UNLOCKING NATURE'S POTENTIAL

Forests related Nature-based Solutions to address climate change and promote sustainable development

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FOREWORD

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In a historic moment where holistic solutions are required to tackle the complicated societal and environmental issues facing our global society, we should remember to observe and learn from our surroundings: nature offers immense potential to support the core connecting our world's economic, environmental and development needs.

In 2019, Nature-based Solutions (NbS) gained increased attention in several political arenas. In September, UN Secretary-General António Guterres called on all leaders to gather in New York for the Climate Action Summit. There, we witnessed great political attention highlighting the power of NbS, particularly by the NbS Coalition co-led by China and New Zealand. At COP 25 in December, NbS was prominent in both high-level segments and many side events. The first months of 2020 witnessed the identification of nature as one of the five priorities of the UK presidency of COP 26; NbS are also expected to take center stage in the negotiations of the upcoming COP 15 of the Convention on Biological Diversity (CBD).

Companies and investors are increasingly addressing the importance of nature, recognizing that business cannot thrive in a world of environmental stress, poverty, and uncertainty. Increased, proactive and purposeful action by companies sends clear signals to governments in support of stronger environmental policies. Those policies, in turn, enable and incentivize businesses to move even further along their environmentally positive path, creating a so-called "ambition loop" – a positive feedback loop between the private sector and governments that accelerates progress toward the objectives of the Paris Agreement and SDGs[1]. Still, not many companies are transparent about how they address NbS nor show evidence of the integration of NbS in their business operations.

At CDP we believe disclosure is the bedrock for action. Companies that are transparent on their environmental information can identify and measure risks and opportunities as a first step towards tailoring their business, reducing the impact on the environment while also improving resiliency. CDP data already provides insights, for example, identifying NbS implemented by companies across the globe, which in turn can be used to inform policy-making.

Now is the time to ride the current momentum, and CDP is moving to better integrate NbS in a series of key opportunities available in 2020: the second cycle of the NDCs under the Paris Agreement, the negotiations of the CBD Post-2020 Global Biodiversity Framework and the kick-off of the decade of action to achieve the 2030 Sustainable Development Agenda and the SDGs. Within these policy contexts, it is important to ensure that NbS are not a substitute to decarbonizing our economies. It must be implemented as part of a wider strategy to cut fossil fuel emissions, as well as maintain, sustainably manage and restore biodiversity-rich ecosystems.

We will propel NbS into these policy spheres, ensuring a solution that can tackle interconnected issues and ensure policy coherence. 2020 is a crucial year: we have the opportunity to support global, regional and national policy arenas to simultaneously address climate and sustainable development objectives. We therefore invite you to join us on this journey.

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1. https://static1.squarespace.com/static/5bbe243651f4d40801af46d5/t/5c00266c0e2e728a28cee091/1543513751309/The-Ambition-Loop.pdf

ABOUT THIS BRIEFING

This policy briefing is CDP's first look at the actions taken by companies on Nature-based Solutions within its forests' disclosure data. It is aimed at policymakers seeking to understand the role of the private sector in unlocking the potential of Nature-based Solutions as a cost-effective tool to support a responsible forest-risk commodity value chain and in delivering a 1.5°C, deforestation-free world.

Companies are increasingly recognizing the impact they are having on the environment throughout their supply chains and are starting to plan and implement corrective actions within their operations. Many have already begun undertaking Nature-based Solutions (NbS) in areas such as forest conservation, wetlands restoration, reforestation, mitigation of flooding and drought risks, among others. Detailed information on how companies are carrying out NbS within their operations, however, is still lagging.

Active participation of business is a core driver in achieving international environment and development agreements, namely the Paris Agreement, the Convention on Biological Diversity (CBD) and the Sustainable Development Goals (SDGs), and their contribution should be promoted.

This briefing describes the increasing importance of NbS in the main international regimes related to climate and biodiversity, assessing the private sector's potential in driving NbS forward. It presents cases of NbS being implemented and supported by companies responding to CDP's forests questionnaire and provides a set of recommendations for policymakers to strengthen the private sector's engagement with NbS.

How do companies responding to CDP's Forests Questionnaire implement NbS?
CDP looked at the responses of 543 companies to CDP's 2019 Forests Questionnaires and analyzed the answers to provide evidence on how NbS is being implemented. CDP data constitutes the most comprehensive collection of self-reported private sector environmental data in the world. It provides a unique and unparalleled wealth of information on how companies are currently using NbS.

KEY FINDINGS

- 15% of the responding companies are implementing and supporting NbS, showing a large potential for growth and space for positive policy incentives.
- Companies in Asia lead in reporting NbS through CDP's Forests Questionnaire, while companies in Central and South America are lagging.
- Companies in the Materials sector lead in reporting NbS, and the Services and Hospitality sectors also perform above average.
- There is a similar rate of NbS reporting for companies disclosing on CDP's four Forest Risk Commodities, with companies disclosing on Timber having a slightly higher percentage.
- Forest conservation and reforestation are the most commonly implemented categories of NbS implemented by disclosing companies.

