Workshop on Mobilizing up-scaling of Nature-based Solutions for climate change throughout 2020 and beyond

04/2 (afternoon) – 05/2 (morning) 2020, Brussels

OUTCOMES & RECOMMENDATIONS

Introduction

Climate change and biodiversity loss are linked and interdependent. We can only achieve climate, biodiversity and sustainable development goals if we scale up and speed up the implementation of technological, societal and nature-based solutions. There is growing global consensus on the importance of addressing these challenges (and the wider set of Sustainable Development Goals) in an integrated manner and, consequently, on the urgency of identifying and implementing win-win solutions.

Nature-based Solutions (NbS), actions that conserve, manage or restore nature to support biodiversity to help address societal challenges, empower people and provide job and business opportunities can be powerful tools for combatting biodiversity loss and supporting climate change mitigation and/or adaptation and disaster risk reduction while delivering further benefits to human well-being (e.g. health). NbS are based on the principle that ecosystems in healthy condition deliver multiple benefits and services for human well-being and can thereby address economic, social and environmental goals simultaneously. Depending on their context, NbS are also framed as Ecosystem-based Adaptation (EbA), Green Infrastructure (GI), Ecosystem-based Disaster Risk Reduction (EcoDRR), or Natural Water Retention Measures (NWRM).

The 2019 Climate Action Summit brought great political attention to the power of NbS for sustainable development and climate action.

The NbS Manifesto, a plan for action to unlock the potential of NbS for climate action, was launched at the 2019 Summit with the support of more than 70 governments, private sector, civil society and international organizations. There is strong commitment to build on the ambitious priorities of the NbS Manifesto and accelerate action to facilitate the achievement of key game changing outcomes already in 2020. This can have positive influence on the 15th Conference of the Parties to the Convention on Biological Diversity (CBD COP15; the zero draft of the post-2020 biodiversity framework includes specific references to NbS) and the 26th Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC COP26) respectively. Several other Multi-lateral Environmental Agreements promote NbS, including the Sendai Framework for Disaster Risk Reduction. At EU level, the European Green Deal recognises the key role of protection and restoration of ecosystems, including through NbS. Achieving biodiversity and climate objectives will depend on successful deployment of NbS timely and at scale. Embedding NbS in sustainable urban planning and at the territorial level in regions can help mainstream NbS.

In light of this global political recognition of the importance of NbS and the need to accelerate its uptake and use by actors across society, a workshop with experts from around the world was held in Brussels 4-5 February 2020 to tackle the issue of scaling up NbS. This report presents a short summary of the workshop, including key discussion points and identified priority needs.

Aims of the workshop

The workshop on *Mobilizing up-scaling of Nature-based Solutions for Climate Change throughout 2020 and Beyond* took place in Brussels over two half days, bringing together key European and global experts on NbS.

Overall, the workshop aimed to:

- provide a platform for exchanging experience and taking stock of recent developments on, and potential for future deployment of, NbS for climate change;
- provide an informal discussion space to identify options by which biodiversity, climate and sustainable development policies (both nationally and internationally) can support scaling up nature-based solutions;
- explore how to make best use of events scheduled for 2020 to advance NbS uptake and implementation.

The majority of the workshop was interactive and discussion-based, allowing participants to share their views and experiences under Chatham House Rules, and to learn from one another.

Day 1

***Key message**: There is unprecedented political momentum and window of opportunity for scaling up NbS, with the existing experience base providing a solid foundation for this.*

The first day began with a welcome note by the European Commission, including a brief introduction on the European Green Deal, which represents an opportunity to prioritise and address the climate and ecological crises in a linked way.

Following this, the first of two keynote speakers (Josef SETTELE, Helmholtz Zentrum für Umweltforschung, co-chair of IPBES Global Assessment and IPCC CLO) presented a summary of the IPBES Global Assessment Report, highlighting that the biosphere and atmosphere have been deeply reconfigured by people, with more species being at risk than ever before. The IPBES report outlines the many contributions nature makes to people and the speaker stressed the need for and opportunity of NbS to be implemented across all sectors. The IPBES report has received tremendous public attention, which provides an important window of opportunity for scaling up NbS.

The second keynote speaker (David NABARRO, NbS Coalition facilitator, 4SD) provided an update on the global NbS discussion. He emphasised that an important shift has taken place in the global political arena, bringing nature into the climate dialogue in the form of NbS for mitigation and adaptation. This more holistic view for responding to climate change, changing the narrative from 'nature or people' to 'nature and people', has created an unprecedented political momentum for NbS. It is therefore now a crucial time to unlock nature's potential and scaling up and speeding up NbS implementation.

