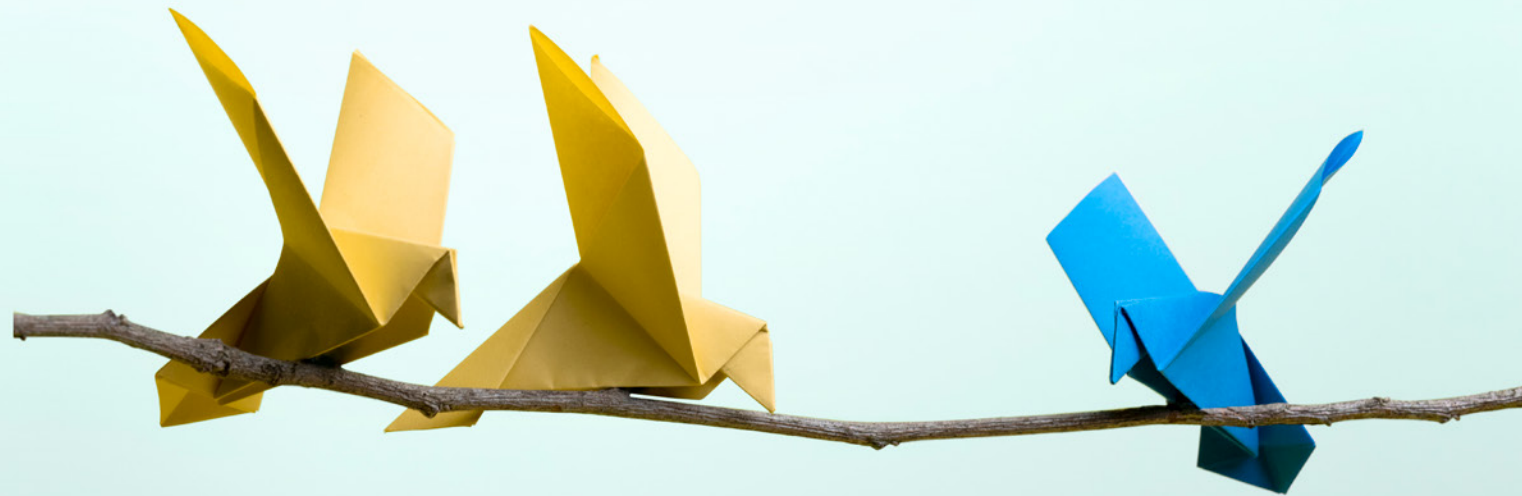


Biodiversity Report

INTRODUCTION	33
Biodiversity Governance	35
Governance for Managing Biodiversity	35
Biodiversity Strategy	36
Participation in Biodiversity-related Initiatives and Application of the LEAP Methodology	36
- Locate (Interface with Nature)	38
- Evaluate (Dependencies and Impacts)	40
- Assess (Material Risks and Opportunities)	42
- Prepare (Response and Disclosure)	43
Management of Biodiversity Risks and Impact	44
Risk Review Process and Monitoring Areas of Concern	44
Biodiversity Risk Management based on the Equator Principles	45



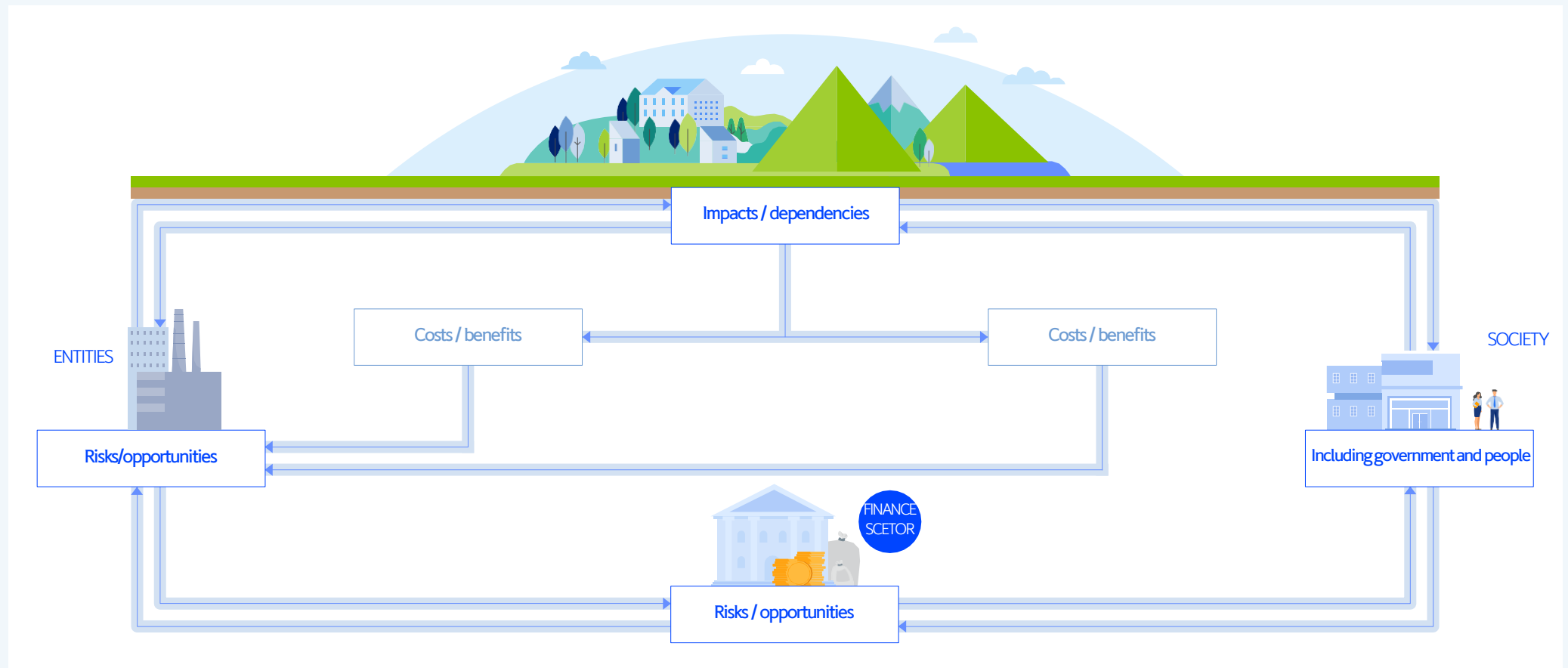
* The TNFD plans to release the final framework in September 2023, and this report is based on the beta version of the framework (v0.4) released in March of the same year.

INTRODUCTION

Taking the limited planetary resources into account, it is clear the times call for efforts to protect and restore biodiversity. Worsening extreme weather events, habitat destruction due to overdevelopment, and species loss due to overfishing threaten a sustainable future for humanity.

In this context, biodiversity is a material issue that directly and indirectly impacts companies' business operations and supply chains. Increasing demands in regards to heightening accountability and legislation, scrutiny of supply chain practices and consumer preferences show that the role of financial institutions (banks, insurers, asset managers, investors, etc.) in addressing biodiversity issues are becoming increasingly important.

The conceptual map of biodiversity in companies and markets¹⁾, on dependencies and impacts on natural capital²⁾



*Source: reorganization of UNEP-FI(2020), Beyond 'Business as Usual': Biodiversity Targets and Finance Figure1

- 1) The variability among living organisms in all locations, including terrestrial, marine, and other aquatic ecosystems and their ecological complex. It includes diversity within species, between species, and between species and ecosystems.
- 2) Renewable or non-renewable natural resources (e.g., plants, animals, air, water, soil, minerals) that are combined to provide benefits to people.

