

Biodiversity Finance Metrics *for* Impact Reporting

Supplement to
**IFC Biodiversity Finance
Reference Guide**



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Reference Guide**

In partnership with:



In collaboration with:
Taskforce on Nature-related Financial Disclosures

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2121 Pennsylvania Avenue, NW
Washington, DC 20433, USA
Internet: www.ifc.org

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Foreword

Biodiversity – vital to a healthy planet, our economies, and livelihoods – is deteriorating worldwide at unprecedented rates. The landmark Kunming-Montreal Global Biodiversity Framework, reached in December 2022, presented an urgent and necessary shift in the global approach to tackling biodiversity loss. It calls for a whole-of-economy approach to halt and reverse biodiversity loss by 2030 by shifting to new ways of producing and consuming. This is a tall order to transform our \$90 trillion global economy, and it simply cannot be achieved without the private sector and private capital.

IFC released its flagship **Biodiversity Finance Reference Guide** in November 2022 to help investors and companies identify opportunities to shift to new restorative business models and production practices, with the aim to unlock the \$10.1 trillion annual business opportunity¹ in the sustainable transition across the food, energy, and infrastructure sectors. This first-of-its-kind guide leverages the power of the multitrillion² sustainable finance market to provide guidance on eligible activities that constitute biodiversity finance and maps the contribution of each of these activities to the Global Biodiversity Framework targets.

With the increased market interest in nature and biodiversity finance, there is now demand for guidance on impact reporting as data collection and attribution remain challenging. I am pleased to present this **supplement** that enhances IFC's Biodiversity Finance Reference Guide to include impact reporting metrics for each eligible activity. The supplement supports issuers and borrowers in reporting on impact across individual projects and wider portfolios. Transparency and credibility of impact reporting are essential to enabling markets to efficiently transition to nature-smart approaches and to attracting private capital at scale.

We are grateful to **BNP Paribas**, the **Finance for Biodiversity Foundation**, **Natixis CIB**, the **Taskforce on Nature-related Financial Disclosures**, and the **Wildlife Conservation Society** for reviewing and supporting the development of this timely market contribution to enhancing transparency and accountability in impact reporting for biodiversity finance.

IFC's intent is to provide a practical tool to advance the growth of the biodiversity finance market and to help empower the private sector to accelerate the transition toward nature-smart growth that meets the targets of the Global Biodiversity Framework and our shared vision of living in harmony with nature by 2050.



Jamie Fergusson

**Global Director of
Climate Business
IFC**

¹ World Economic Forum. 2020. *New Nature Economy Report II: The Future of Nature and Business*. <https://www.weforum.org/publications/new-nature-economy-report-ii-the-future-of-nature-and-business/>.

² Environmental Finance. 2024. "Sustainable Bond Market Hits \$5tr of Issuance." [https://www.environmental-finance.com/content/news/sustainable-bond-market-hits-\\$5trn-of-issuance.html](https://www.environmental-finance.com/content/news/sustainable-bond-market-hits-$5trn-of-issuance.html).

Acknowledgments

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Under the leadership of Jamie Fergusson, the IFC Climate Business Department team includes Irina Likhachova (project lead), Helena Dill (technical lead), Francisco Avendaño, and Beatrice Phillips. The following IFC staff provided further valuable contributions: Veronica Nyhan Jones, Lori Anna Conzo, Maria Estella Nucci, Justin Bishop, Vladimir Steneck, Khondoker Tanveer Haider, Dennis Peter Bours, Bilal Rahill, Katherine Koh, Dmytro Vintsevych, Nina Zegger, Ahmad Slaibi, and William Beloe.

The BNP Paribas team includes Andres Araguas, Michael Bellantoni, Agnes Gourc, Camille Maclet, Nicolas Rydarowicz, Julia Samson, Sabina Veksler, and Myriam Zapata.

The Finance for Biodiversity Foundation team includes Natacha Boric and Julen Gonzalez Redin.

The Natixis CIB team includes Gratien Davasse.

The Taskforce on Nature-related Financial Disclosures team includes Laura Clavey, Fiona Pedebay, Blanche de Biolley, Tom Hegarty, and Alan Marini.

The Wildlife Conservation Society team includes Ray Victurine and Benjamin Hoyer.

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Biodiversity Finance Metrics for Impact Reporting

Supplement to IFC Biodiversity Finance Reference Guide

Summary

This supplement to IFC's Biodiversity Finance Reference Guide is designed to provide expanded guidance on impact reporting for eligible biodiversity finance activities. The guide builds on established recommendations outlined in the International Capital Market Association's (ICMA's) Green Bond Principles³ and in the Green Loan Principles^{4,5} to provide indicative investment activities and project components eligible for biodiversity finance. Impact reporting is one of the four core components required for alignment with the Green Bond and Loan Principles and seeks to ensure transparency and accountability. This supplement aims to facilitate effective impact reporting by offering indicative metrics for each eligible biodiversity finance activity identified in the guide. Considering the evolving landscape of sustainable finance, this document also

offers preliminary considerations on the potential applicability of these metrics to sustainability-linked financing instruments.

To develop this supplement, IFC collaborated with the Finance for Biodiversity Foundation, BNP Paribas, Natixis, the Taskforce on Nature-related Financial Disclosures (TNFD), and the Wildlife Conservation Society. The metrics are informed by current best practices in the market for reporting, such as the ICMA Handbook – Harmonized Framework for Impact Reporting,⁶ the Harmonized Indicators for Private Sector Operations,⁷ and the TNFD's recommended core and additional global disclosure metrics⁸ as well as the TNFD's core and additional sector metrics.⁹

3 [Green Bond Principles](https://www.icmagroup.org/sustainable-finance/the-principles-guide-lines-and-handbooks/green-bond-principles-gbp/), by the International Capital Market Association. Available at <https://www.icmagroup.org/sustainable-finance/the-principles-guide-lines-and-handbooks/green-bond-principles-gbp/>.

4 [Green Loan Principles](https://www.lsta.org/content/green-loan-principles/), by the Asia Pacific Loan Market Association, the Loan Market Association, and the Loan Syndications and Trading Association. Available at <https://www.lsta.org/content/green-loan-principles/>.

5 The Green Bond Principles and the Green Loan Principles are collectively referred to as the "Green Bond and Loan Principles" in this document.

6 <https://www.icmagroup.org/sustainable-finance/impact-reporting/green-projects/>.

7 <https://indicators.ifipartnership.org/indicators/>.

8 https://tnfd.global/wp-content/uploads/2023/08/Recommendations_of_the_Taskforce_on_Nature-related_Financial_Disclosures_September_2023.pdf?v=1695118661.

9 https://tnfd.global/tnfd-publications/?_sft_framework-categories=additional-guidance-by-sector#search-filter.

Impact Reporting

About IFC's Biodiversity Finance Reference Guide

IFC's Biodiversity Finance Reference Guide is the world's first guidance to financial institutions, investors, and companies on the specific types of investments, activities, and project components that constitute biodiversity finance. It can also be used by policy makers to design biodiversity finance taxonomies. While the Green Bond and Loan Principles acknowledge biodiversity as an eligible use of proceeds, they lack the granular detail necessary to identify suitable projects and activities that would fit this category. The guide addresses this gap by providing an indicative list of investment activities that contribute to the protection, maintenance, or enhancement of biodiversity and ecosystem services, as well as the sustainable management of living natural resources. Such biodiversity finance investment activities and project components are organized into the following three main categories:

- **Investments that generate biodiversity co-benefits:** Financing that seeks to address the key drivers of biodiversity loss (land/sea use change; pollution; overexploitation of resources; and invasive species)¹⁰ in economic activity and/or contribute to halting and reversing biodiversity loss.
- **Investments in biodiversity conservation and restoration:** Financing to support nature conservation or restoration and related services as a primary objective of investment.
- **Investments in nature-based solutions:** Financing to support the integration of nature-based solutions into larger projects to provide infrastructure services and displace or complement gray infrastructure.

The guide also aligns such eligible investment activities with other nature-related environmental objectives of the Green Bond and Loan Principles: (i) pollution prevention and control, (ii) natural resource conservation, (iii) climate change mitigation, and (iv) climate change adaptation. The aim is to highlight where biodiversity finance activities can have multiple co-benefits to enable investors to choose which primary environmental category to report against while being able to tag other categories as additional co-benefits.

Furthermore, each eligible activity is mapped to specific targets of the Kunming-Montreal Global Biodiversity Framework.¹¹ This alignment ensures that the guide supports the mobilization of

financial resources in line with Target 19 of the Global Biodiversity Framework. Additionally, it serves as a valuable resource for policy makers, facilitating the development of biodiversity finance taxonomies and policies that contribute to Target 14's call for the integration of biodiversity across all sectors, including by aligning financial flows.

The guide follows the four core components of the Green Bond and Loan Principles – use of proceeds, process for project evaluation and selection, management of proceeds, and reporting. It makes a significant contribution to the use of proceeds component with an indicative list of biodiversity finance investment activities and project components as well as addressing the other three core components at a high level. For the reporting core component, the guide provides a high-level recommendation based on market practices for issuers or borrowers to make all reasonable efforts to develop metrics and gather data for impact reporting on biodiversity finance use of proceeds.

About IFC's Biodiversity Finance Metrics for Impact Reporting

Since the publication of the updated IFC Biodiversity Finance Reference Guide in May 2023, there has been growing demand from the market for more comprehensive guidance on impact reporting for biodiversity finance activities. This supplement responds to the demand and serves as a companion resource to the original guide.

It expands on the preliminary impact reporting guidance provided in the guide and suggests specific metrics for each of the investment activities and project components laid out in Table 1. The intention is to provide guidance to issuers and borrowers on metrics that could be used for impact reporting purposes to strengthen alignment with the reporting core component of the Green Bond and Loan Principles. The document draws on and aligns with the latest market practices wherever possible.

This supplement is not intended to provide an exhaustive list of metrics but rather to function as a complementary resource to be adapted to regional and local contexts. The specific details and local circumstances of individual projects significantly influence their results and metrics. To accurately assess impacts, site-specific indicators related to habitats or species of concern may need to be developed.

