in sections relating to the synergies between climate and biodiversity.

TEXTBOX 5: THE CRITICAL ROLE OF INDIGENOUS PEOPLES AND LOCAL COMMUNITIES

Indigenous peoples and local communities have a critical and unique role in addressing the challenges of biodiversity and climate change.

- Stewards of biodiversity: IPLCs are often regarded as the stewards of biodiversity. Indigenous peoples safeguard 80 percent of world's remaining biodiversity and manage a quarter of world's surface area.
- Values and knowledge of indigenous peoples and local communities: IPLCs have deep understanding of the environment and sustainable practices, refined over centuries of living in harmony with their surroundings. The values and knowledge systems of indigenous peoples and local communities play a critical role in restoring and maintaining the health of biodiversity for the collective wellbeing of current and future generations.
- The importance of cultural diversity for biodiversity: The intricate relationship between indigenous cultures and their environment is mirrored in the link between cultural and biological diversity. The preservation of indigenous languages, customs, and local practices is intertwined with the conservation of the natural world. Meaningful engagement of the knowledge and values of IPLCs can help transform how the global community interacts with nature and contribute to the global effort to conservebiodiversityandfosteramoresustainable,interconnectedworld.

4.2 MAKING PROGRESS: POTENTIAL AREAS FOR ADVANCING AN AGENDA FOR CLIMATE, BIODIVERSITY & SOCIETY AT COP28

4.2.1 EMBEDDING A TRIPLE WIN AGENDA WITHIN THE UNFCCC

Since COP26, momentum has been growing to realise the benefits for climate, biodiversity and society through smart actions that generate benefits across different challenges together. COP28 can build on previous progress at COP26 and COP27 as well as the success of the outcomes from COP15 to truly embed this 'triple win' approach within the UNFCCC. We suggest five key areas for focus:

1) STRENGTHENING AND SAFE-GUARDING THE USE OF NATURE-BASED SOLUTIONS

NbS have significant, unrealised potential to tackle the direct drivers of climate change and biodiversity loss as well as to address the factors that make people and places vulnerable to their consequences. COP28 has a historic opportunity to embed NbS as a critical set of responses that can generate benefits for climate adaptation, climate mitigation, the protection and restoration of biodiversity and a wealth of benefits for society. Positioning NbS as a holistic response would provide a valuable signal to the private sector and civil society that actions are expected that go beyond the traditional forest sector and that generate benefits for climate adaptation alongside mitigation, creating the basis for innovation in this area. This must go hand in hand with the adoption of safe-guards that ensure that NbS are not used to exploit vulnerable people and places nor as a substitute for action that reduces the causes of climate change and biodiversity loss. In particular, carbon and biodiversity credits must not be used to offset the loss of nature or the continued burning of fossil fuels. Efforts to scale up NbS must not come at the expense of delayed action on phasing out fossil fuels, and robust safe-guards are needed to ensure NbS is not be used for greenwashing. Moreover, biodiversity safe-guards are needed to ensure that NbS for climate do not harm biodiversity but instead support it and harness biodiverse ecosystems to deliver the multiple benefits we expect of them. By either creating its own safe-guards or endorsing those already in use COP28 can provide a clear message that the use of NbS must not be used as a substitute for decarbonisation and must be done with and for communities.

2) EMBEDDING ACTION ON THE INDIRECT DRIVERS OF CLIMATE CHANGE AND BIODIVERSITY LOSS

With the GBF having already adopted key Targets for sustainable production and consumption as well as the phase out of harmful subsidies and significant reductions in pollution from nitrates and plastics, there is a significant opportunity for COP28 to either endorse these Targets or translate them into the UNFCCC to enable the harmonisation of action to address the indirect drivers of both climate change and biodiversity loss. This will send a clear signal that Parties are expected to tackle these indirect drivers in ways that enable progress to be made towards 2030 and 2050 goals for both the UNFCCC and CBD.

