



BIODIVERSITY & NATURE FINANCE:

Opportunities for Financial Regulators and Financial Institutions

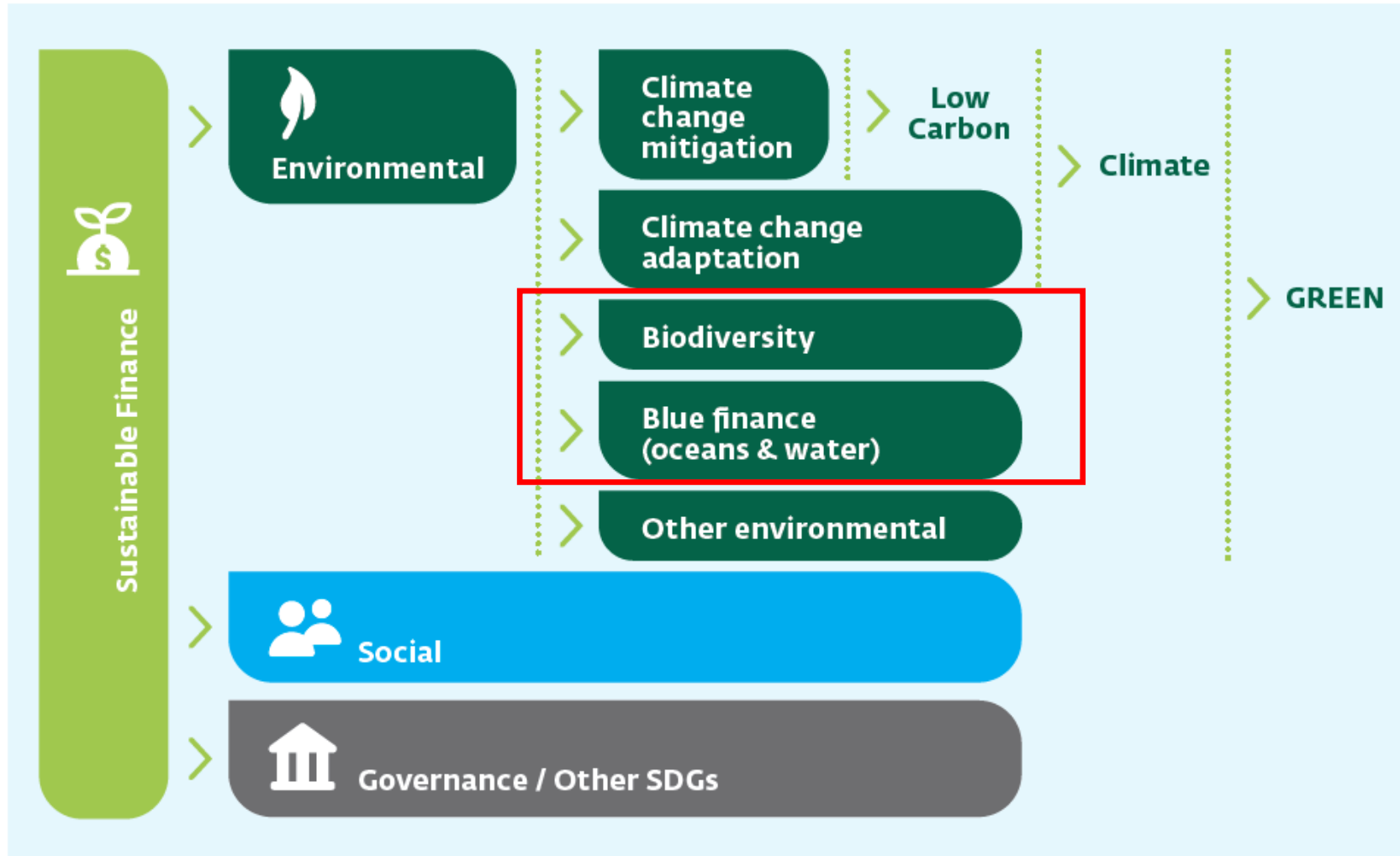
Irina Likhachova, IFC Global Lead for Biodiversity and Nature Finance

February 25, 2025



Creating Markets, Creating Opportunities

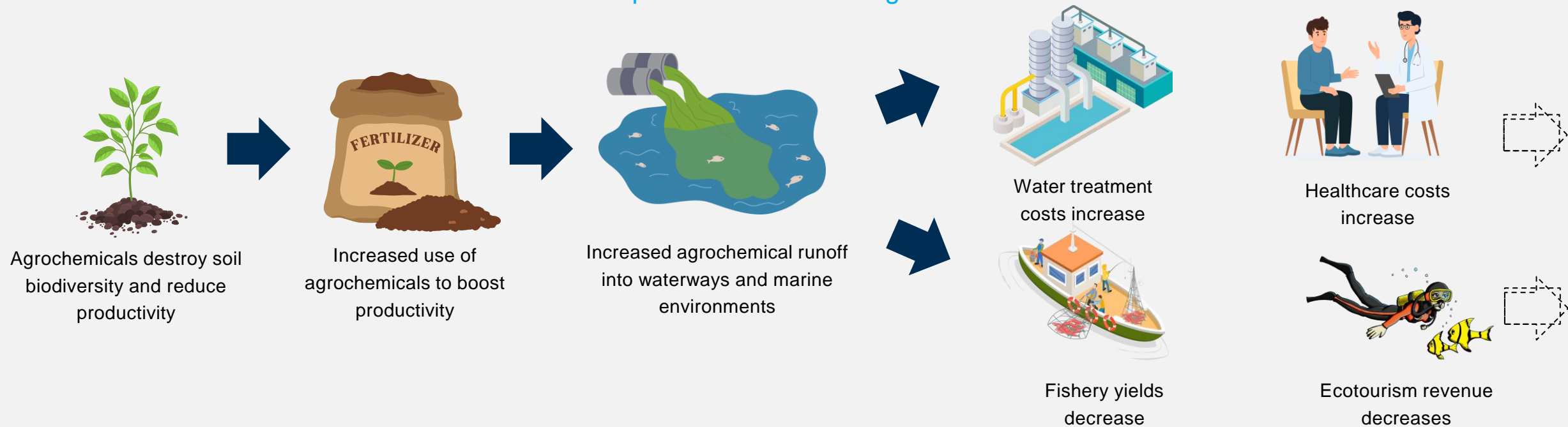
Biodiversity/Nature and Blue Finance within Sustainable Finance




NATURE AND BIODIVERSITY ARE SYSTEMIC TO OUR ECONOMIES

- Current models of unsustainable production practices have led to unprecedented loss of nature and nature's ability to provide inputs and services.
- Loss of nature and its services compounds negative impacts and costs across sectors and economies - e.g. \$10-25 trillion per year losses across food, water and health sectors. (*IPBES Nexus report*).

Example: Conventional Agriculture



Solutions lie in addressing the key drivers of biodiversity loss in economic activity. Conservation alone will not succeed. The financial sector has a critical role to play.



**Biodiversity and Nature Finance =
financing transformation of whole of
economies to regenerative production
and consumption models to halt and
reverse nature loss**

Kunming-Montreal Global Biodiversity Framework:

Whole of economy approach with critical role for the private sector

GBF Targets

“30 x 30” targets: conservation of 30% of land and ocean by 2030



Transformation of economic activity targets to reduce key drivers of biodiversity loss (e.g. pollution, resource overexploitation) and integrate nature-based solutions across sectors