Following the keynote speakers, a moderated panel discussion took place consisting of five speakers (*Patrick WORMS, President European Agroforestry Federation; Elvis Paul TANGRAM, African Union Commissioner for Sahel Great Green Wall Initiative, Lea APPULO, Climate and Disaster Risk Reduction, Wetland International Europe; Elena LOPEZ GUNN, Nature Based Solutions Taskforce H2020, project NAIAD; Stewart MAGINNIS, Global Director of Nature Based Solutions Group, IUCN).* Each panellist made a short intervention on ongoing NbS initiatives and experiences. These ranged

from agroforestry and its advantages as a NbS for mitigation and adaptation, to efforts to implement and scale up NbS on the ground (in the Sahel and in Asian and European wetlands) to pioneering research on the value and uptake of NbS, to developing global standards. Further interventions from the floor continued to showcase the wealth of knowledge and experience on NbS practice, research and policy revealing a substantive body of experience that can be drawn on for scaling up and speeding up NbS implementation. This experience base provides a solid foundation that can inform the scaling up of NbS and the formulation of policy frameworks.

Key take-home messages from discussions on this first day include:

- There are a number of encouraging indications and experience of upscaling, but there needs to be more clarity in the NbS proposition in order to assist its increased uptake. In particular, telling powerful stories about NbS can have great impacts. This should include a narrative on multiple benefits beyond climate and attention to biodiversity.
- To support and substantiate those powerful stories, we need effective monitoring and evaluation that addresses biodiversity and multiple benefits to the extent possible.
- Creating demand is crucial to scaling up effective NbS. Governments and the finance sector have crucial roles to play in providing motivation and incentives for transformative change. New actors are increasingly entering the arena; for example, a growing number businesses are recognising the value of NbS for mitigation, adaptation and for enhancing resilience.
- Both existing and emerging standards and safeguards for NbS are important in reducing the risk of negative social or environmental impacts from NbS.

Day 2

***Key message**: Action on two fronts is required including a) creating an enabling environment to scale up existing initiatives and projects while b) developing a strategic vision and global movement for NbS.*

On the second day of the workshop, participants worked in four breakout groups to discuss key questions related to scaling up and speeding up NbS, especially for climate change.

Key points that emerged by question are as follows:

Question 1: What are the priorities for scaling up NbS and speeding up action?

There was wide consensus that the existing research and on-the-ground experiences provided a robust starting point for both mainstreaming and scaling up NBS, presenting them as solutions to address multiple sustainability challenges going beyond climate change. Harnessing the potential and power of what has already been done should therefore be at the core of future efforts. While endeavours to scale up existing initiatives and projects were important, a globally shared strategic vision for NBS among stakeholders was also considered critical. Building on these two aspects, the following priorities were discussed and identified:

Scaling up existing best practice:

- Create bottom-up demand and acceptance for NbS, by ensuring that initiatives and projects are always co-created with stakeholders in a participatory manner with a view to deliver benefits to human wellbeing, social integration as well as to nature conservation and restoration

- Strive towards a governance transition, policy, regulatory frameworks– from local to national and regional levels – so that they allow accelerating action. These include, for example, polycentric governance arrangements, enabling frameworks and regulatory processes for land- and resource use planning, removing any disincentives for NBS, and targeted public funding for NBS that often deliver public goods.
- Recognise, mobilise and further enable existing NBS champions and actors (cities, local governments, business impact investors etc.) to scale up best practice initiatives, including support for making a business case for NbS, providing targeted funding.
- Set up action-oriented partnerships with new sectors and actors to whom NBS can offer solutions. For example, NBS can be a valuable delivery mechanism for the development and humanitarian sector with existing programmes already set up on a broad geographic scale. Furthermore, engaging with the technology and innovation sector is needed to develop and take up enabling tools, such as mobile phone applications, for scaling up.

