1	
2	
3	
4	
5	
6	Transition Strategies toward Nature Positive Economy
7	 Creating Corporate Value Based on Natural Capital -
8	
9	
10	
11	
12	
13	March 2024
14	
15	Ministry of the Environment
16	Ministry of Agriculture, Forestry and Fisheries
17	Ministry of Economy, Trade and Industry
18	Ministry of Land, Infrastructure, Transport and Tourism
19	
20	
21	
22	

Transition Strategies toward Nature Positive Economy 23 Creating Corporate Value Based on Natural Capital -24 25 26 Ministry of the Environment 27 Ministry of Agriculture, Forestry and Fisheries Ministry of Economy, Trade and Industry 28 Ministry of Land, Infrastructure, Transport and Tourism 29 30 31 Introduction 32 The "Kunming-Montreal Global Biodiversity Framework (GBF)" adopted during 33 the COP15 of Convention on Biological Diversity set forth a vision for 2050 of "a 34 world in harmony with nature" and a mission for 2030, an intermediate goal, of 35 "taking urgent action to halt and reverse the loss of biodiversity to put nature on a 36 recovery path". The 2030 mission is the same concept as the "Nature Positive" agreed 37 upon at the G7 meeting in June 2021. 38 To achieve this new international commitment, the "National Biodiversity Strategy 39 2023-2030" (hereinafter referred to as the "National Biodiversity Strategy") was 40 adopted by the Cabinet in March 2023. In March 2023, the Cabinet approved "the 41 National Biodiversity Strategy 2023-2030" (hereinafter referred to as "National 42 Biodiversity Strategy"). The National Biodiversity Strategy sets forth "five basic 43 strategies" for achieving the 2030 Mission, and "realization of a nature positive 44 economy" is positioned as Basic Strategy 3. 45 The Nature Positive Economy Transition Strategy is positioned as one of the priority 46 measures in Basic Strategy 31, and has been discussed in the Nature Positive 47 Economy Study Group established by the Ministry of the Environment since March 48 2022. 49 A "Nature Positive Economy" is one that contributes to halting and reversing the loss 50 of biodiversity to put nature on a path to recovery, as defined in the National 51

52

53

Biodiversity Strategy. It also refers to an economy in which the flow of funds or others has been transformed by individual companies 2 incorporation of the concept of

 $^{^{\}rm 1}$ National Biodiversity Strategy 2023-2030 (Cabinet Decision on March 31, 2023) (Extract) 3-1-2 Nature Positive Economy Study Group

Through the Nature Positive Economy Study Group launched in March 2022, analyze the international and domestic situation of nature positivity and business, and formulate a vision and strategy for Japan based on this analysis, in order to promote efforts by the private sector for the conservation and sustainable use of biodiversity and natural capital. (Target) Develop a Nature Positive Economy Transition Strategy (tentative name) by the end of FY2023, which presents a vision and a roadmap toward the realization of a nature-positive economy.

² Companies in this strategy refer to entities that engage in economic activities, including individual agricultural enterprises.

nature conservation³ as a materiality in their value creation process (Nature Positive Management⁴), minimizing the burden in their value chains and maximizing their contribution to nature through their products and services, with consideration and evaluation of nature are incorporated through a change to a society in which consumers, markets, etc. evaluate the efforts of such companies, and with the combined efforts of diverse actors, including governments and citizens.

- As indicated in the International Integrated Reporting Framework (IIRC) Value Creation Framework, companies have six types of capital. Natural capital^{5,6} is one of these capitals, and a company's management depends on it and can also take advantage of new value creation opportunities through its utilization and other means.
- In order for individual companies to shift to this kind of nature positive management, it is necessary to consider natural capital as materiality in terms of both risks and opportunities for business activities, and to recognize that investors and the market will evaluate whether the company is appropriately interacting with natural capital (facing risks, seizing opportunities, etc.). Based on this recognition, it is necessary to position the concept of natural capital conservation as a materiality in the corporate value creation process.
- O To this end, this strategy presents the following three points:

 Specific examples of corporate value creation processes and business opportunities

This strategy shows how efforts to conserve and sustainably use natural capital can lead to the creation of corporate value through the improvement of resilience and sustainability of businesses and organizations. We will also present examples of business opportunities that have been created through appropriate responses to risks and the development of new businesses that utilize technologies that contribute to the conservation and sustainable use of natural capital, as well as the estimated market size for such businesses.

³ The term "conservation of natural capital" in this Strategy shall include the restoration and sustainable use of natural capital, and shall be written simply as "conservation" unless specifically quoted from another document or unless it is necessary to specify a particular meaning.

 $^{^4}$ Since we aim to realize nature positivity including natural resilience, as described in Item 3 of 2., nature positive management here is not management that has realized nature positivity, but management that aims for nature positivity.

⁵ The meanings of biodiversity, ecosystem services, and natural capital are as follows, but within this Strategy, from the perspective of clarifying the relationship with corporate value, we will simply refer to "natural capital" unless otherwise quoted from other documents or it is necessary to specify.

Biodiversity: The differences among all living things on Earth, from animals such as humans to microorganisms such as plants and fungi. The richer the biodiversity, the more resilient the Earth is, similar to how diversity in a portfolio decreases risk and uncertainty and increases resilience in business activities.

Ecosystem services: the benefits that ecosystems provide to nature. Flows generated from natural capital.

⁶ While there are various definitions of natural capital, IIRC defines natural capital as "all renewable and non-renewable environmental resources and processes that provide goods and services on which the past, present, and future success of an organization is based. Natural capital includes Biodiversity and ecosystem health. Source: International Integrated Reporting Framework (January 2021)

2 Factors that companies should keep in mind when transitioning to nature positive management

By listing the elements that must be met in order to make the transition, this strategy provides guidelines for actions to be taken by companies (e.g., what the goal is, what to keep in mind, etc.).

3 Backup through national policies

Support for the integration of the concept of natural capital conservation into the corporate value creation process through collaboration among relevant ministries and agencies will be presented, along with examples of specific measures in each step of the value creation process.

○ The individual processes (creation of internal structure, plan-making, etc.) for companies to promote nature positive management are described in the Guidelines for Private Sector Engagement in Biodiversity (issued in April 2023, 3rd edition), and this Strategy, so to speak, connects the National Biodiversity Strategy and the said Guidelines.