Relevance for the private sector

Non-core business activity

- **Conservation and restoration** beyond compliance offsets

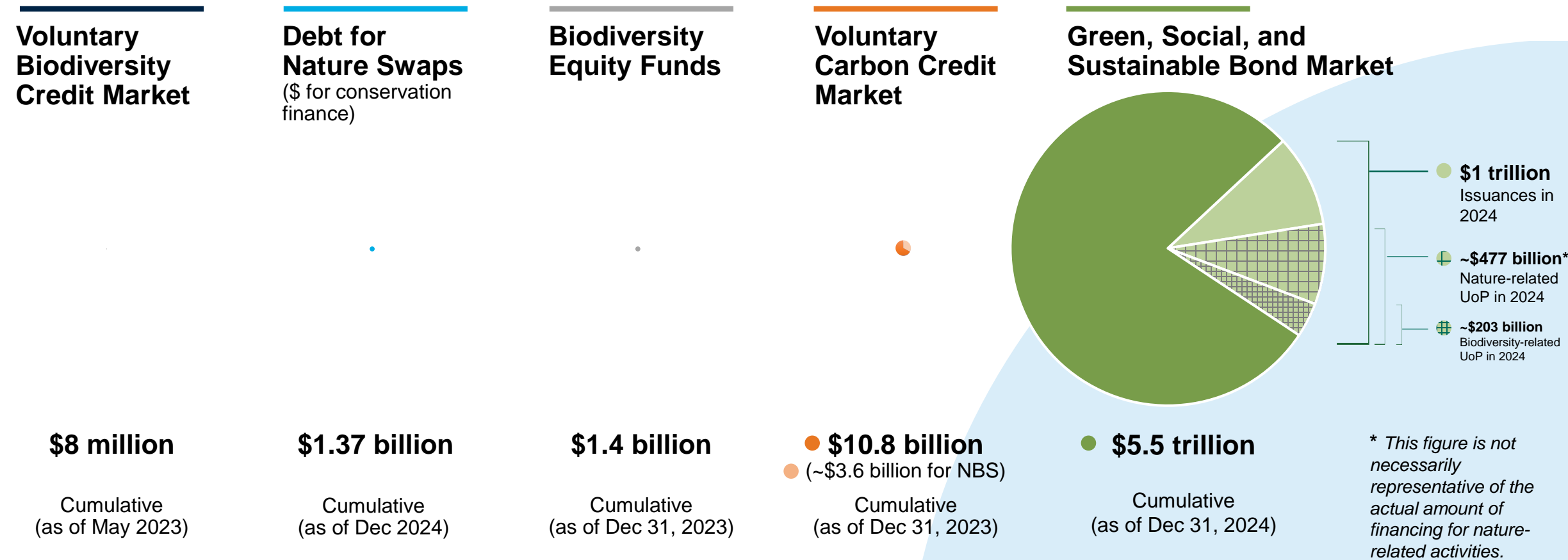


Core business activity

- **Restore at least 30%** of degraded land
- **Stop biodiversity loss** in hot spots
- **Reduce** pollution, spread of invasive species, waste generation, overconsumption
- **Transition** to sustainable production practices
- **Restore** soil health, water and climate regulation
- **Assess and disclose** risks, dependencies and impacts by corporates and FIs
- **Mobilize \$700 bn** per year in financing

FINANCING INSTRUMENTS FOR NATURE

Green, social, and sustainable finance market has the largest potential to meet \$700 bn - \$1.1 tr annual financing gap for nature for whole of economy transformation



Due to data constraints, figures displayed are drawn from different timeframes and refer to different datasets.

IFC'S PIONEERING GUIDANCE ON BIODIVERSITY & NATURE FINANCE FOR SUTAINABLE FINANCE DEBT MARKET & BEYOND

BIODIVERSITY FINANCE REFERENCE GUIDE

BUILDING ON
THE GREEN BOND
PRINCIPLES AND
GREEN LOAN
PRINCIPLES



UPDATED: MAY 2023



Eligible Use of Proceeds for Biodiversity & Nature Finance

under Green Bonds and Green Loans Principles and aligned with Global Biodiversity Framework Targets.

Indicative investments that:

1. Generate **Biodiversity co-benefits**: activities that **target reducing key drivers of biodiversity loss in economic activity**
2. Target **Conservation and Restoration** as **primary objective**
3. Support integration of **Nature-based Infrastructure Solutions** across economic sectors

Available in English, Chinese, Spanish, French, and Portuguese



Biodiversity Finance Metrics for Impact Reporting

Supplement to
IFC Biodiversity Finance
Reference Guide



OCTOBER 2024

Biodiversity Finance Metrics for Impact Reporting for eligible Use of Proceeds to supplement the Guide and enhance transparency and accountability:

1. Draws on and interoperable with **the latest market practices**
2. Applies to **individual projects** and can be applied **across assets and portfolios**
3. Designed for **Use of Proceeds** and can be applied to **Sustainability-linked Financing**
4. Addresses private sector challenges of **attribution, time scales, and data availability** in impact reporting

IFC BIODIVERSITY FINANCE REFERENCE GUIDE: high-level subcategories for eligible activities and examples



I. Biodiversity co-benefits (*reducing direct drivers of biodiversity loss*):

- **Productive land use/ agriculture** (*e.g. reduction in synthetic fertilizer use; intercropping*)
- **Freshwater/ marine sustainable production** (*e.g. deployment of water conservation technologies*)
- **Waste and plastic management** (*e.g. reduction of plastic use in product design; upgrading wastewater treatment plants*)
- **Forestry and plantations** (*e.g. afforestation with native or naturalized species*)
- **Tourism/ ecotourism services** (*e.g. sustainable or ecotourism ventures*)
- **Other** (*e.g. innovation in aviation, trucking, and logistics to avoid transporting invasive species*)



II. Conservation/ Restoration as a primary objective:

- **Conservation land use/ terrestrial habitat conservation** (*e.g. restoring habitats for wildlife, including developing biodiversity corridors; REDD+*)
- **Freshwater and marine habitat conservation** (*e.g. watershed management activities to improve water quality and reduce sedimentation in downstream ecosystems*)



III. Nature-based solutions as infrastructure:

- *E.g. Constructed wetlands for water treatment*
- *E.g. Conservation or rehabilitation of mangroves to reduce flooding and soil erosion, increase coastal resilience and sequester carbon*
- See additional guidance: [*“Catalogue of Nature Based Solutions for Infrastructure Projects”*](#)

SECTORS WITH HIGH POTENTIAL FOR BIODIVERSITY AND NATURE FINANCE



Food and Agriculture



Nespresso suppliers: reforesting coffee plantations with native trees to improve productivity, quality, soil, protect forests



Forestry, Paper, Pulp, Wood Products



BTG Pactual in Brazil: restoration of degraded land via 50% reforestation and 50% commercial timber



Textiles and Wear & Manufacturing



Sanko in Türkiye: expansion of recycled yarn capacity addresses overexploitation of natural resources



Water and Wastewater Utilities



Sabesp: improving sewage system and water supply to clean up the Pinheiros River and Tiête River in São Paulo



Municipalities



Zagreb Bond: financing for biowaste treatment plant for composting and waste sorting plant for plastics and paper



Chemicals



Indorama Ventures (Asia) Blue Loan: PET recycling to manage and reduce plastic waste



Mining



Boston Metals pilot plant in Brazil: RE electrified process to extract valuable metals from mining waste



Transport



MSC Shipping: installation of filters on ballast water tanks to prevent spread of alien invasive species



Renewable energy



Nature-based solutions such as Agrivoltaics

WORLD'S FIRST BIODIVERSITY BOND WITH A PRIVATE BANK: BBVA Colombia

IFC Financing Amount: **\$35 million**

Financial Instrument: **\$70 million** Use of Proceeds Biodiversity Bond issued by BBVA Colombia

Project Description:

- **Financing to support BBVA's biodiversity finance transactions** aligned with eligible activities articulated in the IFC Biodiversity Finance Reference Guide
- **Advisory support and capacity building to establish eligibility criteria and reporting indicators for eligible activities** that help protect, maintain, or improve biodiversity and ecosystem services, and promote sustainable management of natural resources.

Use of Proceeds: projects that **address the key drivers of biodiversity loss**, particularly focused on reforestation, regeneration of natural forests on degraded lands, climate-smart and regenerative agriculture, and restoration of wildlife habitats.