3) ALIGNING NATIONAL PLANNING FOR CLIMATE CHANGE AND BIODIVERSITY ACTION

Harmonising action by Parties under both Conventions is not only likely to be more efficient but also to ensure that such actions are both effective and fair. Parties have traditionally developed national action plans for climate change (i.e. Nationally Determined Contributions and National Adaptation Plans) and for biodiversity (i.e. NBSAPs) separately. Partnerships to foster these contributions and plans by offering expertise and funding have also primarily defined objectives for their own climate or biodiversity agenda, such as the NDC partnership assisting its members to achieve the Paris Agreement and SDGs, and the NBSAP Accelerator seeking to catalyse NBSAPs implementation. Research shows that already 105 nations include the use of NbS for climate adaptation and/or mitigation in their Nationally Determined Contributions (NDCs)[26]. 84% of all updated NDCs at the time of COP26 in 2022 committed to restoring or protecting ecosystems or implementing nature-based agriculture such as agroforestry. Moreover, over 50 NDCs explicitly use the term 'Nature-based Solutions', while 96 nations include NbS in their adaptation plans, citing reasons such as increasing resilience to climate change, enhancing water and food security, and protecting biodiversity. Yet there is a lack of harmonisation and alignment between NDCs and NBSAPs.

As a result, actions suggested for national climate policy may run counter to national biodiversity plans and vice versa. COP28 has the power to request that the next generation of NDCs developed for the next stocktake include a requirement to include key targets for nature and to align with the GBF (e.g. to note the synergies and potential trade-offs for meeting the GBF targets under each action, as some NDCs already note for the SDGs). Not only would this make the opportunities and potential barriers for realising the 'triple win' for climate, biodiversity and people clear but it would also generate new collaborations across the 'whole of government' (e.g. between the different multiple levels of national and sub-national authorities and horizontally between ministries responsible for different sectors/policy areas) which can provide the basis for improving the design and implementation of policy nationally.

4) DEVELOPING A COMMON STRATEGIC ROAD-MAP FOR CLIMATE AND BIODIVERSITY FINANCE

A number of different initiatives are now underway to establish financial vehicles, mechanisms and standards for action on climate change and biodiversity, creating an ever more complex landscape. Convening the public and private sector actors involved in these initiatives and ensuring that their timelines, goals, donors and intended recipients are clear will avoid the potential problem of overlap and double counting (e.g. so that assurance can be given to Parties and to the market of the additionality of new financial commitments) whilst also enabling especially those most in need of access to such funds a clear overview of the funds for which they may be eligible and any requirements involved. This will also inform national planning for climate and biodiversity, creating the possibility of long-term investment plans at the national level for joint action across these policy areas.

5) ADOPTING A FOCUS ON TRANSFORMATIVE CHANGE

While the IPCC has drawn attention to transformative change as crucial for realising the goal of staying within the window of 1.5 degree average increase

in the temperature of the atmosphere, the UNFCCC has not yet recognised its central importance. The Sharm el-Sheikh Implementation Plan agreed at COP27 notes the transformative changes needed in the financial system and more broadly for decarbonisation but it remains at the margins, in contrast to the GBF agreed at COP15 where transformative change is placed at its heart. COP28 could build on this momentum and signal the importance of adopting a focus on transformative change, especially in relation to ensuring that diversity and inclusion are embedded in the design and implementation of actions that seek to realise a triple win for climate, biodiversity and society given the strong basis for such an approach within the CBD and the evidence that demonstrates that inclusive processes lead to stronger outcomes for society, nature and the climate. COP28 could specifically adopt language on diversity and inclusion of IPLC, women and youth from the GBF and may also wish to emphasise the overriding imperative of following core principles of transformative change (see Table 2) if significant progress towards the outcomes needed to 'keep 1.5 alive' are to be made.