INTRO

Financial institutions can accelerate biodiversity recovery in society at large by allocating capital to biodiversity-related projects and financially supporting related initiatives or campaigns. On the other hand, biodiversity issues can pose physical, transition, and systemic risks to companies they lend to or invest in, which can impact their portfolios, leading to weakened financial stability and macroeconomic deterioration. Therefore, financial institutions should identify, analyze, and manage their biodiversity-related dependencies, impacts, risks, and opportunities to mitigate their potential impacts, and integrate them into their decision-making processes to build a sustainable financial system.

Shinhan Financial Group clearly recognizes the importance and urgency of biodiversity issues and the potential impact that the loss of natural capital can have on the various business areas in which Shinhan operates and the society at large. At the same time, we believe that Shinhan's biodiversity-friendly activities can contribute to a better environment for more people and ecosystems, and we are actively engaging in non-financial support such as the creation of urban forests. Since joining the TNFD Forum in March 2022, we have been upgrading our biodiversity management system and expanding related activities. Through this report, we would like to share with our stakeholders our approach to managing biodiversity and the results of our analysis of the Jeju Hallim Offshore Wind Farm, which is part of UNEP FI's TNFD pilot. We will also continue to disclose Shinhan Financial Group's activities, achievements, goals, and plans to protect biodiversity in the future.

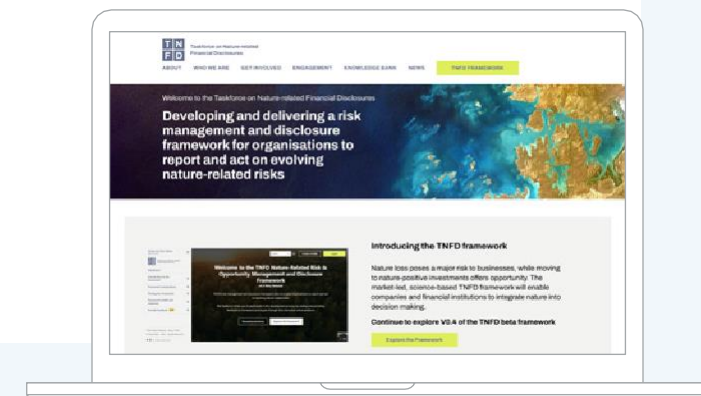
Taskforce on Nature-related Financial Disclosures (TNFD)

TNFD was founded in 2021 at the initiative of international organizations including UNEP FI, UNDP, and WWF in response to the growing need to factor natural capital into financial and business decisions. TNFD's members manage more than \$20.6 trillion in assets and are working to develop a disclosure framework for companies and financial institutions on whether they create natural capital risks and how they are responding, supported by the TNFD Forum and a network of 22 core knowledge partners, comprising more than 1,000 organizations around the world.

The TNFD's disclosure framework, like the Task Force on Climate-Related Financial Disclosures (TCFD), consists of governance, strategy, risk management, targets and metrics. For disclosures, the TNFD recommends the LEAP approach, which consists of locating the interface with nature (Locate), evaluating natural capital dependencies and impacts (Evaluate), assessing natural capital risks and opportunities (Assess), and reporting on preparedness to respond to natural capital risks and opportunities (Prepare). The first beta version (v0.1) was released in March 2022, followed by the last beta version (v0.4) in March 2023, and the final guidelines will be released in September 2023 after comments have been submitted.



* Source: TNFD website

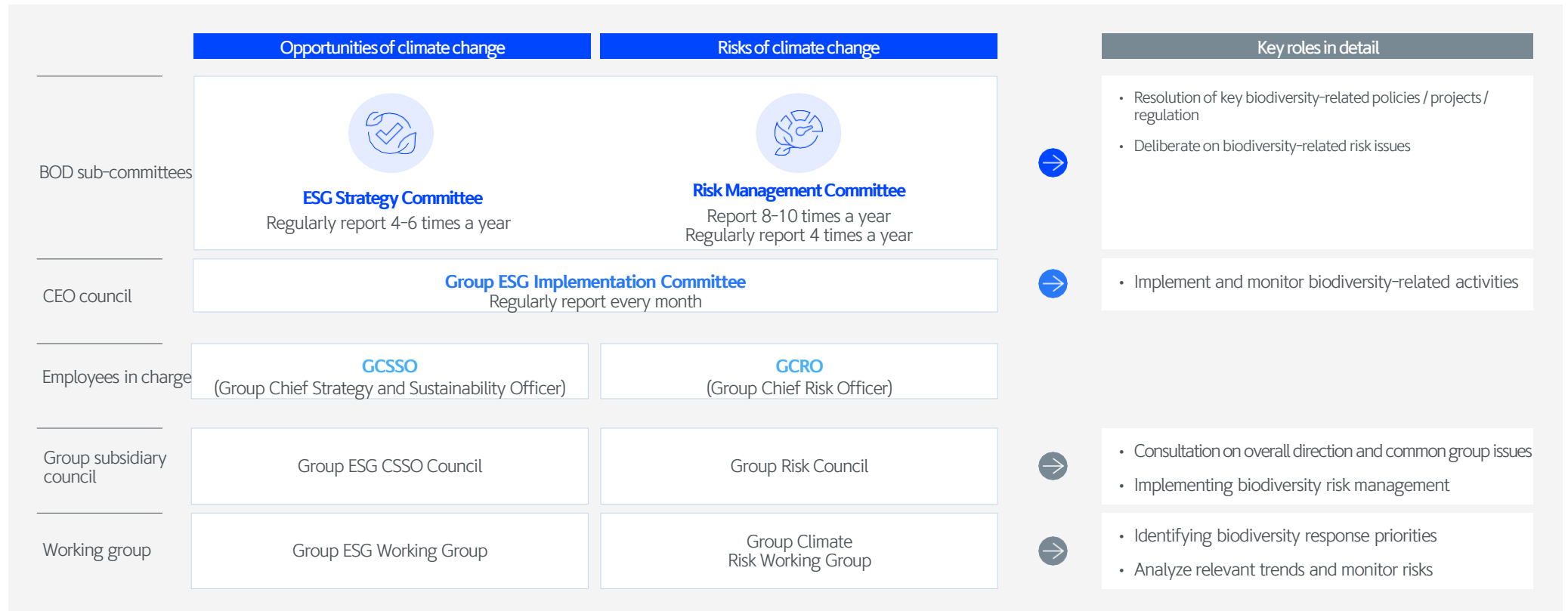


Biodiversity Governance

Governance for Managing Biodiversity

To effectively identify and manage risks and opportunities related to biodiversity, Shinhan Financial Group operates an organic management system among the BOD, management, and working-level teams. The ESG Strategy Committee of the BOD receives reports on activities and progress related to biodiversity, deliberates on major issues, and discusses and manages sustainability issues, including biodiversity, through the Group Chief Strategy and Sustainability Officer (GCSSO), the Group ESG CSSO Council, and the Group ESG Working Committee. The Risk Management Committee of the BOD reviews biodiversity issues, and the Group Chief Risk Officer (GCRO), the Group Risk Council, and the Group Climate Risk Council identify biodiversity-related issues and discuss responses to them.

In 2022, we decided to participate in the TNFD initiative through the ESG Strategy Committee, and we continue to identify and manage risks and opportunities related to biodiversity. Going forward, we will establish biodiversity management as one of the key management indicators for the Group, enhance our assessment and management system, and reflect it in the business strategy of Shinhan Financial Group.