1. Necessity of Transition to Nature Positive Management: Breaking Free from Socioeconomic Disruption Risks and Creating Corporate Value

(Analysis of current situation and need for transition)

99 100

101

102

117118

119

120

121

122 123

124

125

- Natural capital supported by rich biodiversity is the foundation of a prosperous society, as it contributes to the stable supply of safe water and food essential for human survival, supports the safety and security of people's lives through disaster prevention and disaster mitigation, and provides the foundation for the development of unique regional cultures.
- On the other hand, it has been reported that many economic activities depend on natural capital and that natural capital is continuously being degraded.
- 114 As for the state of degradation of natural capital, for example, estimates using the 115 Living Planet Index (LPI), an index of biodiversity, show that as of 2018, it is 69% 116 degraded compared to 1970.^{8,9}
 - O Specific examples of risks to economies due to dependence on and loss of natural capital include the inability to procure raw materials, the impact on pollen-carrying insects such as honeybees¹⁰, and increased economic costs due to invasive alien species¹¹. In the world, failure to properly address nature-related risks can affect a company's finances, external reputation, and even result in economic losses.¹²
 - O Therefore, in order to make socioeconomic activities sustainable, it is necessary to shift to nature positive management (management that incorporates the concept of natural capital conservation), and companies and countries around the world are already making significant moves toward this as a necessary part of the transformation to a sustainable society along with climate change.

⁷ SOURCE: <u>Increasing Nature-Related Risks: Why Crises Around Nature Matter for Business and the Economy</u> (2020, World Economic Forum)

It is clear that more than half of the world's total GDP, or US\$44 trillion, depends to a moderate to high degree on nature for its economic value creation, and is therefore at risk of natural disappearance."

⁸ Source: LIVING PLANET REPORT 2022 (2022, WWF)

⁹ According to the Global Assessment Report on Biodiversity and Ecosystem Services published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in 2019, the direct drivers of biodiversity loss are reported in order of their impact to be (1) changes in land and sea use, (2) direct extraction of organisms, (3) climate change, (4) pollution, and (5) invasion of non-native species, in descending order of impact.

¹⁰ Source: "Economic Valuation of Pollination Services in Japanese Agriculture (2016, National Institute of Agro-Environmental Sciences)."

https://www.naro.affrc.go.jp/archive/niaes/sinfo/result/result32/result32_70.html

¹¹ Source: "Thematic Assessment Report on Invasive Alien Species and their Management" (2024, IPBES) https://zenodo.org/records/10521002

¹² Source: BloombergNEF "When the Bee Stings: Counting the Cost of Nature-Rerated Risks"

(Corporate contributions to the conservation of natural capital and value creation)

142

147

- O Companies have the ability to contribute to the conservation and restoration of natural capital¹³ through the development and utilization of their technologies and the supply of products to the market, in addition to the burden they place on natural capital. Given the fact that companies have already demonstrated their technological capabilities in areas such as climate change countermeasures and reducing the environmental impact of resource use, and that this has led to the creation of corporate value, we can fully expect that the provision of corporate solutions for the conservation and restoration of natural capital will also serve as a driving force for the realization of nature positivity.
- Outlook 5th Edition (GBO5)¹⁴, the realization of Nature Positive requires not only the conservation of the natural environment in the so-called narrow sense, such as the conservation of rare nature, but also the mobilization of all efforts to promote climate change measures, the realization of a circular economy, chemical substance measures, etc. In other words, if a company is taking these measures, it has already started up the path toward nature positivity.
- O Depending on the method, both positive synergies and negative side effects (tradeoffs) can occur between the transition to a nature-positive, carbon-neutral, circular economy. By taking this into account, it will be possible to effectively promote the transition to a nature-positive economy.
 - O It is important to note that the impacts of business activities on natural capital differ significantly from those of climate change responses, including the fact that the impacts of the same activities vary from place to place, that the natural capital of each location is unique and therefore the impacts of one location cannot be truly offset by the recovery of another location, that networking is important, and that the resiliency of nature must be taken into account.
 - O It should be noted, for example, that one of the reasons for the loss of natural capital in Japan, which differs from other countries, is that there are not enough people to manage satochi-satoyama (rural areas) due to population decline and aging, and natural capital is not adequately managed and utilized. Considering nature as a system and promoting sustainable conservation and utilization while deepening dialogue with local communities by adding value to natural capital in Japan will contribute to the conservation of Japan's unique natural capital, including secondary nature that has been maintained by human intervention, and will also help secure the basis for livelihood, culture, and national power. It can also serve as a model for nature-positive initiatives in the Asian monsoon region.

¹³It refers to the restoration of lost nature through afforestation, etc., or to the exercise of nature's resilience.

 $^{^{14}}$ Secretariat of the Convention on Biological Diversity, September 2020

O Furthermore, one of the characteristics of Japan is that it relies on natural capital outside of Japan for the majority of its resources and production activities. Even companies that operates in Japan may depend on natural capital outside of Japan by importing raw materials through trading companies, etc. Therefore, it is necessary to visualize and evaluate the burden on natural capital from the perspective of the global value chain, and to promote efforts to reduce the burden.

2. Factors to keep in mind when transitioning to nature-positive management: Linking the conservation of natural capital to the enhancement of corporate value

(1) Nature Positive Management and the Corporate Value Creation Process

173

174175

176177

192

193

194

195

196197

198

- 178 As mentioned above, the Strategy contemplates a transition to a nature positive economy through behavioral change by individual companies (transition to nature-positive management), nature-positive initiatives by diverse actors including government and citizens, and the transformation of the flow of funds as a total result of these initiatives.
- Companies are already making efforts to incorporate non-financial values positioned 183 as materiality for them into their value creation process in the context of 184 sustainability management, ESG investment, etc. In the case of natural capital, by 185 correctly understanding the company's dependence on and impact on natural capital 186 and its potential for creating opportunities, and by incorporating what is positioned 187 as materiality, social value will be created, which will again be returned to the 188 company's six sources of capital and will have an impact on non-financial capital 189 190 other than natural capital, thus creating a virtuous cycle. This is thought to lead to the creation of new corporate value by creating a virtuous cycle. 191
 - O In the process, measures such as ensuring traceability to understand the burden on natural capital in the value chain and avoiding loss of natural capital will improve business sustainability in terms of improving corporate resilience to procurement risk and disaster risk. Value creation stories such as new business development focused on opportunities will also appeal to investors. The experience and technologies developed in the process of responding to risks in one's own company can be transferred to the risk response of others by providing them as products and services, and this may lead to new business areas.
- 200 In the world, there is a movement to reform the flow of private-sector funds through disclosure of information through the Task Force on Nature-related Financial Disclosure (TNFD), etc. If such a movement spreads globally, companies can expect to attract funds and customers through disclosure of information related to nature-positive management. In addition, through dialogue with local residents, companies can expect to realize continuous and stable business operations and market acquisition in the region.
- 207 O By refining the value creation story through the aforementioned disclosure and dialogue with investors and the community using this information, the non-financial activities of natural capital initiatives may also lead to improved financial performance, such as higher stock prices and better P/B ratios.