¹⁰ Climate change is also considered to be a key driver of biodiversity loss. However, there are well-developed taxonomies for investments and investment activities that target climate change, which are not covered in the guide. The guide only lists those climate-related activities that have significant localized biodiversity benefits.

¹¹ Annex I includes a list of the Global Biodiversity Framework targets for ease of reference.

In addition, metrics should be established during the design phase of investment activities and project components to ensure that information can be collected from the beginning and outcomes can be measured against a baseline. Reporting should encompass biodiversity metrics as well as relevant performance and social impact metrics, where applicable.¹²

The metrics supplement is intended to be applied to individual projects for use of proceeds instruments. However, it can be used when investors need to report impact on a portfolio level. The proposed metrics can serve as a directory to identify the most relevant indicators that could be applied across projects and assets that seek to achieve similar environmental objectives and/or share similar features and, thus, could be aggregated on a portfolio level.

Metrics for Impact Reporting

Table I expands on IFC Biodiversity Finance Reference Guide mapping of eligible biodiversity finance activities to environmental objectives of the Green Bond and Green Loan Principles and their direct and indirect contribution to the targets of the Global Biodiversity Framework. Table I adds sample metrics for each of the eligible activities listed in the guide. These metrics constitute the numerical units of measurement to capture outputs, outcomes, and impacts of the activity. For those activities that seek improvements as the main outcome, Table 1 notes a requirement to gather a baseline measurement that captures the state of the relevant metric before the intervention. Where feasible, the table includes available market benchmarks (sector or geography based) that can serve as important reference points to gauge the level of impact achieved when compared against existing requirements and standards.

In addition, the suggested metrics are mapped to the core and additional disclosure metrics recommended by the TNFD.¹³ This mapping aims to maximize synergies between metrics used for impact reporting on the positive results of biodiversity finance activities (as outlined in this document) and those employed for

corporate disclosures on nature-related dependencies and impacts that constitute financial risks and opportunities (as per TNFD recommendations).¹⁴ Annex II of this supplement includes the TNFD's core and additional global disclosure metrics for ease of reference. The TNFD's core and additional sector metrics can be found on the TNFD website, in the Additional Guidance by sector.¹⁵

Application of Metrics to Sustainability-Linked Financing Instruments

In the dynamic sustainable finance space, sustainability-linked financing instruments¹⁶ have gained significant traction in funding exercises and incentivizing issuers to contribute to sustainability from an environmental, social, and/or governance perspective. There is growing interest in applying sustainability-linked financing to biodiversity finance in particular. This section offers initial considerations for issuers contemplating sustainability-linked instruments with objectives specifically focused on addressing the key drivers of biodiversity loss as well as conserving and restoring nature.

The existing Sustainability-Linked Bond Principles¹⁷ and Sustainability-Linked Loan Principles^{18,19} provide comprehensive recommendations for developing robust sustainability-linked financing instruments. These principles underscore the need to identify key performance indicators (KPIs) that address outstanding issues that are material to the issuer's sustainability performance and business activities.

When selecting KPIs for sustainability-linked financing intended to address one or more of the key drivers of biodiversity loss and/or conserve and restore nature, issuers should adhere to the general recommendations of the Sustainability-Linked Bond and Loan Principles. These recommendations include:

- **Relevance, materiality, and context:** The selected KPIs must be directly relevant and material to the issuer's operations and environmental impact, considering the specific context in which the entity operates.

¹² For example, an increase in natural forest cover or hectares protected.

¹³ <https://tnfd.global/>.

¹⁴ <https://tnfd.global/recommendations-of-the-tnfd/>.

¹⁵ https://tnfd.global/tnfd-publications/?_sft_framework-categories=additional-guidance-by-sector#search-filter.

¹⁶ Instruments where financial and/or other structural characteristics can change based on the issuer's achievement of predefined sustainability objectives.

¹⁷ [Sustainability-Linked Bond Principles](https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/), by ICMA. Available at <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/>.

¹⁸ [Sustainability-Linked Loan Principles](https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/), by the Asia Pacific Loan Market Association, the Loan Market Association, and the Loan Syndications and Trading Association. Available at <https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/>.

¹⁹ Hereafter, referred to as the Sustainability-Linked Bond and Loan Principles.

- **Sustainability strategy:** KPIs should be consistent with the issuer's sustainability strategy, business direction, and corporate policies.
- **Practicality:** KPIs should be based on clear, objective data that can be accurately and feasibly measured as well as tracked over time. The issuer should have at least three years of KPI time series to be able to determine a documented baseline that can be used to define an ambitious target. In the absence of the selected KPI time series, the strategy should consider data collection to document a baseline during the first three years of the strategy.
- **Benchmarking:** To the extent possible, metrics should follow industry-recognized standards where benchmarking can be performed and the level of ambition assessed.²⁰
- **Verifiability:** The data and outcomes associated with the KPIs should be externally verifiable to ensure transparency and accountability.

In addition to the general recommendations, the following biodiversity-related factors can be considered when selecting KPIs for an issuance specifically focused on addressing one or more of the key drivers of biodiversity loss:

- **Nature- and biodiversity-related dependencies:** Assessing the reliance on natural ecosystems and resources, and how these dependencies can be managed or mitigated through KPIs.
- **Impact measurement:** Defining and measuring the direct and indirect impacts of operations or activities on biodiversity and nature and developing KPIs that effectively address these impacts.
- **Sector-specific considerations:** Tailoring the KPIs to reflect the unique biodiversity challenges and opportunities within a specific industry sector and/or geographic scope.

The metrics presented in this supplement for use of proceeds instruments can serve as the starting point for issuers that intend to use sustainability-linked instruments with objectives related to addressing the key drivers of biodiversity loss and advancing the conservation and restoration of nature. Such metrics can provide insights into the development of KPIs that meet the market expectations of relevance, measurability, and quantifiable impact.²¹ This supplement can also be used to assist issuers in reviewing existing biodiversity commitments.

To illustrate, a water utility company may incorporate the implementation of nature-based solutions for water management into its sustainability strategy for the coming years. These nature-based solutions may involve using wetlands to enhance water quality instead of traditional gray infrastructure solutions. A sustainability-linked bond or loan could be used to fund this strategy. Inspired by the metrics presented in Table 1, potential KPIs may include (i) *area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)*, or (ii) *area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)*. The respective sustainability performance targets would have to be ambitious compared to the documented baseline of the selected KPIs. Where industry or science-based pathway benchmarking is not feasible, the company would be encouraged to provide contextual information on performance to ensure the ambition level is adequately assessed.

Another example is a forestry company aiming to increase the portion of land it dedicates to conservation and restoration beyond legal requirements as part of its sustainability strategy. These efforts could encompass restoring and connecting fragmented preserved areas, which contribute to addressing the key driver of land-use change. In this case, potential KPIs for the company's sustainability-linked instrument may include (i) *area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)*, and/or (ii) *area of land restored or rehabilitated (in ha and % of total area; increase in %)*. As in the previous example, the respective sustainability performance targets would have to be ambitious compared to the documented baseline of the selected KPIs.

Sustainability-linked structures aimed at supporting biodiversity-related objectives would benefit from the development of KPIs tailored for specific sectors. As this area could significantly enrich the available toolkit for issuers and contribute to the advancement of biodiversity finance, IFC will consider developing further guidance on the topic and may provide more tailored guidance for KPI selection.

²⁰ To the extent globally recognized standards or references for benchmarking are not available, it is recommended that issuers supplement KPIs with additional relevant contextual information, where feasible.

²¹ Within ICMA's guidance, an illustrative KPI registry including an array of biodiversity KPIs is also available.

Conclusion





The purpose of this document is to scale the biodiversity finance market and promote transparency and accountability. It provides a practical tool for investors and corporations to measure the impact of investments that seek to protect, maintain, or enhance biodiversity and ecosystem services to transition to nature-smart economies. This transformation of economic activity is crucial to halt and reverse biodiversity loss to meet the targets of the Global Biodiversity Framework.

Table 1: Biodiversity finance metrics for impact reporting

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
I. Investment activities that seek to generate biodiversity co-benefits											
A. Productive Land Use/Agriculture											
1. Climate-smart agriculture:											
a. Rehabilitation of degraded lands with native and/or naturalized species.						T2, T10 T8, T11	Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

* This TNFD metric was published in draft format in July 2024 and is likely to be updated following public consultation.






** This is an illustrative example for water provisioning services. Similar metrics could be developed for other material ecosystem services provided by this activity.

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives				Global Biodiversity Framework		Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
b. Reduction in synthetic fertilizer use by at least 20% on project implementation to reduce downstream eutrophication, and to promote use of biofertilizer and other organic solutions (for example, composting).					T7, T10 T2, T11	Reduction in synthetic fertilizer in total fertilizer used (in %)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C2.0		
						Reduction in synthetic fertilizer use intensity (in kg/ha)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C2.0		
						On-farm compost produced and applied to farmland (in t/y; increase in %)	✓				
						Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7	
						Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A2.3 FA.A5.0 FA.A5.3	
						Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard		

