



Transition to Nature-Positive Economies

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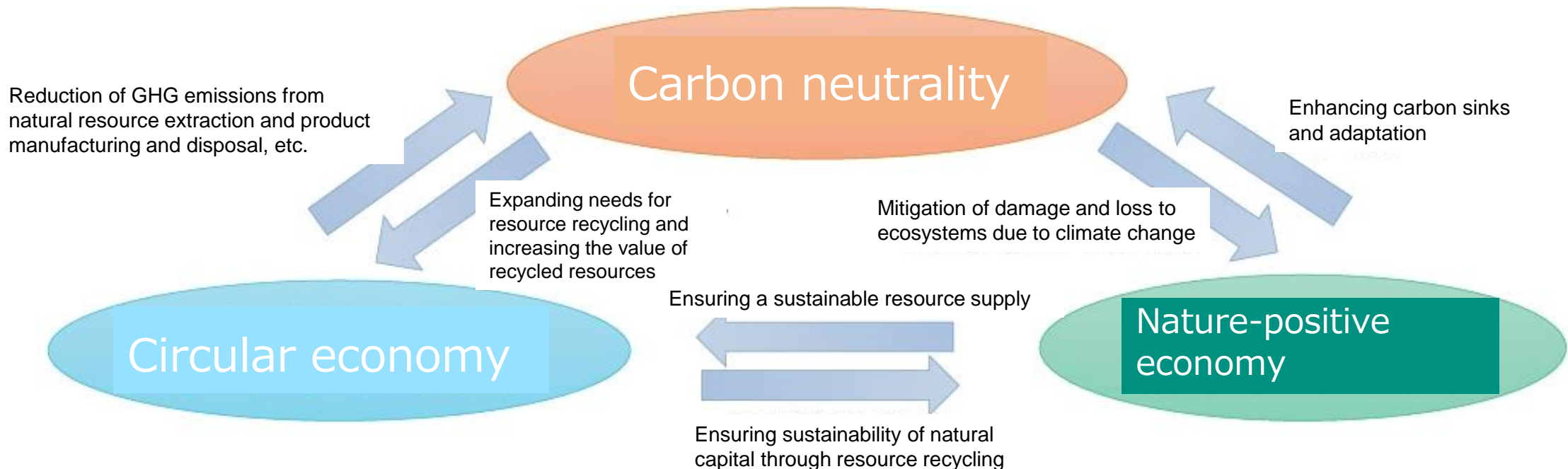
G7 Hiroshima Summit Leaders' Communiqué (Summary)

【Climate, Energy, and Environment *Focusing on finance-related issues】

- Committed to realizing the transformation of the economic and social system towards net-zero, circular, and nature-positive economies, in an integrated manner
- Calls on all Parties-especially major economies that are not yet aligned with the 1.5°C target to enhance the ambition of 2030 NDC targets, long-term low GHG emission development Strategies(LTSs), net zero by 2050.
- Looking forward to the ISSB's future work on disclosure on biodiversity and human capital in line with its work plan consultation.
- Highlighting that transition finance, in line with keeping a limit of 1.5°C temperature rise within reach, avoiding carbon lock-ins and based on effective emissions reduction, has a significant role in advancing the decarbonization of the economy as a whole.
- Shared the ambition at the summit level to reduce additional plastic pollution to zero by 2040
- Referred to the G7 Alliance on Nature Positive Economies led by Japan and also mentioned invasive alien species for the first time.

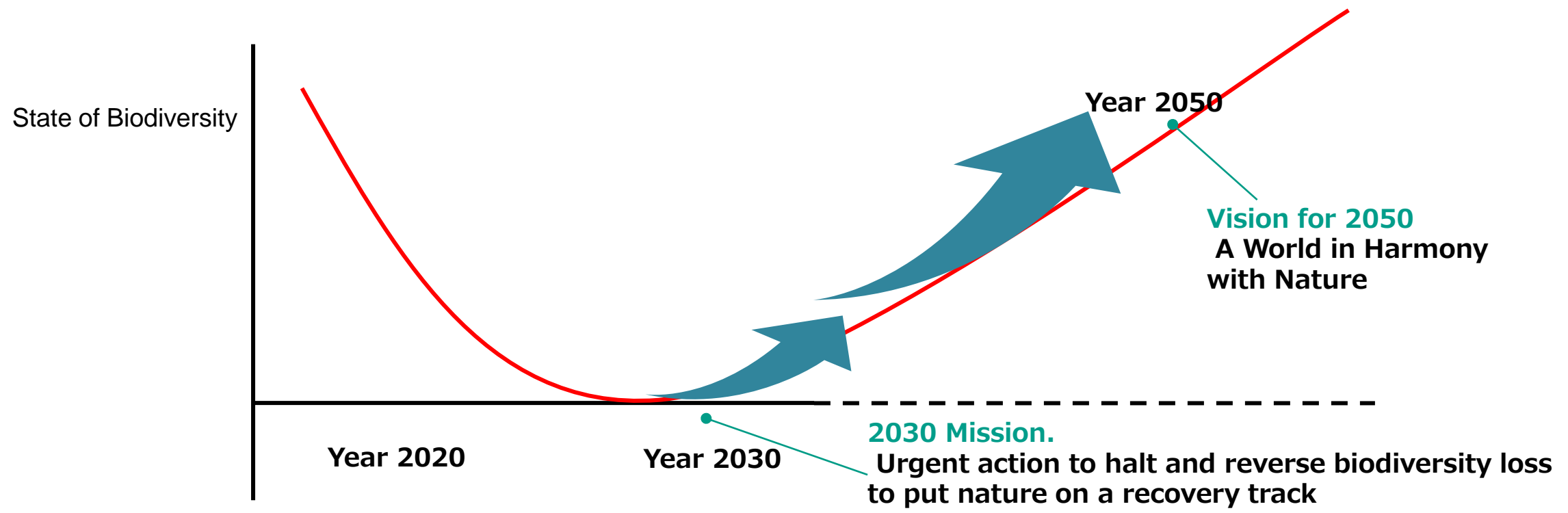
- Three crises of climate crisis (loss of biodiversity, and pollution) + an urgent need to address the energy crisis caused by the Russian problem.