* Shinhan Financial Group integrates and manages biodiversity issues within its governance system for climate change management

Biodiversity Strategy

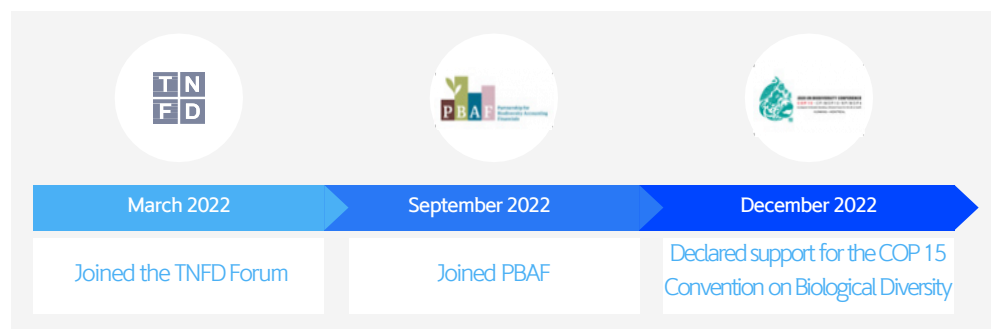
Participation in Biodiversity-related Initiatives and Application of the LEAP Methodology

To actively participate in addressing biodiversity issues, Shinhan Financial Group joined the TNFD Forum in March 2022, and in September of the same year, joined the Partnership for Biodiversity Accounting and Finance (PBAF), a global biodiversity initiative, to collaborate on the development of an international standard for biodiversity impact assessment. In December, we declared our support for the Convention on Biological Diversity through the Global Private Finance Statement at the 15th Conference of the Parties to the Convention on Biological Diversity (COP 15) and solidified our commitment to systematically work with the UN, governments, and central banks to address natural risks by 2030. Through these efforts, we are actively responding to the rapidly changing global ecosystem and biodiversity issues and building leadership in the green financial ecosystem.

Shinhan Financial Group also participated in the UNEP FI LEAD pilots in support of the TNFD (Pilot group 3: Offshore wind farms) in July 2022 to understand the relationship between its business and natural capital. The pilot focused on the Jeju Hallim Offshore Wind Pilot Area and adopted the LEAP approach, a risk and opportunity factor assessment methodology from the TNFD framework. LEAP is not a mandatory process to comply with the disclosure recommendations set out by the TNFD, but is a key basis for disclosures on location, dependencies and impacts, opportunity and risk assessment and reporting.

By applying the LEAP approach, Shinhan identified its dependencies on ecosystem services provided by natural capital in its business as well as its impacts on natural capital, and analyzed the risks and opportunities for Shinhan by examining the interactive nature of dependencies and impacts. Based on the analysis, we derived countermeasures to address these risks.

Key Milestones



Overview of the LEAP and LEAP-FI approaches

The LEAP approach consists of Locate, to locate the interface with nature; Evaluate, to assess our natural capital dependencies and impacts; Assess, to evaluate natural capital risks and opportunities; and Prepare, to respond to natural capital risks and opportunities. First, the Locate step establishes the geographic scope for identifying risks and opportunities. The Evaluate step then utilizes a tool called ENCORE¹) based on industry classifications to diagnose natural capital dependencies and impacts. In the Assess phase, we assess natural capital risks and opportunities using indicators of exposure, dependencies and impacts, and financial impacts; and finally, in the Prepare phase, we set targets for oceans, land and biodiversity. In doing so, the TNFD recommends applying the Science Based Targets Network's (SBTN) target-setting methodology (SBTs for Nature).

The LEAP-FI approach is an additional methodology that takes the characteristics of financial institutions into account and recognizes that, as providers of various types of financial capital, the relative weighting of LEAP's components may be more appropriate. The process is based on the following considerations:

- Financial institutions operating as a corporate entity can apply the LEAP approach for corporates as it pertains to their own operations and supply chain. However, these impacts will be limited compared to those of financed activities.
- Financial institutions can encourage their clients (recipients of financial capital) to use the LEAP approach for corporates and report information in line with the TNFD disclosure recommendations. Data provided to financial institutions by clients can be used to complement other sources of data.
- Financial institutions will need to apply the LEAP-FI approach flexibly to accommodate variations in the nature and structure of the business, the type of asset classes/financial products and level of aggregation of financial products/services.
- Tools and data already exist to help financial institutions get started with the assessment of their portfolios. These include matrices of high impact and high dependency sectors, such as the SBTN. 2022. Sector Materiality Tool, and data and metrics on ecosystem integrity and importance. Examples and case studies are referenced in the framework online platform 'Additional guidance to support LEAP for financial institutions (LEAP-FI).'

Scope the assessment

Corporates	C1 Type of organization	What are the organization's primary activities and assets in its direct operations and value chain? Where are they located?	Financial Institutions	F1 Type of business	What is the nature of our business as a financial institution? What are the main functional units within our business?
	C2 Entry points	What are the typical interactions with nature of these activities and in these locations?		F2 Entry points	In Which sectors/geographies do we allocate capita What asset classes/financial products do we have and what are their potential interactions with nature What biomes/ecosystems do our financial activities interact with and how?
	C3 Type of analysis	Where should the organization focus its analysis based on its own and stakeholders' priorities? What are the constraints and appropriate limits on the assessment?		F3 Type of analysis	What level of assessment is feasible/appropriate for our business, given the level of aggregation of financial products and services?

L Locate - Interface with Nature **E** Evaluate - Dependencies & Impacts **A** Assess - Material Risks & Opportunities **P** Prepare - To Respond % Report

Engagement wit affected stakeholders

L1. Business footprint	Where are our direct assets and operations, and our related value chain (upstream and downstream) activities?	E1. ID of relevant environmental assets and ecosystem services	What are our business processes and activities at each priority location? What environmental assets and ecosystem services do we have a dependency or impact on at each priority location?	A1. Risk and opportunity ID	What are the corresponding risks and opportunities for our business?	Strategy and resource allocation	P1. Strategy and resource allocation	What strategy and resource allocation decisions should be made as a result of this analysis?
L2. Nature interface	- Which biomes and ecosystems do these activities interface with? - What is the current integrity and importance of the ecosystems at each location?	E2. ID of dependencies and impacts	What are our nature-related dependencies and impacts across our business at each priority location?	A2. Existing risk mitigation and risk and opportunity management	What existing risk mitigation and risk and opportunity management approaches are we already applying?		P2. Performance measurement	How will we set targets and define and measure progress?
L3. Priority location identification	At which locations does our organization and its value chain(s) operate in high integrity ecosystems, areas of rapid decline in ecosystem integrity, areas of high biodiversity importance, areas of water stress and/or areas with potential significant dependencies or impacts?	E3. Dependency analysis	What is the size and scale of our dependencies on nature in each priority location?	A3. Additional risk mitigation and risk and opportunity management	What additional risk mitigation and risk and opportunity management actions should we consider?	Disclosure actions	P3. Reporting	What will we disclose in line with the TNFD disclosure recommendations?
L4. Sector identification	What sectors, business units, value chains or asset classes are interfacing with nature in these priority locations?	E4. Impact analysis	What is the size and scale of our nature impacts in each priority location?	A4. Risk and opportunity materiality assessment	Which risks and opportunities are material and should be disclosed in line with the TNFD disclosure recommendations?		P4. Presentation	Where and how do we present our nature-related disclosures?
Review and repeat								

1) Use of the Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool, which analyzes global industry classifications to diagnose natural capital dependence and impacts, including changes in the four domains of oceans, freshwater, land, and atmosphere, as well as climate change, resource use, pollution, and invasive species introduction

* Source: TNFD(2023), The TNFD Nature-related Risk and Opportunity Management and Disclosure Framework Beta v0.4. p.32 and TNFD website

Biodiversity Strategy

Locate (Interface with Nature)

