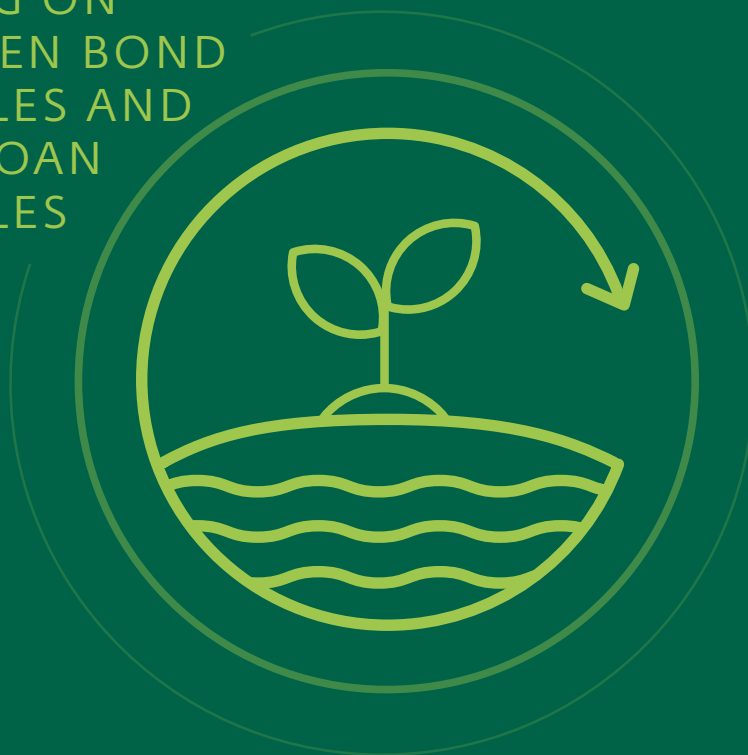


# BIODIVERSITY FINANCE REFERENCE GUIDE

BUILDING ON  
THE GREEN BOND  
PRINCIPLES AND  
GREEN LOAN  
PRINCIPLES



NOVEMBER 2022

# BIODIVERSITY FINANCE REFERENCE GUIDE

**GB-TAP** Green Bond Technical Assistance Program



IN PARTNERSHIP WITH



Kingdom of the Netherlands

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# INTRODUCTION



Nature, underpinned by biologically diverse ecosystems, is critical to human survival, health, wellbeing, and economic prosperity. Half of global gross domestic product, or \$44 trillion, is generated in sectors such as construction, agriculture, and energy that highly or moderately depend on nature and its services.<sup>1</sup> Two-thirds of food crops rely, at least in part, on animal pollination.<sup>2</sup> This natural capital, along with produced capital, human capital, and nonrenewable natural resources, makes up countries' wealth<sup>3</sup> and generates income that drives economic growth and progress towards achieving the Sustainable Development Goals.

Yet economic activity is causing biodiversity loss at an unprecedented rate through land- and sea-use change, unsustainable use of resources, pollution, and the spread of invasive species.<sup>4</sup> Since 1970, the Living Planet Index, which measures the state of the world's biodiversity, has declined by nearly 70%, with 14 key ecosystem services currently in decline.<sup>5</sup>

Nature loss is fundamentally interconnected with climate change – both crises reinforce each other and present compound and systemic risks. Climate change is a key driver of biodiversity loss, which diminishes

ecosystems' ability to provide climate change mitigation and adaptation benefits. This in turn intensifies the impacts of climate change, resulting in a vicious cycle of escalating effects.

Restoring biodiverse ecosystems is a cost-effective way of building resilience and ability to adapt to the physical impacts of climate change. It also provides a way to substantially reduce carbon emissions to meet the goals of the Paris Agreement. Realizing these benefits will require transitioning our economies to sustainable production practices that help halt and reverse biodiversity loss.

Sustainable practices must address the key drivers of biodiversity loss and protect and enhance ecosystems. Strategic investment in this transition - with measures in place to ensure it is equitable and inclusive - can create long-term, local value. A sustainable transition of food, land and ocean use, infrastructure and the built environment, and energy and extractives could create \$10.1 trillion in annual business opportunities, 395 million new jobs by 2030, and significant opportunities for income diversification, which supports the growth of local economies.<sup>6</sup>

<sup>1</sup> [http://www3.weforum.org/docs/WEF\\_New\\_Nature\\_Economy\\_Report\\_2020.pdf](http://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf)

<sup>2</sup> <https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business>

<sup>3</sup> <https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business>

<sup>4</sup> <https://ipbes.net/global-assessment>

<sup>5</sup> <https://www.zsl.org/sites/default/files/LPR%202020%20Full%20report.pdf>

<sup>6</sup> <https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business>

Finance and innovative financial solutions are key to supporting the transition to nature-smart production practices and deploying nature-based climate solutions. Biodiversity finance - defined as finance that contributes or intends to contribute to activities that conserve, restore, or avoid a negative footprint on biodiversity and ecosystem services<sup>7</sup> - has emerged as a fast-growing area in green finance. There is increased interest in financing the transition to nature-smart economic activity from investors, financial institutions, and bond issuers globally. However, there is currently a lack of guidance in the market on criteria for projects eligible for this kind of financing.