WHY NATURE-BASED SOLUTIONS?

The Intergovernmental Panel on Climate Change's (IPCC) Special Report on Climate Change and Land provided an authoritative confirmation of the crucial role of ecosystems as both a source and sink of greenhouse gases (GHGs). Agriculture, Forestry and Other Land Use (AFOLU) activities accounted for 23% of total net anthropogenic emissions of GHGs globally from 2007-2016[2].

The latest global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) stated that the great majority of indicators of ecosystems and biodiversity show rapid decline, "suggesting that around 1 million species already face extinction, many within decades unless action is taken to reduce the intensity of drivers of biodiversity loss"[3]. Both reports identify changes in land use as one of the main direct drivers of biodiversity decline and highlight potential NbS, such as reducing deforestation and forest degradation, ecosystem restoration and integrated water management, as responses that contribute to climate change mitigation and adaptation, as well as to reducing the pace of biodiversity loss.

Nature-based Solutions (NbS) is an umbrella term to describe a wide array of ecosystem-based options to mitigate climate change and ensure ecosystem sustainability. They can be understood as actions that "incorporate the natural environment that mimic or work in concert with natural processes to provide clean water, clean air, flood, fire and drought risk reduction, and other benefits"[4] and, more broadly, as "actions to protect, sustainably manage and restore natural or modified ecosystems, which address societal challenges (e.g. climate change, food, and water security or natural disasters) effectively and adaptively, while simultaneously providing human well-being and biodiversity benefits"[5].

Recent scientific work has shown that NbS "can provide 37% of cost-effective CO2 mitigation needed through 2030 for a >66% chance of holding warming to below 2°C"[6]. Perhaps even more crucially, NbS are being increasingly adopted by governments and international organizations to frame actions aimed at managing, protecting and restoring ecosystems as a means to reduce GHG emissions and to generate biodiversity and human welfare benefits. This has prompted widespread recognition for NbS from governments and international organizations as a cost-effective approach to managing, protecting and restoring ecosystems to reduce GHG emissions, as well as generating biodiversity and human welfare benefits. Consequently, NbS are also noted as having the potential to "increase the resilience of ecosystems and thereby to stabilize the provisioning of important services". Finally, it is important to bear in mind that NbS are a complementary approach to other decarbonization strategies and cannot be seen as substitutes to them.

2. https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf
3. https://www.ipbes.net/system/tdf/ipbes_7_10_add.1_en_1.pdf?file=1&type=node&id=35329
4. https://www.nature.org/content/dam/tnc/nature/en/documents/NBSWhitePaper.pdf
5. https://www.iucn.org/sites/dev/files/content/documents/nature-based_solutions_to_address_global_societal_challenges.pdf
6. https://www.pnas.org/content/114/44/11645
7. http://ndcpartnership.org/nature-based-solutions-better-climate-resilience-need-scale-ambition-and-action

ANALYSIS OF NBS IMPLEMENTATION BY DISCLOSING COMPANIES

To get an early indication of whether and to what extent companies are already implementing forms of NbS in their operations, CDP analyzed the responses of 543 companies that responded to the 2019 Forests Questionnaire[8].

Out of the 543 companies that responded to CDP's 2019 Forests Questionnaire, we found that **84 (15%)** are implementing some form of NbS. The regional breakdown of companies' NbS implementation is shown in Table 1 below. The results are an indication that the majority of companies have yet to embrace NbS. Therefore, there remains much space for the provision of incentives for companies to integrate NbS in their operations[9].

Table 1 – Regional breakdown of companies implementing NbS

Region	Number of companies reporting 1+ NbS	Not reporting NbS	Percentage of companies reporting 1+ NbS
North America	23	131	14.94%
Europe	23	115	16,67%
South America	7	100	6,54%
Asia	25	83	23,15%
Central America	1	18	5,26%
Oceania	4	4	50%
Africa	1	4	20%
Caribbean	0	4	0%
Total	84	459	15%

Figure 1 shows noticeable regional differences in the implementation of NbS. It is interesting to note that Asian companies seem to dominate the implementation of NbS with almost a quarter of all reporting companies working with one or more solutions. Other leaders include Europe (17%) and North America (16%) with a noticeable lack of implementation in Central and South America.