■ **Integrated realization of** decarbonization, circular economy, and nature-positive economies is necessary. One of the measures is to transform the entire value chain.



Toward the realization of "Nature Positive"

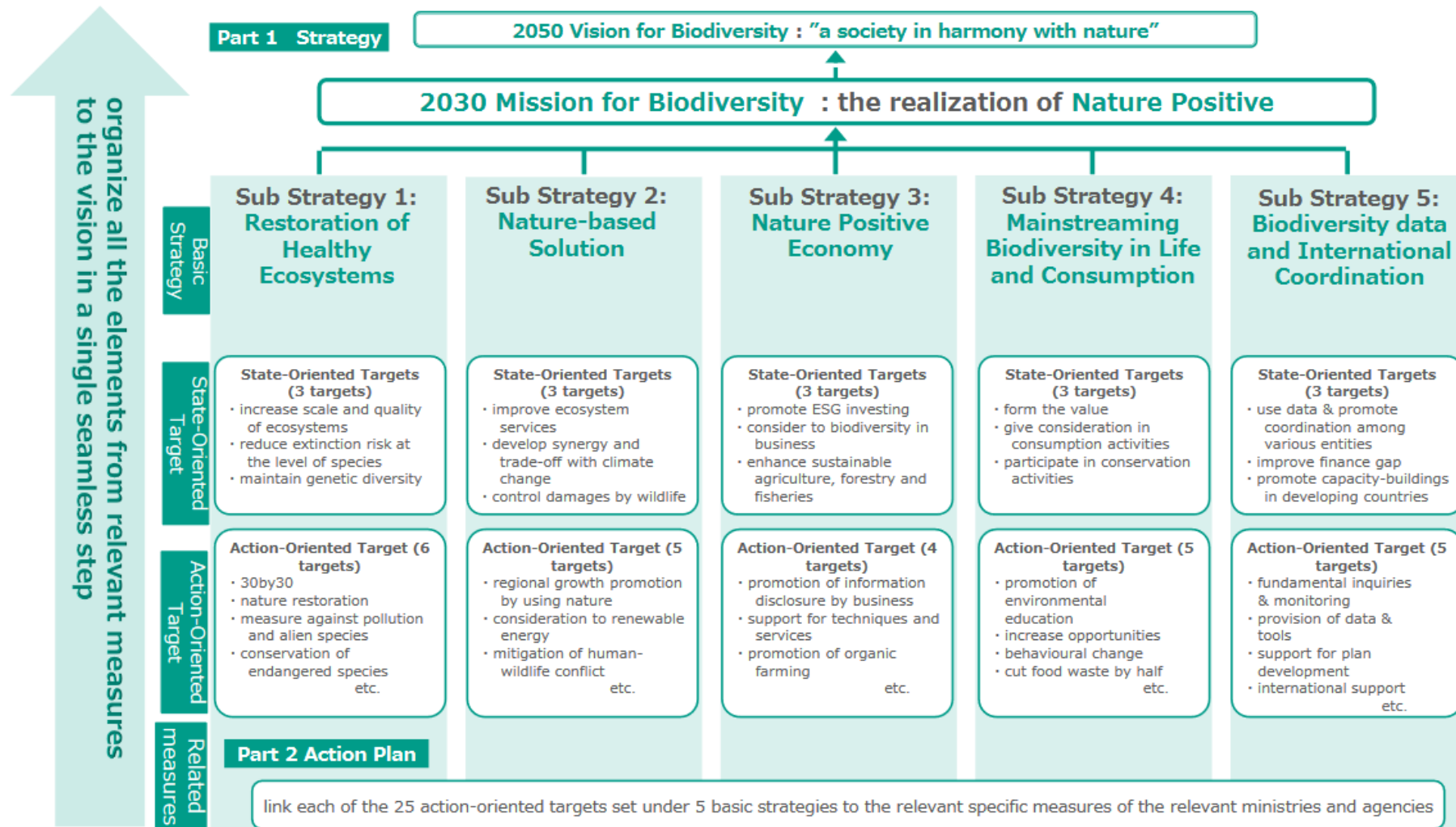
- The "Kunming-Montreal Global Biodiversity Framework", adopted at UN Biodiversity Conference (COP15), set the 2030 mission to "take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery" *This is the same concept as "Nature Positive" agreed upon at the G7 meeting in June 2021.
- In order to realize Nature Positive, the promotion of **OECM*** (areas contributing to biodiversity conservation outside of protected areas) for the **30by30 target** (30% of land and sea areas to be conserved by 2030) and the promotion of mutual linkage with climate change measures are required. *Other effective area-based conservation measure