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
c. Reduction in pesticide use by at least 20% on project implementation and promotion of biosolutions.	🌿	🌿	🌿			T7, T10	Reduction in pesticide use (in kg/ha and % of total pesticide used)	✓		C2.0	FA.A5.4
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Increase in area under integrated pest management (in ha and % of acreage farmed)	✓		C1.1	
d. Switching from monocropping to diversified cropping systems, including intercropping and use of cover crops to improve resilience and soil quality.	🌿		🌿	🌿	🌿	T10 T4, T7, T8	Conversion of agricultural land to more diverse cropping systems (for example, agroforestry) (in ha and % of acreage farmed)	✓		C1.1	
							Distinct crops/plant families farmed (in number/ha)	✓		C3.1	FA.A3.0
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.0
e. Significant reduction of tillage or implementation of no-till practices.	🌿		🌿	🌿	🌿	T7, T8, T10	Farmland under minimum or no tillage farming (in ha and % of acreage farmed; increase in %)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C1.1 A3.4	
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
f. Cultivation of native or naturalized species that can more readily adapt to variations in production cycles, water quality/quantity, and temperatures.	🌿		🌿	🌿	🌿	T4, T10 T8	Area cultivated with more resilient native or naturalized species (in ha and % of acreage farmed; increase in %)	✓		C1.1	FA.A5.1 FA.A1.1
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
g. Infrastructure that uses natural or combined green/gray solutions that prevent runoff of agrochemicals and sediment into rivers or coastal basins.	🌿	🌿	🌿		🌿	T7, T11	Description of type of natural or ecological infrastructure used		A qualitative description of the nature-based solution deployed in a given project is often valuable to demonstrate impact better than quantitative metrics. It could include a description of the gray solution. For example, coastal stabilization mangrove at a port or a constructed wetland for wastewater treatment that displaces a traditional water treatment plant.		
							Area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)	✓			
							Capacity of the nature-based structure (in m ³ /second or m ³ and % of total capacity if combined with gray infrastructure; increase in %)	✓			
							Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A2.3 FA.A5.0 FA.A5.3
							Increase in the biotope area factor (in number and %)	✓		C1.1	
							Share of sustainable material (such as timber and bamboo) used as construction material (in %)	✓		A23.4	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
h. The use of sustainable agricultural practices/ varieties/ technology and/or infrastructure that increases crop yields/ quality on existing land without increasing the environmental footprint.						T1, T1o	Farmland covered by sustainable agricultural practices/varieties/ technology and/or infrastructure that increases crop yields/ quality on existing land without increasing the environmental footprint (in ha and % of acreage farmed; increase in %)	✓		C1.1	
	✓	✓	✓	✓	✓		Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Area cultivated by precision agriculture (in ha and % of acreage farmed; increase in %)	✓		C1.1 A3.4	
							Additional production per hectare (t/ha.y)	✓		C3.1 A1.0, A17.0	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
i. Design, implementation, use, or improvement of traceability mechanisms, data, and technologies used to prevent deforestation and monitor biodiversity benefits at the corporate level or along the supply chain.						T1, T1o T8	Production/supply covered by traceability mechanisms, data, and technologies (in t/y and % of total production/ supply; increase in %)	✓		A22.3	
							Area under monitoring for biodiversity protection (in ha; increase in %)	✓			
	✓	✓	✓	✓			Share of annual revenues derived from tools and services enabling traceability (in %; increase in %)	✓		C7.4	
							Forestry personnel trained in biodiversity conservation (in number and % of workforce; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

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	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
j. Efficient irrigation – promote efficient water allocation, water recycling, sustainable reuse of graywater, rainwater harvesting, and utilization of native species that have low water consumption. This is conditional to avoid depletion of natural resources.								<ul style="list-style-type: none"> Internationally recognized benchmark standards for water use efficiency (for example, EU Directives and Best Available Techniques reference standards or industry/sector good/best practice standards) The Water Exploitation Index Plus (WEI+) or internationally recognized tools such as WRI's Aqueduct and WWF's Water Risk Filter The average monthly water consumption as a percentage of the sustainable basin water 	A3.0, A3.2		
						T10 T7, T8	✓	<ul style="list-style-type: none"> Increase in water recycled and/or reused per hectare or per tonne of production (in m³/ha.y or m³/t.y and %) 	A3.2		
							✓	<ul style="list-style-type: none"> Farmland covered by new or rehabilitated efficient irrigation (in ha and % of acreage farmed; increase in %) 	C1.1		
							✓	<ul style="list-style-type: none"> Farmland covered by native species with low water consumption (in ha and % of acreage farmed; increase in %) 			
							✓	<ul style="list-style-type: none"> Avoided and/or sequestered GHG emissions (tCO₂e/y) 	Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard		

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
k. Climate adaptation and resilience measures that also conserve and/or restore ecosystems (for example, drought-resistant seeds, nutrient cycling, water storage, ecotone levees, floodplain restoration, water storage with watershed restoration or conservation – all projects that make agribusiness more resilient to threats like flooding and drought).						T8, T10, T11 T2, T3	Area cultivated with drought-resistant seeds (in ha and % of acreage farmed; increase in %)	✓		C1.1	
							Area with climate adaptation resilience measure implemented (in ha and % of total area; increase in %)	✓		C1.1	
							Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1 A24.1	
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A23.2, A23.3, A24.1	
							Rainwater capture capacity of the structure (in m ³ /y; increase in %)	✓			
l. Conservation and production of native or naturalized seed varieties, especially endemic species.						T4, T10	Native or naturalized seed varieties conserved/produced (in absolute number and t/y; increase in %)	✓			
							Area covered by native or naturalized seed varieties (in ha and % of total area; increase in %)	✓		C1.1, C5.0	
m. Adoption of practices and/or technologies in supply chain management to promote zero deforestation or other positive effects on biodiversity.						T1, T10 T3, T8	Feedstock/feed supply chain certification coverage (% of total feedstock/feed volume; increase in %)	✓	Recognized certifications with best practice standards such as Roundtable on Sustainable Biomaterials (RSB), Round Table on Responsible Soy (RTRS), ISCC Plus (International Sustainability & Carbon Certification), and Pro Terra	A22.2	
							Production/supply covered by traceability mechanisms, data, and technologies (in t/y and % of total production/supply; increase in %)	✓		A22.3	FP,A22.1
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP,AX.1.0

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>2. Regenerative agriculture: Farming and grazing practices that, among other benefits, rebuild soil organic matter, restore degraded soil biodiversity, enhance and maintain ecosystem function, and preserve native seed and livestock varieties; sustainable fiber production and other activities that focus on recuperation of the ecosystem through improved land management and that operate throughout the supply chain.</p>	🌿	🌿	🌿	🌿	🌿	T8, T10, T11 T2, T7	Area under soil conservation/regenerative agricultural practices, including increased cover crop rotation, complex crop rotation, crop diversity practices, maintaining living roots/permanent soil coverage, and/or crop and livestock integration (in ha and % of acreage farmed; increase in %)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C1.0, C1.1	
							Production covered by regenerative agriculture certification (in t/y and % of total production; increase in %)	✓		A22.2	
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
<p>3. Production and trade of certified crops/ commodities in line with robust sustainability certifications which follow audit protocols that confirm biodiversity and potential climate benefits.</p>	🌿	🌿	🌿	🌿	🌿	T1, T4, T10, T16	Area under certified organic or sustainable agriculture (in ha and % of acreage farmed; increase in %)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C1.0, C1.1	
							Production covered by organic or sustainable agriculture certification (in t/y and % of total production; increase in %)	✓		C3.1 A22.2	
							Feedstock/feed supply chain certification coverage (% of total feedstock/feed volume; increase in %)	✓	Recognized certifications with best practice standards such as Roundtable on Sustainable Biomaterials (RSB), Round Table on Responsible Soy (RTRS), ISCC Plus (International Sustainability & Carbon Certification), and Pro Terra	A22.2	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>4. Alternative production practices, or products such as sustainable hydroponics and alternatives to beef, to reduce pressure on land and prevent land conversion. This includes agricultural practices that contribute to the protection of wildlife, especially endangered and threatened species (wildlife-friendly options), and businesses that promote wildlife-friendly practices to improve land management, establish corridors for wildlife movement, and reduce demand for bushmeat.</p>	🌿		🌿	🌿		<p>T1, T4, T10 T2, T16</p>	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.0, C1.1	
							Increase in the share of revenues generated or share of nutrients sold from plant-based products as beef alternatives (in %)	✓		C7.4	
							Area under wildlife-friendly management practices (in ha and % of acreage farmed; increase in %)	✓		C1.1	
							Wildlife crossings/corridors created (in number and ha; increase in %)	✓		A5.2	
							Description of key species using the wildlife crossings/corridors created			A5.2	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
<p>5. Adoption of innovation and technologies that improve land-use and agricultural practices, such as geospatial data tools and tools to detect soil degradation.</p>	🌿	🌿	🌿	🌿	🌿	<p>T10 T1, T2, T7, T20</p>	Area covered by technologies that improve land-use and agricultural practices (in ha and % of total area; increase in %)	✓		C1.1	
							Description of types of technologies adopted				
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
B. Freshwater/Marine Sustainable Production											
1. Measures that achieve conservation, greater efficiency, and sustainable water use, including at least a 20% reduction in water use in agricultural production, manufacturing and processing, construction and building, and infrastructure development.	🌿		🌿		🌿	T10 T8	Reduction in the annual absolute (gross) water use (in m³/y and %)	✓	<ul style="list-style-type: none"> Internationally recognized benchmark standards for water use efficiency (for example, EU Directives and Best Available Techniques reference standards or industry/sector good/best practice standards) The Water Exploitation Index Plus (WEI+) or internationally recognized tools such as WRI's Aqueduct and WWF's Water Risk Filter Industry Sector EHS Guidelines (food and beverage production) 	A3.0, A3.2	B.C3.0*
							Reduction in the annual absolute (gross) water use per hectare or per tonne of production (in m³/ha.y or m³/t.y and %)	✓	<ul style="list-style-type: none"> Internationally recognized benchmark standards for water use efficiency (for example, EU Directives and Best Available Techniques reference standards or industry/sector good/best practice standards) The Water Exploitation Index Plus (WEI+) or internationally recognized tools such as WRI's Aqueduct and WWF's Water Risk Filter Industry Sector EHS Guidelines (food and beverage production) 	A3.0, A3.2	B.C3.0*
							Water recycled and/or reused per hectare or per tonne of production (in m³/ha.y or m³/t.y; increase in %)	✓		A3.2	
2. Development and manufacturing of water conservation products (for example, low-flow shower heads, faucet aerators, water recyclers, and low-flow toilets) for residential and commercial use.	🌿		🌿		🌿	T16	Water conservation products developed/ manufactured (in number; increase in %)	✓			
							Product water flow rate compared with standard water flow rate (in liters per minute and % of reduction)				
							Share of annual revenues derived from water conservation products for residential and commercial use (in %; increase in %)	✓		C7.4	