O The foundations that support the realization of this value creation process are the progress of digital transformation (DX) backed by the government, the enhancement of scientific knowledge, appropriate evaluation by the international community, and the fostering and maintenance of momentum for initiatives, including among consumers. Not only do these foundations support the realization of the value creation process, but also the knowledge, technology, etc. generated from each step of the process will lead to the strengthening of these foundations.

218

211

212

213

214 215

216 217

219

220

 $\frac{221}{222}$

223

224

225

 $\frac{226}{227}$

228

229230

231

232

233

234 235

236237

238239

240

241

242

243

244 245

246

(2) Elements to be kept in mind when implementing the value creation process (action guidelines)

O There are several elements (action guidelines) that need to be kept in mind when implementing a corporate value creation process that incorporates the concept of natural capital conservation. Corporate governance reforms to meet these guidelines will make it easier for investors and others to evaluate efforts and enable effective value creation.

[Item 1] Reduce the foot load first.

In taking action, in accordance with the concept of the so-called "Mitigation Hierarchy¹⁵", firstly, avoidance and reduction of impacts on natural capital from business activities should be fully considered, and in addition, actions that have a positive impact on natural capital should be considered.

[Item 2] Step-by-step efforts toward overall load reduction are also encouraged.

Aim to understand and reduce the overall burden from the company's business activities as a whole. At the same time, companies should be encouraged to start with one part of their business activities, taking into account the relationship between their business activities and natural capital.

[Item 3] Value in efforts to speed down losses

Therefore, the goal is for each company and its value chain to minimize the impact and maximize the contribution to natural capital through its products and services, thereby achieving nature positivity, including the resilience of nature. The goal is to realize nature positivity, which includes the resilience of nature.

[Item 4] Creating and meeting consumer needs

To properly identify consumer needs and create such needs, and to provide the market with products and services that contribute to nature positivity.

[Item 5] Also contributes to the enhancement of regional value

Nature-positive management should contribute to the conservation of biodiversity in the region and the resolution of local issues. Especially in cases

⁻

¹⁵ Source: Communiqué of the G7 Toyama Environment Ministers' Meeting (provisional translation) (2016, Ministry of the Environment)

where development activities, etc. may place a burden on natural capital, the project should aim to avoid trade-offs and create synergies through careful dialogue with local residents, etc., including voluntary environmental assessments, with regard to efforts to reduce the burden, etc.

As discussed below in section 5, even if the above elements are met, it is difficult to shift to nature-positive management solely through the efforts of individual companies. It is necessary to incorporate the concept of natural capital conservation into society as a whole through backup by national policies and the exertion of solidarity, including government and financial institutions.

251

256

O In addition, please refer to the Guidelines for Private Sector Engagement in Biodiversity (3rd edition) for specific details of corporate initiatives and points to keep in mind for the transition to nature-positive management.

<Column> History and prospects of discussions on evaluation indices necessary to incorporate the concept of natural capital conservation into management.

Various institutions, research institutes, financial institutions, and initiatives have studied and developed indicators to quantitatively evaluate the load on natural capital, and no common indicator that can be used by many businesses has yet been shared. On the other hand, several indicators have been proposed that can be used if the purpose of use is limited and clear, and the limitations are understood. In this reference collection, we have compiled a group of indicators that have been developed and are being used in some advanced fields, including footprint systems, life cycle impact assessment systems, and ecosystem condition assessment systems. While each of these has been improved, the overall trend is to assess multiple environmental and social issues in an integrated manner. Discussions on indicators for assessing and monitoring the state of biodiversity are continuing in preparation for COP16. What is most important for individual businesses is to identify these trends and the characteristics of each indicator, select the most appropriate indicator according to their business form, objectives, etc., and utilize it in load analysis and target setting. Such self-analysis is generally the source of a company's competitiveness.

3. Picture after the transition to a nature-positive economy: A foundation for prosperity beyond GDP, based on natural capital.

- O The following shows the state of the economy in 2030, when the transition to a nature-positive economy has been made through the progress of the transition to nature-positive management by individual companies based on this strategy, the development of nature-positive initiatives by various actors including government and citizens, and the transformation of the flow of funds as a total result of these initiatives.
- O In the picture after the transition to a nature-positive economy, a virtuous cycle has been created in which the realization of the value creation process by individual companies has resulted in their efforts being highly evaluated by investors and local communities through information disclosure, leading to increased corporate value and local value, and further promotion of their efforts.
- O According to a survey by the Japan Business Federation and the Keidanren Council for Nature Conservation, the percentage of company members that have reports or decisions on biodiversity in their board of directors or management meetings is about 30% ¹⁶ in FY2022. In 2030 the concept of conservation of natural capital is now positioned in management as a materiality with this figure will be about 50% by 2030 (estimated by Ministry of the Environment).
- O In small and medium-sized enterprises (SMEs)¹⁷, which account for 99.7% of the total number of enterprises in Japan (based on the number of enterprises), initiatives will be being promoted in part by large enterprises in response to domestic and international value chains, coupled with dialogue and encouragement from regional financial institutions and others. Even in the case of SMEs with local roots that originally conducted economic activities through the sustainable use of natural capital, the concept of a regional recycling symbiosis zone will be gaining popularity, such as the implementation of projects that simultaneously solve local economic cycles and environmental, social, and economic issues. The creation of a social and economic infrastructure in which these businesses can be reevaluated will be progressing. In many cases, the direct impact of the company's own business activities is assumed to be small, so it is effective for small and medium-sized enterprises to find the connection between their business activities and natural capital through external approaches from the government, financial institutions, and business partners, as well as by setting targets for initiatives and linking them with

¹⁶ Refers to the percentage of companies that responded to a survey conducted by the Keidanren Council for Nature Conservation that "there are reports or decisions on biodiversity at board of directors meetings or management meetings. It should be noted that the response rate to this survey (in FY2022) is approximately 20% of Keidanren member companies, and the actual status of companies that have not yet responded is not known.