www.ifc.org/biodiversityfinance



SBFN Webinar Series

Blue Finance



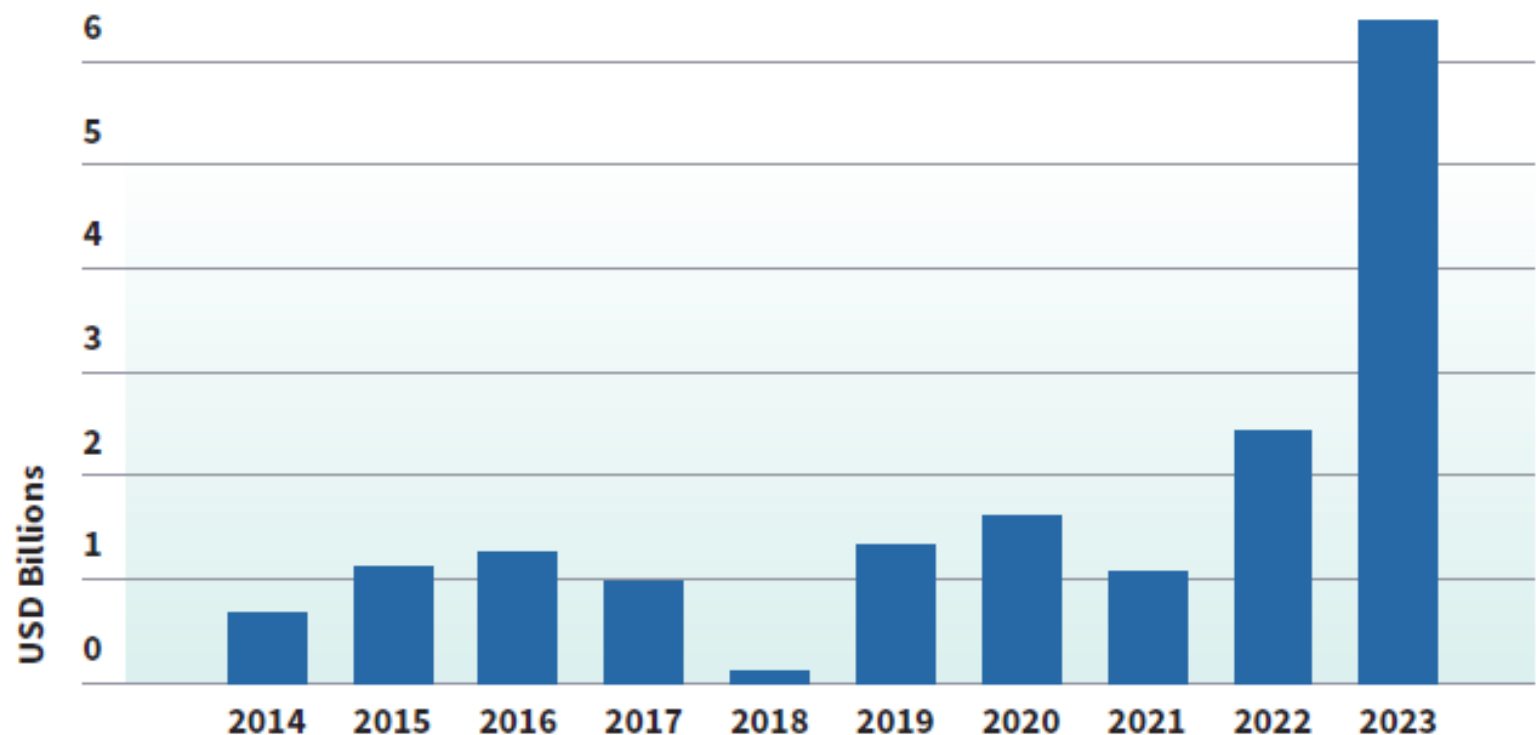
Creating Markets, Creating Opportunities

Pushkala Ratan

Principal | Asia Climate Finance Lead | Global Blue Finance Lead
Financial Institutions Group

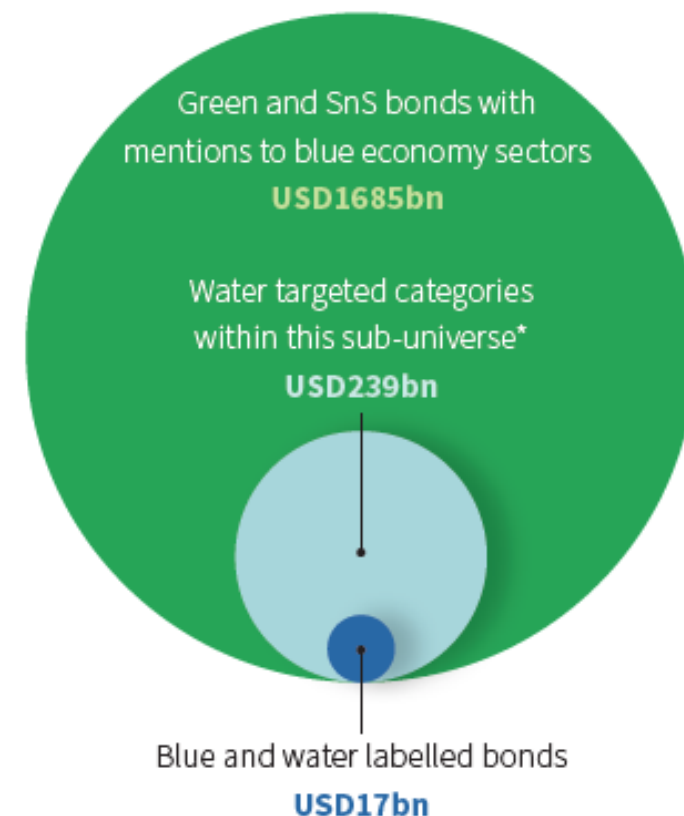
BLUE FINANCE MARKET TRENDS

Blue and water labelled debt crosses the USD6bn mark in 2023, reaching USD17bn in cumulative volume



Source: Climate Bonds Initiative

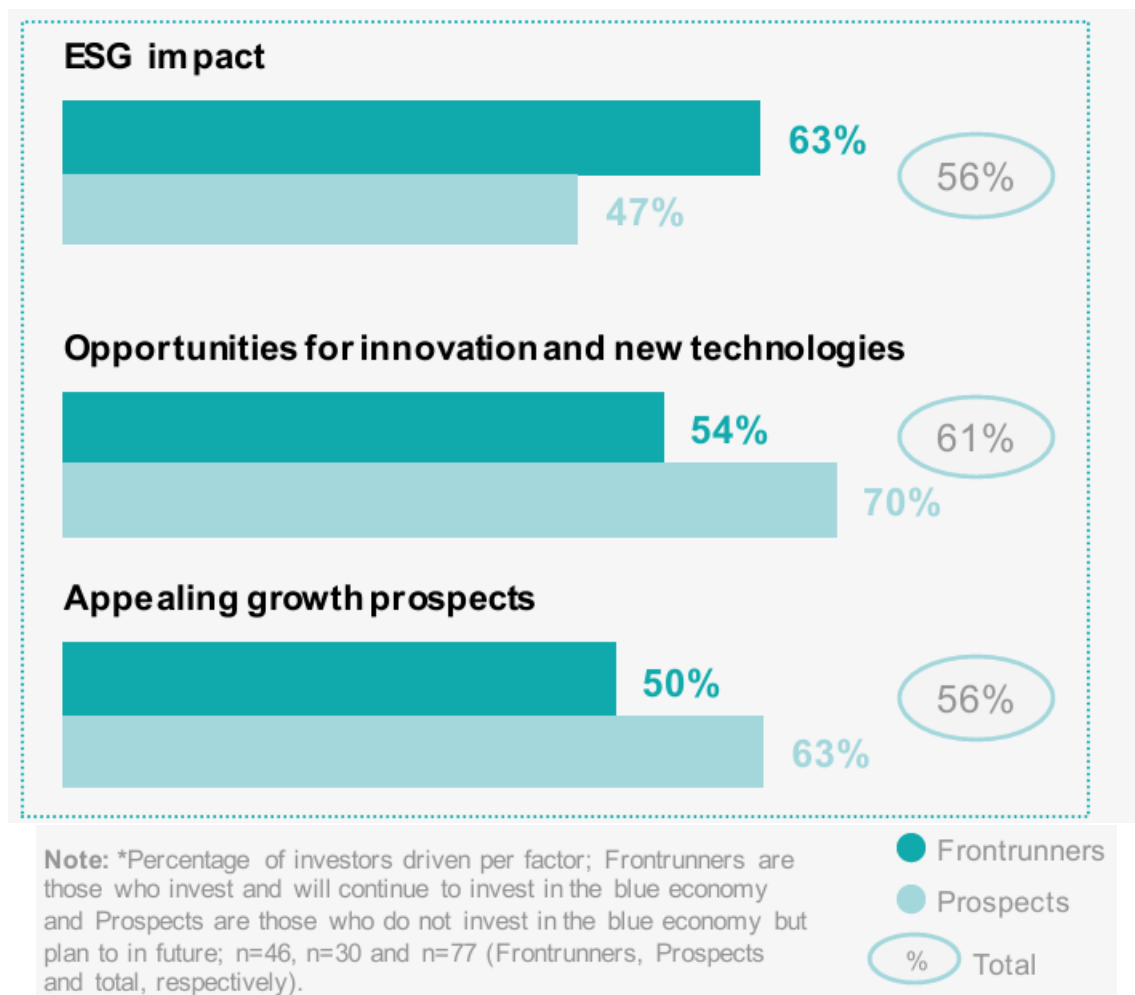
Blue and water labels can be used more often by GSS+ issuers targeting blue sectors



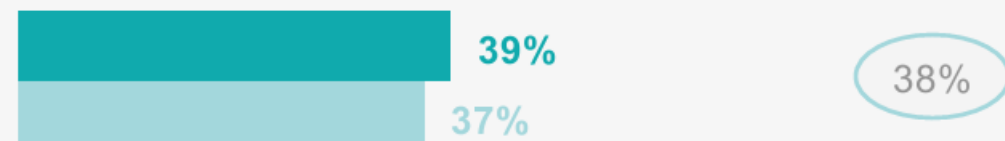
Source: Climate Bonds Initiative

INVESTORS' PERCEPTIONS

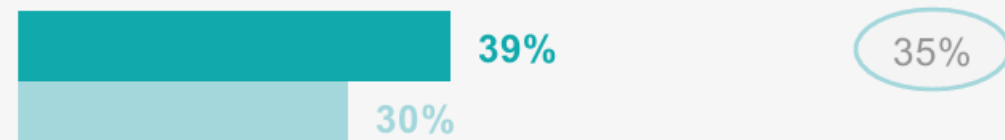
Drivers of investment in the Blue Economy