To address this gap, IFC has developed a Biodiversity Finance Reference Guide. This guide, aimed at financial institutions and investors, provides an indicative list of investment projects, activities, and components that help protect, maintain, or enhance biodiversity and ecosystem services, as well as promote the sustainable management of natural resources. It offers IFC's perspective on potential investment opportunities and how targeted financing can help enable a transition to nature-smart business models and practices that combine conservation needs with sustainable development.

This document is primarily intended to provide a structured approach for investors and financiers to identify eligible use of proceeds that constitute biodiversity finance. Companies can use it to identify opportunities to address the key drivers of biodiversity loss in their production practices, to integrate nature-based solutions into their operations, or to develop nature conservation activities. The guide can also be used by policymakers to design biodiversity finance taxonomies.

This guide is not a substitute for sustainability policies or environmental and social safeguards. It provides an overview of key criteria for selecting eligible projects that can qualify for biodiversity finance and outlines the key steps borrowers and issuers need to follow to develop biodiversity finance frameworks in line with the Green Bond Principles and Green Loan Principles.<sup>8</sup>

The core of the document is the indicative list of biodiversity finance investment projects and activities outlined in the section "Use of Proceeds" on page 11. This is not an exhaustive list and other activities that meet the criteria articulated in this guide could be considered.

This guide will continue to evolve as the market for biodiversity finance develops and matures.

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<sup>7</sup> This definition is adopted from the OECD and is used in "Mobilizing Private Finance for Nature. A World Bank Group paper on private finance for biodiversity and ecosystem services," 2020, available at <https://openknowledge.worldbank.org/handle/10986/35984>

<sup>8</sup> Griscom *et al.* (2017) Natural Climate Solutions. *PNAS*, 114(44): 11645-11650.

# BIODIVERSITY FINANCE REFERENCE GUIDE



This reference guide builds on the Green Bond Principles and Green Loan Principles as well as related resources, including the ICMA Handbook for Impact Reporting.<sup>9</sup>

Both the Green Bond Principles and Green Loan Principles list biodiversity as an eligible use of proceeds. However, they do not provide a granular description of the types of projects that fit this category. The purpose of this reference guide is to address this gap and provide an indicative list of investment activities and components that contribute to protecting, maintaining, or enhancing biodiversity and ecosystem services and sustainably managing living natural resources through the adoption of practices that integrate conservation needs and sustainable development. The guide provides an

indicative list of activities that seek to contribute to Sustainable Development Goal 14: “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” and Sustainable Development Goal 15: “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.”

This guide also aligns investment activities with the following environmental objectives articulated in the Green Bond Principles and Green Loan Principles which address the key drivers of biodiversity loss: (i) pollution prevention and control, (ii) natural resource conservation, (iii) climate change mitigation, and (iv) climate change adaptation.

<sup>9</sup> <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2019/Handbook-Harmonized-Framework-for-Impact-Reporting-WEB-100619.pdf>

# Key Terms, Definitions, and Criteria



This reference guide uses the Convention on Biological Diversity's definition of biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems."<sup>10</sup>

Ecosystem services are defined as the benefits that people, including businesses and public entities, derive

from ecosystems. Ecosystem services are organized into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the nonmaterial benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services.<sup>11</sup>

To be considered biodiversity finance, investment activities should meet all the following criteria:

**1** **Is the project type consistent with the Green Bond Principles' and Green Loan Principles' eligible project categories and does it contribute to Sustainable Development Goals 14 and 15?**

To qualify as a biodiversity finance project, it must be consistent with the project categories of the Green Bond Principles and Green Loan Principles and contribute to either Sustainable Development Goal 14 or 15, with outputs and outcomes directly related to one or more of the target indicators of these Sustainable Development Goals.

**2** **Does the project type introduce risk that may affect progress on other environmental priorities such as Sustainable Development Goals 2, 6, 7, 12, and 13?**

The project can only be labelled biodiversity finance if it does not introduce material risks to other themes and priority environmental areas of the Sustainable Development Goals, including:

- SDG2: Zero hunger
- SDG6: Clean water and sanitation
- SDG7: Affordable and clean energy
- SDG12: Responsible consumption and production
- SDG13: Climate action

<sup>10</sup> <https://www.cbd.int/convention/articles?a=cbd-o2>

<sup>11</sup> Examples are as follows: (i) provisioning services may include food, freshwater, timber, fibers, medicinal plants; (ii) regulating services may include surface water purification, carbon storage and sequestration, climate regulation, protection from natural hazards; (iii) cultural services may include natural areas that are sacred sites and areas of importance for recreation and aesthetic enjoyment; and (iv) supporting services may include soil formation, nutrient cycling, primary production.



3

**Are environmental, social, and governance (ESG) safeguards and standards, such as the IFC Performance Standards, applied in the implementation of the project if there are material environmental and social risks?**

The project must clearly state which internationally accepted sustainability standards it is following in order to minimize and manage any adverse environmental and social impacts, including biodiversity loss. IFC's E&S Performance Standards<sup>12</sup> (or similar good practice E&S standards) are expected to be followed in addition to national requirements. Industry-specific sustainability standards, as well as certain specific product standards, may also be applied for a biodiversity finance investment above national requirements.