Developing a strategic vision and creating a global movement:

- Develop a strategic vision and trajectory for mainstreaming and scaling up NbS, to underpin a global movement that helps to create global demand for NbS.
- Acknowledge nature protected areas as a powerful NbS in the face of climate change. Protected area networks such as the Nature 2000 network can make a significant contribution to building resilient societies.
- Mainstream the vision into relevant social and economic policies aimed at delivering human wellbeing and quality of life. In general, the vision should aim to mainstream NBS as a credible and socially just solution for sustainable development challenges, providing multiple benefits to both nature and people.
- Take an advantage of the current window(s) of opportunity linked to the climate policy. The NBS vision should complement (not compete with) the existing global vision and movement(s) for climate change, with a view to ensure that NbS are well understood and taken up so that they deliver for climate, biodiversity and wellbeing. The vision should also identify any reform needs for the climate policy framework required to integrate NbS.
- Populate the vision with flagship message(s) and concrete stories that allow wide uptake of the narrative, appreciating that simplifying the complexity of NbS is needed to do so. However, identify and mitigate against risks linked to oversimplifying the NbS message. For example, aim to ensure that the flagship messages cannot be easily misinterpreted (e.g. deliberately) and that they do not lead to perverse outcomes for conservation.
- Identify an appropriate process (e.g. necessary convening body) to facilitate the development of the vision and champions to support the global movement at different levels.

Question 2: How NbS for climate change can deliver biodiversity benefits?

Delivering benefits for biodiversity:

- Increase policy recognition of intact, high biodiversity value ecosystems as NbS for climate change, including acknowledging conservation and restoration of these areas within countries in their NDCs …
- … while also draw attention to the potential of NbS within other types of land use in rural and urban areas to deliver range of benefits to sustainability (e.g. agroforestry solutions in largescale agricultural areas; sustainable urban design, focused on public green space for societal interaction and nature connection, for people's health and well-being).
- Create mechanisms that recognise, account for and reward positive externalities and multiple benefits of climate related NbS, taking into consideration the quality of NbS (not only quantity of benefits) and the timescales different benefits start to occur.

- Integrate biodiversity and climate change objectives in the sustainability debate within the private sector, including advocate for reforms towards sustainable corporate governance.

Reducing risks for biodiversity:

- Prevent NbS becoming a simple off-setting mechanism that directs attention away from other mitigation and/or adaptation efforts.
- Avoid over-claiming of NbS benefits, recognising that these benefits are location and context-specific and can also require different time scales to occur.
- Take action on a sound evidence and experience basis, drawing from the different communities (climate modelling community, earth observation community, biodiversity community, landscape architects and urban green planning experts, etc.)
- Engage in honest and open discussions about trade-offs between different NbS objectives and benefits, encouraging collaboration between different communities and sectors to share data, exchange evidence and translate this in an understandable format for the business sector.

Question 3: What would be helpful as outcomes of 2020 international meetings?

A large number of important events relevant to efforts to upscale NbS are taking place in 2020. To make progress through these events we need to have a powerful evidence-based strategic vision (as per Question 1 above) which integrates or is shared by the three Rio Conventions covering the following elements: this is what we mean by NbS, this is what we envisage, and this is what we want from it. This vision needs to resonate beyond the conservation community and to be understood by a wide range of decision makers including ministers of finance and agriculture, and those responsible for infrastructure.

The vision needs to be matched with an action agenda that targets:

- Agriculture and food system changes (this system has the largest footprint on nature – and a great potential for solutions)
- Finance shifts (disclosure and greening the grey), but also climate finance
- Cities and infrastructure
- Protected areas and ecosystem conservation
- Ecosystem restoration

This means the list of events needs to include key sectoral events and to extend beyond 2020. Participants highlighted the World Urban Forum (2020 and 2022) and the UN Food Systems Summit (2021), as well as the Global Adaptation Summit in October 2020. A key goal for all events is to unlock finance for NbS at scale.

Question 4: How can NbS be measured, monitored and reported and what would be suitable indicators?

Being able to measure, monitor and report on NbS and their outcomes is crucial to supporting scaling up their use. Monitoring and evaluation (M&E) provides the basis for adaptive management of NbS initiatives at the site level, for understanding the effectiveness (incl. limitations) of NbS in delivering intended outcomes and co-benefits, and for developing reporting systems at national and international levels that can help track progress towards objectives and targets at multiple scales.