Percentage of companies reporting 1+ NBS (more than 10 responses)

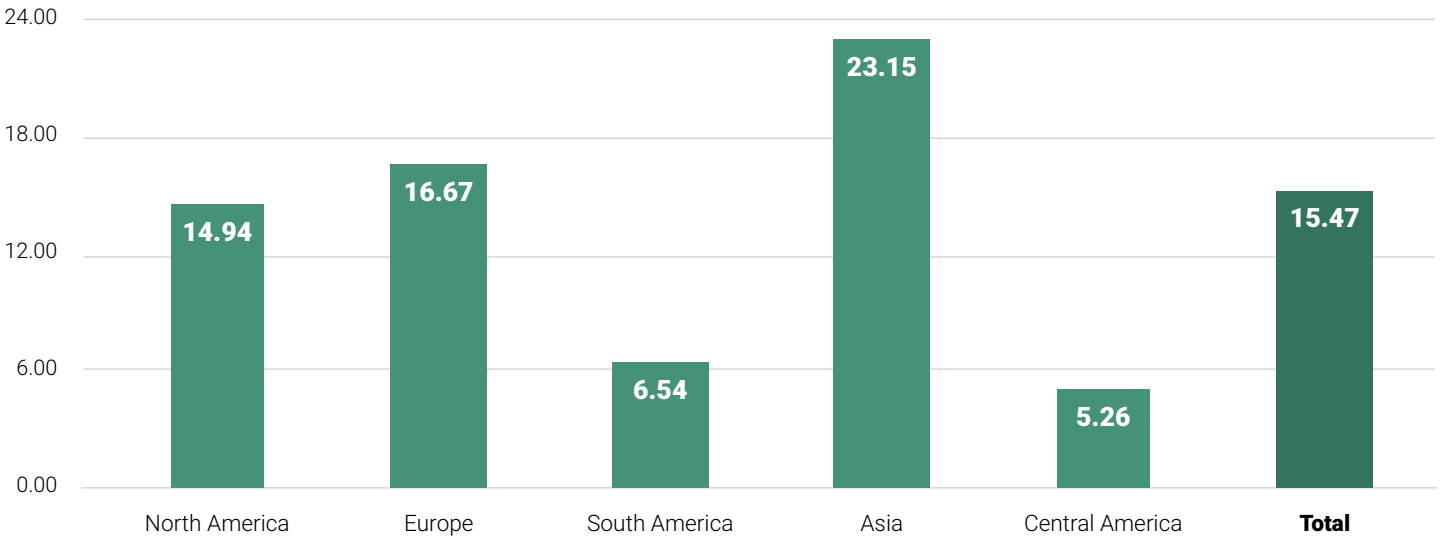

Figure 1 – Percentage of companies reporting one or more NbS (regions where more than 10 companies responded to the forests questionnaire)

8. An explanation of how the NbS were identified can be found in the methodology annex. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/comfy/cms/files/files/000/003/436/original/Methodology-Annex.pdf
9. It is important to note that CDP's forests questionnaire does not directly ask companies to report on NbS, so the numbers in this section may underestimate NbS implementation by companies.

A high proportion of disclosing companies in the Materials sector[10] report the implementation of NbS. Companies in this sector often undertake activities such as mining and operating pulp and paper mills, therefore being more likely to work directly in forests, beyond sourcing materials from forest areas. NbS reported include restoration activities such as replanting with native species around mining sites and area-based conservation efforts by timber companies to safeguard areas with protected status.