4.2.2 SUPPORTING THE ACTION AGENDA FOR CLIMATE, BIODIVERSITY AND SOCIETY

Ever since the formal recognition of the importance of the 'whole of government' and 'whole of society' to the success of the Paris Agreement at the UNFCCC COP21 meeting, a groundswell of action across subnational governments, the private sector and civil society has been galvanised to support action on climate change. While the CBD has recently made moves in this direction, in contrast the support of non-state and subnational actors remains much less developed when it comes to action for biodiversity. The UNFCCC therefore has a significant role to play in ensuring that across the initiatives it directly supports (e.g. through the RtZ and RtR), as well as across the wider community of non-state and subnational actors that follow its direction that action is taken to address the loss of biodiversity and to ensure that the benefits of action for climate and nature are equitably shared for society. Working with the High Level Champions in the UNFCCC and the Action Agenda Champions within the CBD together, we suggest five key areas of focus where COP28 could serve as a turning point in creating an Action Agenda for climate, biodiversity and society, and ensuring that Non State Actors are held duly accountable to implementing their pledges.

6) BRING BIODIVERSITY INTO THE RACE TO ZERO AND RACE TO RESILIENCE

The RtZ and the RtR are the UNFCCCC flagship programmes for involving non-state and subnational actors in the pursuit of its goals. While the 2022 update of the criteria for membership of the RtZ has led to the inclusion of further guidance on the use of high-quality offsets for all members and encouragement for those seeking to show leadership to specifically take action to protect nature further steps could be taken to specifically embed actions that are aligned with GBF targets (e.g. on area based targets for nature protection for subnational authorities or e.g. the development of innovative financial instruments for private sector organisations) and to strengthen and safe-guard the use of NbS across public and private sector organisations.

While the Sharm El-Sheikh Adaptation Agenda defines 30 global adaptation and resilience targets by 2030, at present, the RtR lacks criteria similar to RtZ and COP28 provides an ideal opportunity to develop an approach that embeds working with NbS for climate, biodiversity and people into this initiative. The lack of emphasis on biodiversity and NbS in the RtR presents a particularly blatant gap, as biodiversity underpins the resilience of the flow of ecosystem services and NbS are a crucial tool in strengthening our resilience and adaptation to climate change.

7) ENCOURAGE JOINT MEMBERSHIP OF THE UNFCCC & CBD ACTION AGENDAS

Given the longer history and stronger emphasis on the importance of non-state action historically under the UNFCCC, the Action Agenda for climate change is much more developed in terms of the representation of 'whole of government' and 'whole of society' actors and their involvement in initiatives and the implementation of actions to meet global climate goals. The UNFCCC and specifically the High Level Champions could encourage members of these initiatives to also consider joining initiatives and platforms that specifically seek to develop action for biodiversity, including those recognised by the CBD such as CitiesWithNature, RegionsWithNature, in order to demonstrate the importance of leadership work across these agendas simultaneously. COP28 could provide an important milestone for identifying those organisations who are already making commitments to act for climate, biodiversity and society and to showcase the leadership across different sectors of the economy and subnational actors who are pioneering this approach.

8) DEVELOP A COMMON REPORTING PLATFORM

As more and more non-state and subnational actors make commitments to act for climate, biodiversity and society it will be vital to have a common reporting platform that can account for the progress made and hold actors accountable to their commitments. At the moment, for example, the biodiversity commitments made by actors who pledge climate action are not recorded within the UNFCCC system and there is limited monitoring, reporting and verification of non-state and subnational commitments for biodiversity. Capacity to undertake this reporting and review is currently dispersed globally and it is likely that multiple different platforms will emerge in the next few years, each of which inevitably capturing data in ways that are slightly different making it impossible to get a good overview of what this action 'adds up to', whether there is a significant level of double counting between national commitments and plans and those of non-state and subnational actors, and where important gaps in making progress remain. COP28 could initiate such a common platform, endorsing the UNFCCC and CBD secretariats to institute such a platform vis-a-vis the GCAP and CBD AA data portals that currently exist and establishing a programme of work to bring together and harmonise existing efforts with the goal of having a credible, transparent and legitimate reporting platform ready for the CBD COP16 in 2024. Such a platform would be key to ensure greater accountability of Non-State Actors' pledges across climate and biodiversity.