Discussions identified the following complexities underlying M&E, as well as ways to address them:

- Perceptions of where the issues/challenges lie for improving monitoring and evaluation (M&E) may differ, depending on individuals' starting perspectives, agendas, or entry points, for NbS. For example, the biodiversity community may perceive measuring carbon storage or emissions reductions as a difficulty, while the climate change community is familiar with this process and sees measuring adaptation and co-benefits (including biodiversity) as challenging.
- There has been considerable progress in M&E in a number of sectors and projects relevant to NbS for climate change, eg the Sendai Framework M&E reporting[1], Disaster Resilience Scorecard for Cities[2]. These existing frameworks, processes and indicators provide a valuable basis that should be drawn on in the context of M&E of NbS for climate change.
- One of the challenges in M&E of NbS for adaptation is that it is difficult to establish which components to monitor and how to aggregate them. Given the context-specificity of NbS, each project site will have different M&E needs – however, it is important to find a way to aggregate these to be able to feed into higher-level frameworks.
- Monitoring and evaluating resilience, which is often the intended outcome of NbS for adaptation, is challenging as resilience consists of many different components. To monitor resilience, it needs to be broken down into components that are measurable. A suggestion is to broadly classify such a breakdown by environmental, (socio-) economic, social benefits Another challenge for aggregation across scales is the fact that adaptation and resilience are processes which occur against a moving baseline.
- It is important to monitor the multiple benefits of NbS for climate change, but also to understand potential ecosystem disservices, unintended negative consequences and maladaptation.
- Social and environmental safeguards need to be in place to help avoid negative impacts of NbS. To ensure such safeguards are achieving their purposes, it is important to monitor and evaluate those as well.
- There is great potential to 'repurpose' well established indicators from other fields that give information on socio-economic aspects, poverty alleviation, human well-being, etc., all of which are relevant in the NbS context.
- As NbS will themselves be impacted by climate change, it is also important to monitor the resilience to climate change of the measures themselves.

What's next/conclusions

NbS have great potential for providing progress on both climate change mitigation and adaptation, while contributing to other key agendas on biodiversity and human wellbeing. The linked nature of these agendas and the crucial role that NbS and their multiple benefits can play in meeting objectives in all of them were key themes of the workshop discussions. This needs to be wrapped into a coherent proposition supported by examples and stories that can help to create understanding of and demand for NbS for climate amongst a wide range of actors from governments to the finance sector and business. Confidence in, and positive outcomes from the use of NbS depend on effective monitoring and evaluation of those outcomes and other impacts and multiple benefits and on the rigorous application of safeguards and standards to help avoid adverse impacts and enhance positive outcomes. The year of 2020 is a crucial opportunity to foster wider adoption and upscaling of NbS and secure the associated benefits.

[1] https://sendaimonitor.unisdr.org/

[2] developed with the support of the EU, and private sector to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030 https://www.unisdr.org/campaign/resilientcities/toolkit/article/disaster-resilience-scorecard-for-cities

Annex 1
Background information

NbS in recent policy developments There have been a number of recent developments in policy that are providing NbS crucial political weight and momentum for scaling up action, including:
CBD SBSTTA recommendation CBD/SBSTTA/23/L.4 calls for inclusion of NBS in the upcoming post-2020 global biodiversity framework, including suggestions on how to do that. The CBD Zero Draft Of The Post-2020 Global Biodiversity Framework includes references to NbS in two proposed action targets.
The European Commission has presented the European Green Deal, which is an ambitious package of measures that should enable European citizens and businesses to benefit from sustainable green transition. Measures accompanied with an initial roadmap of key policies range from ambitiously cutting emissions, to investing in cutting-edge research and innovation, to preserving Europe's natural environment. NbS are mentioned twice directly (in relation to a new adaptation strategy and blue economy) and underlie the thinking of other sections, including on biodiversity/restoration.
The NbS for Climate Manifesto, a plan for action to unlock the potential of NbS for climate action, was launched at the UN Climate Summit, with the support of more than 70 governments, private sector, civil society and international organizations. There is strong commitment to build on the ambitious priorities of the NbS Climate Manifesto and accelerate action to facilitate the achievement of key game changing outcomes already in 2020.
The NbS Coalition[3] includes: • Countries: Government members China (co-lead), New Zealand (co-lead), Costa Rica, Djibouti, Fiji, Gabon, Iceland, Monaco, Norway, Portugal, Pakistan, Tajikistan, Argentina, Belarus, Croatia, Finland, Germany, Guyana, Haïti, Ireland, Italy, The Lao People's Democratic Republic, Netherlands, Nicaragua, Saudi Arabia, Seychelles, Slovenia, Spain, Suriname, Sweden, Uruguay, the United Kingdom, and the EU - European Commission. • Private sector: Unilever, Mars, Danone, Coca-Cola, Earth Client, Systemic Earth, WBCSD and WeMeanBusiness coalition. • International Organizations: IUCN, World Bank, Climate & Clean Air Coalition (CCAC) Agriculture Initiative. • Civil Society, Foundations, Research organisations: Conservation International, Wetlands International, Food and Land Use Coalition, Ocean Risk and Resilience Alliance, RARE, WWF, UN Foundation, CIFOR, Ecoshape , Fearless Fund, EDF, Nature4Climate Coalition, ALUS Canada, Isha Foundation, Pacific Institute, WRI, International Federation of Red Cross and Red Crescent Societies, The Ocean Unite, Global Resilience Partnership, Environmental Sciences Group of Wageningen University & Research. • NbS network: The NbS network includes more than 600 individual members from nearly 40 countries, 50 international organizations and institutions, 100+ civil society organizations, 50 private sector organizations and companies and around 12 Foundations.
The UNCCD New Delhi Declaration 'Investing in Land and Unlocking Opportunities' from the 2019 also makes reference to the importance of linking climate action with biodiversity, including: "promote opportunities that support, as appropriate and applicable, the long-term goals of the Paris Agreement and the development of an ambitious post-2020 global biodiversity framework, taking into consideration land-based solutions for climate action and biodiversity conservation and the mutually supportive implementation of the three Rio conventions."