4

**Does the project address one or several of the key drivers of biodiversity loss?<sup>13</sup>**

The project or elements of the project must be designed to intentionally minimize or eliminate one or several of the following key drivers of biodiversity loss:



**Land- and sea-use change.** Ecosystem conversion from agriculture, unsustainable forest management, urbanization, industrial developments, and transport networks is the biggest single source of pressure on biodiversity worldwide, leading to habitat loss, fragmentation, and degradation.



**Overexploitation and unsustainable use of nature.** Overexploitation and destructive harvesting practices are a critical threat to the world's biodiversity and ecosystems. Overexploitation is a particularly significant threat to marine ecosystems. Unsustainable water use for agriculture, cities, energy, and industries puts further pressure on biodiversity and the health of ecosystems.



**Pollution.** Pollution is a growing threat to biodiversity in terrestrial, inland water, coastal, and marine ecosystems. This includes air pollution, greenhouse gas emissions, untreated urban and rural waste, plastic pollution, pollution from nutrients (such as nitrogen and phosphorous), and other pollutants from industries, mining, and agricultural activities.

<sup>12</sup> [https://www.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards](https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards)

<sup>13</sup> <https://www.cbd.int/gb03/?pub=6667&section=6711>



**Invasive species.** The spread of invasive alien species continues to be a major threat to all types of species and ecosystems. Invasive species can be introduced intentionally as part of project design or unintentionally through unrelated project activities, and can have a negative impact on native ecosystems.



**Climate change.** Rising global temperatures are already having an adverse effect on biodiversity and are projected to become a bigger threat in the next decade. More frequent extreme weather events and changing patterns of rainfall and drought associated with the changing climate can be expected to have further significant impacts on biodiversity. There are well-developed taxonomies for investments and investment activities that target climate change, which are not covered in this reference guide. This guide only lists those climate-related activities that have significant localized biodiversity benefits.

5

**Does the project have appropriate metrics to determine the impacts on biodiversity and measure project performance against selected impact indicators?**

The issuer or borrower should make all reasonable efforts to gather data for impact reporting, including a description of the metrics used and reporting against those metrics. For further detail, please see section “On Impact Reporting” (page 24).

# BIODIVERSITY FINANCE FRAMEWORK

## Building on the Green Bond Principles and Green Loan Principles



To be consistent with the Green Bond Principles and Green Loan Principles, it is best practice for an issuer of green bonds or borrower of green loans with a biodiversity finance component to prepare a framework that clearly distinguishes the biodiversity activities for the use of proceeds. This framework should include the following sections:

- ▶ **Use of Proceeds:** This section articulates project types that contribute to SDG14 or SDG15 and are consistent with the Green Bond Principles and Green Loan Principles.
- ▶ **Project Assessment and Selection:** This section articulates how biodiversity finance projects are assessed and selected.
- ▶ **Management of Proceeds:** This section articulates how the proceeds from biodiversity finance will be managed.
- ▶ **Impact Reporting:** This section articulates how the impact of biodiversity finance will be measured and reported.

The framework serves as a transparent way to avoid greenwashing and safeguard against reputational risk and should be endorsed by the issuer's or borrower's senior management. It is best practice to obtain independent third-party review and verification of the framework.

# Use of Proceeds



This guide provides an indicative list of private sector biodiversity-related investment activities to demonstrate eligible use of proceeds that contribute to Sustainable Development Goals 14 and 15.

It lists biodiversity and nature-related investment components that contribute to the protection and enhancement of biodiversity and ecosystem services and that minimize or avoid activities that are harmful to biodiversity.<sup>14</sup> The investment activities reviewed in this guide fall into the following categories:





















- ▶ **Investment activities that seek to generate biodiversity co-benefits.** This category of accepted use of proceeds includes financing for activities within or through established business operations and production practices that seek to address the key drivers of biodiversity loss.
- ▶ **Investments in biodiversity conservation and/or restoration as the primary objective.** This category covers direct financing of conservation, restoration, and related services.
- ▶ **Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity.** These solutions provide infrastructure-type and other services that are material to projects' operations and that can displace or complement man-made structures (such as gray infrastructure).



<sup>14</sup> This approach is consistent with the practice within sustainable finance, including the financing of climate mitigation and adaptation projects, where some activities can be identified as risk management measures (for example, reducing air pollution and as a co-benefit also reducing CO<sub>2</sub> emissions) while others can be considered as value creation (for example, solar photovoltaic in an arid area).

Table 1:

**Mapping biodiversity finance activities' contributions to the Green Bond Principles and Green Loan Principles' environmental objectives**

 <b>Biodiversity Finance Area</b>	GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES				
	 <b>Biodiversity</b>	 <b>Pollution Prevention and Control</b>	 <b>Natural Resource Conservation</b>	 <b>Climate Change</b>	
				<b>Mitigation</b>	<b>Adaptation</b>
Investment activities that seek to generate biodiversity co-benefits					
Investments in biodiversity conservation and/or restoration as the primary objective					
Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity					

Annex 1 includes a more detailed indicative mapping of biodiversity finance activities, illustrating if the activity could have a direct or indirect contribution to the Green Bond Principles and Green Loan Principles' environmental objectives. It should be used only for an initial identification of assets eligible for biodiversity finance. Accepted use of proceeds will need to be considered on a case-by-case basis reflecting the project's available information and context.