National Biodiversity Strategy and Action plan of Japan 2023-2030 (summary excerpts)



■ Based on the results of the 15th Convention on Biological Diversity (CBD-COP15) in December 2022, **revised on March 31, 2023, ahead of the world.**



Basic Strategy 3: Realization of Nature-Positive Economy



- (1) **Promote Nature Positive management initiatives by business**
 - ① Promotion of business activities that take biodiversity and natural capital into consideration
 - ② Introduction of private finance by expanding financing
 - ③ Promotion of industry-specific initiatives
 - ④ Support for small and medium business and local business
- (2) **Provide support for the use of economic instruments and create new natural capital-friendly businesses**
 - ① Investigation and utilization of economic instruments
 - ② Promotion of efforts to create Nature Positive management and industry
- (3) **On the part of National and local governments, take the initiative and set a good example as a business entity**
- (4) **Actively involve in the formation of international codes**
 - ① Involvement of the public and private sector in international frameworks
 - ② Promotion of international voluntary efforts
 - ③ Genetic resources and Access and Benefit-Sharing (ABS)
- (5) **Develop a foundation to create Nature Positive management and industry**
 - ① Research and Development
 - ② Technology development and data infrastructure

Promoting initiatives in the biodiversity and natural capital sectors in green finance

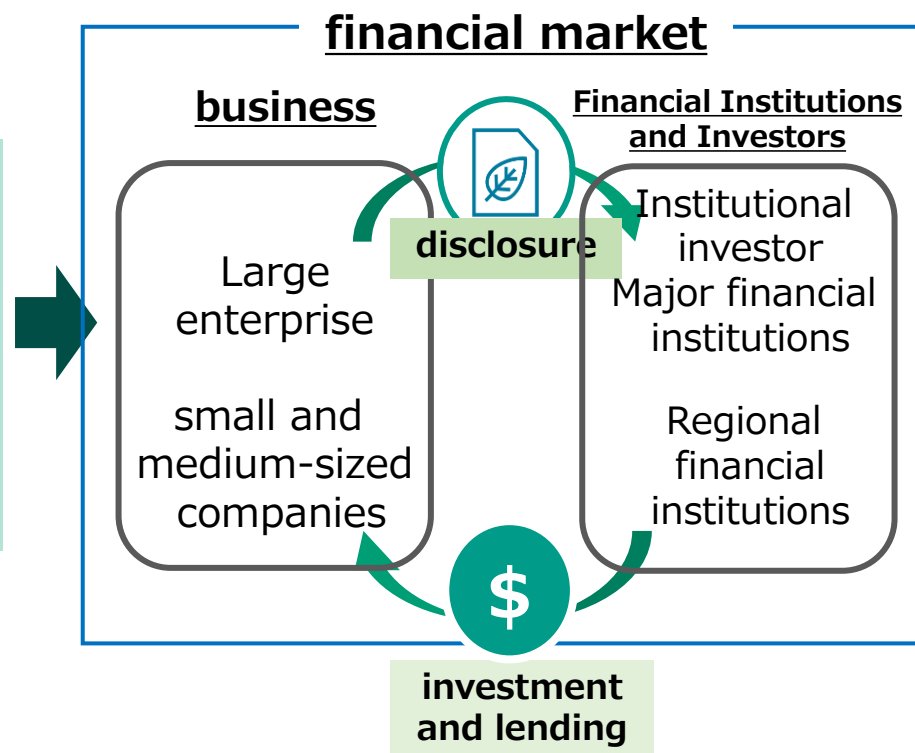
- Promote understanding among financial institutions = Increase awareness of nature-related risks and opportunities through disclosure of information on nature-related assessment by TNFD, etc.
- Provide technical advice on information disclosure and target setting related to biodiversity and natural capital considerations by businesses (including financial institutions)
- Promote the use of private financing methods such as green bonds and expand green finance and ESG investments through social implementation of green infrastructure technologies and conservation and restoration of ecosystems.
- Provide technical advice and establish a system to encourage dialogue (engagement) between operating companies and financial institutions on business activities that take biodiversity and natural capital into consideration.

Strengthen and enhance green finance

- It is necessary to **strengthen and enhance the function of domestic green finance** as a bridge to connect domestic and foreign funds to Japan's decarbonization investment, which is estimated to be 150 trillion yen over the next 10 years.
- To this end, the Ministry of the Environment is further clarifying rules on green, promoting disclosure based on international standards such as TCFD and ISSB, and promoting regional financial initiatives that embody local decarbonized investment.