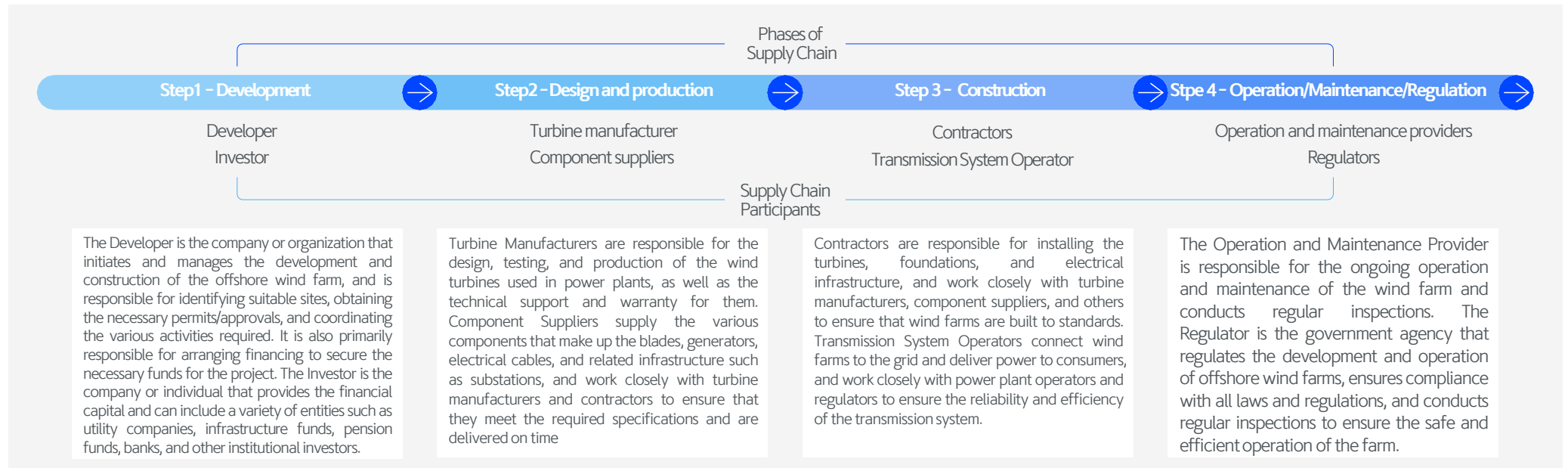
Shinhan Financial Group selected the Jeju Hallim Offshore Wind Farm Pilot Area, where Shinhan Life has committed KRW 37 billion in senior loans to participate in the UNEP FI's TNFD Pilot in the offshore wind farm group, as the subject of analysis through the LEAP approach. The Jeju Hallim Offshore Wind Farm Pilot Area is located in the offshore waters of Suwon-ri, Hallim-eup, Jeju-si, and construction is scheduled to last for 34 months, after which the facility will run for a lifespan of 20 years.

Offshore wind farms involve a wide range of participants depending on the stage of the supply chain. It is broadly categorized into four stages: Development, Design and Production, Construction, and Operation/Maintenance/Regulation. Despite the complexity of multiple stakeholders, financial institutions can play a key role in measuring and mitigating nature-related risks as the financing entity. Through this pilot project, Shinhan Financial Group has identified that its financing activities are related to the Construction and Operation/Maintenance/Regulation stages of the relevant supply chain and have identified interface with nature in the process.

Shinhan Financial Group determined that the distance of the offshore wind power pilot area from marine protected areas and wilderness areas was an important factor. Based on the UN Biodiversity Lab¹⁾, we confirmed that the location of the project is far enough from marine protected areas and wilderness areas. In addition, the environmental impact assessment confirmed that the project site, where underground transmission lines, public information centers, and substations will be installed, is a cultivated area and does not contain natural vegetation and valuable plants. However, it was confirmed that some marine ecosystems, such as some waterfowl, fish, and seaweed that live along the coast, may be impacted. Nonetheless, we determined that the project site is distant enough from nesting sites of migratory birds, and the impact of floating sediment generated during construction is expected to be minimal.

¹⁾The UN Biodiversity Lab (UNBL) aims to provide access to global spatial data to provide insights and impact for conservation and sustainable development

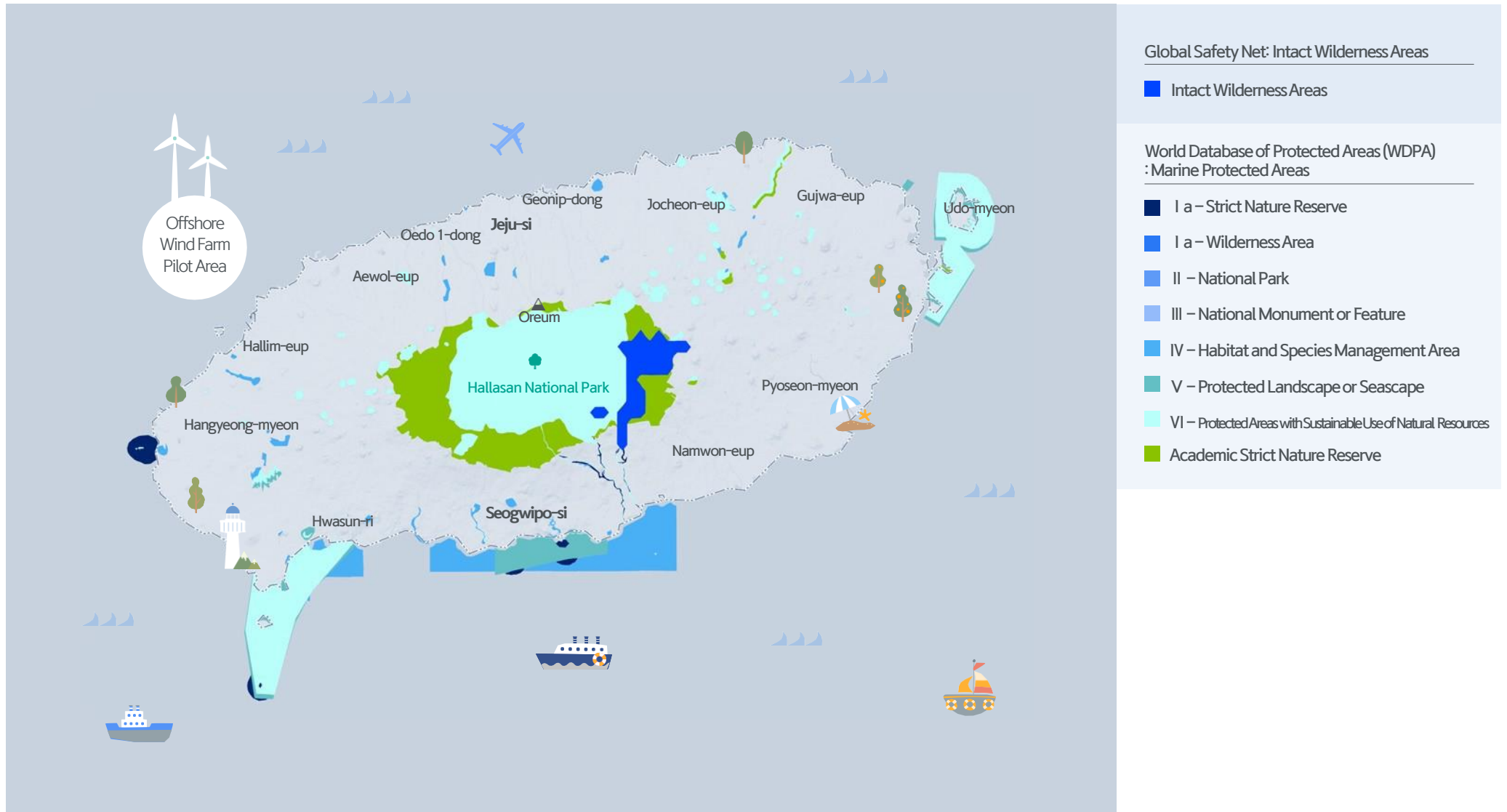
Supply chain stages and key players in offshore wind power