Percentage of companies implementing NbS by industry

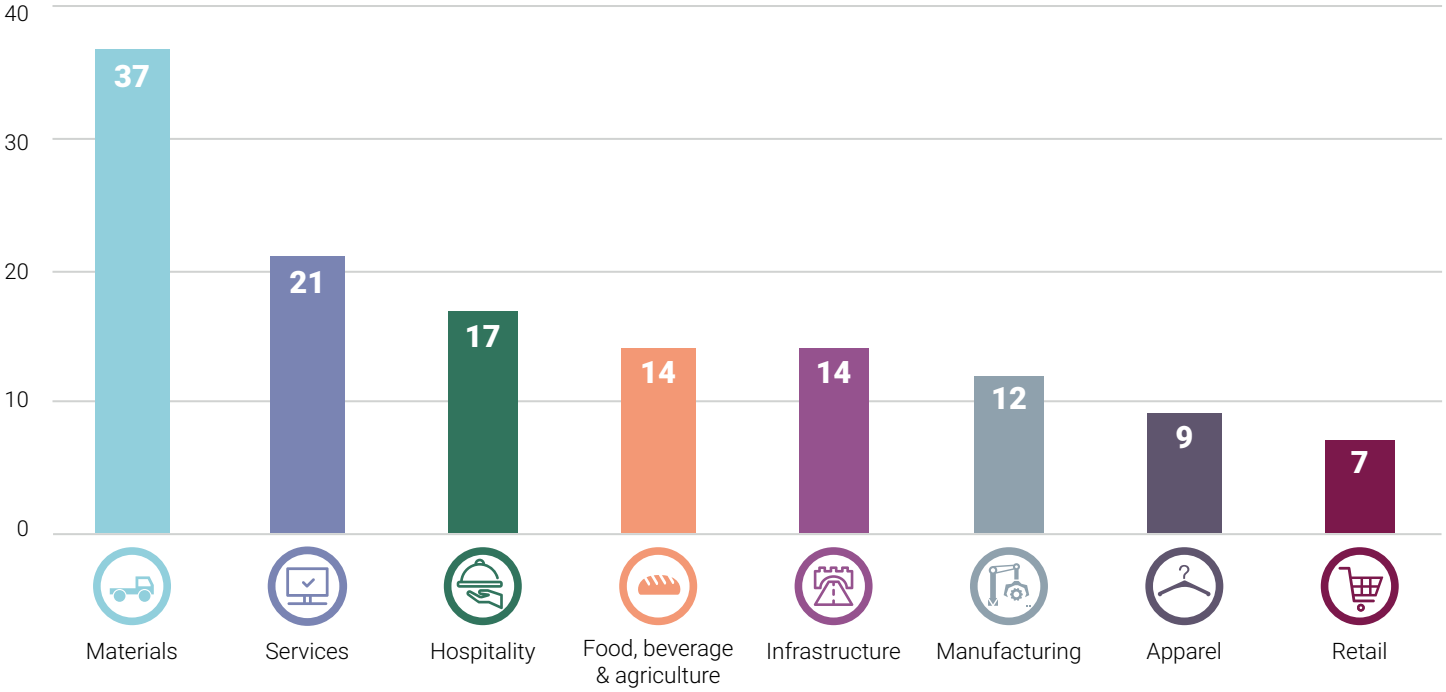

Figure 2 – Percentage of companies in CDP's primary industries implementing NbS (sectors with more than 10 reporting companies)

In terms of Forest Risk Commodities (FRC), our analysis shows a fairly even distribution. About 20% of the companies disclosing on timber, soy, and palm oil, and 16% of companies disclosing on cattle products, report implementing a NbS in their operations.

NbS Adoption by Forest Risk Commodity disclosed

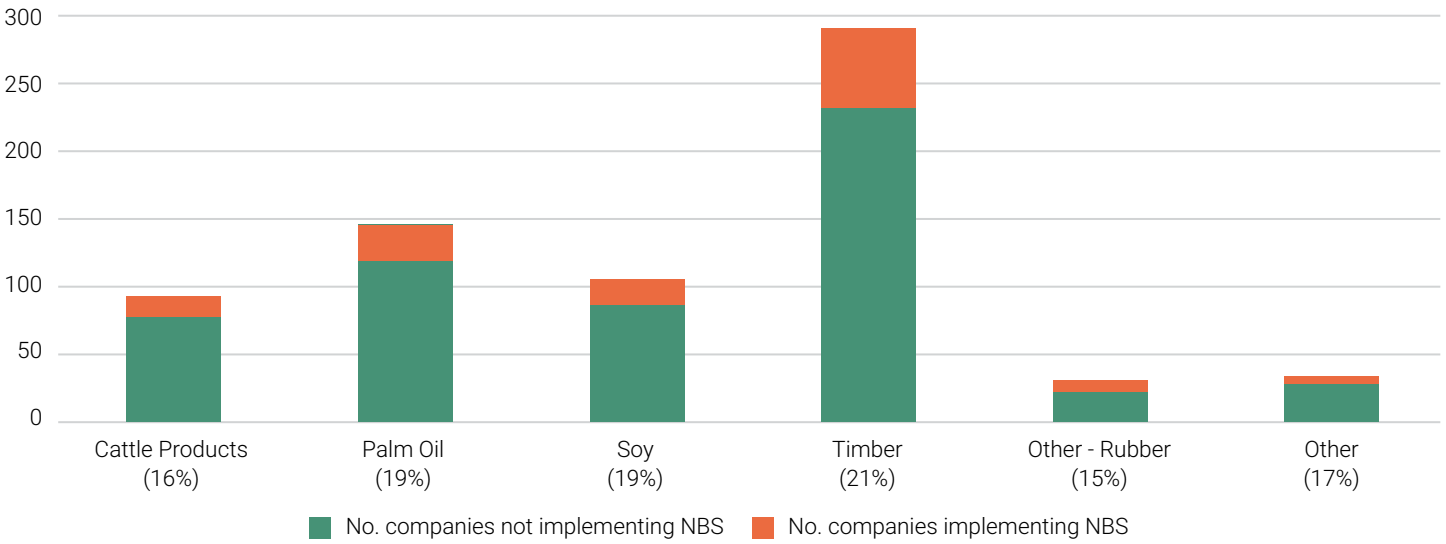

Figure 3: Adoption of NbS by Forest Risk Commodity (FRC) disclosed[11]

10. For details on the sectors, see the full list of classifications for CDP's Activity Classification System (CDP-ACS) https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/guidance_docs/pdfs/000/001/540/original/CDP-ACS-full-list-of-classifications.pdf?1520244912
11. In the CDP Forests Questionnaire, companies have the option to disclose on more than one forest risk commodity. A company implementing a NbS might be doing it in response to any one of its identified FRCs.