## I.

# Investment activities that seek to generate biodiversity co-benefits

This category of accepted use of proceeds includes financing for activities within or through established business operations and production practices that seek to address the key drivers of biodiversity loss. Proceeds could finance activities that seek to expand existing biodiversity-positive operations, or transition existing operations or practices to biodiversity-positive approaches. Projects could be stand-alone activities or consist of components that meet the eligibility criteria for biodiversity finance.



## A. PRODUCTIVE LAND USE/ AGRICULTURE

### 1

#### Climate-smart agriculture:

- a. Rehabilitation of degraded lands with native and/or naturalized species.<sup>15</sup>
- b. Reduction in synthetic fertilizer use by at least 20%<sup>16</sup> on project implementation to reduce downstream eutrophication, and to promote use of biofertilizer and other organic solutions (for example, composting).
- c. Reduction in pesticide use by at least 20%<sup>17</sup> on project implementation and promotion of biosolutions.
- d. Switching from monocropping to diversified cropping systems, including intercropping and use of cover crops to improve resilience and soil quality.
- e. Significant reduction of tillage or implementation of no-till practices.
- f. Cultivation of native or naturalized species that can more readily adapt to variations in production cycles, water quality/quantity, and temperatures.
- g. Infrastructure that uses natural or combined green/gray solutions that prevent runoff of agrochemicals and sediment into rivers or coastal basins.<sup>18</sup>
- 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.

<sup>15</sup> This can also be part of NBS (nature-based solutions).

<sup>16</sup> This threshold is consistent with benchmarks used in climate finance. Thresholds will become stricter over time as technologies and practices develop.

<sup>17</sup> This threshold is consistent with benchmarks used in climate finance. Thresholds will become stricter over time as technologies and practices develop.

<sup>18</sup> If infrastructure solutions include use of nature, this can also be part of NBS.

## I. Investment activities that seek to generate biodiversity co-benefits

- 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.
- 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 water resources.
- 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).
- l. Conservation and production of native or naturalized seed varieties, especially endemic species.
- m. Adoption of practices and/or technologies in supply chain management to promote zero deforestation or other positive effects on biodiversity.

- 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.
- 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.
- 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.
- 5 **Adoption of innovation and technologies** that improve land-use and agricultural practices, such as geospatial data tools and tools to detect soil degradation.



## B. FRESHWATER/MARINE SUSTAINABLE PRODUCTION

- 1 **Measures that achieve conservation, greater efficiency, and sustainable water use**, including at least 20% reduction in water use in:
  - a. Agricultural production
  - b. Manufacturing and processing
  - c. Construction and building
  - d. Infrastructure development.
- 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.
- 3 **Measures that reduce the level of contamination in wetlands or other freshwater bodies.**
- 4 **Biodiversity-friendly fishing:**
  - a. Repopulation of native species in rivers and other water bodies.
  - b. Production, trade, or retail of seafood products meeting or exceeding best practice certification standards.<sup>19</sup>
- 5 **Sustainable aquaculture production:** Aquaculture with a certification that confirms that the investment<sup>20</sup> does not undermine the function and resilience of ecosystems, such as mangroves, salt marshes, seagrasses, and critical habitats.
- 6 **Regenerative (restorative) aquaculture production:** Bivalves and seaweed to increase food production and restore ocean health.
- 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).

<sup>19</sup> See guidelines and information on certification schemes: <https://www.seafoodwatch.org/about-us/our-standards>

<sup>20</sup> Best practices for aquaculture investments include:

- Environmental practices: Mangrove and wetland conservation; effective effluent management and water quality control; sediment control and sludge management; soil and water conservation; efficient use of fishmeal and fish oil; responsible sourcing of broodstock and juvenile fish; control of escapes and minimizing biodiversity and wildlife impact.
- Community practices: Establish well-defined rights, aquaculture zones, and responsibilities for aquaculturists; regulatory compliance and effective enforcement; community involvement; worker safety, fair labor practices, and equitable compensation.
- Sustainable business and farm management practices: Effective biosecurity and disease control systems; minimal antibiotic and pharmaceutical use; microbial sanitation; maintain global standards for hygiene; efficient and humane harvest and transport; accountable record-keeping and traceability; profitability. (<https://www.worldbank.org/en/topic/environment/brief/sustainable-aquaculture>).



- 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 time.
- 9 Biodiversity-friendly shipping and cruising:**
  - a. Installation of ballast water treatment on ships to prevent contamination with invasive species.
  - b. Installation of membrane bioreactor-type water treatment for all blackwater and graywater on ships.
  - c. Installation of bilge water treatment on ships.
  - d. Installation of technology on ships to reduce noise pollution harmful to ocean species.
  - e. Solid waste reception and processing facilities at ports and terminals.
  - f. Deployment of technology-based mapping and analysis tools and/or alternative routing practices to protect biodiversity (for example, avoiding collision with large mammals).
- 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).
- 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).
- 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.
- 13 Upgrading wastewater treatment plants** (agricultural, industrial, commercial, residential, or city level) to eliminate all pollutants harmful to biodiversity.
- 14 Improving upstream watershed activities** (linked to improved land management, agricultural practices, and sanitation) to reduce sediment flow and contamination.