9) GENERATE SHARED PRINCIPLES FOR FINANCING ACTION FOR CLIMATE, BIODIVERSITY & SOCIETY

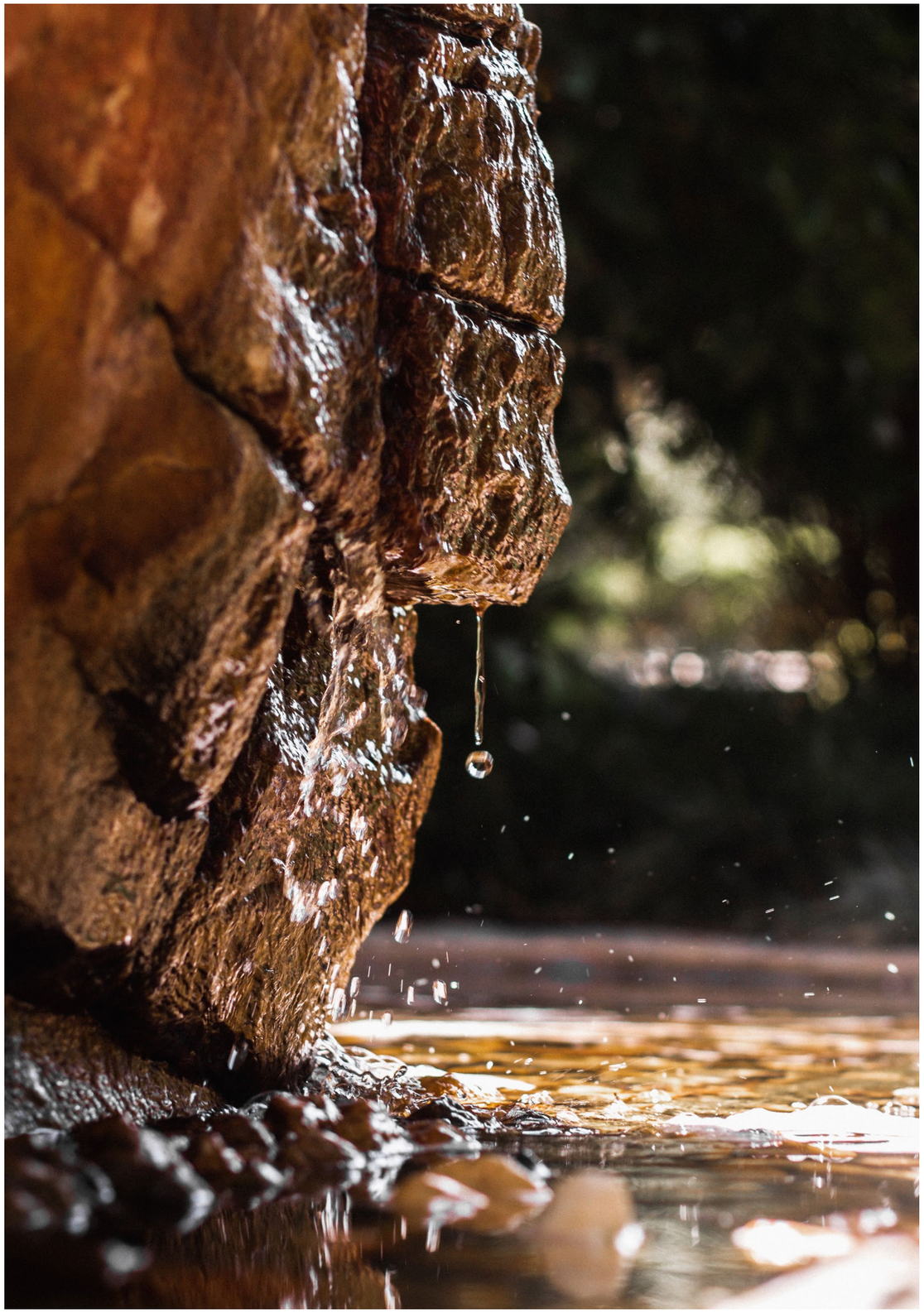
Under the terms of Target 14 of the GBF, biodiversity and its multiple values must be integrated into policies, regulations, planning and development processes, including by aligning fiscal and financial flows with the overall goals and targets of the GBF. This focus on mainstreaming biodiversity has important implications for climate policies and climate finance, as it implies that biodiversity and its multiple values must be considered within these policy processes and forms of resource allocation. Equally, while the growing emphasis on the potential of NbS for addressing climate mitigation, adaptation, biodiversity protection and restoration alongside multiple societal benefits is attracting significant attention from public and private investors there is growing concern that this may lead to multiple forms of 'greenwashing'. Creating shared principles for public and private investment in actions that support climate, biodiversity and societal outcomes could provide a key means to ensure the mainstreaming target of the GBF is met while also levelling the playing field for investment in NbS and restoring public trust in this approach as a legitimate means through which we can tackle multiple global challenges together. Building on existing work from diverse initiatives, COP28 could provide a key moment to bring these together and create a harmonised set of principles that can be adopted by leading public and private investors.