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	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
3. Measures that reduce the level of contamination in wetlands or other freshwater bodies.						T7 T2, T11	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 AT.A5.0*
4. Biodiversity-friendly fishing:											
a. Repopulation of native species in rivers and other water bodies.						T2, T4 T9, T10	Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
b. Production, trade, or retail of seafood products meeting or exceeding best practice certification standards.						T10 T16	Certified sustainable seafood products produced/traded/retailed (in t/y and % of total; increase in %)	✓	Internationally recognized benchmark standards and certification schemes for fisheries and aquaculture (for example, MSC, ASC, and Global-GAP). Note: Certified sustainable fisheries should be accredited by the GSSI and comply with FAO technical guidelines.	C3.1 A22.2	
5. Sustainable aquaculture production: Aquaculture with a certification that confirms that the investment does not undermine the function and resilience of ecosystems, such as mangroves, salt marshes, seagrasses, and critical habitats.						T10 T11, T16	Production covered by sustainable aquaculture certification (in t/y and % of total production; increase in %)	✓	Internationally recognized benchmark standards and certification schemes for aquaculture (such as ASC and Global-GAP). Note: Certified sustainable aquaculture should be accredited by the GSSI and comply with FAO technical guidelines.	C3.1 A22.2	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
6. Regenerative (restorative) aquaculture production: Bivalves and seaweed to increase food production and restore ocean health.	✓		✓			T2, T10 T16	Sustainable seafood production of bivalves and seaweed (in t/y; increase in %)	✓	Internationally recognized benchmark standards and certification schemes for aquaculture (such as ASC and Global-GAP). Note: Certified sustainable aquaculture should be accredited by the GSSI and comply with FAO technical guidelines.	C3.1	
							Production covered by regenerative aquaculture certification (in t/y and % of total production; increase in %)	✓		A22.2	
							Reduction in antibiotic use (in % of the total used)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
7. Sustainable fisheries and fishery practices: Operations compliant with gear restrictions/modifications, offtake and sourcing procedures, and vessel modifications, and consistent with best practice for preventing fishery degradation (for example, reducing by-catch).	✓		✓			T10 T5	Production covered by sustainable fishery certification (in t/y and % of total; increase in %)	✓	Internationally recognized benchmark standards and certification schemes for fisheries (such as MSC and ASC). Note: Certified sustainable fisheries should be accredited by the GSSI and comply with FAO technical guidelines.	A22.2	
							Low-impact fishing gear by type of catch (in % of operations covered; increase in %)	✓			F.A23.3*
							Biodegradable fishing gear (in t and % of total gear; increase in %)	✓		C2.2 A23.1	F.A23.4*
							Fisheries by-catch (in t/y and % of total catch; reduction in %)	✓			F.C3.0*
							Vessels with by-catch exclusion devices and other fishing gear modification programs (in number and % of fleet; increase in %)	✓			F.A23.5*
8. Adoption of practices and/or technologies in supply chain management (including cold storage, fish processing facilities, and shipping) to reduce loss, expand access to markets, and reduce transport times.	✓					T10, T16	Capacity of storage or facility (in t/y; increase in %)				
							Capacity of cold storage (in t/y; increase in %)	✓			
							Avoided fishery loss (in t/y; increase in %)	✓			

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	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
9. Biodiversity-friendly shipping and cruising:											
a. Installation of ballast water treatment on ships to prevent contamination with invasive species.	✓	✓				T6	Vessels with ballast water treatment systems installed (in number and % of fleet; increase in %)	✓	D2 standard of the International Convention for the Control and Management of Ships' Ballast Water and Sediments		F.A23.2*
							Capacity of ballast water treatment (in m ³ /s; increase in %)	✓			
b. Installation of membrane bioreactor-type water treatment for all blackwater and graywater on ships.	✓	✓				T7	Vessels with membrane bioreactor-type water treatment systems installed (in number and % of fleet; increase in %)	✓			
							Capacity of membrane bioreactor-type water treatment (in m ³ /s; increase in %)	✓			
c. Installation of bilge water treatment on ships.	✓	✓				T7	Vessels with bilge water treatment systems installed (in number and % of fleet; increase in %)	✓			F.A23.2*
							Capacity of bilge water treatment (in m ³ /s; increase in %)	✓			
d. Installation of technology on ships to reduce noise pollution harmful to ocean species.	✓	✓				T7	Ambient noise reduction (in decibels and % of baseline)	✓		A2.3	F.A2.o*
							Share of fleet with noise reduction technology (in %; increase in %)	✓			
e. Solid waste reception and processing facilities at ports and terminals.	✓	✓				T7	Annual absolute (gross) waste collected and treated (including composted) (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1	
f. Deployment of technology-based mapping and analysis tools and/or alternative routing practices to protect biodiversity (for example, avoiding collision with large mammals).	✓					T1, T4	Vessels with navigation systems that include biodiversity-protection technology (in number and % of fleet; increase in %)	✓			F.A22.o* F.A22.1*

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				Mitigation	Adaptation						
10. Manufacturing or retail of ocean- and water-friendly household products (for example, biodegradable and phosphate-free products such as detergent, shampoos, soaps, deodorants, cleaners; microbead-free toothpaste; non-plastic packaging).	✓	✓				T7	Products awarded an internationally recognized eco-label, eco-efficiency, or other relevant environmental certification (in number; increase in %)	✓	Relevant environmental certification, such as the Nordic eco-label, EU eco-label, FSC, PEFC, Cradle to Cradle, Blue Angel, and ISO 14021	A22.2	
						T16	Production/retail covered by an internationally recognized eco-label, eco-efficiency, or other relevant environmental certification (in t/y and % of total; increase in %)	✓		A22.2	
11. Reduction of downstream eutrophication through the replacement of phosphate- or nitrogen-based synthetic fertilizers with non-synthetic organic fertilizers (linked also to improved agricultural practices).	✓	✓	✓	✓		T7, T10	Reduction in synthetic fertilizer in total fertilizer used (in %)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)		FA.A2.1
						T7, T10	Reduction in synthetic fertilizer use intensity (in kg/ha)	✓	Internationally recognized and/or locally relevant benchmark standards for organic farming (for example, EU eco-label for organic food production, USDA organic label, Demeter, and Naturland)	C2.0	FA.A2.1
						T7, T10	Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
						T7, T10	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
						T7, T10	Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	





Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
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				Mitigation	Adaptation						
<p>12. Prevention of stormwater and wastewater runoff into waterways, including investing in nature-based solutions for wastewater treatment, such as constructed wetlands to support removal of organic pollutants from wastewater.</p>	🌿	🌿	🌿	🌿		<p>T7, T11 T2, T12</p>	Description of type of natural or ecological infrastructure used				
							Area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)	✓			
							Wastewater treatment capacity of the structure (in m ³ /y; increase in %)	✓			
							Rainwater capture capacity of the structure (in m ³ /y; increase in %)	✓			
							Area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Wetlands created, financed, rehabilitated, restored, or under conservation practices (in number; increase in %)	✓		A24.2	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
<p>13. Upgrading wastewater treatment plants (agricultural, industrial, commercial, residential, or city level) to eliminate all pollutants harmful to biodiversity.</p>	🌿	🌿	🌿			T7	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
							Wastewater treatment capacity of the structure (in m ³ /y; increase in %)	✓			
							People/households benefiting from wastewater treatment (in number; increase in %)	✓		A6.0	