[3] State after the Climate Action Summit in New York September 2019

NbS in action: networks, initiatives and implementation

Accompanying the growing political momentum for NbS for climate change has been an increase in networks and initiatives to raise ambition and accelerate action, as well as efforts to document NbS implementation:

The NbS Contributions Platform, hosted by UN Environment, was established to share inputs received following the global call for contributions to the NbS work stream for the 2019 UN Climate Action Summit. It compiles nearly 200 contributions.

Linked to the NbS Contributions Platform (but not identical), the Compendium of Contributions Nature-Based Solutions was compiled by the NbS Facilitation Team with the entrustment of China and New Zealand, the co-lead countries of the NbS coalition of the 2019 UN Climate Action Summit. This compendium contains descriptions of nearly 200 initiatives and best practices from a broad range of entities around the world. The initiatives are all opportunities for extending and intensifying NbS on land; in freshwater; in marine and coastal areas; as well as in agriculture, food and nutrition.

The Global Commission on Adaptation (GCA) moves communities, cities and countries to proactively prepare for the disruptive effects of climate change with urgency, fierce determination and foresight, to take advantage of the best, most cost-effective options, reduce risk and come out stronger. The GCA has produced a Flagship Report that highlights the importance of nature in adaptation, as well as a background paper dedicated to this topic, which provides an evidence-based overview of the role of the natural environment in adaptation to climate change, including 25 case examples illustrating the use of NbS for adaptation across different sectors.

The Nature-based Solutions Initiative is an interdisciplinary programme of research, policy advice and education based at the University of Oxford. It hosts a global policy platform for climate change adaptation, which showcases adaptation plans in the climate pledges of all signatories of the Paris Agreement of UNFCCC, highlighting the prominence of NbS to climate change impacts in global policy and links pledges to the underlying science. It also hosts the NbS Evidence Platform, which is an interactive map linking NbS to climate change adaptation outcomes based on a systematic review of the peer-reviewed literature.

Nature4Climate (N4C) is an initiative of the United Nations Development Programme (UNDP), UN-REDD, UN Environment, the CBD, IUCN, Conservation International (CI), The Nature Conservancy (TNC), Wildlife Conservation Society (WCS), Woods Hole Research Center, World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI), and WWF that aims to increase investment and action on NbS in support of the 2015 Paris climate agreement.

The United Nations General Assembly has proclaimed 2021-2030 as the Decade on Ecosystem Restoration, following a proposal for action by over 70 countries from all latitudes. The UN Decade positions the restoration of ecosystems as a major NbS towards meeting a wide range of global development goals and national priorities.

The Global Peatlands Initiative is an effort by leading experts and institutions formed by 13 founding members at the UNFCCC COP in Marrakech, Morocco, in 2016 to save peatlands as the world's largest terrestrial organic carbon stock and to prevent it being emitted into the atmosphere.

The UN-REDD Programme is the United Nations Collaborative Programme on Reducing Emissions from Deforestation and forest Degradation (REDD+) in developing countries. The Programme supports nationally led REDD+ processes and promotes the informed and meaningful involvement of all stakeholders, including indigenous peoples and other forest-dependent communities, in national and international REDD+ implementation.