(1) Promote market formation

- Promoting corporate use of the Green Bond Guidelines by enhancing their content
- Expand issuance support for green bonds, etc.
- Promotion of Transition Finance in collaboration with various ministries and agencies



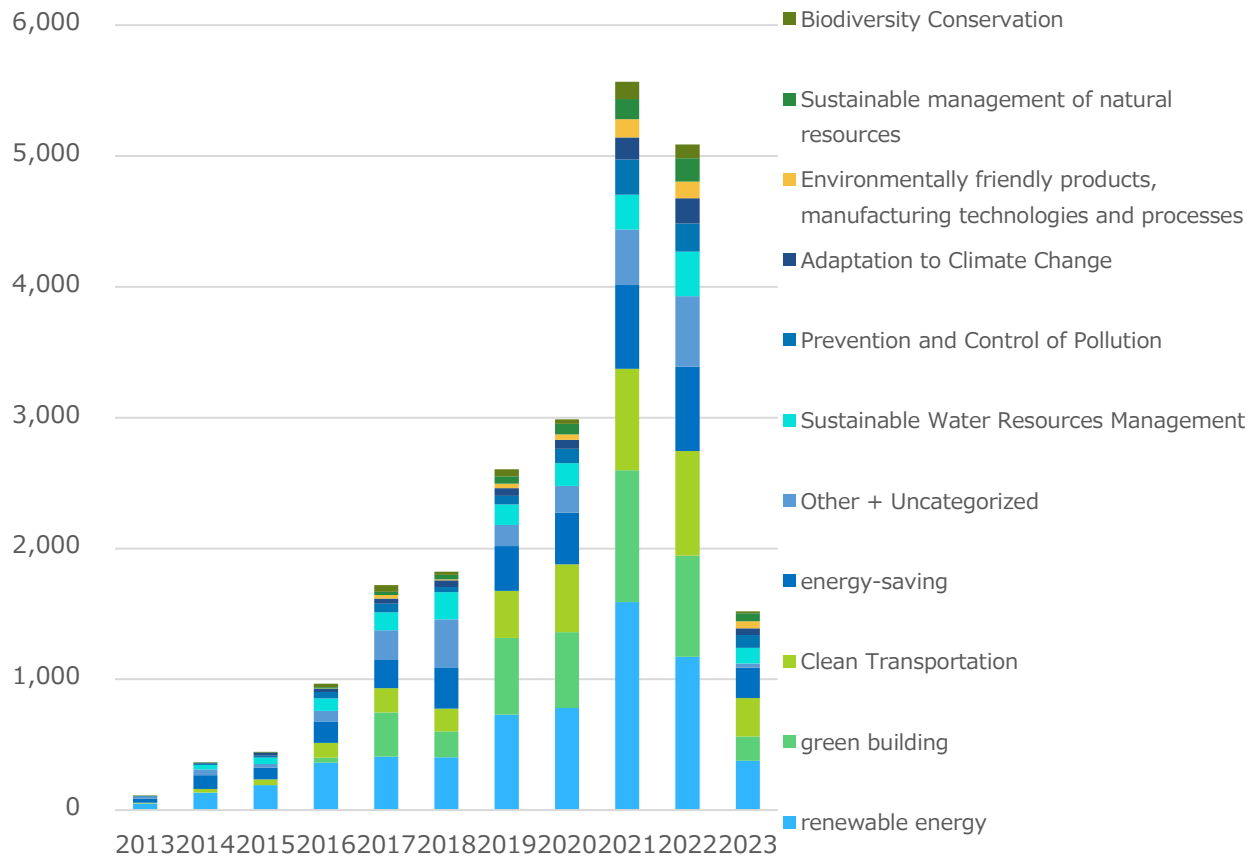
(2) Promotion of disclosure and commitment

- Technical assistance for TCFD disclosure, etc.
- Assistance by financial institutions in analyzing emissions and formulating strategies for their investments and loans