* Source: UNEP FI(2022), Unboxing Nature-related Risks pp.11-12

Biodiversity Strategy

Mapping the Hallim Offshore Wind Farm Pilot Area and marine/wilderness areas



* Source: Mapping Jeju's marine/wilderness protected areas (Global Safety Net: Intact Wilderness Areas and marine Protected Areas WDPA) with the UN Biodiversity Lab

Biodiversity Strategy

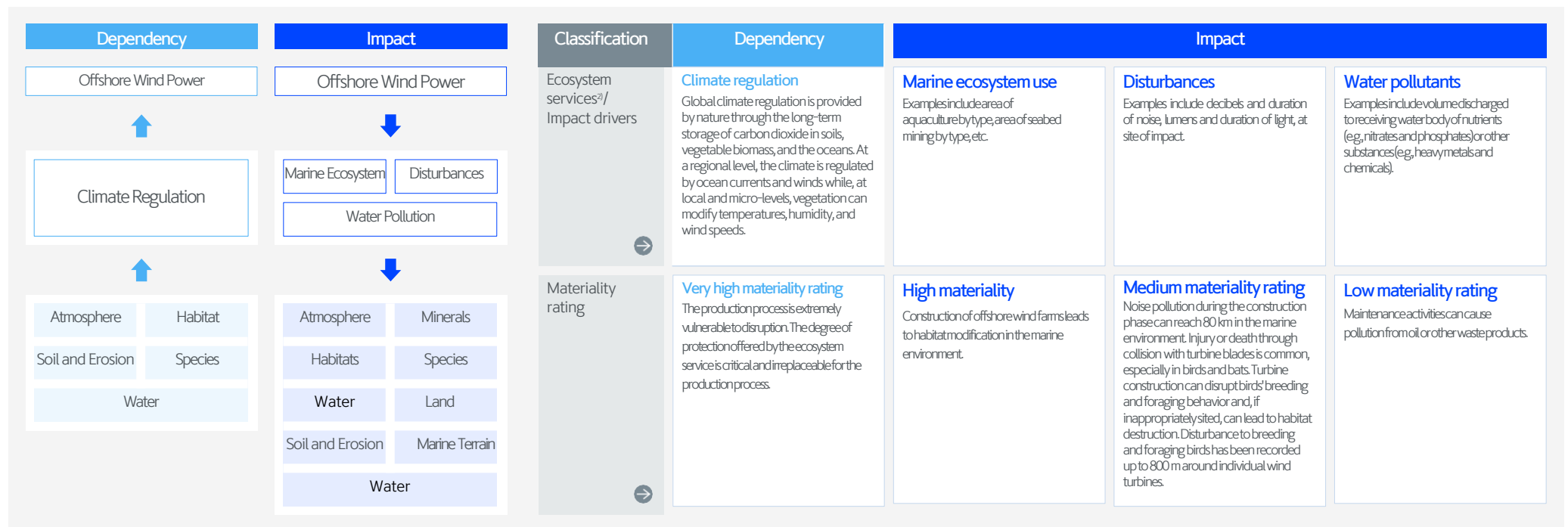
Evaluate (Dependencies and Impacts)

To understand the relationship between the offshore wind power project and natural capital, Shinhan Financial Group identified dependencies and impacts based on ENCORE, a TNFD-recommended tool.

With respect to Dependencies, businesses can benefit from the ecosystem services that natural capital generates. On the other hand, if the value of natural capital is compromised (e.g., natural disasters, overdevelopment, etc.) and ecosystem services are disturbed, it can lead to additional costs or business continuity issues. To address these issues, companies will either shift their business model or make capital investments. In the case of offshore wind power, there is a very high degree of dependency on climate regulation.

With respect to Impacts, companies can negatively impact natural capital by polluting soil and air, emitting greenhouse gases, and using large amounts of water, which in turn reduces ecosystem services. Impacts can also result in additional costs and reputational damage as regulations or stakeholder demands for ecosystem protection increase, leading to business transformation or capital investment to address the issue. In the case of offshore wind power, potential impacts include marine life and ecosystem disturbances and water pollution.

Offshore wind dependencies and impacts identified in ENCORE ¹



1) Reorganized ENCORE's wind energy segment by selecting dependencies and impacts related to offshore wind.

2) Defined broadly as the conditions and processes that enable ecosystems and species to sustainably support human life; the goods and services that humans derive directly or indirectly from ecosystem functions; the benefits that humans derive from ecosystems; and the various ways in which humans benefit from ecosystems (National Geographic Information website)

Biodiversity Strategy

Based on the analysis of dependency and impact factors on offshore wind power identified based on ENCORE, Shinhan Financial Group reviewed biodiversity-related items among the 14 items in the environmental impact assessment conducted for the Hallim offshore wind power pilot project. We selected six items, including 'water quality and hydrology', 'marine environment (marine water quality, marine sediment quality, and marine physics)', 'marine environment (marine flora and fauna)', 'flora and fauna', 'eco-friendly resource circularity, and 'noise and vibration', and identified impact factors for each item.

Focusing on six biodiversity-related items from the environmental impact assessment and analyzing their impacts

Air quality and GHGs	Land use	Noise and vibration
Water quality and hydrology	Soil	Landscape
Marine environment (marine water quality, marine sediment quality, marine physics)	Terrain and geology	Social and economic environment
Marine environment (marine flora and fauna)	Flora and fauna	Electromagnetic interference
	Eco-friendly resource circularity	Others

1 Water quality and hydrology

- Sediment Discharges
- Stormwater runoff and nonpoint source discharges during construction and operations

2 Marine environment (marine water quality, marine sediment quality, marine physics)

- Floating sediment
- Construction noises
- Oil pollution
- Fishing

3 Marine environment (marine flora and fauna)

- Floating sediment
- Oil pollution
- Noise, vibration, and electromagnetic waves impacting marine flora and fauna

4 Flora and fauna

- Collision of flying birds with wind turbine blades
- Coastal protection during cable construction (including preservation of habitat for waterfowl)

5 Eco-friendly resource circularity

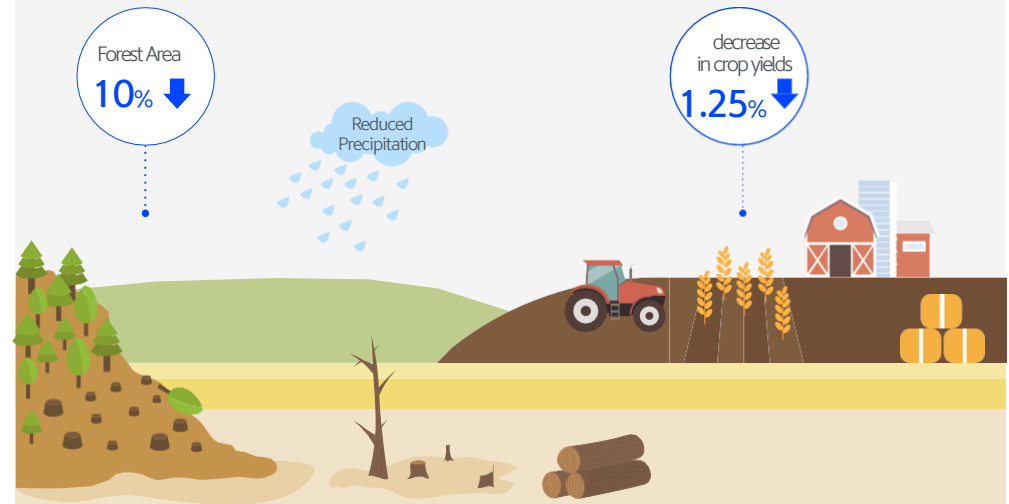
- Maintenance of construction equipment during offshore construction (land transfer, etc.)
- Waste oil and other wastes from onshore construction