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	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
14. Improving upstream watershed activities (linked to improved land management, agricultural practices, and sanitation) to reduce sediment flow and contamination.						T7 T2, T10	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
	✓	✓	✓	✓			Area covered by sustainable land and water resources management practices (in ha and % of total area; increase in %)	✓		C1.1	
							People/households benefiting from sanitation (in number; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
C. Waste and Plastic Management											
1. Manufacturing, trade finance, or retail of compostable and biodegradable products, including plant-based plastics and packaging solutions that displace traditional products that impact marine, freshwater, and terrestrial biodiversity.						T7 T16	Reduction or removal of harmful substances (persistent, carcinogenic, mutagenic, reprotoxic) used (in % in comparison to the original design and/or in t/y)	✓	Internationally recognized benchmark standards, including current EU standards for the quality of materials/products as well as use of chemical substances (such as REACH), the Cradle to Cradle Products Innovation Institute's C2C Guideline, the ISCC Certification System, and the APR Postconsumer Resin (PCR) Certification Program		
	✓	✓					Compostable and/or biodegradable products manufactured/traded/retailed (in t/y and % of total; increase in %)	✓		A23.4	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
2. Manufacturing, trade finance, or retail of low-carbon and biodegradable materials (for example, Lyocell) as an alternative to cotton and fossil-based fibers.	✓	✓	✓	✓		T7 T16	Low-carbon and/or biodegradable fibers manufactured/traded/retailed (in t/y and % of total; increase in %)	✓		A23.4	
							Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
3. Urban drainage systems that prevent plastic, solid waste, and pollutants runoff into freshwater and marine habitats.	✓	✓	✓			T7 T12	Avoided plastic and/or solid waste runoff to freshwater and marine habitats (in t/y; increase in %)	✓		A2.0	
4. Flood mitigation measures that prevent plastic, solid waste, or pollutants runoff.	✓	✓		✓		T7 T12	Avoided plastic and/or solid waste runoff to freshwater and marine habitats (in t/y; increase in %)	✓		A2.0	
5. Reduction of plastic use in product design and manufacture, and use of recycled plastics for residual material needs.	✓	✓				T7 T16	Increase in the share of circular materials used as a % of the total material use of the project (in %)	✓	Internationally recognized benchmark standards, including current EU standards for the quality of materials/products as well as use of chemical substances (such as REACH), the Cradle to Cradle Products Innovation Institute's C2C Guideline, the ISCC Certification System, and the APR Postconsumer Resin (PCR) Certification Program	A23.1, A23.4	
							Avoided amount of plastic used (in t/y and % of total; increase in %)	✓		C2.3	
							Plastic waste that is prevented, minimized, repurposed, reused, or recycled (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1, A23.1, A23.4	
							Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
6. Support for research and innovative technology aimed at recycling single-use plastic as part of larger-scale plastic recycling efforts.	🌿	🌿	🌿	🌿		T7 T16	Investment in research and innovative technology related to recycling plastics (in \$; increase in %)	✓		C7.3 A14.0, A21.0	
							Technologies related to recycling plastics developed and demonstrated (in number; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
7. Plastic recycling activities and facilities.	🌿	🌿	🌿	🌿		T7	Processing capacity of the plastic recycling facility (in t/y; increase in %)	✓			
							Plastic waste that is prevented, minimized, repurposed, reused, or recycled (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1, A23.1, A23.4	
							Products produced from recycled plastic (in number of different products and in t/y of each type)				EH.A23.0* MM.A23.1 RE.A23.0* AT.A23.0* CM.A23.0*
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓	Internationally recognized tools for calculating greenhouse gases (GHG) in solid waste management (SWM), such as the SWM-GHG Calculator (https://www.ifeu.de/en/project/tool-for-calculating-greenhouse-gases-ghg-in-solid-waste-management-swm/) or EPA's Waste Reduction Model (WARM, https://www.epa.gov/warm)	Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
8. Reuse or sustainable repurposing of plastics.	🌿	🌿	🌿	🌿		T7 T16	Plastic waste that is prevented, minimized, repurposed, reused, or recycled (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1, A23.1, A23.4	
							Increase in plastic materials reused or repurposed (as absolute amount and % of the total material of the project)	✓		C2.3 A23.1, A23.4	FA.A23.0
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
D. Forestry and Plantations											
1. Reforestation with native or naturalized species resulting in biodiversity benefits and ecosystem services (for example, carbon sequestration, water quality, water supply in areas of critical ecological flow).	🌿		🌿	🌿	🌿	T2, T8, T10, T11	Area reforested with native or naturalized species (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	FA.A1.1 FA.A5.1
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Improvement in the Species Threat Abatement and Restoration (STAR) score	✓		C5.0 A5.0	
							Increase in the Ecosystem Integrity Index	✓		C5.0 A5.0	
							Increase in the Forest Landscape Integrity Index	✓		C5.0 A5.0	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.0
							Enabled ecosystem services (for example, water recharge in m ³ /y)**	✓	Millennium Ecosystem Assessment or TEEB (https://teebweb.org/)	A6.0, A6.1	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>2. Afforestation (plantations) or natural forest regeneration on degraded lands with native or naturalized species to create production buffer zones or biodiversity corridors, especially when adjacent to or connecting virgin forest or protected areas.</p>					<p>T1, T2, T4, T10 T3, T8</p>	Area afforested with native or naturalized species (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1		
						Area of natural forest regenerated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1		
						Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0		
						Improvement in the Species Threat Abatement and Restoration (STAR) score	✓		C5.0 A5.3		
						Increase in the Ecosystem Integrity Index	✓		C5.0 A5.0		
						Increase in the Forest Landscape Integrity Index	✓		C5.0 A5.0		
						Increase of afforested production buffer area (in ha and % of total area)	✓		C1.0, C1.1 A5.1		
						Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.0	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
3. Native non-timber forest products contributing to forest conservation, soil retention and recovery, and alternative livelihoods.						T3, T5, T9 T11	Native non-timber products in the project (in absolute number; increase in %)	✓			
							Production of native non-timber forest products (in t/y and % of total; increase in %)	✓		C3.1 A6.o, A6.1	
							Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	FP.A24.o
							Improvements in site-specific physical, chemical, and/or biological indicators of soil quality	✓	Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.o A5.o	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
							People from local communities employed (in number and % of workforce; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.o
4. Sustainable forest management: Forest production and management that meets international best practices and internationally accepted quality certification standards to ensure ecological, economic, and social benefits.						T10 T16	Area under certified sustainable forest management (in ha and % of total area; increase in %)	✓	Internationally recognized benchmark standards for sustainable forest management (such as FSC, PEFC, and Rainforest Alliance)	C1.1	FP.A22.o
							Production of sustainable wood and wood products (in t/y and % of total production; increase in %)	✓		C3.1 A6.o, A6.1	
							Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	FP.A24.o
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.o

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
5. Sustainable tree-crop production that incorporates native or naturalized species and does not cause or result in deforestation or loss of natural forests or any other biodiversity hotspot that has high conservation value or high carbon stock ecosystems.	🌿		🌿	🌿		T1, T3, T4, T10	Area under certified sustainable forest management (in ha and % of total area; increase in %)	✓	Internationally recognized benchmark standards for sustainable forest management (such as FSC, PEFC, and Rainforest Alliance)	C1.1	FP.A22.o
							Production of sustainable wood and wood products (in t/y and % of total production; increase in %)	✓		C3.1 A6.o, A6.1	
							Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	FP.A24.o
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.o
6. Agroforestry systems linked to sustainable agricultural practices. Mixed tree and crop production, using native or naturalized species, appropriate for local climate conditions.	🌿			🌿	🌿	T10	Area under diverse cropping systems (in ha and % of total area farmed; increase in %)	✓		C1.o, C1.1 A3.4	
							Share of business/assets covered by certification (in %; increase in %)	✓		A22.2	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.o
E. Tourism/Ecotourism Services											
1. Sustainable or ecotourism ventures that meet established standards for best practices, and conserve or restore habitats or avoid increasing encroachment on habitat, and work to reduce carbon emissions.	🌿		🌿	🌿		T1, T2, T3 T16	Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
							Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1 A24.1	
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.o, C1.1 A5.1, A23.2, A23.3, A24.1	
							Share of business/assets covered by sustainable tourism or eco-tourism certification (in %; increase in %)	✓			







Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>2. Tourism concessions and operations inside marine and terrestrial conservation areas that create opportunities or incentives for enhanced biodiversity protection or reduced biodiversity threat. These opportunities could be economic (for example, alternative livelihoods), social (for example, supporting changing norms or behaviors through education/best practice), or fiscal (for example, profit-sharing user fees with conservation areas). Tourism operations must meet recognized ecotourism standards.</p>	🌿		🌿			<p>T1, T3, T14 T16</p>	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Share of business/assets covered by sustainable tourism or eco-tourism certification (in %; increase in %)	✓			
							Waste that is prevented, minimized, repurposed, reused, or recycled (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1, A23.1	
							People from local communities employed (in number and % of workforce; increase in %)	✓			
							Share of revenues directly contributing to conservation and/or supporting local communities (in %; increase in %)	✓		C7.4	
							Conservation workers (for example, game wardens, rangers, and natural park officials) trained in biodiversity conservation (number and % of workforce; increase in %)	✓			


Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>3. Ecotourism ventures and operations outside conservation areas that are consistent with ecotourism principles. For example, these ventures could be located in buffer zones of protected areas, in critical habitats, or in other sensitive sites, or where there is strong community participation or ownership.</p>	🌿		🌿			<p>T1 T3, T16, T22</p>	Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Share of business/assets covered by sustainable tourism or eco-tourism certification (in %; increase in %)	✓			
							Waste that is prevented, minimized, repurposed, reused, or recycled (in t/y and % of total waste; increase in %)	✓	Internationally recognized benchmark standards for waste management (such as EU Waste Policy and Waste Framework Directive statistics and reports)	C2.2 A2.1, A23.1	
							People from local communities employed (in number and % of workforce; increase in %)	✓			
							Share of revenues directly contributing to conservation and/or supporting local communities (in %; increase in %)	✓		C7.4	
							Conservation workers (for example, game wardens, rangers, and natural park officials) trained in biodiversity conservation (number and % of workforce; increase in %)	✓			
F. Other Investments											
<p>1. Research and development and technology that helps to identify, monitor, report on, and verify biodiversity and business impacts. Examples include geographic information systems for biodiversity protection and artificial intelligence tools and software to track wildlife and monitor displacements in areas where poaching may occur.</p>	🌿		🌿			<p>T1, T4 T14, T15, T20, T21</p>	Investment in research and innovative technology related to biodiversity (in \$; increase in %)	✓		C7.3 A14.0, A21.0, A23.5	MM.A23.2
							Technologies related to biodiversity developed and demonstrated (in number; increase in %)	✓			MM.A23.2
							Area under monitoring for biodiversity protection (in ha; increase in %)	✓			
							Species under monitoring (in number; increase in %)	✓			

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
2. Retrofitting existing infrastructure and construction projects to address adverse impacts on biodiversity previously caused or exacerbated by the project.						T7 T11, T12	Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Enabled ecosystem services (for example, water recharge in m ³ /y)**	✓	Millenium Ecosystem Assessment or TEEB (https://teebweb.org/)	A6.0, A6.1	
							Road, rail, or other infrastructure retrofitted (in km; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
3. Innovations in aviation, trucking, and logistics to avoid transporting invasive species.						T6	Technologies deployed in operations to avoid the transportation of invasive species (description and number)			A14.0	
							Investment in technologies to avoid transportation of invasive species (in \$; increase in %)	✓		A14.0, A21.0	
							Marine and/or terrestrial vehicles retrofitted to avoid transportation of invasive species (in number; increase in %)	✓			

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
II. Investments in biodiversity conservation and/or restoration as the primary objective											
A. Conservation Land Use/Terrestrial Habitat Conservation											
1. Conservation of key biodiversity areas through the establishment of legally recognized protected areas.						T1, T3 T11	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	FPA24.0 MM.A23.0
							Description of biodiversity significance and main species included				
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Improvement in the Species Threat Abatement and Restoration (STAR) score	✓		C5.0 A5.3	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FPA24.0
2. Conservation or restoration to create biodiversity credits for meeting mitigation requirements (for example, mitigation banking). (Note: These could be linked to conservation easements set up to provide offsets via protection/management/restoration.)						T2, T3, T19 T1, T11, T14	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Biodiversity credits generated, with description of type and environmental asset behind (in number and \$)	✓		A23.6, A24.4	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
3. Conservation easements/servitudes/right of ways: Conservation easements earmark land for biodiversity conservation on private land while allowing owners to retain certain private property rights (some of these may be directly related to biodiversity credits/mitigation banking).	🌿		🌿	🌿		T3 T11, T14, T19	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protected-area-categories)	C1.1	
							Biodiversity credits generated, with description of type and environmental asset behind (in number and \$)			A23.6, A24.4	
							Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
4. Payments for ecosystem services or investments in mechanisms and conservation trust funds that support payment for ecosystem services directly linked to nature and biodiversity conservation.	🌿		🌿	🌿		T3, T11, T19	Payment for ecosystem services (description and amount in \$; increase in %)	✓		A8.6, A9.o, A12.1	
							Investment in mechanisms and conservation trust funds that support payment for ecosystem services (in \$; increase in %)	✓		C7.3 A21.o	
							Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
5. A public-private partnership mechanism that rewards/reduces tax paid by private landowners to implement new, privately managed protected areas adjacent to existing protected areas; investments in oversight and verification mechanisms to ensure correct use.	🌿		🌿	🌿		T1, T3, T11, T10, T19 T4, T14	Area under public-private partnership set aside for conservation (in buffer zones of protected areas) (in ha and % of total; increase in %)	✓		C1.1	
							Private landowners participating in the public-private partnership mechanism (in number; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO _{2e} /y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