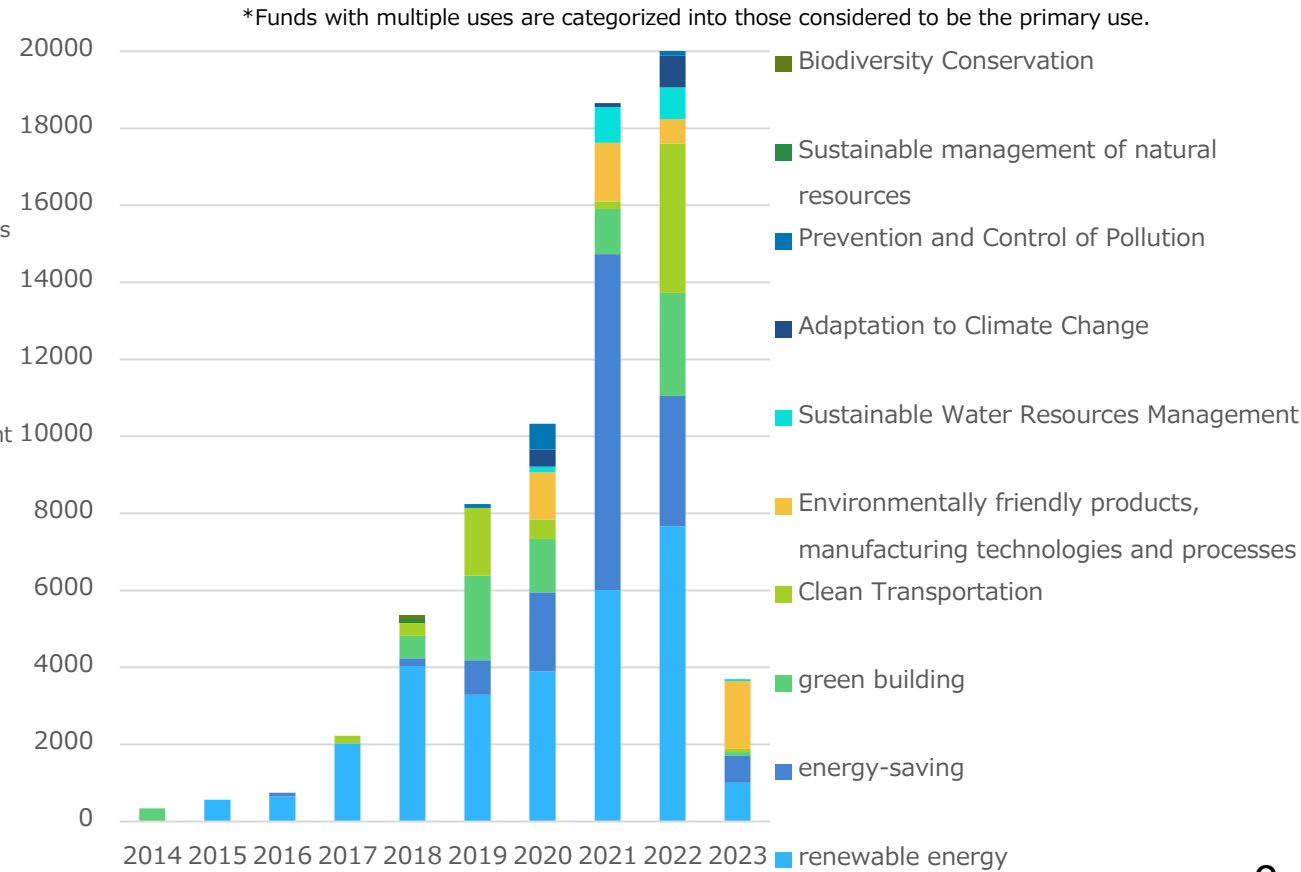
Breakdown of global and domestic green bond market issuance and use of proceeds

- The amount of green bond issuance has **increased dramatically**, supporting the financing of a sustainable society.
- Although the use of funds has been **diversifying** over the years, the majority of funds are still used for renewable energy and energy conservation. **Financing for sectors other than climate change mitigation, such as biodiversity conservation and resource recycling, has only just begun.**

Global Issuance by Use of Funds (US\$ billion)



Domestic Issuance Amount by Use of Funds (Billions of Yen)

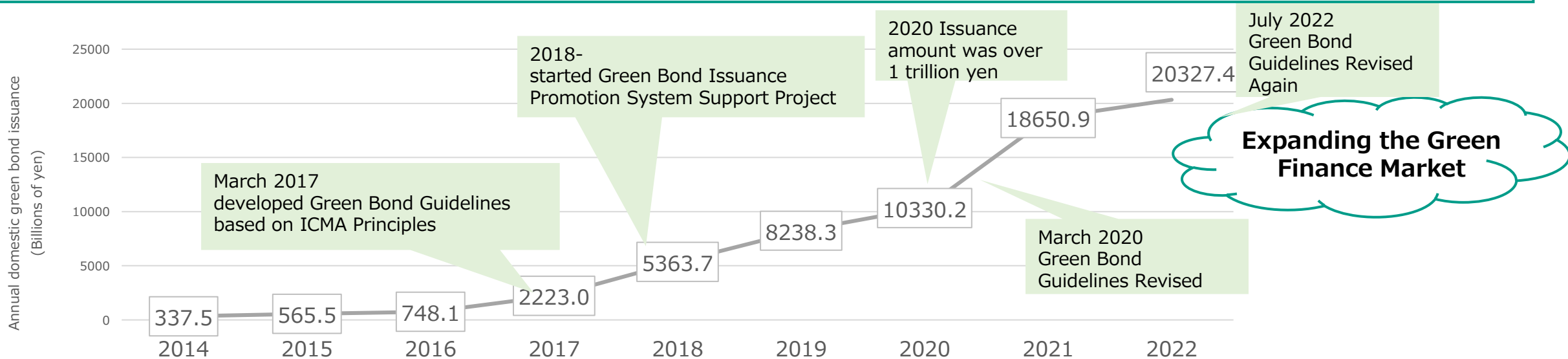


source Environmental Finance (2022) database (as of March 31, 2023 (accessed May 11, 2023)); Ministry of Environment Green Finance Portal (as of March 20, 2023)