6 Noise and vibration

- Exceeding the target noise standard in residential areas and other noise-regulated regions
- Underwater noise and vibration at and around wind turbine installations

Importance of Biodiversity: Decrease in Precipitation Due to Deforestation

The decrease in precipitation caused by deforestation has significant implications for agriculture and hydropower generation. On average, agricultural yields decrease by 0.5% for every 1% reduction in precipitation. Changes resulting from deforestation can potentially exacerbate the impacts of climate change and future droughts, as crop yields decrease by 1.25% for every 10% loss in the forest area. Despite this, deforestation continues in tropical regions, leading to a vicious cycle where the decrease in crop yields due to reduced precipitation outweighs the production increase from expanding agricultural areas. Additionally, reduced rainfall in the remaining tropical regions is expected to have further effects on additional deforestation, changes in biodiversity, carbon sequestration, and fire frequency. As a response to these concerns, international efforts are expanding, including agreements like the 'Halt Deforestation by 2030' consensus made during the 26th UN Climate Change Conference (COP26).



* Source: C. Smith, J. C. A. Baker1 & D. V. Spracklen(2023), Tropical deforestation causes large reductions in observed precipitation 참고

Biodiversity Strategy

Assess (Material Risks and Opportunities)

If a financial institution's business activities degrade or deplete natural capital and reduce its value, this could lead to higher business costs and increased severity of natural disasters, as well as physical risks from negative environmental impacts (e.g., greenhouse gas emissions, wastewater discharges). At the same time, degradation of natural capital and environmental change can lead to situations such as the adoption of new technologies or business disruption, and entail transition risks from government policies and regulations related to biodiversity. On the other hand, financial institutions can have a positive impact on natural capital by supporting biodiversity through financial products and services, which can help ensure business continuity and identify new business opportunities.

Potential risks and hazards associated with offshore wind power¹⁾

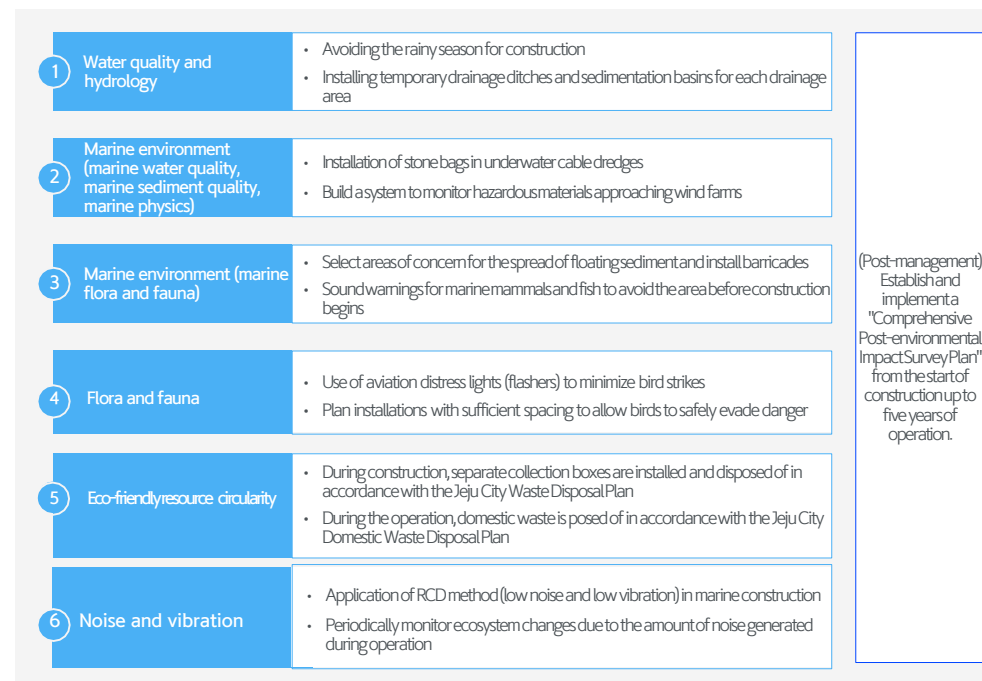
Classification		Description
Risk	Habitat disruption	Inevitably involves habitat disruption of natural ecosystems, with the magnitude of the disruption depending on the form
	Collision risk	Birds and bats may fly into turbine blades, causing injury or death, but the frequency of occurrence is unspecified
	Noise pollution	The construction and operation of wind farms generate unavoidable noise that may disturb marine life and ecosystems
	Interference with feeding and reproduction	Depending on the location, offshore wind power can disrupt feeding and reproduction of birds, bats, and marine life
Opportunities	Habitat creation	Can be designed in such a way as to create an 'artificial reef' environment, where the infrastructure structures (e.g. turbines and foundations) support the growth of marine flora and fauna
	Nature-friendly design	Designed and deployed in a way that minimizes impact on wildlife, including avoiding sensitive habitats and migration routes
	Air pollution reduction	Offshore wind energy can replace fossil fuels as a source of electricity, reducing the amount of air pollution caused by burning fossil fuels
	Job creation	Jobs are created in the construction, operation, and maintenance process of wind farms, as well as in related industries such as manufacturing and engineering
	Energy independence	Reduction of a country's dependence on fossil fuel imports from other countries

1) Summarized from the UNEP FI(2022), Unboxing Nature-related Risks pp.10-11

Shinhan Financial Group has analyzed the risks and opportunities that may arise based on the relationship between offshore wind power business activities and natural capital. Offshore wind power has potential negative impacts on marine ecosystems, local wildlife, and migratory birds, as well as on fishing and aquaculture, and on real estate values due to changes in coastal landscapes, and therefore requires careful planning and management. On the other hand, opportunities can be identified and utilized by focusing on the energy independence and fossil fuel mitigation effects of offshore wind power.

Shinhan Financial Group comprehensively reviewed the potential risks of the identified offshore wind power projects, as well as their dependencies and impacts, and matched them with the impacts of the six key checkpoints on biodiversity in the environmental impact assessment to derive specific risk management measures.

Risk management measures per checkpoint



Biodiversity Strategy

Concept of Nature-based Solutions (NbS) and their role in creating a new market

Nature-based Solutions (NbS) are gradually gaining attention as a method to achieve the objectives of various global agreements, considering their potential to provide extensive social and economic benefits and services, while also addressing existing changes and mitigating biodiversity loss. In the resolution adopted by the United Nations Environment Assembly (UNEA) in March 2022, NbS is defined as measures taken to effectively and appropriately address social, economic, and environmental issues, while providing benefits to human well-being, ecosystem services, resilience, and biodiversity in natural or modified terrestrial, freshwater, coastal, and marine ecosystems, aiming to protect, conserve, restore, and sustainably manage these ecosystems.

The transition to a green economy based on NbS is expected to impact the market in various ways, and it can play a crucial role in addressing a wide range of social challenges, from water scarcity management to disaster risk reduction and poverty alleviation. Notably, while most related spending is projected to occur in high-income regions, the majority of job creation will take place in income-vulnerable areas that heavily rely on nature and resources. The World Economic Forum (WEF) estimates that nature-friendly policies could generate over \$10 trillion in new business value annually and create 395 million jobs by 2030. Businesses can leverage NbS-based business models to capitalize on these market opportunities.