10) SUPPORT UN RESIDENT COORDINATOR SYSTEM TO DELIVER INTEGRATED ACTION

The UN Resident Coordinator System offers a unique resource to support integrated action for climate, biodiversity and the SDGs within a national context. Whilst national governments may be working in sectoral policy arenas, such that policy and action for climate, biodiversity and sustainable development are distributed across different ministries, the UN Resident Coordinator can provide the convening power to bring together different actors across government to align policies and plans and to identify any specific opportunities or challenges in moving ahead with an agenda that focuses on delivering 'triple wins' for climate, nature and society. Equally, the Resident Coordinator could further embed a 'whole of government' and 'whole of society' approach to the design, development and delivery of national policy in these areas by convening key non-state and subnational actors, such that their contribution to these agendas as well as their responsibilities for delivery, monitoring and reporting can be recognised. Such an approach can yield significant dividends – as has been witnessed in the Indus River project in Pakistan. To further enable and embed this approach, COP28 could facilitate an open call for innovative collaborative initiatives, modelled on the success of the Indus River project (Textbox 6), with for example the top three entries being supported with additional resources and capacity over the following 12 months to get off the ground. Such an annual call for collaborative innovation could become a hallmark of future COPs and a strong legacy from COP28.

Textbox 6: Multi-Stakeholder 'Living Indus' Initiative

During COP15, Pakistan's climate change minister announced the multi-stakeholder **'Living Indus'** Initiative, which aims to restore and protect the currently degraded Indus Basin. Pakistan, and its Indus basin are particularly vulnerable to the effects of climate change, illustrated by the severe floods last year. The large-scale restoration project of the 'lifeline' of Pakistan seeks to enhance Indus' ecological health and flood resilience. As a so-called 'umbrella' initiative, it aims to mobilise and scale-up new and existing projects and ideas, by engaging with and consulting the public and private sector, academics, aera-specific experts and civil society. This has resulted in a 'living' menu of 25 interventions, including NbS and ecosystem-based approaches, aiming to protect, conserve and restore Indus' ecosystems. As a 'living' list of contributions - including urban forests, promoting permaculture and watershed management along the Indus - these interventions are expected to evolve over time, together aiming to contribute to a healthier, more adaptive and resilient Indus Basin.