Efforts to Expand Green Finance in Japan



- March 2017: **The Green Bond Guidelines** were established for the first time in Japan as a domestic practical **guideline** based on the International Capital Market Association's Green Bond Principles, which are the most widely recognized in the market.
- 2018: **Started the project to provide subsidies related to additional costs for the issuance of green bonds.**
- March 2020: The Green Bond Guidelines were revised in light of international trends and the revised ICMA Green Bond Principles. In addition, **guidelines for green loans and sustainability-linked loans were newly established.**
- July 2022: newly developed **Sustainability Linked Bond Guidelines (Revised Green Bond, Green Loan, and Sustainability Linked Loan Guidelines)** based on revised international principles and domestic and international trends.
- Summer 2023: Establish **a working group to update and expand the list of examples of green projects (Annex 1 Appendix to the Guidelines) to include biodiversity conservation, resource recycling, etc.**



Japan's Participation in the TNFD



- From Japan, Mr. Makoto Haraguchi (MS&AD Insurance Group) and Mr. Hiroataka Hideshima (Norinchukin Bank) of the 40 TNFD Task Force members from 18 countries on five continents
- The University of Tokyo's Global Commons Center joins TNFD knowledge partners (19 in all, including ISSB and CDP).
- The Ministry of Environment, together with the FSA, participated in the TNFD Forum in December 2021. In April 2023, MAFF (Ministry of Agriculture, Forestry and Fisheries) and MLIT (Ministry of Land, Infrastructure, Transport and Tourism) participated.
- Seven members of the Data Catalyst Initiative (127 organizations worldwide), including NEC, Biome, INOCA, and Tohoku University.
- In June 2022, the TNFD Consultation Group for Japan was established. In October 2022, the Keidanren Nature Conservation Council became the convener.
- Of the approximately 1,200 Forum members worldwide, about 150 organizations, mainly major business corporations and financial institutions, participate from Japan. (As of September 2023)

Kirin Holdings - World's First Trial of Disclosure in accordance with TNFD



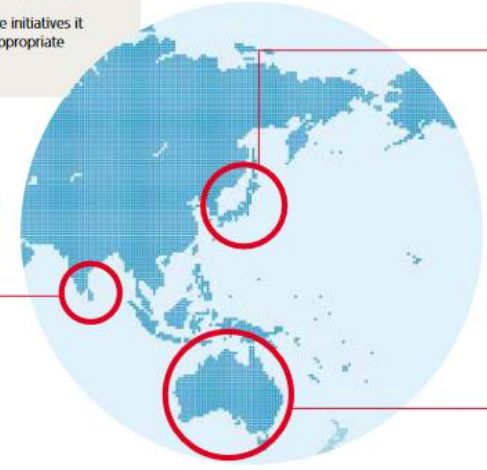
- Kirin Holdings became the first company in the world to make disclosures in accordance with a prototype version of the TNFD framework, and disclosed them in the Kirin Group Environmental Report 2022. (July 2022)
- Presented as an example of pilot testing in TNFD guidance.

■ **Focus on "place"** to assess dependencies on and impacts on natural capital

■ All projects were inspected to identify **priority areas** (3 sites) that had **highly dependencies and impacts on nature**.

LEAP approach focusing on "Location"

The LEAP approach involves analytical activities in the following order: Discovering the nature interface (Locate), diagnosing dependencies and impacts (Evaluate), assessing risks and opportunities (Assess), and preparing to address nature-related risks and opportunities and reporting back to investors (Prepare). This is a new approach to assessing and prioritizing natural capital dependence and impacts, with a focus on "Location". The Kirin Group intends to use the LEAP framework to organize and deepen the initiatives it has been pursuing as a company dependent on natural capital, and to make appropriate disclosures.



"Locations" that have a significant impact on our businesses and are important in terms of the natural and social environment.

Sri Lankan tea farms

Locate The delicious taste of *Kirin Gogo-no-Kocha* is supported by tea farms in Sri Lanka. Water sources of large coastal cities exist on the farms.

Evaluate Approximately 25% of the Sri Lankan tea leaves imported by Japan are used by *Kirin Gogo-no-Kocha*. Tea production areas face increased water risk and stress due to climate change, while heavy rains run off fertile soils.

Assess If Sri Lankan tea leave on which Kirin is highly dependent, cannot be used sustainably, the product concept will fail.

Prepare Supporting Sri Lankan tea farms in obtaining The Rainforest Alliance certifications since 2013. Widely publish the number of farms obtained the certificate and the number of farms trained in environmental reports, and on the Web.

The Japanese wine where "Location" determines the characteristics of the product.

Mariko Vineyard

Locate An important factor that determines the taste of wine is "terroir" or the character of the land. The vineyard is an area that remains natural and inhabited by rare species of plant and wildlife.

Evaluate Expansion of vineyards is necessary for the expansion of the Japanese wine, and the target is derelict land.

Assess Joint research with the National Agriculture and Food Research Organization (NARO) revealed that converting derelict land into vineyards creates high-quality grasslands and contributes to a rich ecosystem.

Prepare Contributing to Nature Positive and 30 by 30.

"Locations" where water risks are high and water resource management is particularly important.

Production plants in Australia

Locate All Kirin Group Australian brewery locations are in water-stressed watersheds.

Evaluate Water stress in Australia is very high both empirically and when measured with such tools as Aequeduct. Once every few decades, when flooding occurs due to torrential rains, the damage is significant.

Assess Water saving technology is the best in the Group, but there remains a possibility that production could be disrupted in the event of a severe drought.