The following platforms provide compilations of case examples of NbS implementation on the ground:

- PANORAMA – Solutions for a Healthy Planet is a partnership initiative to document and promote examples of inspiring, replicable solutions across a range of conservation and sustainable development topics, enabling cross-sectoral learning and inspiration.
- The Equator Initiative NbS database contains examples of how local communities and indigenous peoples around the world are working towards achieving the UN Sustainable Development Goals through nature-based actions.
- The OPPLA website features a collection of case studies of NbS in cities, compiled by DG Research and Innovation at the European Commission from publicly available information and cross-checked by city administrations.

NbS terms and concepts

Depending on their context, NbS are also framed as Ecosystem-based Adaptation (EbA), Green Infrastructure (GI), Ecosystem-based Disaster Risk Reduction (EcoDRR), or Natural Water Retention Measures (NWRM) etc. All concepts share the assumption that ecosystems in healthy condition deliver multiple benefits and services for human well-being and address economic, social and environmental goals, including climate change adaptation and mitigation and biodiversity conservation and restoration.

The following links provide information on terms and concepts linked to NbS for climate change:

In 2018 at CBD COP 14 Parties adopted *Voluntary guidelines for the design and effective implementation of ecosystem based approaches to climate change adaptation and disaster risk reduction* (CBD COP 14/5), which include principles and safeguards. A more detailed version of the *Voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction and supplementary information* was launched in 2019. The document provides further elaboration on how EbA and Eco-DRR relate to each other, as well as to other approaches. The Voluntary guidelines are structured in three main sections: the first designed as a primer for policy makers; the second providing guidelines related to implementation of EbA and Eco-DRR; and the third offering advice on outreach into other sectors.

In 2010 at CBD COP 10 Parties adopted a Decision on Biodiversity and Climate change (CBD COP 10/33) outlining concepts of ecosystem-based mitigation and ecosystem-based adaptation.

Ecosystem-based adaptation (EbA) was defined by the Ad Hoc Technical Expert Group under the Convention on Biological Diversity (CBD) in 2009 as: "the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to the adverse effects of climate change."

The International Union for Conservation of Nature (IUCN) has defined NbS as "actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits." As per this definition, NbS for climate mitigation and adaptation are classified as "issue-specific ecosystem-related approaches." In order to create a common understanding and consensus on NbS, IUCN's Ecosystem Management Programme and Commission are jointly leading a collaborative process to elaborate a Global Standard for the Design and Verification of Nature-based Solutions, to be launched at the World Conservation Congress in June 2020.

The European Commission's Research department describes nature-based solutions to societal challenges as "solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions". Nature-Based Solutions therefore provide multiple benefits for biodiversity. Any approaches that do not improve biodiversity, are not based or delivering on a range of ecosystem services, are not Nature-Based Solutions.

Similarly, ecosystem-based approaches are also used in the context of disaster-risk reduction (Eco-DRR), where such approaches are defined as: "the sustainable management, conservation, and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development."

The Friends of EbA network (FEBA), hosted by IUCN, has developed a framework for defining qualification criteria and quality standards for EbA, which aim to help decision makers and practitioners apply a common set of qualification criteria and standards in the context of implementing the UNFCCC Paris Agreement and NDC commitments as well as the national adaptation planning processes.

NbS have been deployed for climate change mitigation, especially through efforts to conserve, manage and restore forest under REDD+ (Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries). Significant progress has been made in the development of agreed methodologies and approaches for REDD+. One of the key instruments is a set of social and environmental safeguards (also known as the Cancun Safeguards) to ensure that potential risks are avoided and co-benefits for biodiversity and human well-being are as strong as possible. A substantial body of materials has been elaborated to help countries apply the safeguards.

Management of ecosystems other than forests also provides key NbS for mitigation, with recent attention focused especially on peatlands.

Converging science : links to CBD INF documents on biodiversity and climate change based on recent IPCC and IPBES reports