* Source: ILO, UNEP and IUCN(2022), Decent Work in Nature-based Solutions 2022 & WEF (2020), 395 Million New Jobs by 2030 if Businesses Prioritize Nature, Says World Economic Forum

Prepare (Response and Disclosure)

Shinhan Financial Group identified the risks and opportunities associated with the offshore wind power pilot project and conducted an analysis by setting up focused checklist items accordingly. In the future, we will expand the analysis to various business segments of Shinhan and consider setting targets to quantify related impacts and reduce negative impacts based on global standards such as the SBTN (Science Based Targets Network) target-setting methodology. In addition, we will conduct annual information disclosure based on the TNFD framework and gradually upgrade the contents.



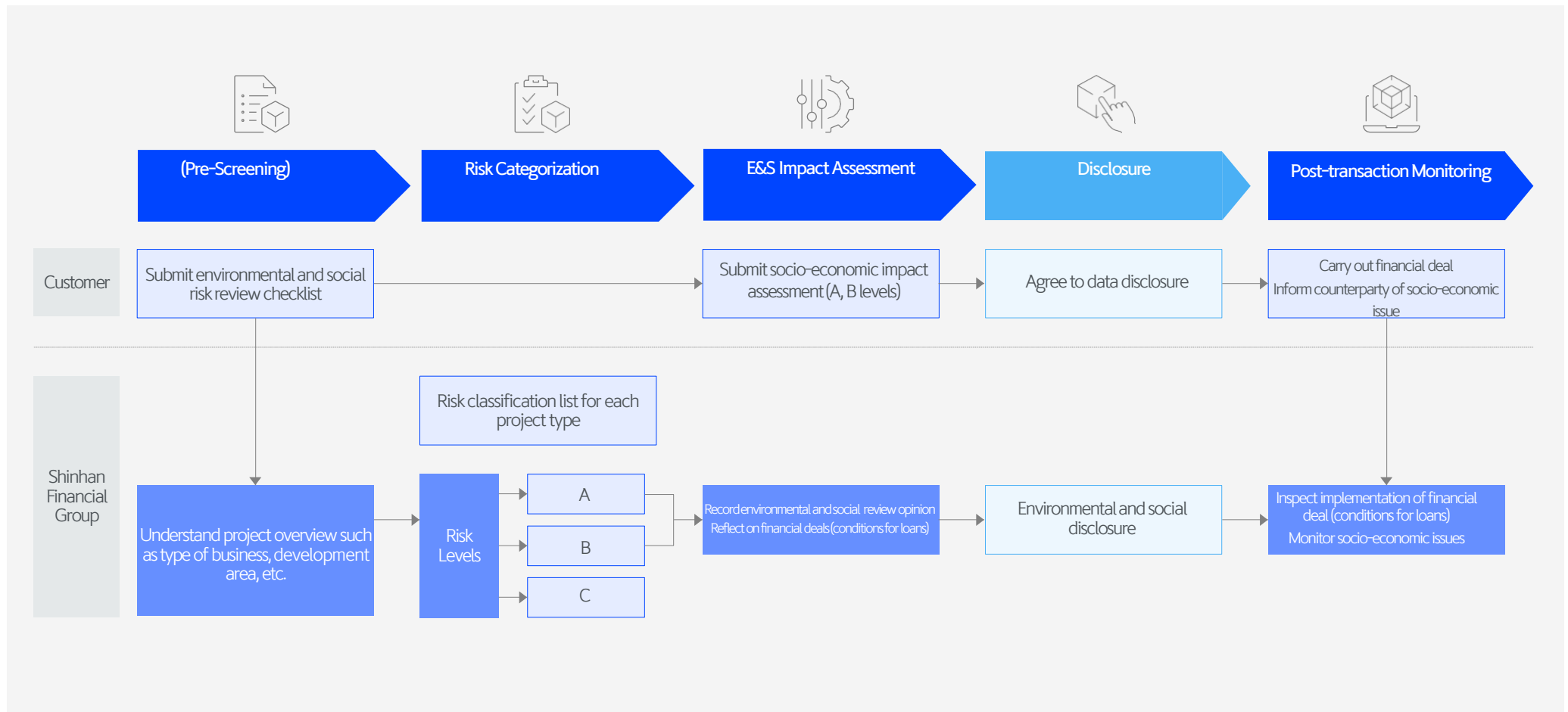
* Source: Jeju Hanlim Offshore Wind Power Co.

Management of Biodiversity Risks and Impact

Risk Review Process and Monitoring Areas of Concern

Shinhan Financial Group clearly recognizes that risks related to biodiversity are factors that have a significant impact on our business activities and conducts environmental and social risk reviews to continuously manage them. The review is divided into four stages: pre-screening, risk categorization, E&S impact assessment, disclosure, and post-transaction monitoring. In the environmental and social impact assessment stage, biodiversity risks that may arise during business activities are monitored.

Shinhan plans to operate this monitoring system in conjunction with the LEAP approach. The review of the Hallim Offshore Wind Power Pilot Area was also conducted with this perspective in mind.



Management of Biodiversity Risks and Impact

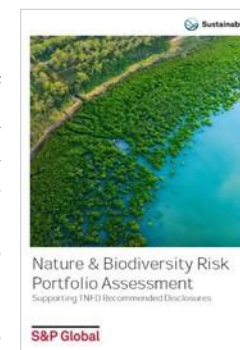
We also comprehensively review environmental and social impacts, including biodiversity, to select areas of significance and define risks. We then conduct active risk management based on the review items for each area of concern.

Risks	Review items(illustrative example)	
1. Large-scale agriculture and food crop production	<ul style="list-style-type: none"> Environmental impact Violation of the right to living conditions and impact on habitats 	<ul style="list-style-type: none"> Soil pollution <ul style="list-style-type: none"> - Water pollution - Impacts ecosystem around large farmlands
2. Forestry	<ul style="list-style-type: none"> Environmental impact Violation of the right to living conditions and impact on habitats Occupational Safety and Health 	<ul style="list-style-type: none"> Local habitat and ecological impacts in the case of large-scale logging <ul style="list-style-type: none"> - Logging acreage and whether the logging site hosts habitat for protected species - Worker safety and health precautions
3. Chemical Manufacturing	<ul style="list-style-type: none"> Environmental impact GHG emission Occupational Safety and Health 	<ul style="list-style-type: none"> Air pollutant concentrations and emissions <ul style="list-style-type: none"> - Water pollutant concentrations and discharges - Environmental/safety incident prevention/detection/response measures
4. Mining	<ul style="list-style-type: none"> Environmental impact Violation of the right to living conditions and impact on habitats Occupational Safety and Health 	<ul style="list-style-type: none"> Manage dust emissions <ul style="list-style-type: none"> - Impact on the ecosystem - Emergency response system
5. Oil and gas development	<ul style="list-style-type: none"> Environmental impact GHG emission Occupational Safety and Health 	<ul style="list-style-type: none"> Managing environmental impacts and contamination of soil, groundwater, and seawater around the development site <ul style="list-style-type: none"> - Health and safety measures for workers in drilling and mining operations
6. Large-scale infrastructure projects	<ul style="list-style-type: none"> Environmental impact Violation of the right to living conditions and impact on habitats Occupational Safety and Health 	<ul style="list-style-type: none"> Managing dust <ul style="list-style-type: none"> - Impact on natural habitat and the ecosystem - Managing the environmental impact of nearby areas regarding hazardous materials storage, or underground oil pipes, etc.
7. Electricity Generation	<ul style="list-style-type: none"> Environmental impact GHG emission Violation of the right to living conditions and impact on habitats 	<ul style="list-style-type: none"> (Thermal power generation) Whether air pollution prevention facilities are installed and managed Impact on natural habitat and the ecosystem (Hydropower) Impact on natural habitat (Large-scale solar power)
8. Wastewater and waste treatment	<ul style="list-style-type: none"> Environmental impact GHG emission 	<ul style="list-style-type: none"> Treatment of wastewater and waste byproducts (sludge, ash, etc.) <ul style="list-style-type: none"> - Avoid contaminating surrounding soil and groundwater due to waste landfill
9. Weapons and defense	<ul style="list-style-type: none"> Social impact 	<ul style="list-style-type: none"> Product manufacturing activities <ul style="list-style-type: none"> - Vision and strategy
10. Drift-net fishing	<ul style="list-style-type: none"> Environmental impact Social impact 	<ul style="list-style-type: none"> Survey on forced labor <ul style="list-style-type: none"> - Ensuring workers' occupational safety
11. Tobacco	<ul style="list-style-type: none"> Environmental impact Occupational Safety and Health 	<ul style="list-style-type: none"> Managing soil pollution <ul style="list-style-type: none"> - Water pollution contamination levels - Minimize raw material inputs and increase reuse and recycling rates
12. Coal processing	<ul style="list-style-type: none"> Environmental impact Social impact 	<ul style="list-style-type: none"> Scope of the surrounding impact due to dust <ul style="list-style-type: none"> - Emergency response system