Prepare Contribute to the development of the SBTs for Nature methodology and set new goals in line with this. Widely publish joint research results in environmental reports, and on the Web, environmental reports, and on the Web.

(From the Kirin Group Environmental Report 2022)

Trial Prioritization

Country	Manufacturing site	Water stress	Water Use	Biodiversity risk
US	Biokyowa	★★★★★	★★★★★	★★★
Thailand	Thai Kyowa Biotechnologies	★★★★★	★★★★★	★★★
Japan	KYOWA PHARMA CHEMICAL	★★★★★	★★★★★	★★★
Japan	Kirin Brewery Toride Plant	★★★★★	★★★★★	★★★
Japan	Kirin Brewery Yokohama Plant	★★★★★	★★★★★	★★★
Japan	Kirin Gotemba Distillery	★★★★★	★★★★★	★★★
Japan	Kyowa Kirin Fuji Plant	★★★★★	★★★★★	★★★
Australia	Lion Tooheys Brewery	★★★★★	★★★★★	★★★
Japan	Kirin Brewery Nagoya Plant	★★★★★	★★★★★	★★★
China	Shanghai Kyowa Amino Acid	★★★★★	★★★★★	★★★
Japan	Kirin Beverage Shonan Plant	★★★★★	★★★★★	★★★
Australia	Lion Castlemaine Perkins Brewery	★★★★★	★★★★★	★★★
China	Kirin Brewery (Zhuhai)	★★★★★	★★★★★	★★★
US	New Belgium Brewing Fort Collins Brewery	★★★★★	★★★★★	★★★

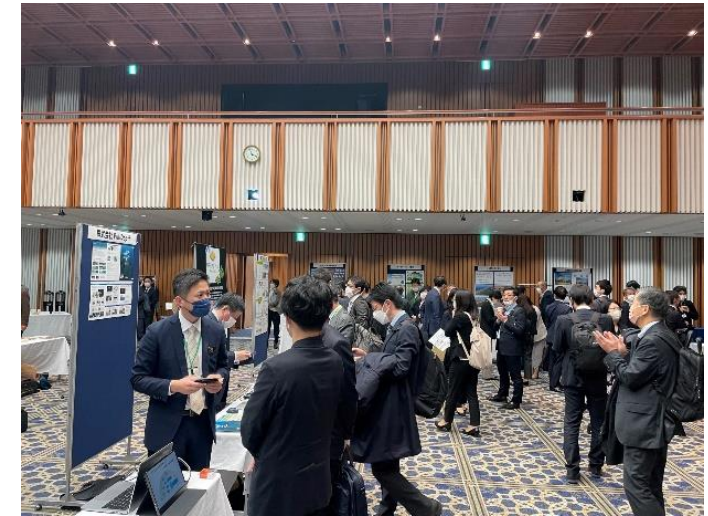
■ Prioritize manufacturing sites based on water risks and impacts and biodiversity risks

■ Collect data on priority areas and review prioritization

2023.3.9 Organized biodiversity business matching event



- **Co-hosted with Keidanren Council for Nature Conservation** as part of activities of the Japan Conference on the 2030 Framework for Biodiversity (J-GBF).
- **The first matching event on biodiversity technologies for the Ministry of the Environment.** 12 small and medium-sized ventures with related technology participated.
- Various matching activities will be conducted in the future.



List of Exhibitors

Company Name	Title.
FullDepth Co., Ltd.	"DiveUnit300" industrial underwater drone
Carbontribe	ReFi to convert Co2 reductions from forests and biodiversity into digital assets
ENOWA Co., Ltd.	Sustainable paddy padditch with water resource DX
UMITRON K. K.	UMITORONCELL Smart Feeder for Aquaculture
ESPEC MIC Corp.	Ecosystem restoration services based on local vegetation
Japan Manned Space Systems Corporation	JAMSS RemoFarm® - Agricultural information service using satellite images
Leave a Nest Co.,Ltd	Biodiversity conservation through the formation of education, technology and business development teams.
ThinkNature Inc.	TNFD Support! Biodiversity analysis tool "easyLEAP" using satellite data and AI
FishPass Co.,Ltd	A glass of water, a local river DX - Providing a new service to improve the environment
Civil Engineering & Eco-Technology Consultants Co.,Ltd	Introduction of support services for biodiversity information disclosure for corporate ESG management
Biome Inc.	Nature Positive Enabling Services Using Biodiversity Big Data
Innoqua Inc.	"Environmental transfer technology" that reproduces the ecosystem in an aquarium.

- ◆ Develop a "**Nature Positive Economy Transition Strategy** (tentative name)" by the end of FY2023 to clarify the vision and path toward the realization of a nature positive economy.
- ◆ Based on international trends such as the TNFD disclosure framework, **guidelines for corporate target setting and information disclosure will be developed** to support companies that engage in biodiversity-conscious management.

<Draft Elements of the Nature Positive Economic Transition Strategy (tentative name)>

- Effects in Japan of the shift to Nature Positive (economic effects, employment effects, etc.)
- The scale and areas of business opportunities created by Nature-positive economy
- Bottlenecks in the realization of Nature-positive economy
- Role of each entity and advanced cases, etc.