TYPES OF NBS REPORTED BY COMPANIES

There is no consensually agreed upon typology of NbS. The International Union for Conservation of Nature (IUCN) however, provides broad categorizations[12]. Due to the nature of the activities reported by companies, it was deemed useful to devise a more specific categorization of NbS to better illustrate the type of activity being disclosed in CDP's Forests Questionnaire.

Table 2 describes the categories appearing in this briefing and how they relate to IUCN's typology. A full description of the categories used in the analysis can be found in the methodology annex.

Table 2 – Categories of NbS implemented by companies (more than 5 results per category)

IUCN typology	Categories	Description
Ecosystem restoration approaches	Habitat restoration	Restoration focused on species/biodiversity
	Other ecosystem restoration	Restoration activities other than reforestation or regeneration
	Reforestation (native species)	Restoring the functionality of deforested or degraded forest landscapes through reforestation with native species.
	Natural forest regeneration	Restoring the functionality of deforested or degraded forest landscapes by allowing natural succession to occur
Issue-specific ecosystem-related approaches	Forest conservation (Climate-focused)	Forest conservation activities with explicit climate objectives
	Sustainable forest management (Climate-focused)	Focused on improving the sustainability of production forests with explicit climate objectives
Ecosystem-based management approaches	Water-focused forest management	Forests are managed with the objective of improving/conserving water quality/availability
	Support for forest management	Companies support the improvement of the sustainability of production forests
	Direct forest management	Companies improve the sustainability of production forests in their direct operations and owned areas
Ecosystem protection approaches	Support to forest conservation	Companies support conservation activities by external actors
	Forest conservation (General)	Companies implement conservation activities in their direct operations and owned areas
	Habitat conservation	Conservation activities are focused on the conservation of specific species

12. https://www.iucn.org/sites/dev/files/content/documents/nature-based_solutions_to_address_global_societal_challenges.pdf

Forest conservation activities are the most common type of NbS being implemented by companies, followed by reforestation and support to forest conservation and management. The responses are a good initial indication of the direction in which companies are deciding to use their resources towards more sustainable operations.

Companies implementing NbS sub-category (more than 5 results)