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	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
6. Rewilding through creating and restoring habitats for wildlife, including developing biodiversity corridors.						T2, T4 T9, T11	Area of land under conservation practices (above legislation requirements) or recognized as legally protected (in ha and % of total area; increase in %)	✓	IUCN categories for protected areas (https://www.iucn.org/theme/protected-areas/about/protectedarea-categories)	C1.1	MM.A23.0 FP.A24.0 OG.A1.2 OG.A1.3
							Area of land restored or rehabilitated (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	FP.A24.0 MM.A23.0 MM.A23.3
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Improvement in the Species Threat Abatement and Restoration (STAR) score	✓		C5.0 A5.3	
							Wildlife crossings/corridors created (in number and ha; increase in %)	✓			CM.C1.0 ^o EH.C1.0
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓			Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard FP.AX.1.0
7. Fire management/fire risk reduction programs that finance management and interventions that directly reduce fire threats and have demonstrated a benefit to biodiversity.						T8 T10, T11	Reduction in the number of wildfires and/or in the area damaged by wildfires (in number and/or ha)	✓	World Bank Group Global Wildfire Hazard indicator (https://datacatalog.worldbank.org/search/dataset/0042058)		
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓			Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
8. REDD+ ventures that reduce emissions and produce carbon credits (post-Paris Agreement framework) and that generate sustained economic opportunities and social benefits for local communities.						T2, T3, T11, T19 T9	Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	FP.AX.1.0
							Area under REDD+ ventures (in ha and % of total; increase in %)	✓		C1.0, C1.1 A23.2, A23.3, A24.1	
							Share of revenues directly contributing to conservation and/or supporting local communities (in %; increase in %)	✓		C7.4	
							Carbon credits generated, with description of type and environmental asset behind (in number and \$)		Use of well-known carbon methodologies such as Verra and Gold Standard		
B. Freshwater and Marine Habitat Conservation											
1. Wetland conservation/restoration to provide and sustain ecosystem services.						T2, T3, T11 T1, T8	Area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of wetlands under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Enabled ecosystem services (for example, water recharge in m ³ /y)**	✓	Millennium Ecosystem Assessment or TEEB (https://teebweb.org/)	A6.0, A6.1	
							Number of wetlands created, financed, rehabilitated, restored, or under conservation practices (in number; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
2. Conservation and creation of wetlands to create biodiversity credits that establish wetland mitigation banks.	🌿		🌿	🌿		T3, T11, T19 T8, T14	Area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of wetlands under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Number of wetlands created, financed, rehabilitated, restored, or under conservation practices (in number; increase in %)	✓			
							Biodiversity credits generated, with description of type and environmental asset behind (in number and \$)			A23.6, A24.4	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>3. Conservation/restoration of marine areas (such as seagrass beds, coral, and mangroves) that protect important species, improve habitats, and provide services or important ecological functions. In some cases, these interventions can be designed to deliver carbon and biodiversity credits (marine habitat bank).</p>	🌿		🌿	🌿		T1, T2, T3, T4, T11 T19	Marine area rehabilitated or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Marine area under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Area of mangroves created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of mangroves under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Area of coral reefs created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of coral reefs under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Improvement in the Species Threat Abatement and Restoration (STAR) score	✓		C5.0 A5.0	
							Biodiversity credits generated, with description of type and environmental asset behind (in number and \$)			A23.6, A24.4	
							Carbon credits generated, with description of type and environmental asset behind (in number and \$)		Use of well-known carbon methodologies such as Verra and Gold Standard		
Avoided and/or sequestered GHG emissions (tCO ₂ e/y)				Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard							





Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
4. Provision of services for restoring natural habitats (for example, use of drones to plant mangroves, monitoring services to enforce fishing quotas, repopulation of native species in a landscape).	🌿		🌿			T2, T10, T11 T14	Area covered by services for restoration of natural habitats (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A23.2, A23.3, A24.1	FP.A24.0 MM.A23.0
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
5. Nutrient credit schemes to reduce the amount of pollutants discharged into water bodies (nutrient trading in regulated markets).	🌿	🌿				T7 T14, T19	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
							Nutrient credits generated, with description of type (in number and \$)				
6. Watershed management activities (linked to improved land management, agricultural practices, and sanitation) to improve water quality and reduce sedimentation in downstream ecosystems (for example, reefs).	🌿	🌿	🌿	🌿		T7, T10, T11 T2	Area covered by sustainable land and water resources management practices (in ha and % of total area; increase in %)	✓		C1.1	
							Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
							Avoided and/or sequestered GHG emissions (tCO ₂ e/ly)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
III. Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity											
A. Nature-Based Solutions											
1. Natural or ecological infrastructure that prevents runoff of agrochemicals and sediment into rivers or coastal water basins (for example, swales, biofiltration).							Description of type of natural or ecological infrastructure used				
							Area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)	✓			
							Capacity of the nature-based structure (in m ³ /second or m ³ and % of total capacity if combined with gray infrastructure; increase in %)	✓			
							Increase in the biotope area factor (in number and %)	✓			
							T7, T11 T2, T8	Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0
							Avoided and/or sequestered GHG emissions (tCO ₂ e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
2. Constructed wetlands for water treatment (primary through tertiary) provided that they do not interfere with, and ideally complement, any natural wetlands that are in the project's area of impact.	✓	✓	✓	✓	✓	T7, T11 T2, T8	Area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Wetlands created, financed, rehabilitated, restored, or under conservation practices (in number; increase in %)	✓			
							Wastewater treatment capacity of the structure (in m³/y; increase in %)	✓			
							Water treated, reused, or recycled (in m³/y; increase in %)	✓		A2.0	
							Increase in the biotope area factor (in number and %)	✓			
							Avoided and/or sequestered GHG emissions (tCO₂e/y)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
3. Watershed management practices to decrease runoff, sedimentation, and siltation, and increase recharge.	✓	✓	✓		✓	T7, T8, T11 T10	Area covered by sustainable land and water resources management practices (in ha and % of total area; increase in %)	✓		C1.1	
							Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
4. Natural infrastructure to reduce water temperatures of used water discharged into waterways.	🌿	🌿	🌿			T7 T11	Reduction in temperatures of used water discharged (in °C and %)	✓		C2.1	
							Description of type of natural or ecological infrastructure used				
							Capacity of the nature-based structure (in m ³ /second or m ³ and % of total capacity if combined with gray infrastructure; increase in %)	✓			
							Used water discharged with reduced temperature (in m ³ /y; increase in %)	✓		C2.1	
							Number of measures adopted to reduce temperatures of used water discharged				



Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>5. Natural infrastructure or a combination of natural and gray infrastructure focused on managing stormwater and integrating conventional coastal and riverine flood protection infrastructure with ecological infrastructure (for example, mangroves with seawalls, and marshes with levees).</p>	🌿	🌿	🌿	🌿	🌿	<p>T7, T8 T11, T12</p>	Description of type of natural or ecological infrastructure used				
							Capacity of the nature-based structure (in m ³ /second or m ³ and % of total capacity if combined with gray infrastructure; increase in %)	✓			
							Increase in the biotope area factor (in number and %)	✓			
							Share of sustainable material (such as timber and bamboo) used as construction material (in %)			A23.4	CM.A23.0 ⁶
							Reduction in repair costs due to storms (to all kinds of infrastructure and assets) (in \$ and %)	✓		A8.2, A17.0	
							Reduction in flood damage costs (in \$ and %)	✓		A8.2, A17.0	
							Reduction in operating days lost to floods (in number)	✓			
							Reduction in land loss from inundation and/or coastal erosion (in ha)	✓			
							People and/or enterprises (such as companies or farms) benefiting from measures to mitigate the consequences of floods (in number; increase in %)	✓			
Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓			Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard							

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>6. Construction (changed to conservation in our prior update) or rehabilitation of wetlands to reduce flooding and soil/water salination.</p>						T2, T8, T11	Area of wetlands created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of wetlands under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Wetlands created, financed, rehabilitated, restored, or under conservation practices (in number; increase in %)	✓			
							Increase in the biotope area factor (in number and %)	✓			
							Reduction in flood damage costs (in \$ and %)	✓		A8.2, A17.0	
							People and/or enterprises (such as companies or farms) benefiting from measures to mitigate the consequences of floods (in number; increase in %)	✓			
							Improvements in water quality indicators	✓	Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	
							Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives				Global Biodiversity Framework		Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
7. Construction (changed to conservation in our prior update) or rehabilitation of mangroves to reduce flooding and soil erosion, increase coastal resilience, and sequester carbon.	🌿		🌿	🌿	🌿	T2, T8, T11	Area of mangroves created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of mangroves under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Increase in the biotope area factor (in number and %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/yr)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
							Reduction in flood damage costs (in \$ and %)	✓		A8.2, A17.0	
							Reduction in operating days lost to floods (in number)	✓			
							Reduction in land loss from inundation and/or coastal erosion (in ha)	✓		C1.0	
							People and/or enterprises (such as companies or farms) benefiting from measures to mitigate the consequences of floods (in number; increase in %)	✓			