¹⁷ In this Strategy, medium- and small-sized enterprises, excluding large enterprises, are simply referred to as "SMEs.

310 finance. 18

- 311 As an indication of the expansion of the base, including small and medium 312 enterprises, the number of organizations declaring and endorsing the Nature 313 Positive Declaration¹⁹ will be 1,000 organizations.
- As a result, a wide range of companies are shifting to nature-positive management, and consumers and markets are evaluating the efforts of these companies, creating an economic society in which consideration and evaluation of nature and ecosystems are incorporated and the flow of funds is reformed.
- 318 O The above lays the foundation for a prosperous society based on natural capital and beyond GDP.

< Column>Goal Setting of Local Governments and Financial Institutions

In Kyoto Prefecture, the Kyoto Zero Carbon Framework, a sustainability-linked loan that provides incentives such as preferential interest rates to companies that achieve the total CO2 reduction targets set by the prefecture, was established in January 2023. In the field of nature, as well, the Kyoto Zero Carbon Framework may lead to the promotion of initiatives throughout the value chain through sustainable finance, depending on progress in quantitative evaluation of the impact and effects of business activities and efforts to understand the value chain, and is expected to serve as a driving force for initiatives, including those by small and medium-sized enterprises.

320

321 322

323

324

325 326

327

328

¹⁸According to a survey conducted by the Japan Chamber of Commerce and Industry (JCCI) (FY2023), about 30% of JCCI members recognize that there is a "close relationship" between their business activities and biodiversity.

¹⁹ The Japan Council for the Realization of the 2030 Biodiversity Framework (J-GBF) launched a call for action in October 2023. It is composed of organizations that can encourage behavioral change in all sectors of the public. The ministries and agencies participating include the Financial Services Agency, Consumer Affairs Agency, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, and Ministry of Land, Infrastructure, Transport and Tourism. The current number of declared organizations is 28 (as of March 11, 2024).

4. Effects of the Transition to a Nature Positive Economy - Annual 1,372 trillion yen business opportunity created worldwide

330

363

364

331 332 The transition to nature-positive management and the economy as a whole will entail 333 334 a major social and economic transformation, requiring huge investments and creating significant business opportunities. 335 For example, the World Economic Forum estimates for 2020 that approximately \$368 336 trillion in annual global investment is needed to create new opportunities through 337 338 the transition to a nature-positive economy. ²⁰ 339 Looking at the breakdown of the said estimates, "Infrastructure and built environment systems" accounts for a large share of the absolute amount. In terms of 340 multipliers between the amount of investment and the amount of opportunities 341 created by the investment, the multipliers for "food, land, and ocean use" and "energy 342 and mining activities" are large. 343 Furthermore, according to the World Economic Forum's estimate for 2020, the 344 transition to a nature-positive economy will increase business opportunities 345 worldwide by 1,372 trillion yen per year by 2030. The Ministry of the Environment 346 347 estimated that the transition to a nature-positive economy would create 47 trillion yen in new business opportunities annually by 2030.²¹ 348 349 More than three-quarters of the estimated amount is also strongly related to carbon neutrality (net zero) and the circular economy. In other words, it can be said that the 350 climate change countermeasures and promotion of resource recycling that Japanese 351 companies have focused on so far have all been nature-positive efforts, just as the 352 aforementioned GBO5 describes. 353 354 There can be synergies and trade-offs between the transition to a nature-positive economy and the transition to a carbon-neutral, circular economy, depending on the 355 approach, and similar considerations are needed between nature-related values and 356 in relation to social values such as disaster prevention/mitigation, local economic 357 revitalization, and health, and so on. 358 Beyond the realization of nature positivity, carbon neutrality, and a circular economy, 359 the ultimate goal is the realization of sustainability in the environment, economy, 360 and society, and the improvement of wellbeing through such sustainability. Therefore, 361 in addition to companies, all stakeholders, including investors and financial 362

can create, are required to have a bird's-eye view of sustainability as a whole.

institutions that evaluate business opportunities and economic value that companies

²⁰ Source: New Nature Economy Report II: The Future Of Nature And Business (2020, World Economic Forum) The opportunity amounts shown in this estimate represent the difference between the BAU case and the case where the transition to a nature-positive economy takes place.

²¹ Source: 5th Nature Positive Economy Study Group, Document 3 (2023, Ministry of the Environment)

365
366 (Reference) Examples of New Business Opportunities Created by the Transition to a
367 Nature-Positive Economy (Reference Materials)
368

5. Challenges and Responses to the Transition to a Nature Positive Economy - Backed up by Measures of Relevant Ministries and Agencies

O In order to make the value creation process incorporating the concept of natural capital conservation a reality, it is necessary for the government to clearly express its intention to encourage the private sector to actively engage in the process, and to provide backup through measures that address issues in each field. This is because issues related to the conservation and restoration of natural capital tend to lag behind other social and environmental issues, despite the fact that damage to nature is a risk that directly leads to business interruption, as evidenced by the fact that we would not be able to obtain even a drop of water without the work of nature.

This may be related to the fact that it is difficult to directly perceive the crisis, especially when, as in Japan, the majority of resources and production activities depend on natural capital outside of Japan, and some say that it is actually difficult to understand the connection between their business activities and natural capital.²² In addition, it is also believed that, with regard to Japan, the perception that Japan is blessed with abundant natural resources is deeply rooted, making it difficult to feel a sense of crisis. ²³

O Despite this background, creating an environment that allows Japanese companies to correctly recognize and respond to the risks associated with not working to conserve and restore natural capital, and to seize the opportunities presented by such efforts, will lead to the strengthening of the international competitiveness of Japanese companies.