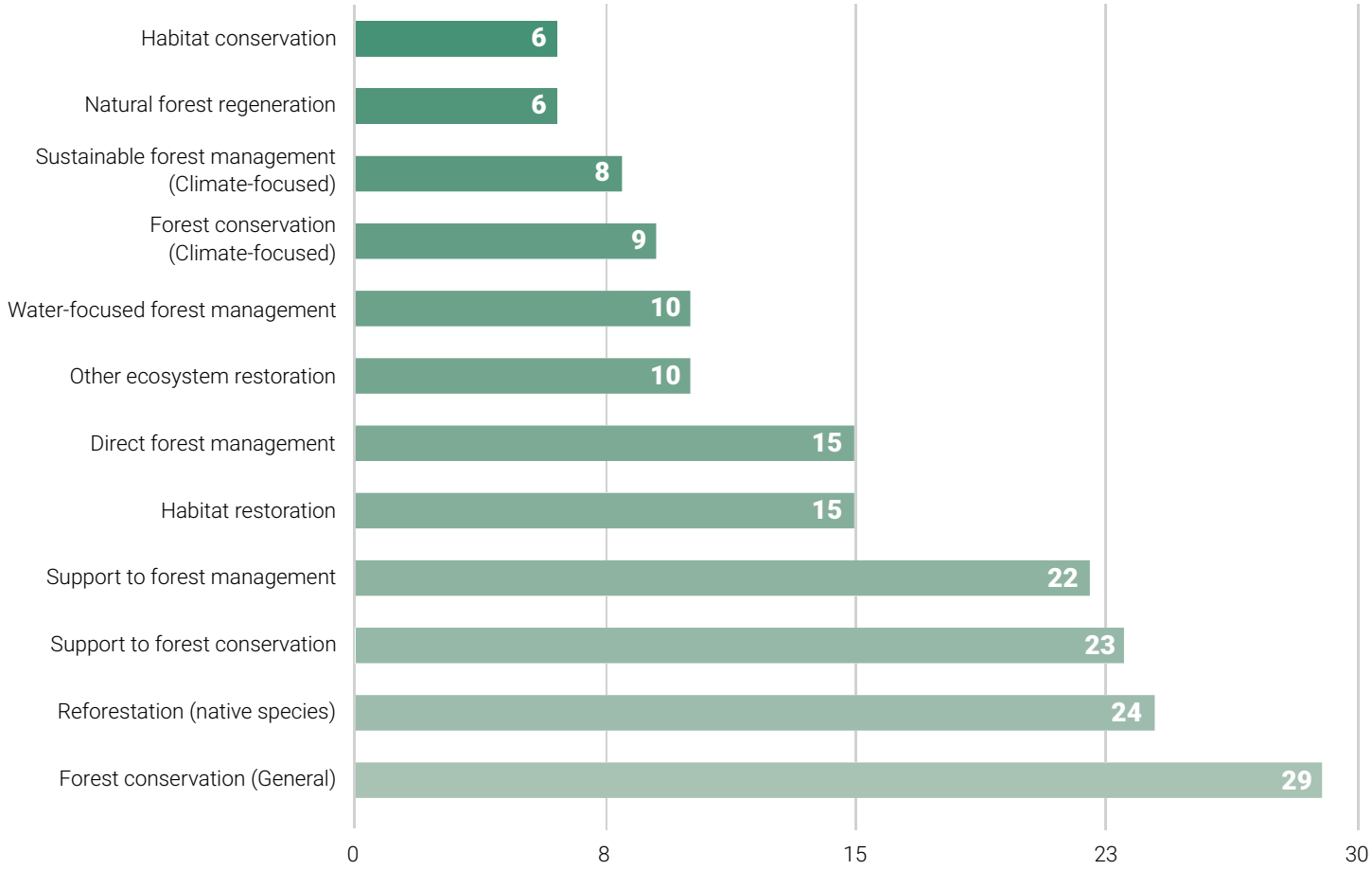

Figure 4: Types of NbS reported by companies

Using IUCN's typology, we see a fairly even distribution between protection, restoration, and management approaches, while issue-specific approaches are less common.

IUCN Categories

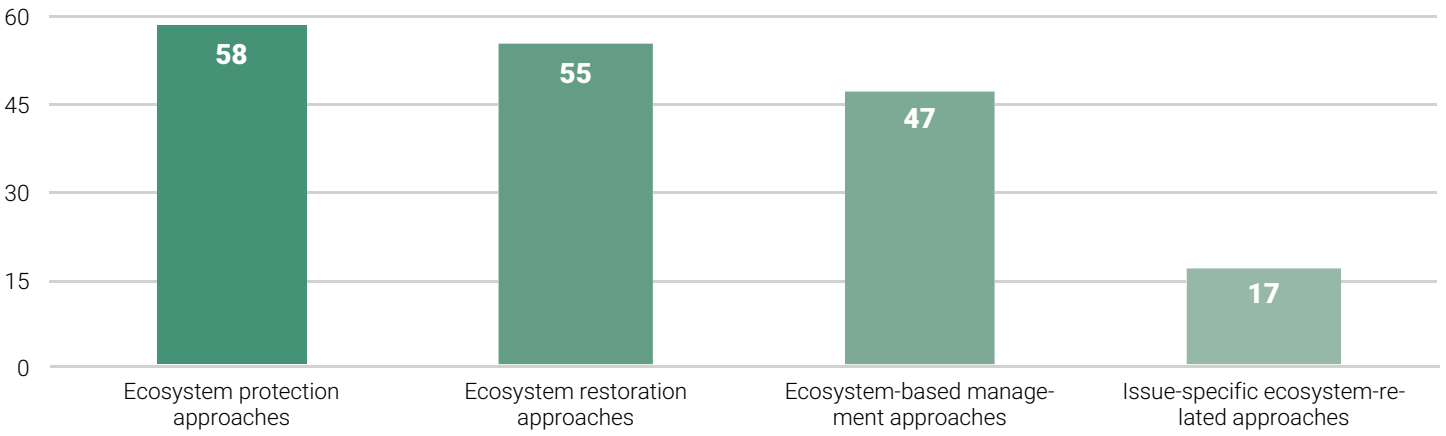

Figure 5: Companies reporting NbS – IUCN Categories

Disclosing companies show that NbS can be powerful tools to preserve and improve forest landscapes globally. The cases below illustrate activities reported by companies.