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
8. Construction (changed to conservation in our prior update) or rehabilitation of coral reefs to reduce storm surges and flooding.	🌿		🌿	🌿	🌿	T2, T8, T11	Area of coral reefs created, rehabilitated, or restored (in ha and % of total area; increase in %)	✓		C1.0, C1.1 A5.1, A23.2, A23.3, A24.1	
							Area of coral reefs under conservation practices or recognized as legally protected (in ha and % of total area; increase in %)	✓		C1.1	
							Increase in species richness and relative abundance of priority biodiversity species (in number)	✓	"Reference condition" (UN-SEEA) – condition against which past, present, and future ecosystem conditions are compared in order to measure relative change over time	C5.0 A5.0	
							Changes in the CO ₂ , nutrient, and/or pH levels for coral reefs (in %)	✓		C5.0 A5.0	
							Reduction in flood damage costs (in \$ and %)	✓		A8.2, A17.0	
							Reduction in repair costs due to storms (to all kinds of infrastructure and assets) (in \$ and %)	✓		A8.2, A17.0	
							Reduction in operating days lost to floods (in number)	✓			
							People and/or enterprises (such as companies or farms) benefiting from measures to mitigate the consequences of floods (in number; increase in %)	✓			
							✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard		

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives				Global Biodiversity Framework		Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
<p>9. Use of forest buffers, agricultural strips, swales, and other techniques to avoid runoff of nutrients and sediments.</p>											
						T7 T10, T11			Location-specific benchmarks on healthy soil (for example, guidance provided by the Natural Resources Conservation Service). Soil quality indicators might include nutrient concentration (phosphorus, nitrate), pH level, reactive carbon, water hold capacity, and soil organic matter, among others.	C5.0 A5.0	FA.A5.4 FA.A5.5 FA.A5.6 FA.A5.7
									Water quality standards for receiving bodies, the current quality of the receiving body, applicable national requirements, or internationally accepted standards (for example, those cited in the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines). Water quality indicators might include temperature, pH, biochemical oxygen demand, chemical oxygen demand, total nitrogen, total phosphorous, total suspended solids, total heavy metals, perfluorinated and polyfluorinated chemicals, microfibers, or other potential pollutants.	C5.0 A5.0	FA.A5.0 FA.A5.3
										Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
10. Parametric insurance schemes for green/blue infrastructure such as coral reefs, fisheries, and coastal protection.						T11, T19 T2, T3	Amount spent on and insured by parametric insurance schemes for green/blue infrastructure (in \$)			C7.3 A23.5	
							Area of coral reefs covered by parametric insurance schemes for green/blue infrastructure (in ha)				
							Length of coastal area covered by parametric insurance schemes for green/blue infrastructure (in km; increase in %)	✓			
							Fishery production covered by parametric insurance schemes for green/blue infrastructure (in t/y; increase in %)	✓			
							People and/or enterprises (such as companies or farms) benefiting from parametric insurance schemes for green/blue infrastructure (in number; increase in %)	✓			A6.o

Biodiversity Finance Eligible Activities	Green Bond/Green Loan Principles' Environmental Objectives					Global Biodiversity Framework	Metric Suggested	Need Baseline	Benchmark/Standard/Comment	TNFD Mapping	TNFD Sector-Specific Mapping
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Climate Change		Contributions to Targets					
				Mitigation	Adaptation						
11. Green/blue urban infrastructure such as green roofs, green facades, permeable surfaces, rain gardens, bioswales, canals, and ponds to address the effects of droughts, floods, and urban heat.	🌿	🌿		🌿	🌿	T11, T12 T7, T8	Description of type of natural or ecological infrastructure used				
							Area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)	✓			
							Capacity of the nature-based structure (in m ³ /second or m ³ and % of total capacity if combined with gray infrastructure; increase in %)	✓			
							Number of native species integrated in green/blue urban infrastructure				
							Increase in the biotope area factor (in number and %)	✓			
							People and/or enterprises (such as companies or farms) benefiting from measures to mitigate the consequences of floods and droughts (in number; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/ly)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	
12. Nature-based solutions for solar farms to cool solar panels and enhance their performance (for example, seeding with native grasses and flowers, agrivoltaics).	🌿			🌿	🌿	T11 T8	Share of solar panels with cooling system totally based on nature-based solutions (in %; increase in %)	✓			
							Description of type of natural or ecological infrastructure used				
							Area covered by nature-based solution (in ha and % of total area under land management practices and/or infrastructure area; increase in %)	✓			
							Avoided and/or sequestered GHG emissions (tCO ₂ e/ly)	✓		Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard	

Annex I: Kunming-Montreal Global Biodiversity Framework's Targets

GOALA



The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050;



Human induced extinction of known threatened species is halted, and, by 2050, extinction rate and risk of all species are reduced tenfold, and the abundance of native wild species is increased to healthy and resilient levels;



The genetic diversity within populations of wild and domesticated species is maintained, safeguarding their adaptive potential.

- Target 1** Ensure that all areas are under participatory integrated and biodiversity inclusive spatial planning and/ or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.
- Target 2** Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.
- Target 3** Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities 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, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively 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, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spill-over, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.
- Target 6** Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 percent, by 2030, eradicating or controlling invasive alien species especially in priority sites, such as islands.

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, considering cumulative effects, including:

- (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use;
- (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and
- (c) by preventing, reducing, and working towards eliminating plastic pollution.

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.

GOAL B



Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development, for the benefit of present and future generations by 2050.

Target 9	Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.
Target 10	Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, 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, such as the 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 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, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.

GOAL C



The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments.

Target 13	Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030 facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.
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GOAL D



Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal Global Biodiversity Framework are secured and equitably accessible to all Parties, especially developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of \$700 billion per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for Biodiversity.

Target 14	Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities and fiscal and financial flows with the goals and targets of this Framework.
Target 15	Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: <ul style="list-style-type: none">(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios;(b) Provide information needed to consumers to promote sustainable consumption patterns;(c) Report on compliance with access and benefit-sharing regulations and measures, as applicable; in order 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 including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, halve global food waste, significantly reduce overconsumption and substantially reduce waste generation, in order for all people to live well in harmony with Mother Earth.
Target 17	Establish, strengthen capacity for, and implement in all countries biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.
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, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.
Target 19	<p>Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by:</p> <ul style="list-style-type: none"> (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, 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, as well as countries with economies in transition, to at least \$20 billion per year by 2025, and to at least \$30 billion per year by 2030; (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances; (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments; (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards; (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises; (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; (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use.
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, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.

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, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent, in accordance with national legislation.
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, 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.
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, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

Annex II: The Taskforce on Nature-related Financial Disclosures' Core and Additional Global Disclosure Metrics

Table II.1: TNFD core global disclosure indicators and metrics for nature-related dependencies and impacts

Metric no.	Driver of nature change	Indicator	Metric
	Climate change	GHG emissions	Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard
C1.0	Land/ freshwater/ ocean-use change	Total spatial footprint	Total spatial footprint (km ²) (sum of): <ul style="list-style-type: none"> Total surface area controlled/managed by the organisation, where the organisation has control (km²); Total disturbed area (km²); and Total rehabilitated/restored area (km²).
C1.1		Extent of land/freshwater/ ocean-use change	Extent of land/freshwater/ocean ecosystem use change (km ²) by: <ul style="list-style-type: none"> Type of ecosystem; and Type of business activity. Extent of land/freshwater/ocean ecosystem conserved or restored (km ²), split into: <ul style="list-style-type: none"> Voluntary; and Required by statutes or regulations. Extent of land/freshwater/ocean ecosystem that is sustainably managed (km ²) by: <ul style="list-style-type: none"> Type of ecosystem; and Type of business activity.
C2.0	Pollution/ pollution removal	Pollutants released to soil split by type	Pollutants released to soil (tonnes) by type, referring to sector-specific guidance on types of pollutants.

Metric no.	Driver of nature change	Indicator	Metric
	Climate change	GHG emissions	Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard
C2.1	Pollution/ pollution removal	Wastewater discharged	<p>Volume of water discharged (m³), split into:</p> <ul style="list-style-type: none"> Total; Freshwater; and Other. <p>Including:</p> <ul style="list-style-type: none"> Concentrations of key pollutants in the wastewater discharged, by type of pollutant, referring to sector-specific guidance for types of pollutants; and Temperature of water discharged, where relevant.
C2.2		Waste generation and disposal	<p>Weight of hazardous and nonhazardous waste generated by type (tonnes), referring to sector-specific guidance for types of waste.</p> <p>Weight of hazardous and nonhazardous waste (tonnes) disposed of, split into:</p> <ul style="list-style-type: none"> Waste incinerated (with and without energy recovery); Waste sent to landfill; and Other disposal methods. <p>Weight of hazardous and nonhazardous waste (tonnes) diverted from landfill, split into waste:</p> <ul style="list-style-type: none"> Reused; Recycled; and Other recovery operations.
C2.3	Pollution/ pollution removal	Plastic pollution	<p>Plastic footprint as measured by total weight (tonnes) of plastics (polymers, durable goods and packaging) used or sold broken down into the raw material content.</p> <p>For plastic packaging, percentage of plastics that is:</p> <ul style="list-style-type: none"> Re-usable; Compostable; Technically recyclable; and Recyclable in practice and at scale.
C2.4		Non-GHG air pollutants	<p>Non-GHG air pollutants (tonnes) by type :</p> <ul style="list-style-type: none"> Particulate matter (PM_{2.5} and/or PM₁₀); Nitrogen oxides (NO₂, NO and NO₃); Volatile organic compounds (VOC or NMVOC); Sulphur oxides (SO₂, SO, SO₃, SO_x); and Ammonia (NH₃)

Metric no.	Driver of nature change	Indicator	Metric
	Climate change	GHG emissions	Refer to ISSB's IFRS-S2 Climate-related Disclosures Standard
C3.0	Resource use/ replenishment	Water withdrawal and consumption from areas of water scarcity	Water withdrawal and consumption (m ³) from areas of water scarcity, including identification of water source.
C3.1		Quantity of high-risk natural commodities sourced from land/ocean/freshwater	Quantity of high-risk natural commodities (tonnes) sourced from land/ocean/freshwater, split into types, including proportion of total natural commodities. Quantity of high-risk natural commodities (tonnes) sourced under a sustainable management plan or certification programme, including proportion of total high-risk natural commodities.
C4.0	Invasive alien species and other	Placeholder indicator: Measures against unintentional introduction of invasive alien species (IAS)	Proportion of high-risk activities operated under appropriate measures to prevent unintentional introduction of IAS, or low-risk designed activities.
C5.0	State of nature	Placeholder indicator: Ecosystem condition Placeholder indicator: Species extinction risk	For those organisations that choose to report on state of nature metrics, the TNFD encourages them to report the following indicators, and to refer to the TNFD additional guidance on measurement of the state of nature in Annex 2 of the LEAP approach: <ul style="list-style-type: none"> Level of ecosystem condition by type of ecosystem and business activity; and Species extinction risk. There are a number of different measurement options for these indicators. The TNFD does not currently specify one metric as there is no single metric that will capture all relevant dimensions of changes to the state of nature and a consensus is still developing.