○ Within the government, measures related to nature positivity are being actively developed in various fields. For example, the Ministry of Agriculture, Forestry and Fisheries (MAFF) formulated the "Green Food System Strategy" (May 2021) for the establishment of a sustainable food system and the "Green Food System Law²⁴," a legal system to realize the strategy, and the "Forest and Forestry Basic Plan" (June 2021), which calls for the recycling of forest resources by "harvesting, using, planting, and raising, the operation and revision of the "Fishery Law²⁵," the initiatives of the Ministry of Land, Infrastructure, Transport and Tourism's Green Infrastructure Public-Private Partnership Platform, and the development of measures based on the "Green Infrastructure Promotion Strategy 2023" (September 2023). This strategy is

²² According to a survey conducted by the Japan Business Federation and the Keidanren Council for Nature Conservation (FY2022), when asked "What challenges do you face when working on biodiversity (including responding to the TNFD)?", 25% of corporate members who responded said that, although the percentage has decreased since the FY 2019 survey, they answered that they were unsure of the relevance to their business.

²³ In fact, as mentioned above, on land, nature is being degraded mainly due to underutilization caused by the concentration of population in urban areas, population decline, and the aging of the population.

²⁴ Law Concerning the Promotion of Business Activities to Reduce Environmental Impact for the Establishment of a Food System in Harmony with the Environment (Law No. 37, 2022)

²⁵ Fishery Act (Act No. 267 of 1949)

402 in line with these related measures and will be promoted in an integrated manner. It is also important to incorporate nature-positive elements into existing subsidies 403 and projects in order to reform the flow of funds. For example, the Ministry of 404 Agriculture, Forestry and Fisheries (MAFF) is introducing "cross-compliance" for all 405 406 subsidized projects, etc., requiring the submission of a checklist of initiatives to reduce environmental impact at the time of project application and reporting, which 407 should be implemented as a minimum.²⁶ 408 The following section outlines the direction of measures in line with the corporate 409 value creation process depicted in section 4, as well as specific measures that will 410 support the realization of each process. 411 Through the implementation of these measures, funds from both the government and 412 the private sector (companies, financial institutions/investors, consumers, etc.) will 413 be invested in reducing negative impacts on natural capital and increasing positive 414 impacts, thereby enabling society as a whole to realize nature positivity. 415 Based on the direction indicated in this Strategy, we will vigorously promote 416 measures in close collaboration among relevant ministries and agencies.²⁷ 417

(1) Recognition of risks and opportunities, identification and response to risks

<Direction of measures>

project implementation stage.

418419

420 421

422

423 424

425 426

427

428 429

430 431

432433

- Assist companies to understand the contact points and impacts of their business activities with nature. In particular, given the fact that many industries have a considerable degree of dependence on and impact on nature through their domestic and international value chains, we will develop and provide support according to the needs of companies to enable them to assess their relationship with natural capital throughout their value chains.
- O In promoting the assessment of the relationship with natural capital, it is effective to strategically utilize indicators and tools for evaluating one's own efforts in accordance with one's own business form, objectives, etc., and from the perspective of being able to appropriately express the level of one's own environmental impact and the amount of one's own efforts. Even without measuring biological diversity itself, it is possible to approach the quality and quantity of water, soil, air, forests, and other components of natural capital that are closely related to business activities, and we support the use of²⁸, an indicator that makes it possible to measure them,

²⁶ Trial implementation will be limited to the time of application in FY2024, with full-scale implementation targeted for FY2027.

²⁷ Climate change and biodiversity have been discussed as "twin conventions" and as separate treaties, and therefore, climate change measures (especially mitigation measures) are not included in this report. However, as mentioned above, climate change measures are also important for the realization of Nature Positive, and many mitigation measures implemented by relevant ministries and agencies contribute to the realization of Nature Positive as long as there is no trade-off with Nature Positive at the

²⁸ Indicators that measure the amount of load on things closely related to one's business activities (initial indicators) include the water footprint, which is an indicator for water consumption, and the land footprint, which is an indicator for land use.

- and²⁹, an indicator that comprehensively measures the amount of impact on natural capital.³⁰
- O In addition, given that the value of natural capital is tied to the region in which it exists, measures should be taken to establish methods for assessing the value of natural capital on a regional basis and to encourage local governments to make use of such assessments.
- Market data will be provided, etc., in order to improve the value of initiatives not only in terms of risk response but also in terms of opportunity creation by appropriately understanding the status of changes in consumer awareness and behavior.
 - O Regarding the development of a system to promote initiatives, we will promote an integrated approach such as the use of "Nature-based Solutions (NbS) 31" to contribute climate change mitigation and adaptation, environmental values of resource recycling, disaster prevention and mitigation, revitalization of local economies, water and air quality conservation, maximizing synergies with social values such as health, etc., minimizing trade-offs in order to build a comprehensive, integrated, and efficient framework to promote sustainability, amidst the existence of many sustainability-related issues such as climate change and human rights.

<Specific measures>

445

446

447

448449

450

451

452453454

455

456

457

463

464

465

(Related to risk recognition and identification)

- Promotion of nature-related financial information disclosure based on TNFD, etc. [Ministry of the Environment].
- Verification in the market on consumer behavior change and study of measures to promote nature-positive consumption behavior [Ministry of the Environment].
- Survey of good practices in Japan and abroad for efficient and effective methods of identifying nature-related risks in the value chain by business category or product/service.
 - Survey on the status of OECM, etc. in other countries to enable detection of raw material procurement risks [Ministry of the Environment].
 - Demonstration of carbon footprint calculation for the life cycle of processed foods

²⁹ Typical indicators and tools for comprehensively measuring the impact of a company's business activities on nature include the Ecological Footprint, which is based on resource consumption, and the LCIA (Life Cycle Impact Assessment: a typical example in Japan is LIME), which enables assessment on a life cycle basis. The most common example in Japan is LIME (Life Cycle Impact Assessment), which enables life cycle assessment. Indicators and tools to assess the direct impact of development and mining on nature and the impact of development and mining through the value chain include the STAR based on the IUCN Red List.

³⁰ For more information on the practical application of indicators and tools related to nature in each company, as well as methodologies for target setting, disclosure, etc., please refer to the Guidelines for Private Sector Engagement in Biodiversity (3rd Edition) prepared by the Ministry of the Environment, as well as materials and videos from the "Let's Touch the Tools" meeting held by the Ministry in FY2023.