Forest conservation

- **Sappi Limited** sets aside one third of its land in South Africa for biodiversity conservation. About 73% of the land managed for biodiversity conservation comprises riparian zones, firebreaks, cliffs, rocky outcrops, dams, and small wetlands. The remaining 27% comprises larger areas classified as Important Conservation Areas (ICAs) which receive special management according to specially developed management plans. ICAs conserve representative examples of grassland, forest or woodland and many of them are home to rare or threatened species. Sappi also participates in a national stewardship program, through which six nature reserves have been declared on their land.
- **Mondi plc** maintains a network of conservation areas, representing priority ecosystems, and imitating natural dynamics wherever possible. In Russia, High Conservation Value (HCV) areas are set aside, and the company monitors the consistency and integrity of these areas annually, using earth observation data and Geographic Information System (GIS) with selective field surveys where necessary. In 2017, Mondi, WWF Russia, and Silver Taiga signed an agreement, which summarized results of 10 years of work on an inventory of Intact Forest Landscapes (IFLs) in Komi Republic and adjacent territories (1,200,000 ha), defining territory boundaries, protecting them, at least on paper, from any logging operations and wood sourcing.
- In Chile, **Empresas CMPC** has created protected areas that act as corridors between fragments of indigenous forest critical to conserving biodiversity and acting as buffer zones between forest plantations and native forest zones.

Reforestation

- **Klabin S/A**, through its Legal Forests Program, has distributed more than 700.000 native seedlings among 833 property owners in the state of Paraná, Brazil, and more than 65.000 seedlings among 176 property owners in the state of Santa Catarina, also in Brazil.
- In South America, **Empresas CMPC** is planting about 500 thousand native plants in neighbouring properties, equivalent to 10 thousand m^3 of wood. Additionally, the company has established a goal for the restoration of native forest cover by 2026. It plans to reforest 65,086 hectares in Brazil and 8,738 hectares in Chile, of which 49% has been achieved in Brazil and 22% in Chile.

Support to forest conservation

- **Marfrig Global Foods S/A**, through its Marfrig Club initiative, aims to promote the development of rural properties to ensure a safer production and with fewer environmental impacts. The program aims to strengthen the relationship between producers and Marfrig and to encourage them to use good agricultural practices on their farms, particularly concerning the environment and management of social aspects. Some practices encouraged by the program include management actions, such as monitoring Legal Reserves and Permanent Protection Areas.

Support for forest management

- In North America, **Sappi Limited**'s Sappi Maine Forestry Program and the Sappi Lake States Private Forestry Program offer a wide range of services to landowners including contracting with experienced loggers, providing plans for harvesting activities and regeneration post-harvest and forest health, as well as advice in complying with town, state and federal regulations. Sappi North America staff monitor the implementation of best management practices on harvest sites to ensure adequate regeneration, conservation of soil and water resources, and adherence to the harvest plan. At the end of September 2018, Sappi was involved in helping beneficiaries to manage approximately 19,000 hectares of land.
- **Mondi plc** supports small-scale forest enterprises to improve their technical and management capabilities to meet the certification requirements of their forests. Mondi is contributing to the development of FSC national standards in South Africa & Russia, adapting the current international generic indicators to reflect local conditions. The company also works with WWF to address the issue of sustainable intensification of productive forests to ensure availability and quality of wood, while also ensuring biodiversity conservation and ecosystem services remain effective.

Direct forest management

- **Asia Pulp and Paper** manages forestry activities in peatland areas to limit carbon emissions and to ensure sustainable forest practices are developed and maintained. Specifically, APP works together with peat experts to improve land zoning and to determine areas that must be protected for water storage, buffer zones, and production forests. APP recognizes the twin challenges of (i) delivering technical land use assessments that meet the needs of plantation management and science-based land management and (ii) using our knowledge of balancing pulp production with forest conservation, flood mitigation, and carbon emission reduction to support rezoning.

THE WAY FORWARD - POLICY RECOMMENDATIONS

NbS are a cost-effective way to build ecosystems resilient to a changing climate, while also delivering other sustainable development benefits. Yet, many businesses are unaware of their potential, with only 15% of companies disclosing through CDP's Forests Questionnaire implementing any sort of NbS. There is, therefore, clear space for growth, and policymakers are the key actors with the capacity to positively incentivize a broader and more ambitious implementation of NbS.

The private sector should be a central stakeholder in collective efforts to build more resilient ecosystems. For that reason, in addition to strengthening their efforts on mitigation oriented NbS, the private sector has a major role to play in fostering the role of nature in adaptation and resilience strategies for a warming, less biodiverse planet. It is also important to stress that NbS should not be implemented in isolation or seen as a substitute for other environmental practices, especially if NbS are aimed at offsetting emissions. NbS must be part of a mix of activities aimed at reducing the impact of business on climate and biodiversity.

International policy efforts to promote sustainable development are reaching an inflection point in 2020. Multiple windows of opportunity are open to innovative, integrated solutions to interdependent problems such as climate change, biodiversity loss, and human development. Our relationship with nature underpins all those issues. 2020 represents a crucial year on global, regional and national policy arenas in setting us on the right path to simultaneously address climate change and sustainable development objectives. We should propel NbS into those policy spheres in order to tackle interconnected issues and ensure policy coherence. As a snapshot:

- NbS are present in the majority of the NDCs submitted to the UNFCCC to date, but most of those NDCs do not include quantifiable targets[13], suggesting the existence of much potential for increasing the robustness of NbS as a tool to combat climate change. Additionally, NbS are present in the NDCs of most developing countries but in only 27% of high-income countries' NDCs, which also shows great room for improvement going forward[14].