Shinhan Financial Group Biodiversity Assessment Result

Shinhan Financial Group performed a biodiversity pilot analysis with Standard & Poor's Global to heighten awareness and understanding of biodiversity risk. We analyzed Shinhan's portfolio with the Nature & Biodiversity Risk Portfolio Assessment model, developed by S&P Global based on biodiversity-related data sourced from UNEP-WCMC¹⁾. This methodology allowed for risk assessment related to biodiversity from three perspectives, covering a total of 1,130 companies in the analysis. (This stage accounts for the Locate and Evaluate phases from the LEAP framework)

We could identify companies with bigger impacts and dependencies related to biodiversity within our portfolio companies. Shinhan Financial Group strives to enhance our risk assessment methodology in the coming future, through continuous research and analysis on the subject of biodiversity risk.

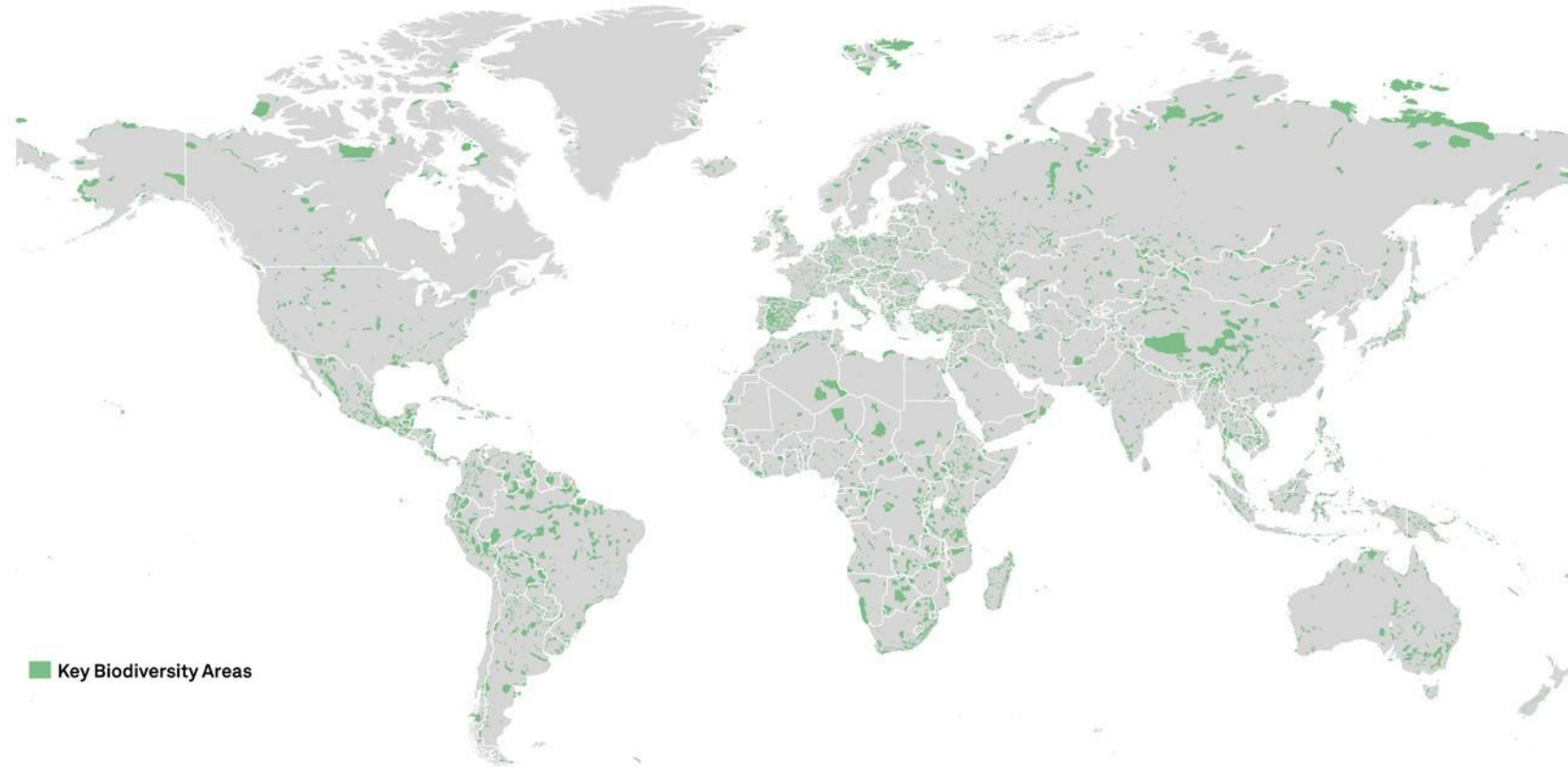


¹⁾ United Nations Environment Programme World Conservation Monitoring Centre

Risk Type	Definition	Assessment Result
Reputational and Regulatory Risk	Risk arising from the corporate asset being located in biodiversity-related area	<ul style="list-style-type: none"> Only 2% of Shinhan portfolio companies are located in Key Biodiversity Areas (KBAs). - Ratio of invested companies that may cause potential risk in biodiversity-related areas
Impact Risk	Risk arising from potential impact from corporate activity to natural resources and ecosystem ex) Impact on regional contamination and habitat damage	<ul style="list-style-type: none"> We quantified ecosystem impact by identifying impacted land area. As a result of a biodiversity-focused analysis on the significance of the area and the level of damage compared to the original state, 9ha (7%) of operating land area for Shinhan portfolio companies out of 122ha are identified as having potential for impact on ecosystem.
Dependency Risk	Risk arising from degree of corporate dependency on natural ecosystem ex) Operation activities dependent on water resources, land, raw materials, etc.	<ul style="list-style-type: none"> We identified companies with high dependency on natural environment such as land, raw materials, climate, etc. and calculated risk levels. 441 companies out of all analyzed companies are assessed to have high nature dependency risk.

¹⁾ Key Biodiversity Areas

Management of Biodiversity Risks and Impact



For KBAs: Sources: S&P Global Sustainable1; S&P Global Market Intelligence. Key Biodiversity Area data downloaded March 2022 from the Integrated Biodiversity Assessment Tool (IBAT). Integrated Biodiversity Assessment Tool (IBAT) provided by BirdLife International, Conservation International, International Union for Conservation of Nature and United Nations Environment Programme World Conservation Monitoring Centre. Please contact ibat@ibat-alliance.org for further information.