## C. WASTE AND PLASTIC MANAGEMENT:

- 1 **Manufacturing, trade finance, or retail of compostable and biodegradable<sup>21</sup> products**, including plant-based plastics and packaging solutions that displace traditional products that impact marine, freshwater, and terrestrial biodiversity.
- 2 **Manufacturing, trade finance, or retail of low-carbon and biodegradable materials** (for example, Lyocell) as an alternative to cotton and fossil-based fibers.
- 3 **Urban drainage systems that prevent plastic, solid waste, and pollutants runoff** into freshwater and marine habitats.
- 4 **Flood mitigation measures** that prevent plastic, solid waste, or pollutants runoff.
- 5 **Reduction of plastic use** in product design and manufacture, and use of recycled plastics for residual material needs.
- 6 **Support for research and innovative technology** aimed at recycling single-use plastic as part of larger-scale plastic recycling efforts.
- 7 **Plastic recycling activities and facilities.**
- 8 **Reuse or sustainable repurposing of plastics.**



## D. FORESTRY AND PLANTATIONS

- 1 **Reforestation<sup>22</sup>** 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).<sup>23</sup>
- 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.
- 3 **Native non-timber forest products** contributing to forest conservation, soil retention and recovery, and alternative livelihoods.

<sup>21</sup> A biodegradable substance seamlessly breaks down and mixes back into the earth, leaving no toxins behind.

<sup>22</sup> Practices that restore trees to ecologically suitable landscapes include reforestation (replanting or naturally regenerating trees), afforestation (planting trees where none have grown for at least 50 years), restocking (increasing tree biomass in degraded forests), agroforestry (integrating trees into croplands or pasture), and urban forestry (integrating trees into metropolitan areas). All these practices carry some commercial potential, including the production of timber and other forest products, while also helping businesses and governments fulfill biodiversity and climate commitments.

<sup>23</sup> This is also part of watershed management under NBS.

## I. Investment activities that seek to generate biodiversity co-benefits

- 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.
- 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.
- 6 **Agroforestry systems** linked to sustainable agricultural practices. Mixed tree and crop production, using native or naturalized species, appropriate for local climate conditions.



## E. TOURISM/ECOTOURISM SERVICES

- 1 **Sustainable or ecotourism ventures** that meet established standards for best practices, conserve or restore habitats or avoid increasing encroachment on habitat, and work to reduce carbon emissions.
- 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.
- 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.



## F. OTHER INVESTMENTS

- 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.
- 2 **Retrofitting existing infrastructure and construction projects** to address adverse impacts on biodiversity previously caused or exacerbated by the project.
- 3 **Innovations in aviation, trucking, and logistics** to avoid transporting invasive species.

## II.

# Investments in biodiversity conservation and/or restoration as the primary objective

This category of accepted use of proceeds includes direct financing of conservation, restoration, and related services as the primary focus of investments.



## A. CONSERVATION LAND USE/ TERRESTRIAL HABITAT CONSERVATION

- 1 **Conservation** of key biodiversity areas through the establishment of legally recognized protected areas.<sup>24</sup>
- 2 **Conservation or restoration to create biodiversity credits for meeting mitigation requirements** (for example, mitigation banking).<sup>25</sup> *(Note: These could be linked to conservation easements set up to provide offsets via protection/management/restoration.)*
- 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).
- 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.
- 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.

<sup>24</sup> Areas as defined by IFC Performance Standard 6, particularly natural and critical habitats as well as habitats listed in IUCN Protected Area Categories, World Database of Key Biodiversity Areas, and IUCN Red List of Ecosystems.

<sup>25</sup> Mitigation banking (conservation banking) is a system of credits and debits to ensure that ecological loss resulting from various development works is compensated by the preservation and restoration of similar habitats. An investor may acquire an area to conserve or restore and establish a system of credits based on government regulations (for example, number of habitat hectares). They will sell those credits to developers that need to compensate for impacts by ensuring conservation prior to license issuance. This system can also work where a company will commit to voluntary compensation/offsets, but it works best where developers are required to provide compensation for their impact on an ecosystem and investors can anticipate market demand.

## II. Investments in biodiversity conservation and/or restoration as the primary objective

- 6 **Rewilding** through creating and restoring habitats for wildlife, including developing biodiversity corridors.
- 7 **Fire management/fire risk reduction** programs that finance management and interventions that directly reduce fire threats and have demonstrated a benefit to biodiversity.
- 8 **REDD+ ventures that reduce emissions and produce carbon credits** (post-Paris Agreement framework)<sup>26</sup> and that generate sustained economic opportunities and social benefits for local communities.