³¹ Nature-based solutions: Efforts to solve social issues by utilizing the functions of healthy natural ecosystems.

[Ministry of Agriculture, Forestry and Fisheries of Japan].

468 (related to risk response)

466

467

- Support for corporate goal-setting through the use of nature-related data and the sharing of case studies [Ministry of the Environment].
- Collaboration on selection of procurement sources and duplication (Sustainable Management Promotion Platform (tentative name)) [Ministry of the Environment].
- Encouraging Corporate Practices Based on Guidance on Environmental Due Diligence, etc. [Ministry of the Environment].
- Promote substitution of parts and materials procurement with recycled materials and renewable resources such as wood, etc. [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry].
- Promotion of dialogue and action toward circular economy transition in the private sector based on the "Circular Economy and Resource Efficiency Principles (CEREP³²)" adopted at the G7 Sapporo Ministerial Conference on Climate, Energy and Environment in April 2023, etc. [Ministry of the Environment, Ministry of Economy, Trade and Industry].
- Promotion of reduction of marine litter generated from business activities and reduction of use and discharge of microplastics based on the Law for Promotion of Shoreline Debris Disposal, etc. [Ministry of the Environment].
- Promote an environmental impact assessment system that ensures appropriate environmental considerations in the implementation of projects and contributes to the preservation of the natural environment.
- Promotion of geothermal utilization in symbiosis with local communities through the establishment of a continuous hot spring monitoring system using the IoT [Ministry of the Environment].
- Promotion of surveys, etc. to prevent resource depletion due to the expanding use of hot springs and disasters caused by combustible natural gas [Ministry of the Environment].
- Ensuring sustainability in the fisheries industry [Ministry of Agriculture, Forestry and Fisheries].
- Promotion of measures against invasive alien species based on the Action Plan for the Prevention of Invasive Species Damage (reviewed in FY2024) to reduce business risks in the value chain caused by the unintentional introduction of alien species [Ministry of the Environment].
- Promote initiatives that contribute to regional economic development, climate change adaptation and ecosystem maintenance through Nature based Solutions

³² Circular Economy and Resource Efficiency Principles. International guidelines for promoting private sector action on circular economy and resource efficiency.

(NbS) such as green infrastructure [Ministry of the Environment, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Agriculture, Forestry and Fisheries].

(2) Identifying and creating opportunities

<Direction of measures>

- 509 Support the creation of new industries that contribute to the realization of nature positivity through business matching and technological development support.
 - O In Japan, in light of the negative impact on natural capital caused by the reduction or withdrawal of human influence, in order to actively utilize natural capital in the countryside and other regions in a sustainable manner while also utilizing traditional culture and local and traditional knowledge, the conversion to biomass fuels, etc. and appropriate management of forests and forest resources which leads to solve social issues in the region and realize Nature Positive through the sustainable use of forest resources. As mentioned above, in nature positive management, not only the conservation of natural capital but also its sustainable use will lead to value creation. The agriculture, forestry, and fisheries industries are businesses that utilize natural capital, and the sustainable promotion of the agriculture, forestry, and fisheries industries is directly linked to the increase of natural capital. Therefore, we will also work to improve the productivity of agriculture, forestry, and fisheries, including the restoration of wetlands and seagrass beds, and the management of forests.
 - O In addition, nature-symbiosis sites that contribute to the "30by30 target," which is one of the global targets for 2030 set in the Kunming-Montreal Biodiversity Framework further develop the efforts to contribute to the enhancement of corporate and regional values, the "Law on Promotion of Activities for Enhancing Biodiversity in Local Communities," which will include efforts to restore degraded land and create places that nurture biodiversity, as targets for promotion, and a certificate of support will be established to promote efforts that contribute to nature positivity in various ways, including indirect support.

<Specific measures>

- (Common to all sectors: creation of new industries)
- Matching and information dissemination to promote the use of technologies that contribute to nature positivity held by start-up companies, etc. [Ministry of the Environment].
- Promote management of hazardous substances that damage nature by preventing their leakage into the environment, etc., and promote development of alternative

- substances with low environmental impact [Ministry of the Environment, Ministry of Economy, Trade and Industry].
- Addition of requirements for Nature Positive in the adoption of subsidies and grants for projects that have synergy with Nature Positive, etc. [Ministry of the Environment, etc.

546

549

550

551

552

553

547 (Food, agriculture, forestry, and fisheries sectors: Balance of improving productivity and 548 sustainability of the food, agriculture, forestry, and fisheries industries)

- Support for the creation of model advanced districts for reducing environmental impact and sustainable development on a regional basis, from procurement of materials and energy to production, processing, distribution, and consumption of agricultural, forestry, and fishery products [Ministry of Agriculture, Forestry, and Fisheries of Japan].
- Support for municipalities that are working to create organic villages (production areas where the entire community is involved in organic farming) [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Promotion of "visualization" of reduction of environmental burden through efforts to reduce greenhouse gas emissions and conserve biodiversity at the production stage of agricultural products [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Sustainable development of food, agriculture, forestry, and fishery industries rooted in the unique regional climate, including Geographical Indications (GI) products, and promotion of cooperation with the tourism sector, etc. [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Forest development to fulfill multifunctional roles of forests such as water source recharge and disaster prevention [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Study to promote forest management that contributes to biodiversity conservation [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Recognition of corporate activities that maximize carbon sequestration and contribute to biodiversity conservation through the recycling of forest resources [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Promoting the use of wood in urban areas, etc., where carbon storage effects are expected [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Environmental improvement to promote the use of wood produced through sustainable forest management [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Introduction of "Cross Compliance", which requires all subsidized projects of the 578 Ministry of Agriculture, Forestry and Fisheries, that mandates the implementation