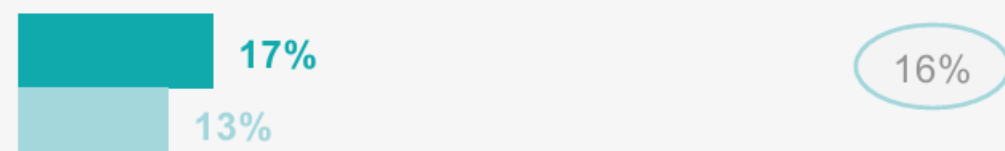
Contribution to the UNSDGs



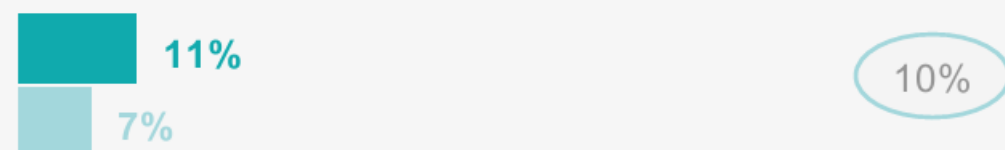
Positive effect of blue economy investments on financial performance (confidence in the business case for investing in the sustainable blue economy)



Portfolio diversification



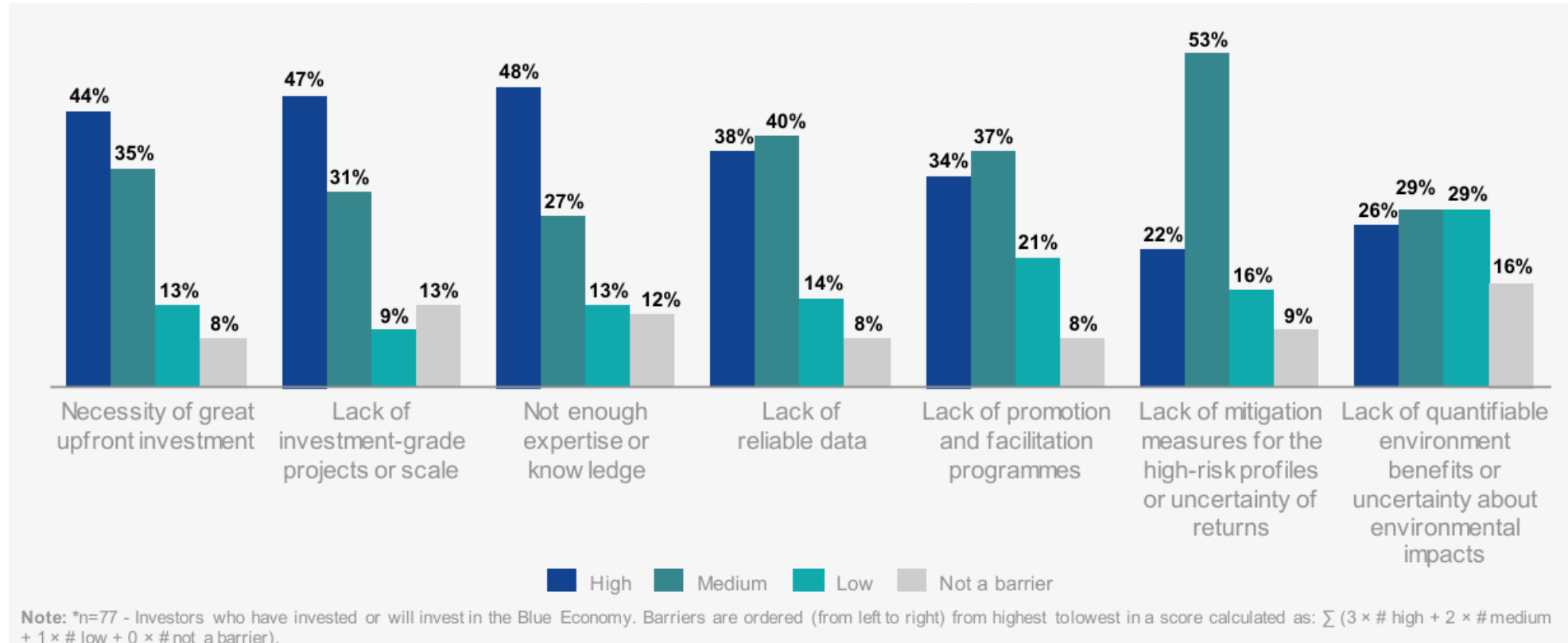
Public incentives (National Governments, EIB, EIF)



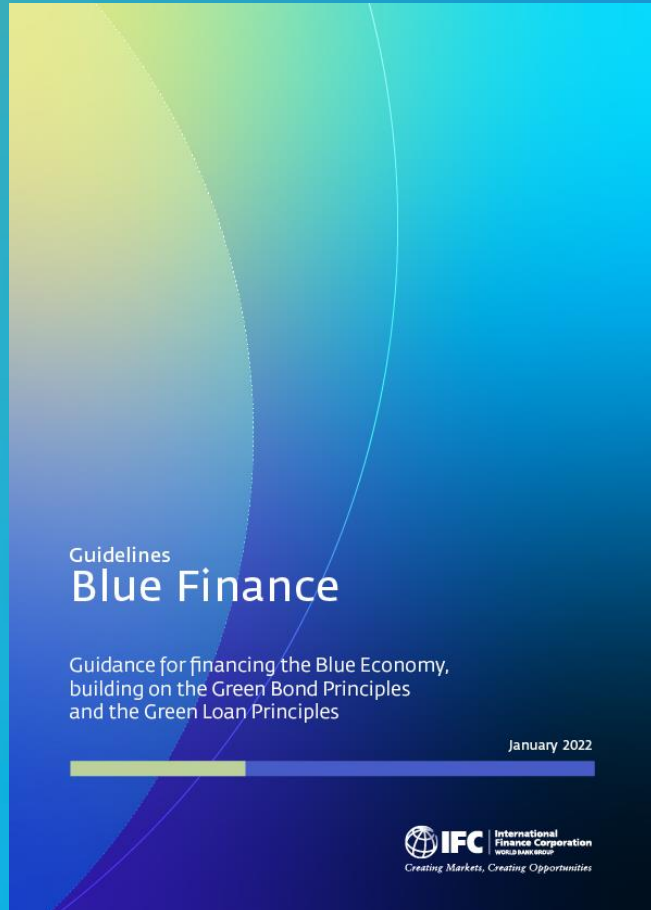
Source: [BlueInvest \(2023\): new investor report features an ocean of investment opportunities in the sustainable blue economy - European Commission](#)

INVESTORS' PERCEPTIONS

Barriers to investment in the Blue Economy



Source: [BlueInvest \(2023\): new investor report features an ocean of investment opportunities in the sustainable blue economy - European Commission](#)



Guidelines

that identify a list of eligible use of proceeds to support blue bond issuances and blue lending

Financing

for blue investments, leading to some of the first in-the-market transactions



addressing sustainable water management and ocean protection

IFC BLUE GUIDELINES 2022

IFC Blue finance encompasses investments that address sustainable water management and ocean protection (SDG 6 and 14)

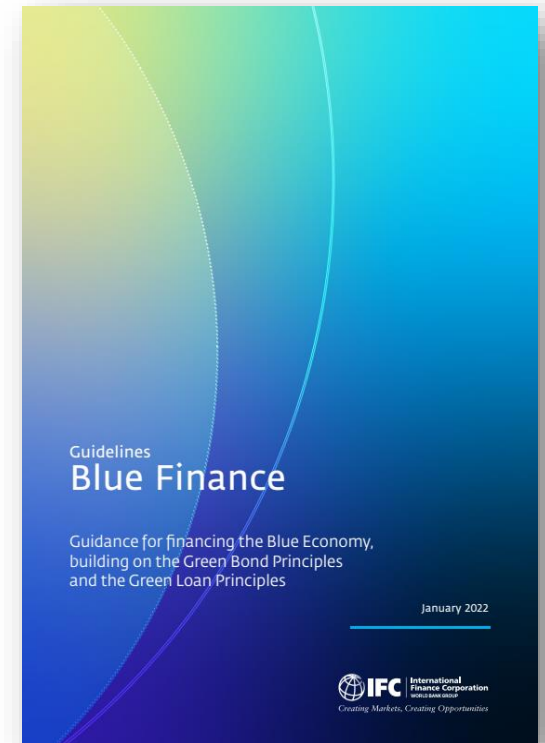
The guidelines identify a list of eligible use of proceeds to support blue bond issuances and blue lending. Its implementation across IFC investments and in the market have been leading to some of the first in-the-market transactions.