- The preparatory process to the Convention for Biological Diversity (CBD) Conference of Parties (COP) kicked off in mid-2019 and the negotiations of the Post-2020 Global Biodiversity Framework are explicitly addressing the topic of implementation of NbS, showing their centrality in reducing threats to biodiversity, contributing to climate change mitigation, adaptation, disaster risk reduction, and clean water provision[15].

- The implementation of the SDGs is also at a crucial moment. With the world entering the last decade of the 2030 Agenda for Sustainable Development, stepping up action is required to reach those targets. Additionally, 21 of the 169 SDG targets have a deadline in 2020; stakeholders will be already taking stock of the implementation of goals and considering what can be improved or replicated in the following years, opening up further avenues to the use of NbS towards the achievement of these SDGs. The 12 biodiversity-related targets will include the agreed global biodiversity framework to be negotiated at the CBD COP.

For this ambitious agenda, it is crucial for all stakeholders to undertake ambitious action. In addition to the efforts of governments, the engagement of businesses and the investor sector will be crucial. The private sector's contributions must be incentivized and recognized, and there must be more transparency from the private sector's activities. SDG target 12.6 calls on encouraging the integration of sustainability information into companies' reporting cycles.

These actions already being implemented by the businesses, highlighted in this policy brief, could be further incentivized, scaled, and counted within global data stock takes. Those insights are a preliminary source of evidence that policy actors have a vast playing field to engage companies on NbS. Below, we provide a preliminary list of recommendations for policymakers to strengthen the incorporation of NbS among businesses.

1. Recognize the role and participation of non-state actors in driving NbS and contributing to ecosystem resilience

The private sector presents a largely untapped opportunity for the implementation of NbS that benefits business, society, and the planet. Policymakers must provide strong signals, consistent guidance and outline the business case for companies to increasingly incorporate NbS in their responses to environmental and development challenges, with targets set using the best available science and appropriate safeguards. Institutional arrangements to facilitate public-private partnerships for the implementation of NbS should be fostered at all jurisdictional levels, and intra-governmental dialogue and mainstreaming environmental targets will foster awareness and institutional stability across policy spaces, enabling companies to be more confident in their business planning. Further, contribution of non-state actors should be captured in the monitoring and assessment of progress.

2. Boost ambition and enhance action on NbS beyond 2020

Governments and international organizations should seize the political momentum for the 2021 – 2030 UN Decade on Ecosystem Restoration[16] to integrate the private sector in restoration efforts. There is room for significant improvement in the integration, target setting, and ambition of NbS in the majority of NDCs. This is particularly valid in Central and South America.

3. Enhance policy conducive to more and better corporate environmental disclosure

More transparency is urgently needed on corporate environmental disclosure, including NbS. For this to occur, there needs to be improved regulatory frameworks to increase transparency in supply chains, fostering the integration of environmental protection in business operations. This is particularly valid for upstream companies in Central and South America.

4. Mobilize finance for NbS

NbS should be incentivized through public investment such as Official Development Aid (ODA) as well as directing private capital flow, rewarding long-term perspective to allow time NbS to unfold their triple bottom line profitability.

5. Mainstream NbS into legislation and regulatory frameworks for policy coherence between climate change, biodiversity, and sustainable development

Situating NbS as a cross-cutting policy tool within NDCs, NBSAPs, and the SDGs would not only streamline efficient implementation of projects and more accurate measurement of the suite of impacts but also reduce inadvertent and potentially negative impacts on nature.

13. https://www.naturebasedsolutionsinitiative.org/wp-content/uploads/2019/09/NBS_in_Nationally_Determined_Contributions_final_web.pdf
14. https://www.naturebasedsolutionsinitiative.org/wp-content/uploads/2019/09/NBS_in_Nationally_Determined_Contributions_final_web.pdf
15. https://www.cbd.int/doc/c/efb0/1f84/a892b98d2982a829962b6371/wg2020-02-03-en.pdf
16. https://www.decadeonrestoration.org/

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Norway's International Climate and Forest Initiative

About CDP

CDP is a global non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. Voted number one climate research provider by investors and working with institutional investors with assets of over US$106 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 8,400 companies with over 50% of global market capitalization disclosed environmental data through CDP in 2019. This is in addition to the over 920 cities, states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP is a founding member of the We Mean Business Coalition.

Visit https://cdp.net/en or follow us @CDP to find out more.