APPENDIX

TABLE 6: Synergies and Complementarities Between the GBF Targets and Climate Action

ACTION	GBF TARGET	IMPLICATIONS FOR CLIMATE CHANGE
Directly Address Climate Change	Target 8 - Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.	Increasing action on climate change in order to protect biodiversity and also to enhance the ways in which nature can contribute to supporting responses to climate change, including through supporting carbon storage (e.g. forests, wetlands, peatland), reducing emissions (e.g. through reducing urban heat islands which contributes to reducing energy use) and enhancing resilience. Nature-based/ecosystem-based approaches can support all of these actions and work across climate/biodiversity.
	Target 11 - Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.	Developing nature-based solutions/ecosystem-based approaches to enhance nature's contributions to people can generate action that jointly addresses climate mitigation, adaptation & biodiversity conservation and restoration, as well as enabling communities to thrive with nature. Even interventions designed primarily for e.g. air pollution, water pollution or soil health can generate co-benefits for climate and biodiversity given their multi-functionality.
Direct Contribution to Climate Change Mitigation and Adaptation	Target 1 - Ensure participatory integrated biodiversity inclusive spatial planning and management processes, to bring the loss of areas of high biodiversity importance close to zero by 2030 while respecting the rights of IPLCs. Target 2 - Ensure that by 2030 at least 30% of areas of degraded terrestrial, inland water & coastal and marine ecosystems are under effective restoration. Target 3 - Ensure & enable at least 30 per cent of terrestrial, inland water & of coastal & marine areas, are conserved & managed through systems of protected areas & other effective area-based conservation measures while ensuring that any sustainable use is consistent with conservation outcomes, recognizing and respecting the rights of Indigenous Peoples and Local Communities, including over their traditional territories.	Areas of high biodiversity importance are often important carbon sinks (e.g. tropical and temperate forests) and the restoration of degraded systems (e.g. peatlands) can also contribute to reducing atmospheric levels of GHGs by enhancing carbon storage. Effective protection of areas of high biodiversity importance (e.g. coral reefs) and restoration of degraded systems (e.g. rivers, wetlands) also contribute to and increase resilience to the impacts of climate change.
	Target 6 - Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services.	Action to reduce the impact of alien species on biodiversity can enhance the resilience of ecosystems i.e. in terms of how far ecosystems that provide e.g. food production, water management, are able to withstand climate impacts.
	Target 12 - Significantly increase the area and quality and connectivity of, access to, and benefits from green & blue spaces in urban and densely populated areas sustainably … contributing to inclusive & sustainable urbanization & the provision of ecosystem functions & services.	Urban green and blue areas can contribute directly to climate mitigation (e.g. by reducing the urban heat island) and to adaptation (e.g. by increasing the resilience of cities to the impacts of climate events, such as heatwaves, droughts, floods and costal inundation).
Addressing Common Underlying Drivers	Target 7 - Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services including from nutrients, pesticides and plastics.	Reducing the use of plastics & pesticides has the potential to contribute to reducing GHGs as both these sectors are intensive users of fossil fuel energy. Reducing the contamination of freshwater systems from nutrients, pesticides and plastics can increase resilience to the impacts of climate change by increasing water availability for nature and people.
	Target 10 - Ensure that areas under agriculture, aquaculture, fisheries & forestry are managed sustainably … contributing to the resilience & long-term efficiency productivity of these production systems and to food security, conserving & restoring biodiversity & maintaining nature's contributions to people, including ecosystem functions & services. Target 12 - Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably … improving human health and well-being and connection to nature	Improving the sustainable management of these systems has the potential to reduce GHG emissions from the land, forestry and food systems and reducing their impact on water systems that may be vulnerable to the impacts of climate change. It can also improve the resilience of these systems to the impacts of climate change. Urban green and blue areas can address indirect drivers of climate change & biodiversity loss: (a) addressing land conversion from nature for urban development, increasing urban density sustainably and reducing the impact of land-use change on biodiversity loss; and (b) increasing connection with nature amongst urban communities which can foster environmental values alongside health/well-being outcomes.