- A. Water supply
- B. Water sanitation



- C. Ocean-friendly and water-friendly products
- D. Ocean-friendly chemicals and plastics-related sectors
- E. Sustainable shipping and port logistics sectors
- F. Fisheries, aquaculture, and seafood value chain
- G. Marine ecosystem restoration
- H. Sustainable tourism services
- I. Off-shore wind



IFC Blue Investments

Totalizing \$2billion

\$200million

The first blue sustainability-linked loan will fund the development and reconstruction of two Hotels located near marine protected areas in Croatia.

\$25million

Türkiye's first blue bond issuance by QNB Bank Türkiye for projects supporting biodiversity, sustainable fisheries, and sustainable tourism, sectors crucial for Türkiye's coastal economy.

\$70million

Blue loan in China to INTCO Recycling

\$100million

The first blue financing loan in Central and Eastern Europe for Banca Transilvania SA (BT), will increase funding for blue economy projects in Romania.

\$50million

First blue borrowing by a financial institution in India (Axis Bank) and the first blue investment by IFC in India.

\$150million

Syndicated blue loan in China to Bank of Qingdao

\$150million

First blue bond in Colombia issued by BBVA to support the protection of the country's water resources

\$60million

First blue loan in Turkey to Yapi Kredi Leasing, supported by co-financing from institutional investors through MCPP.

\$300million

IFC's first ever blue loan for Thailand's Indorama Ventures and exclusively focused on addressing marine plastic pollution.

\$50million

First blue bond in Vietnam to SeABank

\$79million

First blue bond from the private sector in LAC issued by Banco Internacional in Ecuador

\$100million

First blue bond in the Philippines issued by BDO Unibank.

\$160million

Sustainable loan to Produbanco to support the blue economy in Ecuador

\$150million

Blue Loan to (SABESP), one of the largest water and sanitation companies in the world to help increase access to sewage collection services and improve water quality in the state of São Paulo.

\$50million

First blue bond by a commercial bank in Thailand issued by TMBThanachart Bank (TTB).

\$15million

First blue loan in Indonesia to Shinhan to fund projects in marine or water resources-related industries.

\$52million

Blue Loan to (SANASA), to improve water quality and increase access to sanitation services in Brazil

\$107million

Blue Loan to Buquebus to build the world's largest electric ferry (e-ferry) , which will connect Buenos Aires, Argentina, and Colonia del Sacramento, Uruguay.

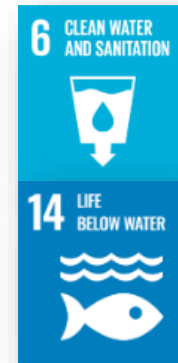
\$50million

Blue bond issued by Bank of Ayudhya (BAY) dedicated to supporting the development of the Bank's blue assets.

FIRST BLUE BOND STRATEGY TO SUPPORT THE SUSTAINABLE BLUE ECONOMY ACROSS EMERGING MARKETS

T. Rowe Price and IFC have announced a partnership to create a global blue bond investment strategy to mobilize international capital from eligible investors to support blue-labeled investments in emerging markets globally through blue bonds issued by financial institutions and real sector companies

- **Supporting the least funded UN's Sustainable Development Goals (SDG):**
 - SDG 6 - "ensure availability and sustainable management of water and sanitation"
 - SDG 14 - "conserve and sustainably use the oceans, seas and marine resources".
- **Aligned with ICMA/LMA Green Bond/Loan Principles**
- **Robust blue investment guidelines** to assess eligibility and report on impact indicators
- **Technical Assistance Facility (TAF)**, managed by IFC, designed to increase the quality and quantity of blue bond issuance in emerging markets



SECTOR CASE STUDY: WATER SUPPLY, TREATMENT AND WASTEWATER PLANTS

IFC's Blue Loan to SABESP (Brazil) to Improve Access to Water and Sanitation

- **IFC's Blue Finance Guidelines Categories:** A – Water Supply and B – Water Sanitation
- **IFC' role:** advisory and investment
- **Amount (USD):** \$150m
- **Use of Proceeds (UoP):** funds to be used for investments that protect the ocean, natural water resources and urban water bodies
- **Programs (4):**
 - 1. Pinheiros' River Clean-up and 2. Sanitation Improvements in Coastal Areas
Focus: sewage network construction, network interconnections and connection of households, and social work with local communities
 - 3. Water Supply Infrastructure in the Coastal Area and 4. Water Supply Infrastructure in the Metropolitan Area
Focus: providing water distribution flexibility and increasing water security
- **Positive impacts:** improve water quality and expanding sewage collection and treatment in the poorest neighborhoods of São Paulo, reduction of pollution in river Pinheiros, increase competitiveness in the water sector and promote inclusive growth Brazil



SECTOR CASE STUDY: OCEAN-FRIENDLY CHEMICALS AND PLASTICS

INDORAMA – RECYCLING PET IN THAILAND

- A landmark **\$300 million financing package** has been arranged by IFC for Indorama Ventures Global Services Limited (IVGS), a subsidiary of Indorama Ventures Public Company Limited (IVL), a leading global manufacturer and recycler of PET resin.
- The funding will help IVL **increase its recycling capacity** in Thailand, Indonesia, Philippines, India, and Brazil—countries which are grappling with mismanaged waste and serious plastic waste in the environment—and invest in renewable energy and resource efficiency projects.
- This marks **IFC's first blue loan exclusively focused on addressing marine plastic pollution**. A Blue Loan is an innovative instrument under Green Loans, whereby the funds raised are certified and tracked exclusively for projects that support a Blue Economy.



MULTI-SECTOR CASE STUDY: WATER CONSERVATION, PLASTICS RECYCLING AND OTHERS

IFC's Blue Bond to BDO to Support Blue Economy in the Philippines

- **IFC's Blue Finance Guidelines Categories:** Multiple
- **IFC' role:** advisory and investment (subscriber). IFC will also help BDO identify projects that can be funded by the Blue Bond while building its capacity in terms of monitoring the impact of these projects.
- **Amount (USD):** \$100m
- **Use of Proceeds (UoP):** funds to provide support to critical areas such as water conservation, wastewater treatment, plastic recycling, sustainable tourism, fisheries, and sustainable seafood processing.
- **Highlight:** The first blue bond issuance in the Philippines
- **Positive impacts:** This issuance will expand financing for projects that help prevent marine pollution and preserve clean water resources, while supporting the country's climate goals. IFC's role is likely to further inspire confidence among other investors, promoting market competition.