- 579 of environmental impact reduction initiatives which should be done by minimum [Ministry of Agriculture, Forestry and Fisheries of Japan]. 580
- Study on the addition of specific methodologies to promote further expansion of J-581 credits in the agricultural sector, etc. [Ministry of Agriculture, Forestry and Fisheries 582 583 of Japan].
- Promoting further creation and utilization of forest-based J-credits based on their 584 contribution to biodiversity conservation and prevention of natural disasters in 585 addition to carbon neutrality [Ministry of Agriculture, Forestry and Fisheries of 586 587 Japan].
- 588 Promotion of forestation activities by private companies in national forests through conclusion of agreements, etc. [Ministry of Agriculture, Forestry and Fisheries of 589 Japan]. 590
- Environmental improvement for promotion of forestry projects by Japanese 591 592 operators under JCM [Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment]. 593
- Based on the ASEAN-Japan Midori Cooperation Plan, formation of concrete projects 594 by setting up public-private councils for decarbonization in the ASEAN region and 595 596 creation of JCM (Bilateral Reduction Mechanism under the Paris Agreement) projects in the agricultural sector [Ministry of Agriculture, Forestry and Fisheries, 597 Ministry of the Environment]. 598

(Construction and infrastructure sector: Green infrastructure initiatives that utilize the 600 diverse functions of the nature in social capital development, land use, etc.) 601

599

- Study to establish a practical evaluation method for green infrastructure and to 602 603 reflect the economic value of green infrastructure in the market and to promote investment [Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of urban development GX, including the establishment of a certification 605 system for efforts to secure green space by the private sector, etc. [Ministry of Land, 606 607 Infrastructure, Transport and Tourism.
- 608 Promotion of technological development and regional introduction of green 609 infrastructure planning, development, maintenance, etc. [Ministry of Land, Infrastructure, Transport and Tourism]. 610
- Promoting efforts to create multi-nature rivers that contribute to the conservation 611 612 and creation of river environments through technological development [Ministry of Land, Infrastructure, Transport and Tourism]. 613
- Conservation, restoration, and creation of blue infrastructure (seaweed beds, tidal 614 flats, etc. and biologically symbiotic port structures) through effective use of dredged 615 sediments generated by port construction, etc. [Ministry of Land, Infrastructure, 616

Transport and Tourism].

617618619

620

(Regional and financial sectors: Measures to make nature-positive initiatives a solution to issues and business opportunities in the region)

- Promotion of visualization of corporate contributions to nature, creation of environmental value, and reduction of burdens in business operations in the region through consideration of the draft law on promotion of activities to enhance biodiversity in the region and certificates of support to further develop initiatives for nature-symbiosis sites [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Land, Infrastructure, Transport and Tourism].
- Creation of business models that contribute to nature-positive regional management (including tourism using nature close at hand) through the positioning of local nature value assessment in regional biodiversity strategies, etc. [Ministry of the Environment].
- Promotion of tourism that contributes to nature positivity (nature positive tourism), including the realization of a virtuous cycle of protection and utilization in national parks [Ministry of the Environment].
- Promotion of "New Touji (spa-treatment)," a new way of spending time in hot spring resorts, in which one actively enjoys the surrounding nature, history, culture, food, and other local resources in addition to bathing in the hot springs [Ministry of the Environment].
- Support for the creation of a regional recycling and symbiosis zone (project creation and dispatch of human resources) [Ministry of the Environment].
- Creation of a model that brings tangible benefits to the region, such as improving the well-being of the people and the attractiveness of the region, tourism, etc., through the complementary promotion of the use of OECM and the creation of a favorable environment [Ministry of the Environment].
- Establishment of "regional circulation models (location of circular economy industries and wide-area resource circulation networks)" according to the characteristics of regional economic zones, preparation of guidance for realization of circular economy in the region, and support for development of expert personnel (P) [Ministry of the Environment, Ministry of Economy, Trade and Industry].
- Promotion of value assessment of corporate efforts to contribute to nature-positive activities based on the draft law on promotion of activities to enhance biodiversity in the region to further develop efforts for nature-symbiosis sites [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of proper fertilization and effective use of livestock manure and sewage

sludge resources, etc. for local environmental conservation, such as creating a clean and rich ocean through proper nutrient management, addressing water quality deterioration due to eutrophication in lakes and marshes, and preventing pollution of water sources with nitrate nitrogen, etc. [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Land, Infrastructure, Transport and Tourism].

- Promotion of initiatives related to the utilization of blue carbon and other resources, including the "Expansion of Blue Infrastructure in Minato that Nurtures Life" project, which contributes to the enhancement of forest sink functions and biodiversity conservation [Ministry of the Environment, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Agriculture, Forestry and Fisheries, and Ministry of Economy, Trade and Industry].
- Promotion of utilization of "J Blue Credit", a carbon credit system derived from blue carbon [Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of satoumi development to create a virtuous cycle between the conservation, restoration, and creation of seaweed beds and tidal flats with multifaceted functions and their utilization as local resources [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries].
- Promotion of a mechanism to evaluate and support efforts to conserve and create a favorable river environment [Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of river town planning that contributes to biodiversity conservation [Ministry of Land, Infrastructure, Transport and Tourism].
- Support for creating demand for products and services that utilize carbon footprints, etc. [Ministry of the Environment].
- Creation of green finance projects that contribute to nature positivity in the region [Ministry of the Environment].
- Survey and information on trends surrounding nature positives in domestic and foreign financial institutions [Ministry of the Environment].

(3) Attract funds through disclosure and dialogue, search for risks and opportunities through ongoing dialogue

<Direction of measures

684

685

686

687

688 689

690

691 692 O From the viewpoint of encouraging companies that are proactively and positively working toward nature positivity, the project will enable stakeholders such as investors, financial institutions, consumers, and local residents to evaluate companies' efforts toward nature positivity by understanding and disclosing the impact and burden on natural capital by the companies. To this end, a mechanism

- 693 for recognizing the value of initiatives that contribute to nature positivity and an environment that encourages financing will be developed. 694
- 695 In this context, scientific research, analysis, and evaluation of natural capital, dialogue with local stakeholders, and contribution to the enhancement of local values 696 697 are key to the sustainable development of the project, and the regional biodiversity strategy based on the Basic Act on Biodiversity may serve as a communication tool 698 and contribute to the establishment of a collaborative framework among companies, 699 governments, citizens, research institutions, and others. Therefore, the project will 700 701 provide support for the creation of case studies that will lead to the utilization and 702 improvement of the quality of the regional biodiversity strategies.
- In addition, no matter how much scientific knowledge and technological progress is 703 made in understanding and monitoring the dependence on and impact of nature, 704 there is uncertainty about the dynamics and impact of natural capital, and humans 705 706 are not capable of sequentially and precisely understanding and predicting all of 707 nature's conditions. For a company to demonstrate such a humble attitude toward nature will also demonstrate that it is appropriately facing risks in its disclosure and 708 dialogue. 709
- 710 Furthermore, given the network nature of nature, investors have pointed out that it is effective for companies to position their initiatives in regional plans (such as 712 regional biodiversity strategies and comprehensive plans of local governments) because the value of their initiatives can be enhanced by clarifying the significance 713 of their independent initiatives in the regional ecosystem network. 33.