APPENDIX

ACTION	GBF TARGET	IMPLICATIONS FOR CLIMATE CHANGE
Addressing Common Underlying Drivers cont.	Target 15 - Take legal, administrative or policy measures to encourage & enable business … in particular to ensure that large and transnational companies & financial institutions: (a) regularly monitor, assess, & transparently disclose their risks, dependencies & impacts on biodiversity; (b) provide information needed to consumers to promote sustainable consumption patterns; … (d) … reduce biodiversity-related risks to business & financial institutions, & promote actions to ensure sustainable patterns of production.	Encouraging and enabling sustainable production through the disclosure of how businesses are impacting biodiversity and the risks they are exposed to in the face of biodiversity loss may lead to co-benefits for climate mitigation (e.g. through enhancing action on sustainability more broadly) and resilience (e.g. through ensuring the sustainability and viability of supply chains). Promoting sustainable consumption can also address a fundamental driver of climate and biodiversity loss.
	Target 16 - Ensure that people are encouraged and enabled to make sustainable consumption choices … and by 2030 reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation.	Consumption is a key underlying driver of both climate change and biodiversity loss. Actions under Target 16 have the potential, especially through the focus on reducing food waste and overconsumption, has significant potential to contribute to climate mitigation especially through a focus on reducing the overall footprint of consumption.
	Target 18 - Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way.	Incentives that are harmful for biodiversity e.g. land concessions for mining or forestry, payment schemes that support intensive agriculture, can increase demand for carbon-intensive products. Reducing these subsidies can potentially contribute to mitigation.
Sources and Means of Financing	Target 19 - Substantially and progressively increase the level of financial resources from all sources … by 2030 mobilizing at least 200 billion USD, including by: (a) increasing total biodiversity related international financial resources from developed countries … and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States (b) significantly increasing domestic resource mobilization … (c) leveraging private finance, promoting blended finance … (d) stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets & credits, and benefit-sharing mechanisms, with environmental and social safe-guards; (e) optimizing co-benefits & synergies of finance targeting the biodiversity & climate crises;	The prioritisation of co-benefits and synergies between climate change and biodiversity provides an opportunity for existing and future public and/or private finance to prioritise initiatives that are able to leverage benefits across these domains. At the same time, there is a clear demand for additional finance for biodiversity action. If this biodiversity-focused finance is (as suggested under clause (e)) aligned with climate outcomes, this could provide an important resource for climate mitigation and adaptation co-benefits.
	Target 19 - (f) Enhancing the role of collective actions, including by Indigenous Peoples and Local Communities, Mother Earth centric actions and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity.	Clause (f) of Target 19 explicitly focuses on the importance of collective action and non-market based approaches as a resource for the conservation of biodiversity, suggesting that resource mobilisation needs to be all encompassing and that the resources bought by diverse communities should be recognised even where they do not have significant financial value. Climate action could also benefit from recognising the importance of these kinds of resources for achieving policy goals and collective ambitions.
Mainstreaming and Policy Processes	Target 14 - Ensure the full integration of biodiversity & its multiple values into policies, regulations, planning & development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments … within & across all levels of government & across all sectors … aligning all relevant public & private activities, fiscal & financial flows with the goals and targets of this framework.	Climate policy and finance at all levels of government (e.g. national, regional and local) will be required under this target to ensure the 'full integration of biodiversity and its multiple values.'
	Target 22 - Ensure the full, equitable, inclusive, effective & gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by Indigenous Peoples and Local Communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.	The strong emphasis on inclusive decision-making, including with IPLC, represents a challenge and opportunity for climate policy (and finance) which has to date often proceeded on the grounds of expert and technical knowledge, especially in regard to climate mitigation. Given the need for climate policy & finance to take account of biodiversity (Target 14) such policies/financial processes could reasonably seem to fall under the remit of Targets 22 & 23 to ensure inclusive decision-making processes where biodiversity is concerned.
	Target 23 - Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention.	