CBD/COP/14/INF/22 : Key messages BIODIVERSITY AND CLIMATE CHANGE: INTEGRATED SCIENCE FOR COHERENT POLICY

CBD/SBSTTA/23/3 : REVIEW OF NEW SCIENTIFIC AND TECHNICAL INFORMATION ON BIODIVERSITY AND CLIMATE CHANGE

Box 1. EU Strategies policies and investment in support of NbS

EU Strategies and Policies in support of nature-based solutions

- The EU Strategy on adaptation to climate change (2013) commends ecosystem-based approaches (EbA) for their cost-effectiveness under different scenarios, for being easily accessible, and for providing multiple benefits.
- The EU Green Infrastructure Strategy, (2013) commends to consolidate actions on green infrastructure, ecosystem-based approaches to adaptation and disaster risk reduction. At the core of the Green Infrastructure is the Natura 2000 network, the largest coordinated network of protected areas in the world stretching over 18 % of the EU's land area and almost 10% of its marine territory.
- The EU Biodiversity Strategy for 2020 (2011) called on Member States to map and assess the state of ecosystems and their services in their national territory with the assistance of the European Commission, including the important role that ecosystems play in mitigating climate change and adapting to its impacts as essential ecosystem services.
- The EU "Blueprint to Safeguard Europe's Water Resources" recognises the role of Natural Water Retention Measures for preventing flood risk when producing co-benefits.
- The EU Action Plan on the Sendai Framework for Disaster Risk Reduction covers eco-system based approaches to DRR under priority 3 'Investing in disaster risk reduction for resilience'.
- The EU policy on international ocean governance (2016) sets out a series of action with a nature-based solution approach. The EU has recognized the importance of the oceans and climate nexus and is promoting and developing ocean-related action to implement the Paris Agreement, including nature-based solutions.

Investment in Nature-based solutions

- The Research and Innovation policy initiative on Nature-based solutions triggered a to portfolio of projects on nature-based solutions supported with EUR 156 M (200 M up to 2020) under the Current Framework Programme, Horizon 2020 (see Box 2).
- The Urban Agenda for the EU partnerships includes a partnership on sustainable land use and nature-based solutions.
- The Global Climate Change Alliance Flagship, since 2007 has supported 77 countries (37 LDCs, 39 SIDS) in implementing actions for tackling climate change (including disaster risk reduction, from which 72% are directly related to nature-based solutions.
- The EC is the major funding institution for an Eco-DRR Programme implemented by UNEP.
- The Natural Capital Financing Facility, set up by the EC and the European Investment Bank with a budget of €185 million, provides resources for the preservation of natural capital, including adaptation to climate change.
- Since 2017, the EU has dedicated specific funding to restore marine and coastal ecosystems in different regions around the world, including the Mediterranean, Southeast Asia, and the ACP countries for a total of more than EUR 90 million.

Box 2. Horizon 2020 funded projects related to NbS	
RESCUE	River flood Embankments Subject to Climate change: Understanding Effects of future floods and novel 'low-carbon' adaptation measures
DIVERSIFOOD	Embedding crop diversity and networking for local high quality food systems
PEGASUS	Public Ecosystem Goods And Services from land management - Unlocking the Synergies
Ecopotential	IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATIONS
ESMERALDA	Enhancing ecoSysteM sERvices mApping for poLicy and Decision mAking
GREEN-WIN	Green growth and win-win strategies for sustainable climate action
TransRisk	Transitions pathways and risk analysis for climate change mitigation and adaption strategies
Aquacross	Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies
INSPIRATION	INtegrated Spatial PlannIng, land use and soil management Research ActTION
BiodivERsA3	Consolidating the European Research Area on biodiversity and ecosystem services
Placard	PLAtform for Climate Adaptation and Risk reDuction
RESIN	Climate Resilient Cities and Infrastructures
SMR	Smart Mature Resilience
INNOVCITIES	Institutional Innovation for Adapting to Climate Change in Water Governance within Cities
OPTWET	Finding optimal size and location for wetland restoration sites for best nutrient removal performance using spatial analysis and modelling
BlueHealth	Linking Up Environment, Health and Climate for Inter-sector Health Promotion and Disease Prevention in a Rapidly Changing Environment
INHERIT	INter-sectoral Health Environment Research for InnovaTions
Sim4Nexus	Sustainable Integrated Management FOR the NEXUS of water-land-food-energy-climate for a resource-efficient Europe
INCOVER	Innovative Eco-Technologies for Resource Recovery from Wastewater
Aquanes	Demonstrating synergies in combined natural and engineered processes for water treatment systems
MERCES	Marine Ecosystem Restoration in Changing European Seas
AMBER	Adaptive Management of Barriers in European Rivers
BRIGAID	BRIdges the GAp for Innovations in Disaster resilience
FOODEV	Food and Gastronomy as leverage for local development
SustUrbanFoods	Integrated sustainability assessment of social and technological innovations towards urban food systems
BioCarbon	Rapid tree-planting through the use of remote sensing and unmanned vehicle planting technologies for large scale reforestation
UNALAB	Urban Nature Labs
CONNECTING nature	COproductioN with NaturE for City Transitioning, INnovation and Governance
NATURVATION	Nature Based Urban Innovation
EN-SUGI	Eranet Sustainable Urbanisation Global Initiative
GROW GREEN	Green Cities for Climate and Water Resilience, Sustainable Economic Growth, Healthy Citizens and Environments
Think Nature	Development of a multi-stakeholder dialogue platform and Think tank to promote innovation with Nature based solutions
Clarity	Integrated Climate Adaptation Service Tools for Improving Resilience Measure Efficiency
UrbanGreenUp	New Strategy for Re-Naturing Cities through Nature-Based Solutions
Nature4Cities	Nature Based Solutions for re-naturing cities: knowledge diffusion and decision support platform through new collaborative models
NAIAD	NAture Insurance value: Assessment and Demonstration
ProGIReg	productive Green Infrastructure for post-industrial urban regeneration
CLEVER Cities	Co-designing Locally tailored Ecological solutions for Value added, socially inclusivE Regeneration in Cities
EdiCitNet	Edible Cities Network Integrating Edible City Solutions for social resilient and sustainably productive cities
Phusicos	'According to nature' - solutions to reduce risk in mountain landscapes