Table II.2: TNFD core global disclosure indicators and metrics for nature-related risks and opportunities

Metric no.	Category	Metric
C7.0	Risk	Value of assets, liabilities, revenue and expenses that are assessed as vulnerable to nature-related transition risks (total and proportion of total).
C7.1		Value of assets, liabilities, revenue and expenses that are assessed as vulnerable to nature-related physical risks (total and proportion of total).
C7.2		Description and value of significant fines/penalties received/litigation action in the year due to negative nature-related impacts.

Metric no.	Category	Metric
C7.3	Opportunity	Amount of capital expenditure, financing or investment deployed towards nature-related opportunities, by type of opportunity, with reference to a government or regulator green investment taxonomy or third-party industry or NGO taxonomy, where relevant.
C7.4		Increase and proportion of revenue from products and services producing demonstrable positive impacts on nature with a description of impacts.

Table II.3: TNFD additional global disclosure metrics for dependencies and impacts on nature

Metric no.	Metric category	Indicator	Example metrics
A1.0	Driver of nature change: Land/freshwater/ocean-use change	Intensity of land-use	Land-use intensity (tonnes or litres of output/km ²). This will vary by sector context; for example, crop yield (tonnes/km ²) for the agriculture sector.
A2.0	Driver of nature change: pollution/pollution removal	Wastewater treated, reused/recycled or avoided	Volume of wastewater treated, reused or recycled (m ³). Reduction in volume of wastewater relative to baseline as a result of technological or process changes (m ³).
A2.1		Waste minimised, reused or recycled	Reduction in waste generated relative to baseline as a result of technological or process changes (tonnes).
A2.2		Pollutants removed	Volume of pollutants removed from land, atmosphere, ocean and freshwater (tonnes).
A2.3		Light and noise pollution	For example: <ul style="list-style-type: none"> Percentage of light fixtures that fully cut-off or are fully shielded, or are below 60W; Intensity of outdoor lighting (lumen/ha); and Average noise level on-site during noisiest part of the day, an hour either side of sunrise and an hour either side of sunset (dB); distance from nearest habitat (m).

Metric no.	Metric category	Indicator	Example metrics
A3.0	Driver of nature change: resource use and replenishment	Total water consumption and withdrawal	Total volume of water withdrawal and consumption (m ³).
A3.1		Water replenished	Volume of water (m ³) replenished to the environment through replenishment programmes (split into total and to areas of water scarcity).
A3.2		Water reduced, reused or recycled	Total volume (m ³) or percentage of water (total, freshwater, other) reduced, reused or recycled.
A3.3		Water loss mitigated	Volume (m ³) of water loss mitigated.
A3.4		Area used for the production of natural commodities	Area (km ²) that the organisation controls and/or manages that is used for the production of natural commodities from land/ocean/freshwater ecosystems, by type of ecosystem.
A3.5		Use of wild species	Quantity of wild species (tonnes and/or number of individual specimens, by species) extracted from natural habitats for commercial purposes.
A4.0	Driver of nature change: Invasive species and other	Number/extent of unintentionally introduced species, varieties or strains	Number/extent of unintentionally introduced species, varieties or strains in areas owned, operated, used or financed in priority areas (absolute, presence/absence and/or number removed).
A5.0	State of nature	Ecosystem condition	Level of ecosystem condition by type of ecosystem and business activity – refer to TNFD additional guidance on state of nature measurement in Annex 2 of the LEAP approach.
A5.1		Ecosystem extent	Quantitative measure of ecosystem extent, e.g. change in habitat cover (km ²).
A5.2		Ecosystem connectivity	Quantitative measure of ecosystem connectivity, e.g. Singapore Index.
A5.3		Species extinction risk	Quantitative measure of species extinction risk – refer to TNFD additional guidance on state of nature measurement in Annex 2 of the LEAP approach.
A5.4		Species population size	Quantitative measure of species population size.

Metric no.	Metric category	Indicator	Example metrics
A6.0	Ecosystem services	Ecosystem services the organisation has an impact on: measurement of the change in the availability and quality of the ecosystem services	See guidance on measuring changes in ecosystem services in the TNFD additional guidance on the LEAP approach.
A6.1		Ecosystem services the organisation depends on: measurement of the change in the availability and quality of the ecosystem services	See Measuring changes in ecosystem services in the TNFD additional guidance on the LEAP approach.

Table II.4: TNFD additional global metrics for nature-related risks and opportunities

Metric no.	Risk / opportunity	Category	Metric	
A7.0	Risk	Multiple	Value of write-offs and early retirements of assets due to nature-related risks.	
A7.1			Value of capital expenditure, financing or investment deployed towards nature-related risks.	
A8.0		Physical risk	Description and value of assets/total annual revenue dependent on area affected by physical risk.	
A8.1			Number of locations/business lines/facilities exposed to physical risk.	
A8.2			Value of capital expenditure on infrastructure asset repair or replacement as a result of nature-related loss and damage.	
A8.3			Percentage increase in insurance costs due to nature-related loss and damage in the previous year.	
A8.4			Capital expenditure on adaption due to nature-related physical risks.	
A8.5			Costs associated with the relocation of operations and suppliers due to physical nature-related risks.	
A8.6			Value of assets, liabilities, revenue and expenses that are exposed to nature-related physical risks (total and proportion of total).	
A9.0			Transition risk	Value of assets, liabilities, revenue and expenses that are exposed to nature-related transition risks (total and proportion of total).
A10.0			Transition risk – Policy	Description and costs related to loss of operating areas.
A11.0	Transition risk – Liability	Description and value of clean-up costs due to nature-related impacts.		

Metric no.	Risk / opportunity	Category	Metric
A12.0	Risk	Transition risk	Description of exposure to/costs related to loss of market access.
A12.1		– Market	Description of exposure and costs related to raw material and natural resource price volatility.
A13.0		Transition risk – Reputation	Exposure to increased operational costs/loss of revenue due to reputational risks.
A14.0		Transition risk – Technology	Expenditure on R&D for new and alternative technologies related to mitigation and adaptation of nature-related risks.
A15.0	Opportunity	Market	Year-on-year change in ESG rating scores for previous three years.
A16.0		Capital flow and financing	Value of green finance instruments used, such as green bonds and sustainability-linked bonds.
A17.0		Resource efficiency	Value of operational cost savings associated with nature-related management, such as improvements in efficiency of use of nature-related resources and adoption of circular economy practices.

Table II.5: TNFD additional global disclosure metrics for responses to nature-related issues

Metric no.	Category	Subcategory	Metric
A19.0	Strategy	Policies, commitments and targets	Proportion of targets that are time-bound and quantifiable.
A19.1			Proportion of targets that address short term, medium term and long term risks and opportunities.
A19.2			Proportion of geographical sites/priority locations that are covered by targets.
A20.0	Strategy	Engagement	Proportion of sites that have active engagement with local stakeholders on nature-related issues.
A20.1			Participation in sector-wide and/or multi-stakeholder agreements (number of agreements; number of stakeholders and stakeholder groups covered).
A21.0	Strategy	Capital allocation/ investment	Value of investment in projects that avoid or reduce negative nature impacts or conserve or restore ecosystems or species where impacts cannot be avoided.
A21.1			Investment in nature-related solutions as defined in relevant government or regulator green investment taxonomy.

Metric no.	Category	Subcategory	Metric
A22.0	Dependency, impact, risk and opportunity management	Value chain	Proportion of suppliers screened on nature-related issues, by spend and/or volume.
A22.1			Proportion of suppliers engaged for priority nature issues identified and/or when assessing nature-related issues, by spend and/or volume.
A22.2			Credible and transparent third-party certification: percentage and/or value of production, consumption and sourcing of raw materials, per certification type.
A22.3			Proportion of production, consumption and sourcing of raw materials that is traceable to original location.
A22.4			Proportion of suppliers committed to and effectively implementing sustainable production.
A23.0	Dependency, impact, risk and opportunity management	Changes to nature (dependency and impact): mitigation hierarchy steps	Proportion of sites producing and effectively implementing nature action plans.
A23.1			Rate of reuse and recycling of i) waste or ii) product/material outflows (%).
A23.2			Restoration of negatively affected species and ecosystems (investment and extent (km ²)) split into ecosystem/biome type and split into: <ul style="list-style-type: none"> • Required by regulation; • Required by certifier; and • Voluntary.
A23.3			Extent (km ²), duration (years) and monitoring frequency (count/year) of ecosystem restoration and/or species restoration projects.
A23.4			Circular material use rate (%).
A23.5			Value of operational/capital expenditure, categorised into mitigation hierarchy actions (avoid, reduce, restore and regenerate, transform) by value and/or proportions (%).
A23.6			Mandatory credit market schemes: Value of total biodiversity offsets purchased and sold by type and scope (geographies, activities).

Metric no.	Category	Subcategory	Metric
A24.0	Dependency, impact, risk and opportunity management	Voluntary conservation, restoration and regeneration	Value invested in voluntary ecosystem and/or species restoration.
A24.1			Extent (km ²), duration (years) and monitoring frequency (count/year) of voluntary ecosystem and/or species restoration projects.
A24.2			Value of investment in additional conservation actions split into type of action and type of ecosystem/biome applied to.
A24.3			Value of investment in nature-related community development programs intended to enhance positive impacts for Indigenous Peoples and affected stakeholders.
A24.4			Voluntary credit market schemes: Value of total biodiversity offsets purchased and sold by type and scope (geographies, activities).
A25.0	Dependency, impact, risk and opportunity assessment		The level(s) at which the assessment is taken (corporate, location-specific and/or project/service-line-specific).
A25.1			Percentage of direct operational locations assessed.
A25.2			Percentage of operational locations assessed upstream and downstream.
A25.3			Percentage of suppliers engaged on access to and availability of high-quality data.