## B. FRESHWATER AND MARINE HABITAT CONSERVATION

- 1 **Wetland conservation/restoration to provide and sustain ecosystem services.**
- 2 **Conservation and creation of wetlands to create biodiversity credits** that establish wetland mitigation banks.<sup>27</sup>
- 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).<sup>27</sup>
- 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).
- 5 **Nutrient credit schemes** to reduce the amount of pollutants discharged into water bodies (nutrient trading in regulated markets).
- 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).

<sup>26</sup> This can also be part of NBS.

<sup>27</sup> This can also be part of NBS.

<sup>28</sup> Areas as defined by IFC Performance Standard 6, particularly natural and critical habitats, as well as habitats listed in IUCN Protected Area Categories, World Database of Key Biodiversity Areas, and IUCN Red List of Ecosystems. This can also be part of NBS.

## III.

# Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity

This category of accepted use of proceeds lists investments in nature-based solutions within larger projects. These investments seek to conserve, enhance, and restore ecosystems and biodiversity to provide infrastructure-type or other services that are material to a project's operations and/or that can displace or complement man-made structures.



## A. NATURE-BASED SOLUTIONS<sup>29</sup>

- 1 **Natural or ecological infrastructure<sup>30</sup>** that prevents runoff of agrochemicals and sediment into rivers or coastal water basins (for example, swales, biofiltration).
- 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.
- 3 **Watershed management practices** to decrease runoff, sedimentation, and siltation, and increase recharge.
- 4 **Natural infrastructure to reduce water temperatures** of used water discharged into waterways.
- 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).

<sup>29</sup> Principles for good governance and practices are captured in the IUCN Global Standard for Nature-based Solutions. <https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf>

<sup>30</sup> Refers to naturally functioning ecosystems that deliver valuable services to people, such as regulation of water and climate, formation of soil, and reduction of disaster risk. It is the nature-based equivalent of built or hard infrastructure and can be just as important for providing services and underpinning socioeconomic development. Ecological infrastructure does this by providing cost-effective, long-term solutions to service delivery that can supplement, and sometimes even substitute, built infrastructure. Ecological infrastructure includes healthy mountain catchments, rivers, wetlands, coastal dunes, and nodes and corridors of natural habitat, which together form a network of structural elements in the landscape.

**III. Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity**

- 6** **Conservation or rehabilitation of wetlands** to reduce flooding and soil/water salination.
- 7** **Conservation or rehabilitation of mangroves** to reduce flooding and soil erosion, increase coastal resilience, and sequester carbon.
- 8** **Conservation or rehabilitation of coral reefs** to reduce storm surges and flooding.
- 9** **Use of forest buffers, agricultural strips, swales, and other techniques** to avoid runoff of nutrients and sediments.
- 10** **Parametric insurance schemes for green/blue infrastructure** such as coral reefs, fisheries, and coastal protection.
- 11** **Green/blue urban infrastructure** such as green roofs, green facades, permeable surfaces, rain gardens, bioswales, canals, and ponds to address the effects of drought, floods, and urban heat.
- 12** **Nature-based solutions for solar farms** to cool solar panels and enhance their performance (for example, seeding with native grasses and flowers, agrivoltaics).

# On Project Selection



The issuer or borrower should understand and apply the indicative list above to identify eligible assets in its portfolio and pipeline. Projects should include a clear description of biodiversity protection, conservation and restoration strategies planned from the investments, and how success will be measured. Only activities for which enough information can be

gathered to objectively describe the use of proceeds and enable impact reporting can be selected. The eligible projects should also be aligned with existing local and international biodiversity regulations (for example, National Restoration Plan and Management of Sensitive Lands) and meet stringent environmental and social standards.

# On Management of Proceeds



The issuer or borrower should have the capabilities to ringfence the proceeds from biodiversity finance and allocate them only to eligible activities, that is, those activities satisfying the criteria outlined on pages 7-9 and in the Use of Proceeds section. Using a follow-the-money approach, if a project or investment has several components, only the eligible component

should receive funds from biodiversity finance. Components of the project which are not eligible under this framework should in no way contribute to avoidable negative impacts (all impacts must be avoided and mitigated effectively) on biodiversity and ecosystem services.



# On Impact Reporting



The issuer or borrower should make all reasonable efforts to gather data for impact reporting, including a description of the metrics used and the reporting against those metrics. After identifying the activities that are eligible for receiving proceeds from biodiversity finance, the issuer or borrower can work with investors, biodiversity experts, and affected stakeholders to define suitable impact indicators to include in annual impact reports and include financing to support short-, medium-, and long-term monitoring, and, where possible, independent third-party verification. To the extent possible, it is recommended to use impact indicators included in the monitoring protocols of an applicable certification system or those included in the ICMA Handbook for Impact Reporting.<sup>31</sup> In addition, site-specific indicators related to habitats or species

of concern may need to be developed when assessing impacts. Indicators should be developed when the project is being designed so that information can be collected and biodiversity outcomes can be reported against a baseline. There should be reporting against biodiversity indicators as well as specific performance and social impact indicators related to the project (for example, increase in natural forest cover or hectares protected). To facilitate impact reporting, IFC will consider developing a set of sample key performance indicators for the eligible use of proceeds captured in this reference guide. Impacts on affected stakeholders should also be measured to ensure that the eligible activities have not had a negative impact on local people, including their access to ecosystem services, and that any such impacts have been mitigated effectively.