Toward a Nature-Positive Economy

Strategy for Nature Positive Economies

- Will be developed within 2023 FY, under the collaboration with related ministries, based on recommendations by the Liberal Democratic Party
- Shows that NP is not just a cost increase for companies but leads to new growth and encourages its practice.

Support for information disclosure including TNFD

- The Guidelines for Private Sector Engagement in Biodiversity Third Edition (April 2023) https://www.biodic.go.jp/biodiversity/private_participation/guideline/BDGL3_en_summary.pdf



- “Let’s touch evaluation tools” seminar

Promotion of OECM

- 30by30 Alliance (participants: 531)
- Legislation for OECM promotion
- Consideration of Incentives for OECM (Matching for “Certificate of Support”, Dispatch of specialized personnel)



Others

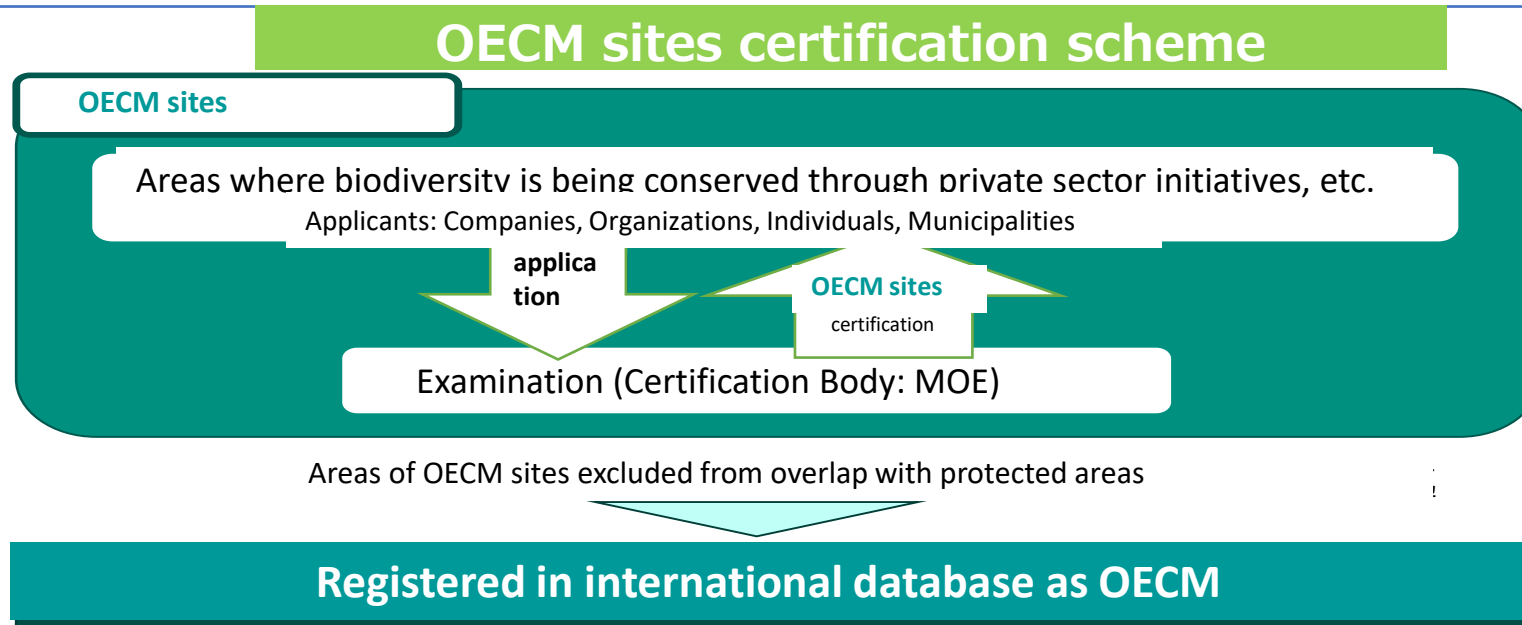
- Business matching (part1 March 2023, part2 Dec 2023)
- Establishment and operation of the G7ANPE



OECM sites



- Towards the realization of "Nature Positive," private lands are certified as "OECM sites" in order to promote efforts by companies and others, including those outside of protected areas.
- Areas certified as "OECM sites," excluding those overlapping with protected areas, are registered as "OECMs."
- In order to further promote such activities by the private sector and others, we are considering a legal system to certify voluntary efforts by companies and others, with a view to submitting a proposal to the Diet this fiscal year.



OECM: Other Effective area-based Conservation Measures (areas contributing to biodiversity conservation other than protected areas)
In Japan, a wide variety of sites can fall under this category, including satochi-satoyama, biotopes, forests managed for various purposes, and green spaces in cities and factories.

Image of OECM sites



Mitsui Sumitomo Insurance
Surugadai Bldg.(Tokyo)



Fujitsu Numazu Plant
(Shizuoka Prefecture)



Nippon Paper Industries
Houou Company Forest
(Yamanashi Prefecture)



Tsukuba Children's Forest
Nursery School
(Ibaraki Prefecture)

“Contribution Certificates” when you support some others’ OECM sites



The entity implementing the conservation activities (owner/manager of the OECM) will be issued a **certificate of accreditation**, and its supporters will be issued a **certificate of support**.