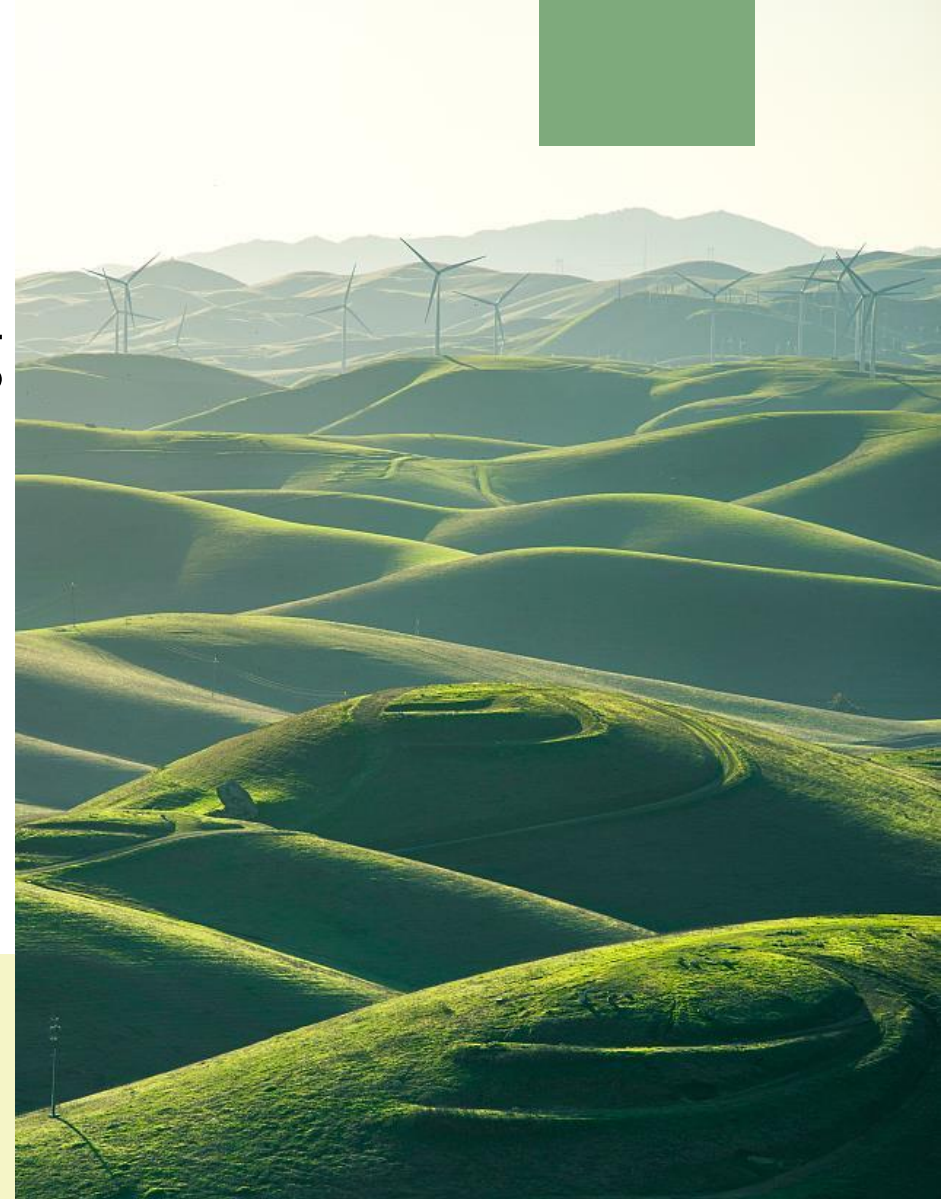
THANK YOU

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China's Exploration in Developing Biodiversity Finance Taxonomy

Wang Xin
February 25, 2025



| CONTENTS

- **Background**
- **Progress**
- **Key Challenges and Responses**

I . Background

In recent years, China has actively promoted the implementation of the Kunming-Montreal Global Biodiversity Framework and expanded financial support for biodiversity to bridge funding gaps in conservation efforts.

However, the lack of a unified, scientific and user-friendly classification framework and quantitative standards remains a key barrier to mobilizing diverse capital for nature and biodiversity initiatives.



Kunming-Montreal Global Biodiversity Framework been adopted at the UN biodiversity conference,COP15

At present," China National Biodiversity Conservation Strategy and Action Plan (2023-2030)" proposes to establish a diversified investment and financing mechanism for biodiversity conservation, but the implementation path isn't very specific and clear.

China's classification standards such as the “The Green Industry Guidance Catalogue" and the "Green Bonds Endorsed Projects Catalogue" formulated for green finance and transition finance directly or indirectly cover the content of biodiversity conservation.

However, the relevant indicators are still not perfect, and some classification standards lack operability .

Compiling a biodiversity finance catalogue (hereinafter referred to as the "catalogue") can reduce the difficulty for financial institutions and relevant market entities to understand and identify relevant activities, and optimize the efficiency of financial resource allocation in the field of biodiversity conservation and utilization.

中国生物多样性保护战略与行动计划
(2023—2030 年)

附件 1

绿色产业指导目录（2019 年版）

1 节能环保产业

1.1 高效节能装备制造

1.1.1 节能锅炉制造

1.1.2 节能窑炉制造

1.1.3 节能泵及真空设备制造

1.1.4 节能型气体压缩设备制造

1.1.5 节能型液压气压元件制造

1.1.6 节能风机风扇制造

1.1.7 高效发电机及发电机制造

附件

绿色债券支持项目目录（2021年版）

领域	项目名称	说明/条件
一、节能环保产业		
1.1 能源	1.1.1 节能锅炉制造	高炉煤气、生物质成型燃料、固体可燃废弃物燃料电站锅炉、工业锅炉、船用锅炉等装备制造及贸易活动。其中，工业锅炉能效达到或优于《工业锅炉能效限定值及能效等级》（GB 24100）能效标准 2 级及以上能效等级。其他锅炉能效达到或优于相关设备技术规范能效指标目标值要求。所有锅炉设备都需要符合《锅炉大气污染物排放标准》（GB 13271）以及地方对锅炉排放的要求。
1.1.1.1 节能窑炉制造	1.1.1.1 节能窑炉制造	采用高温空气燃烧、富氧燃烧、余热利用等节能技术的冶金加热炉、非电冶金处理用炉、工业电炉、工业窑炉等节能型窑炉装备制造及贸易活动，以及节能型炉用燃烧器等设备制造及贸易活动。
1.1.1.2 节能泵及真空设备制造	1.1.1.2 节能泵及真空设备制造	节能泵、节能型真空干燥设备、节能型真空炉等装备制造及贸易活动。其中，节能泵设备能效指标达到或优于相关能效标准节能评价价值或一级能效。
1.1.1.3 节能型气体压缩设备制造	1.1.1.3 节能型气体压缩设备制造	节能型空气压缩机、空气调节器用压缩机等装备制造及贸易活动。节能设备能效等级达到或优于《容积式空气压缩机能效限定值及能效评价》（GB 19153）、《空气调节器用全封闭型电动机-压缩机能效限定值及能效等级》（GB 35971）等国家能效标准一级能效。其他节能型气体压缩设备，需满足对应能效要求。
1.1.1.4 节能型液压气压元件制造	1.1.1.4 节能型液压气压元件制造	节能型液压和气压动力机械及元件制造及贸易活动。

II . Progress

March 2024

A working group of the People's Bank of China was formed, and the research and compilation work of the catalogue was launched.

Conducted a systematic comparison of relevant documents and progress of related standards at home and abroad, and determined the basic ideas for the screening of items in the catalogue and the setting of indicators.

Carried out investigations in Sichuan, Zhejiang, and Yunnan provinces, and summarized the practices of financial support for biodiversity conservation and utilization.

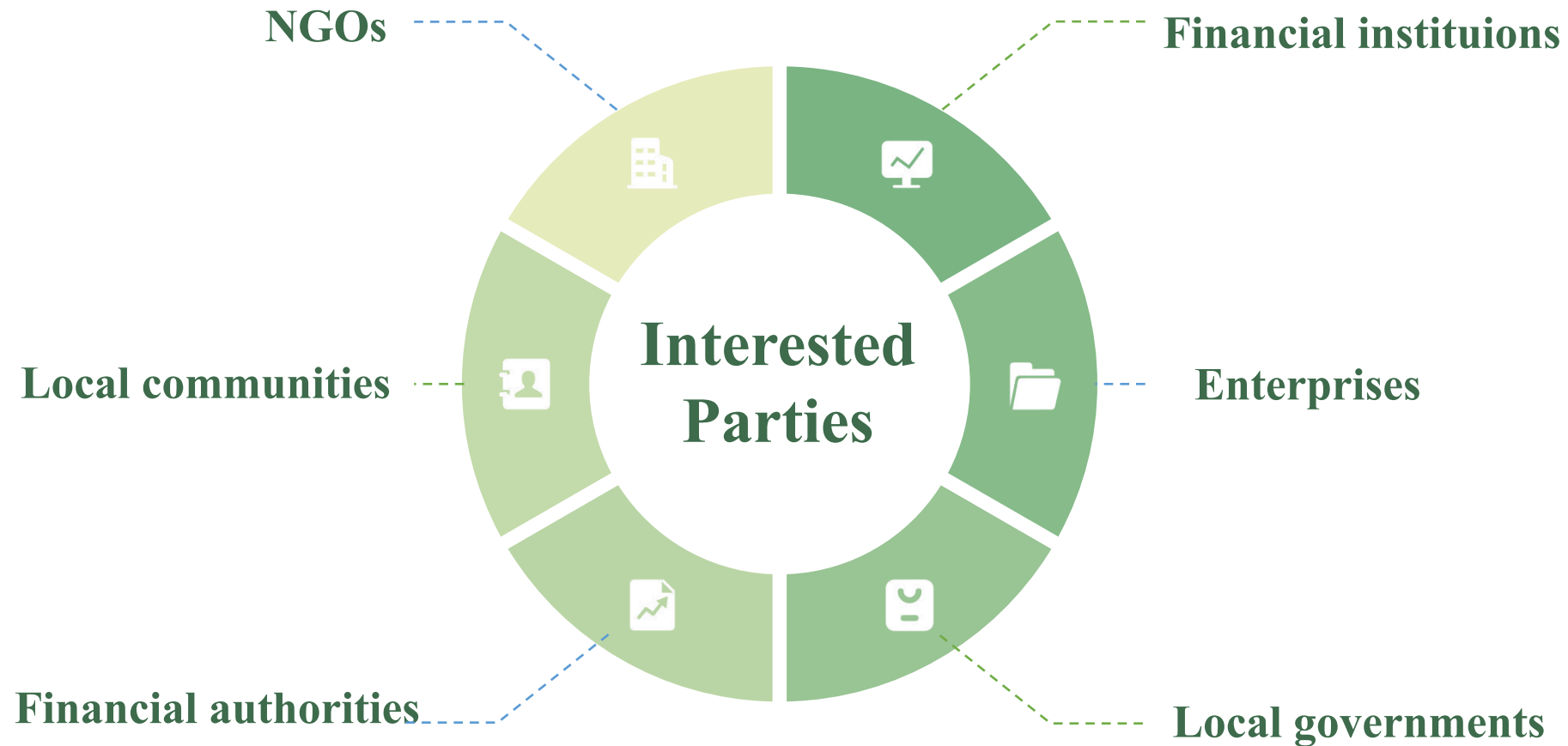
Widely solicited opinions from international institutions such as the IFC, government departments, and financial institutions.