FOOTNOTES

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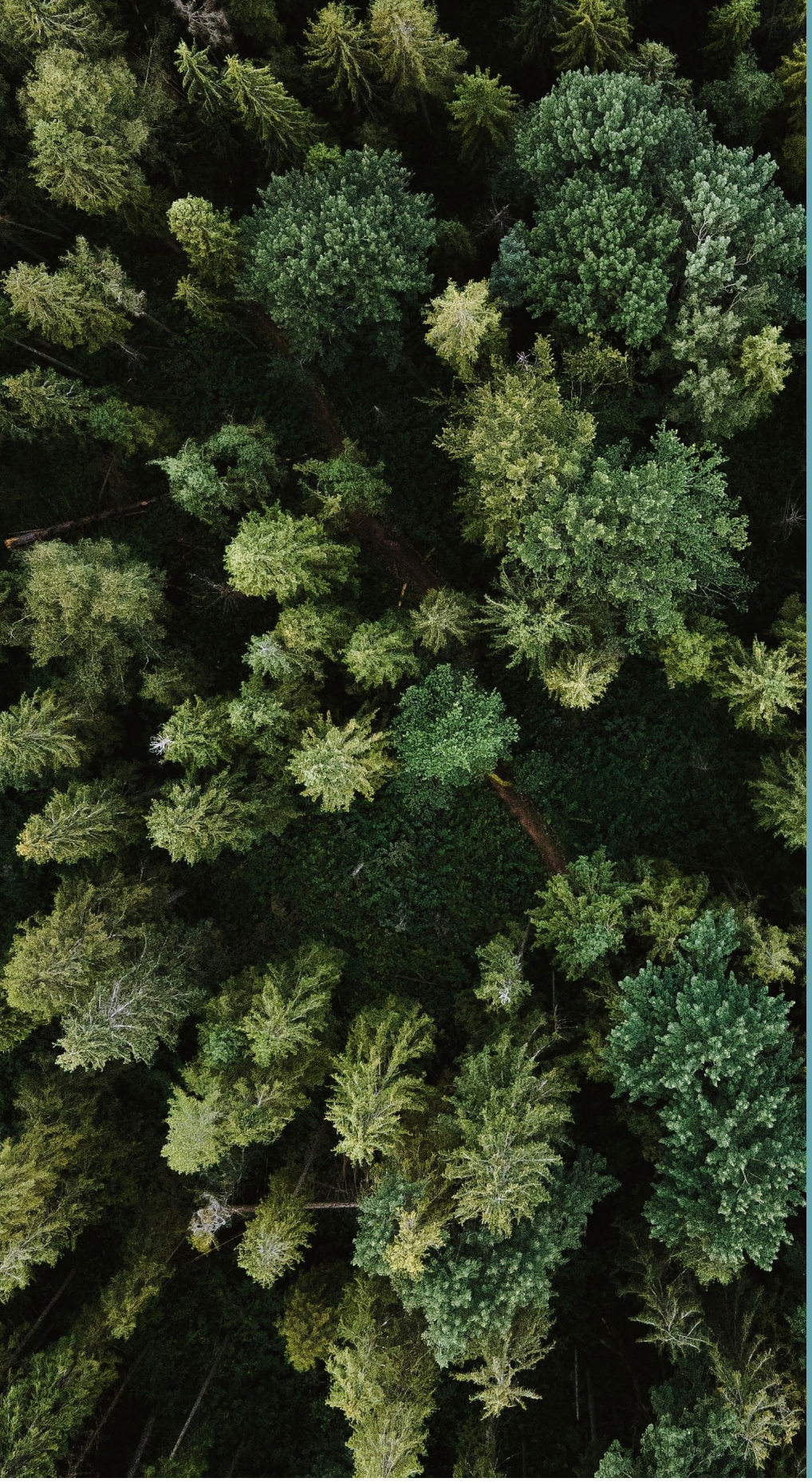

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