URBiNAT	Healthy corridors as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS
Operandum	OPEn-air laboRAtories for Nature baseD solUtions to Manage environmental risks
Reconect	Regenarating ECOsystems with Nature-based solutions for hydro-meteorological risk rEduCTion
ReNature	promoting Research Excellence in NAture-based soluTions for innovation, sUstainable economic GRowth and human wEll-being in Malta
EU-VNP-Net	EU Valuing Nature Programme and Network
REGREEN CLEARING HOUSE	Fostering nature-based solutions for smart, green and healthy urban transitions in Europe and China Collaborative Learning in Research, Information-sharing and Governance on How Urban tree-based solutions support Sino-European urban futures

Annex 2
Agenda of the Workshop

Tuesday 04/02 afternoon 14:00 – 18:00 **Salle Robert Schuman Berlaymont, 170 rue de la Loi, 1040 Brussels**	
13:30-14:00	**Registration**
14:00-15:00	**Session 1** Welcome and introduction on European Green Deal by European Commission IPBES Global Assessment and its uptake: **Josef SETTELE** IPBES co-chair, IPCC author Update on NBS global discussion: **David NABARRO** NBS Coalition facilitator, 4SD Q&A Introduction of working method by World Conservation Monitoring Centre (WCMC) and Institute for European Environment Policy (IEEP)
15:00-15:30	**Coffee and Tea break**
15:30-17:45	**Session 2** Panel discussion on recent progress on nature-based solutions for climate change *Panellists:* **Patrick WORMS** President, European Agroforestry Federation **Elvis Paul TANGRAM** African Union Commissioner for Sahel Great Green Wall Initiative **Lea APPULO** Climate and Disaster Risk Reduction, Wetland International Europe **Elena LOPEZ GUNN** Nature Based Solutions Taskforce H2020, project NAIAD **Stewart MAGINNIS** Global Director of Nature-based Solutions Group, IUCN *Moderators:* **Val CAMPOS** (UNEP-WCMC) and **Marianne KETTUNEN** (IEEP) Further interventions from the floor in plenary or virtually & Open Discussion
17:45-18:00	**Closing of day 1**
18:00-19:00	**Networking Cocktail**

Wednesday 05/02 morning 09:00-13:00 Room C, Avenue Beaulieu 5, 1160 Brussels	
08:00-09:00	**Registration & Welcome Coffee**
09:00-09:30	**Session 3** Short recap of Day 1 and introduction of working groups
09:30-11:00	Breakout group discussion on scaling up and speeding up NBS action Participants will be divided into up to 4 breakout groups. The following set of questions will be addressed by each breakout group: 1. What should be the priorities for scaling up and speeding up NBS action (e.g. with regard to innovative collaboration and ways of working, policy options, as well as resourcing and funding models)? 2. What are ways of addressing biodiversity benefits and risks of NBS for climate change? 3. What would be helpful for the further upscaling on NBS for climate change in terms of outcomes of 2020 meetings, such as for example the CMS COP13 (February), the OEWG 2 on the post-2020 framework for biodiversity (February), CBD SBSTTA-24 and SBI-3 (May), IUCN World Conservation Congress (June), UN SG's Nature Summit (September), CBD COP15 (October) and UNFCCC COP26 (November)? 4. How can nature-based solutions be measured, monitored and reported and what would be suitable indicators?
11:00-11:30	**Coffee and Tea break**
11:30-12:30	Reports back to plenary Open discussion
12:30-13:00	Next steps and closing of the workshop