《生物多样性金融目录》 (初稿)

1 生物多样性及生物自然资源可持续经营与管理	4
1.1 可持续农业	4
1.1.1 农用地污染治理生物修复	4
1.1.2 高效低毒低残留农药生产与替代	4
1.1.3 农作物病虫害绿色防控	5
1.1.4 退耕还林还草和退牧还草工程建设	5
1.1.5 绿色农业生产	6
1.1.6 高效节水灌溉	6
1.1.7 立体种植	7
1.1.8 农业气候韧性提升	7
1.1.9 现代农业种业及种质资源保护	7
1.1.10 种质资源培育	8
1.1.11 再生农业及土地管理	8
1.1.12 替代农业	9
1.1.13 有机、绿色等认证农业	9
1.1.14 农业绿色供应链	9
1.1.15 农业环境监测	10
1.1.16 农业技术创新、系统建设和运营	10
1.2 水资源可持续利用及生产	10
1.2.1 水资源高效及循环利用	10
1.2.2 水资源高效及循环利用装备研发与制造	11
1.2.3 水体保护及地下水污染防治	12
1.2.4 城市（含县城）黑臭水体整治	12
1.2.5 重点行业水污染治理	13
1.2.6 工业园区水污染集中治理	13
1.2.7 城镇和农村污水处理设施及再生利用设施的建设运营和改造	14
1.2.8 海绵城市建设和运营	14

Biodiversity Finance catalogue (First Draft)

Who Use the catalogue?



6 Principles

1

Principle of no significant harm.

Projects included in the scope of biodiversity finance support should not cause significant harm to various sustainable development goals.



2

Principle of prudent utilization.

When formulating and implementing corresponding management and investment decision-making activities according to the catalogue, the interests of all parties should be comprehensively balanced to ensure a just transition for the affected regions or communities.



3

Principle of consistency.

The scope of support in the catalogue should be consistent with the objectives set in the Convention on Biological Diversity, the Kunming-Montreal Global Biodiversity Framework, and the China Biodiversity Conservation Strategy and Action Plan, and should be coordinated with local and industrial policies.



6 Principles

4

Principle of risk prevention.

In activities related to the development and utilization of biodiversity, risk prevention measures should be taken.



5

Principle of transparency and certification.

It is encouraged to disclose biodiversity information, and the ecological and environmental benefits of relevant activities should be certifiable by a third party to ensure the traceability and accountability of investment activities.



6

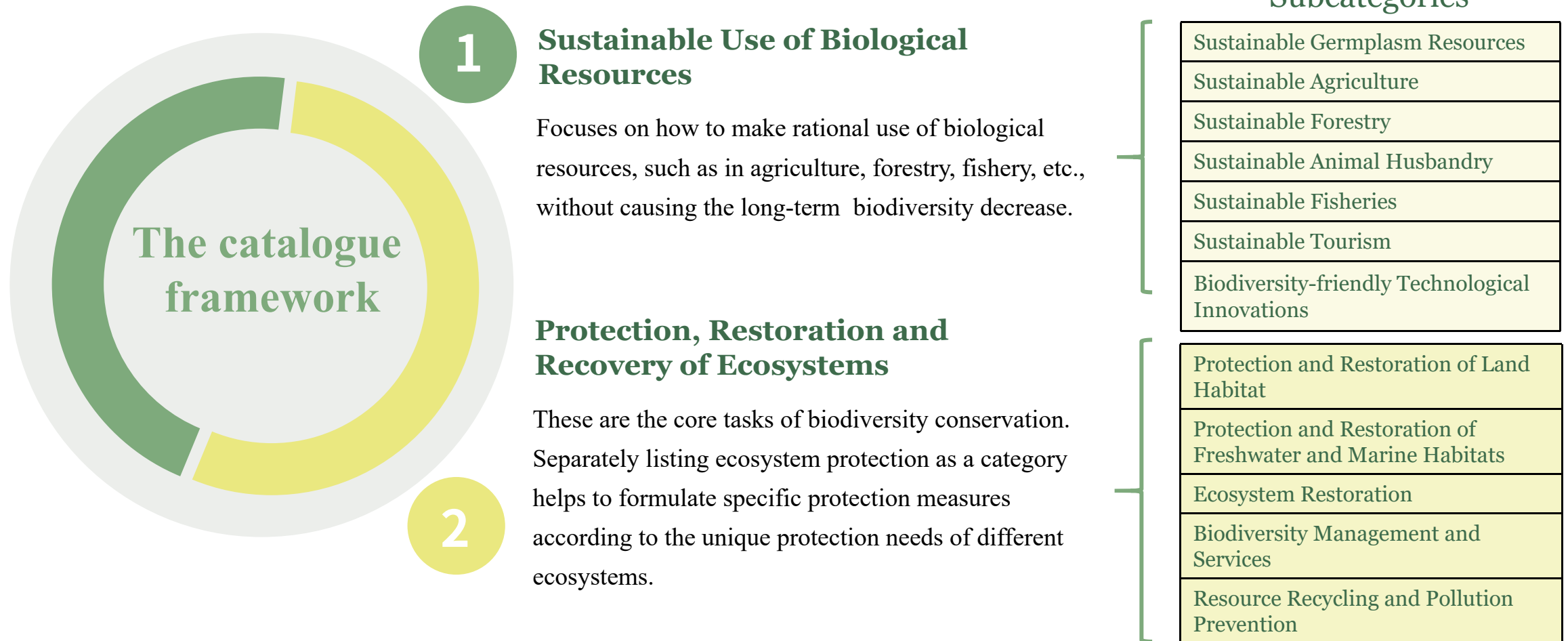
Principle of dynamic adjustment

The content of the catalogue should be regularly reviewed and updated according to the latest policy changes and other factors.

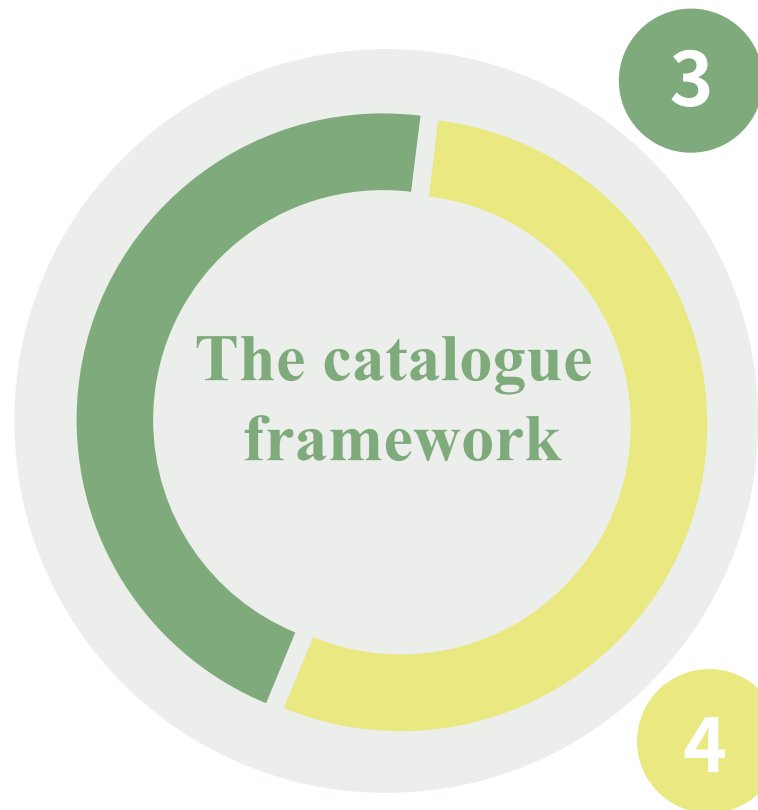


Framework

Currently, the catalogue framework includes 4 major categories, 19 subcategories, and 67 specific activities.



Framework



3

Nature-based Solutions (NbS)

Nature-based solutions (NbS) is an emerging international concept of ecological protection, emphasizing the use of the power of natural ecosystems to solve sustainable development problems. Separately classifying NbS helps to promote the implementation of this concept in China.