<sup>31</sup> <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Handbook-Harmonized-Framework-for-Impact-Reporting-220520.pdf>

# ANNEX I













## **Mapping biodiversity finance activities' contributions to the Green Bond Principles and Green Loan Principles' environmental objectives.**

The table below maps biodiversity finance activities articulated in this guide to the environmental objectives of the Green Bond Principles and Green Loan Principles: biodiversity conservation, pollution prevention and control, natural resource conservation, climate change mitigation, and climate change adaptation.

The table is indicative and illustrates if an activity could directly or indirectly contribute to the Green Bond Principles and Green Loan Principles' environmental objectives. This table does not constitute eligibility criteria and is provided only as a reference. Specific projects will need to be considered individually based on their available information and context. Each project needs to map its contributions to specific environmental objectives and articulate how these will be measured and verified.

GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES


































 <b>Biodiversity Finance Group and Economic Activity</b>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
<b>I. Investment activities that seek to generate biodiversity co-benefits</b>					








**A. PRODUCTIVE LAND USE/AGRICULTURE**

<b>1. Climate-smart agriculture:</b>					
<b>a.</b> Rehabilitation of degraded lands with native and/or naturalized species.					
<b>b.</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).					
<b>c.</b> Reduction in pesticide use by at least 20% on project implementation and promotion of biosolutions.					
<b>d.</b> Switching from monocropping to diversified cropping systems, including intercropping and use of cover crops to improve resilience and soil quality.					
<b>e.</b> Significant reduction of tillage or implementation of no-till practices.					
<b>f.</b> Cultivation of native or naturalized species that can more readily adapt to variations in production cycles, water quality/quantity, and temperatures.					
<b>g.</b> Infrastructure that uses natural or combined green/gray solutions that prevent runoff of agrochemicals and sediment into rivers or coastal basins.					
<b>h.</b> The use of sustainable agricultural practices/ varieties/technology and/or infrastructure that increases crop yields/quality on existing land without increasing the environmental footprint.					
<b>i.</b> 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.					
<b>j.</b> 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.					


























GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
<p><b>k.</b> 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).</p>					
<p><b>l.</b> Conservation and production of native or naturalized seed varieties, especially endemic species.</p>					
<p><b>m.</b> Adoption of practices and/or technologies in supply chain management to promote zero deforestation or other positive effects on biodiversity.</p>					
<p><b>2.</b> Regenerative agriculture: Farming and grazing practices that, among other benefits, rebuild soil organic matter and 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 operate throughout the supply chain.</p>					
<p><b>3.</b> 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>					
<p><b>4.</b> 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><b>5.</b> Adoption of innovation and technologies that improve land-use and agricultural practices, such as geospatial data tools and tools to detect soil degradation.</p>					


































GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <p><b>Biodiversity Finance Group and Economic Activity</b></p>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation

 **B. FRESHWATER/MARINE SUSTAINABLE PRODUCTION**

<p><b>1.</b> Measures that achieve conservation, greater efficiency, and sustainable water use, including at least 20% reduction in water use in agricultural production, manufacturing and processing, construction and building, and infrastructure development.</p>					
<p><b>2.</b> Development and manufacturing of water conservation products (for example, low-flow shower heads, faucet aerators, water recyclers, low-flow toilets) for residential and commercial use.</p>					
<p><b>3.</b> Measures that reduce the level of contamination in wetlands or other freshwater bodies.</p>					
<p><b>4.</b> Biodiversity-friendly fishing:</p>					
<p><b>a.</b> Repopulation of native species in rivers and other water bodies.</p>					
<p><b>b.</b> Production, trade, or retail of seafood products meeting or exceeding best practice certification standards.</p>					
<p><b>5.</b> 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.</p>					
<p><b>6.</b> Regenerative (restorative) aquaculture production: Bivalves and seaweed to increase food production and restore ocean health.</p>					
<p><b>7.</b> 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).</p>					
<p><b>8.</b> 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.</p>					
























GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
<b>9. Biodiversity-friendly shipping and cruising:</b>					
<b>a.</b> Installation of ballast water treatment on ships to prevent contamination with invasive species.					
<b>b.</b> Installation of membrane bioreactor-type water treatment for all blackwater and graywater on ships.					
<b>c.</b> Installation of bilge water treatment on ships.					
<b>d.</b> Installation of technology on ships to reduce noise pollution harmful to ocean species.					
<b>e.</b> Solid waste reception and processing facilities at ports and terminals.					
<b>f.</b> Deployment of technology-based mapping and analysis tools and/or alternative routing practices to protect biodiversity (for example, avoiding collision with large mammals).					
<b>10.</b> 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).					
<b>11.</b> 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).					
<b>12.</b> 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.					
<b>13.</b> Upgrading wastewater treatment plants (agricultural, industrial, commercial, residential, or city level) to eliminate all pollutants harmful to biodiversity.					
<b>14.</b> Improving upstream watershed activities (linked to improved land management, agricultural practices, and sanitation) to reduce sediment flow and contamination.					













GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <p><b>Biodiversity Finance Group and Economic Activity</b></p>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation















 **C. WASTE AND PLASTIC MANAGEMENT**

<p><b>1.</b> 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.</p>					
<p><b>2.</b> Manufacturing, trade finance, or retail of low-carbon and biodegradable materials (for example, Lyocell) as an alternative to cotton and fossil-based fibers.</p>					
<p><b>3.</b> Urban drainage systems that prevent plastic, solid waste, and pollutants runoff into freshwater and marine habitats.</p>					
<p><b>4.</b> Flood mitigation measures that prevent plastic, solid waste, or pollutants runoff.</p>					
<p><b>5.</b> Reduction of plastic use in product design and manufacture, and use of recycled plastics for residual material needs.</p>					
<p><b>6.</b> Support for research and innovative technology aimed at recycling single-use plastic as part of larger-scale plastic recycling efforts.</p>					
<p><b>7.</b> Plastic recycling activities and facilities.</p>					
<p><b>8.</b> Reuse or sustainable repurposing of plastics.</p>					







 **D. FORESTRY AND PLANTATIONS**

<p><b>1.</b> 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).</p>					
<p><b>2.</b> 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><b>3.</b> Native non-timber forest products contributing to forest conservation, soil retention and recovery, and alternative livelihoods.</p>					

GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  			 <b>Climate Change</b>	
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
<b>4.</b> 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.					
<b>5.</b> 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.					
<b>6.</b> Agroforestry systems linked to sustainable agricultural practices. Mixed tree and crop production, using native or naturalized species, appropriate for local climate conditions.					

 **E. TOURISM/ECOTOURISM SERVICES**








<b>1.</b> 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.					
<b>2.</b> 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.					
<b>3.</b> 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.					



GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  				
	<b>Biodiversity</b>	<b>Pollution Prevention and Control</b>	<b>Natural Resource Conservation</b>	<b>Climate Change</b>	
			<b>Mitigation</b>	<b>Adaptation</b>	











 **F. OTHER INVESTMENTS**

<p><b>1.</b> 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><b>2.</b> Retrofitting existing infrastructure and construction projects to address adverse impacts on biodiversity previously caused or exacerbated by the project.</p>					
<p><b>3.</b> Innovations in aviation, trucking, and logistics to avoid transporting invasive species.</p>					



















**II. Investments in biodiversity conservation and/or restoration as the primary objective**

				
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 **A. CONSERVATION LAND USE/TERRESTRIAL HABITAT CONSERVATION**

<p><b>1.</b> Conservation of key biodiversity areas through the establishment of legally recognized protected areas.</p>					
<p><b>2.</b> 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.)</p>					
<p><b>3.</b> 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).</p>					
<p><b>4.</b> 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.</p>					

GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  			 <b>Climate Change</b>	
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
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.					
6. Rewilding through creating and restoring habitats for wildlife, including developing biodiversity corridors.					
7. Fire management/fire risk reduction programs that finance management and interventions that directly reduce fire threats and have demonstrated a benefit to biodiversity.					
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.					

 **B. FRESHWATER AND MARINE HABITAT CONSERVATION**

1. Wetland conservation/restoration to provide and sustain ecosystem services.					
2. Conservation and creation of wetlands to create biodiversity credits that establish wetland mitigation banks.					
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).					
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).					
5. Nutrient credit schemes to reduce the amount of pollutants discharged into water bodies (nutrient trading in regulated markets).					
6. Watershed management activities (linked to improved land management, agricultural practices, and sanitation) to improve water quality and reduce sedimentation into downstream ecosystems (for example, reefs).					

GREEN BOND/GREEN LOAN PRINCIPLES' ENVIRONMENTAL OBJECTIVES

 <b>Biodiversity Finance Group and Economic Activity</b>	  				
	Biodiversity	Pollution Prevention and Control	Natural Resource Conservation	Mitigation	Adaptation
<b>III. Investments in nature-based solutions to conserve, enhance, and restore ecosystems and biodiversity</b>					

 **A. NATURE-BASED SOLUTIONS**

<b>1.</b> Natural or ecological infrastructure that prevents run-off of agrochemicals and sediment into rivers or coastal water basins (for example, swales, biofiltration).					
<b>2.</b> 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.					
<b>3.</b> Watershed management practices to decrease run-off, sedimentation, and siltation, and increase recharge.					
<b>4.</b> Natural infrastructure to reduce water temperatures of used water discharged into waterways.					
<b>5.</b> 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).					
<b>6.</b> Conservation or rehabilitation of wetlands to reduce flooding and soil/water salination.					
<b>7.</b> Conservation or rehabilitation of mangroves to reduce flooding and soil erosion, increase coastal resilience, and sequester carbon.					
<b>8.</b> Conservation or rehabilitation of coral reefs to reduce storm surges and flooding.					
<b>9.</b> Use of forest buffers, agricultural strips, swales, and other techniques to avoid run-off of nutrients and sediments.					
<b>10.</b> Parametric insurance schemes for green/blue infrastructure such as coral reefs, fisheries, and coastal protection.					
<b>11.</b> 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.					
<b>12.</b> Nature-based solutions for solar farms to cool solar panels and enhance their performance (for example, seeding with native grasses and flowers, agrivoltaics).					

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