4

Other Biodiversity-friendly Activities

The field of biodiversity conservation and utilization is constantly evolving, and an open-end classification is needed to cover a wider range of biodiversity conservation activities.

Subcategories

Construction and Operation of Green City Infrastructure

Construction and Operation of natural or ecological infrastructure

Ecosystem related methods for specific problems

Biodiversity friendly infrastructure

Biodiversity friendly mining

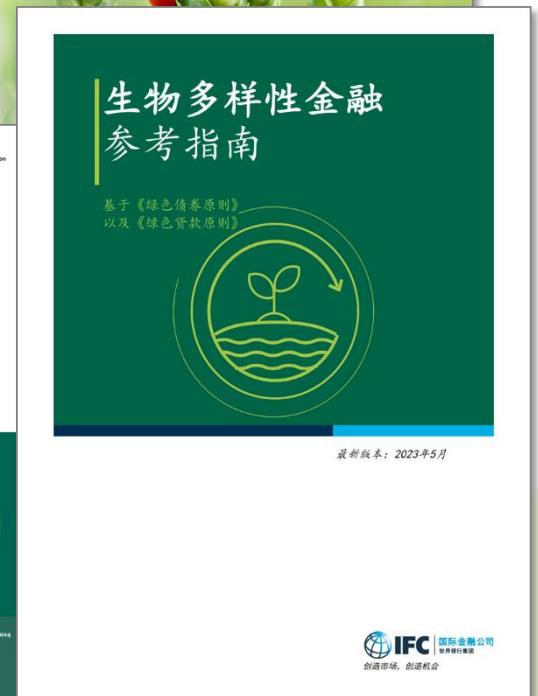
Biodiversity friendly energy construction and operation

Biodiversity friendly shipping

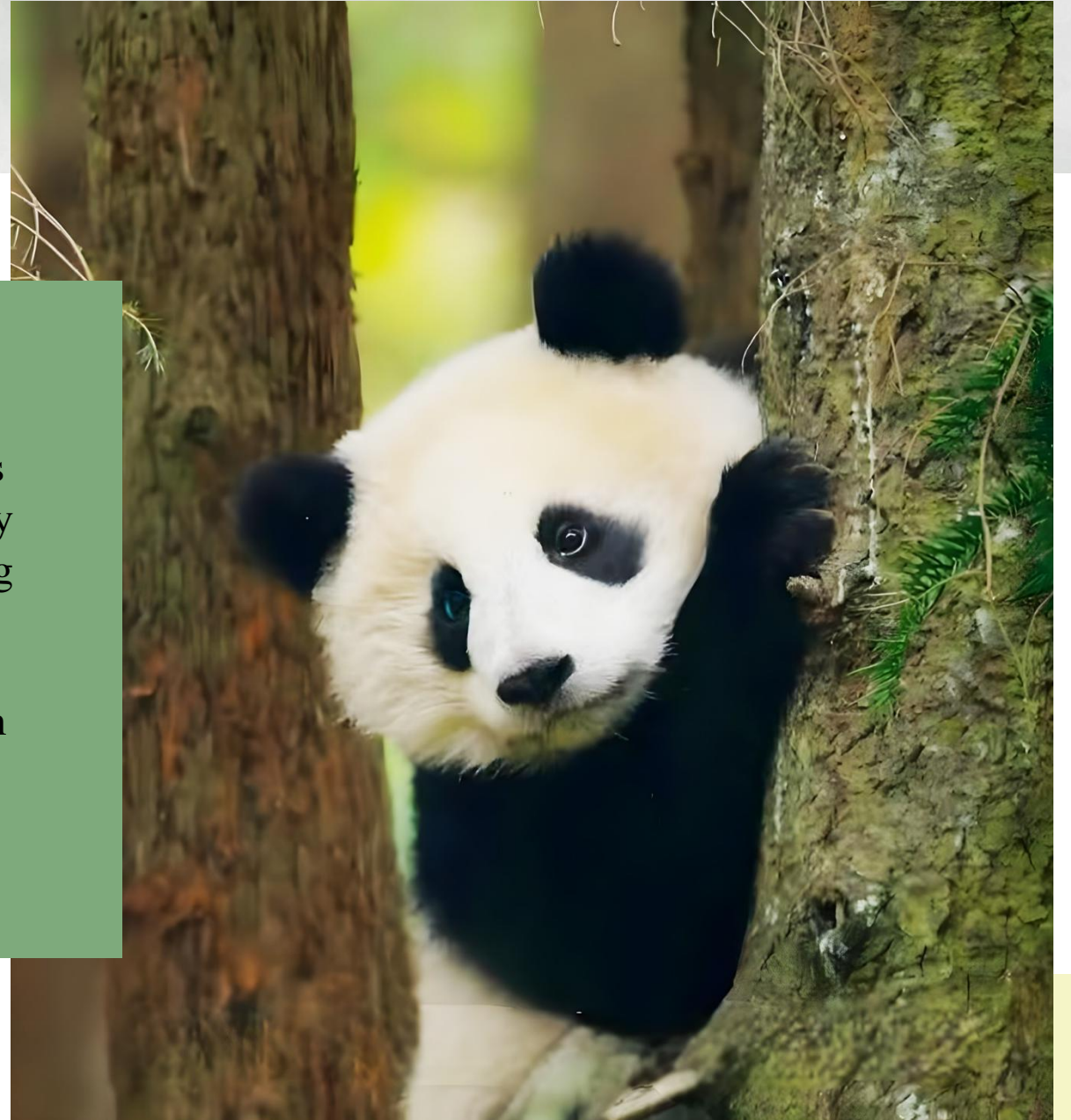
References

Reference List of international standards:

- **Biodiversity Finance Reference Guide** (IFC) ;
- **Green Bond Principles** (ICMA);
- **Green Loan Principles** (LMA/APLMA/LSTA);
- **EU Taxonomy for Sustainable Finance**;
- ...



- Currently, the compilation work of the catalogue is being accelerated. We plan to develop a relatively mature version of the catalogue and its supporting documents in the first half of 2025.
- Pilot the catalogue in China's green finance reform pilot zones.



III. Key Challenges and Responses

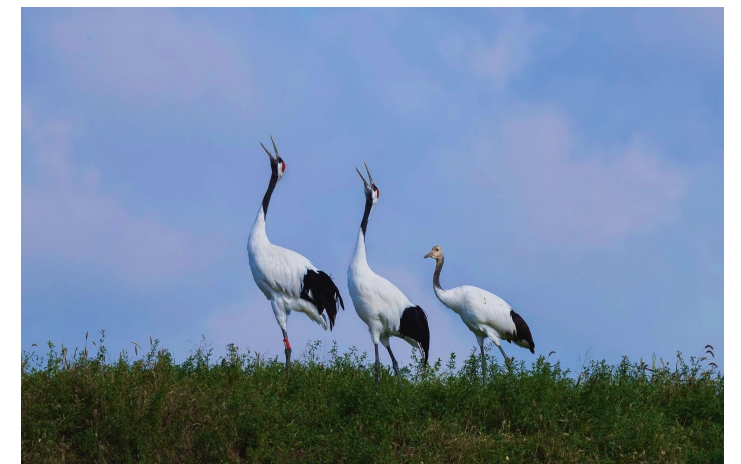
Challenges

The main challenge we encountered during the compilation of the catalogue is the difficulty in defining and measuring biodiversity conservation activities.

Biodiversity is a complex and broad concept that encompasses species diversity, ecosystem diversity, and genetic diversity, etc. Quantifying and monitoring these indicators require professional support.

Moreover, the characteristics of biodiversity and the needs for its conservation and utilization vary across different regions, making it difficult to formulate a unified measurement standard from a technical perspective.

How to refine actionable and quantifiable biodiversity performance indicators based on affordable economic costs and in combination with ecological methods is the main challenge we are facing at present.





Responses

- **Widely recruited interdisciplinary experts from diverse backgrounds.**
- **Closely aligning with the relevant industry regulatory authorities.**
- **Drafting the “Instructions for Using the Catalogue”.**

Next steps

1

Capacity building and knowledge sharing

We look forward to receiving professional advice from all parties, engaging in collaborative research, and fostering the exchange of practical experiences in the field of biodiversity finance.

Standard comparability and interoperability

We will continuously improve the comparability and interoperability of the catalogue with important international biodiversity finance standards such as the IFC's "Biodiversity Finance Reference Guide".

2



Next steps

3

Innovation of financial instruments and services and the introduction of various types of capital.

We will explore blended finance instruments and promote co-financing among international environmental funds, multilateral development banks (MDBs), domestic development banks, and commercial financial institutions.

Global Advocacy

We will promote the integration of biodiversity finance into the global agenda and make biodiversity finance an indispensable part of the sustainable finance policy framework.

4



THANK YOU!