<Specific measures>

- Support for the creation of a mechanism for intra-regional collaboration among stakeholders regarding the conservation and utilization of nature [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Land, Infrastructure, Transport and Tourism].
- 721 Support for formulation of regional biodiversity strategies [Ministry of the 722 Environment].
- Promotion of visualization of corporate contributions to nature and load reduction in 723 business in the region through consideration of nature symbiosis sites and 724 certificates of support [Ministry of the Environment, Ministry 725 of Land, Infrastructure, Transport and Tourism] (reiterated) 726
- 727 Quantify natural capital and ecosystem services in the region and promote measures 728 to utilize them for local development and solving regional issues in cooperation with 729 local governments, etc. [Ministry of the Environment].

711

714 715 716

717

718

³³ Source: FY2023 3rd Study Group on Economic Incentives for 30by30 (March 21, 2024)

730731

733734

735

736

737738

739

740

741

742

743

747

748749

750

751

(4) Infrastructure Development

732 (DX related)

<Direction of measures>

- Advancing DX is key throughout the value creation process. For example, a database of primary information necessary for location-based analysis is necessary to recognize and identify risks, while ensuring traceability using digital technology is effective in understanding the value chain. Monitoring, simulation, and other technologies are effective in visualizing the effects of initiatives. In particular, detailed data collection, including citizen participation, is necessary for effective initiatives at the regional and production site levels. Furthermore, the development of alternative technologies and smart agriculture and other smart business areas can not only reduce the load on natural capital, but also address issues such as resource constraints, declining and aging populations, and other challenges.
- Therefore, we will develop basic data and systems so that the necessary funds and capital can be invested in initiatives that can be carried out efficiently and effectively with the advancement of DX.
 - O However, it has been pointed out that the progress of DX involves environmental burdens such as water consumption associated with semiconductor manufacturing, etc. and electricity consumption associated with the use of digital technology. Therefore, in parallel with the development of DX, it is necessary to address the effective use of water resources associated with business activities and expand decarbonized power sources such as renewable energy.

752753

754

755

756

757

<Specific measures

- Development of a domestic data base on nature and utilization of corporate technologies, etc., that will contribute to visualization of the effects of corporate initiatives [Ministry of the Environment].
- Promoting the development of an information infrastructure to promote the effective and efficient use of the results of periodic surveys of flora and fauna in rivers [Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of business utilizing data such as nature-related information using remote sensing and AI technologies [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries].
- Development and utilization of data infrastructure related to nature-related information and green infrastructure on national land [Ministry of Land, Infrastructure, Transport and Tourism].

- 768 (Support for research and development and technology demonstration)
- <Direction of measures</pre> 769

778

779

780

781

782

783

784 785

786

787

791 792 793

794 795

796

797

798

- 770 Enhanced scientific knowledge is also needed at each stage of the value creation process. For example, progress in the development of indicators and evaluation 771 772 methods that can be used for corporate risk analysis needs to be made from the 773 perspective of balancing the accuracy of reflecting primary information tied to location with usability and making the effects of initiatives measurable. It is also 774 important to work simultaneously on international standardization and rulemaking 775 776 to ensure that these scientific findings are evaluated as appropriate and utilized 777 internationally.
 - Research and development of alternative technologies that reduce the load on natural capital is also essential. Furthermore, given that climate change countermeasures and circular economy are included in the initiatives necessary for nature positivity as described in the Global Biodiversity Outlook 5th edition (GBO5). The gradual promotion of research that clarifies the synergies and trade-offs between these efforts to conserve and restore natural capital, and the dissemination of research results in a form that is easily accessible to companies, will contribute to making it easier for companies to consider each effort and to clarify the type, amount, and priority of efforts that should be undertaken.
- Therefore, we will promote the creation of various innovations by developing technologies that contribute to understanding and reducing the burden on natural 788 capital, and by promoting research that contributes to an effective transition to a 789 790 nature-positive economy, including consideration of integrating natural capital into the national accounts.

<Specific measures>

- Development of technologies and creation of new business opportunities to promote bioeconomy utilizing biotechnology and renewable biological resources, etc. [Ministry of the Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism].
- 799 Creation of business opportunities through the realization of a circular economy, including technological development of alternative materials and advancement of 800 recycling systems [Ministry of the Environment, Ministry of Agriculture, Forestry 801 802 and Fisheries, Ministry of Economy, Trade and Industry].
- Promotion of social implementation of evaluation and investigation methods for the 803 natural environment, including soil and water, from the viewpoint of nature 804 805 positivity. [Ministry of the Environment, Ministry of Agriculture, Forestry and

806 Fisheries]

818819

820

821 822

823

824

825

826

827

828

829 830

831

832

833

- Promote innovation through research and technology demonstrations related to "approaches to learning from nature and living organisms (biomimicry)," a type of biodiversity benefit, with a view to applying it to "sustainable manufacturing" and "designing social systems and institutions" [Ministry of the Environment].
- Promotion of problem solving through analysis of individual cases and scientific and technological innovation, etc., regarding avoidance and minimization of trade-offs with climate change countermeasures for the introduction of renewable energy generation facilities [Ministry of the Environment].
- Promotion of research contributing to an effective transition to a nature-positive economy including through the Comprehensive Fund for the Promotion of Environmental Research [Ministry of the Environment].

(participation in international frameworks, etc.)

<Direction of measures</pre>

- It is extremely important that corporate initiatives receive appropriate recognition in the international community from the perspective of attracting funds through disclosure and dialogue. For example, by utilizing information networks (e.g., G7 Nature Positive Economy Alliance) that enable analysis of the business environment, including international trends, it is possible to continuously verify risks and search for opportunities, while taking actions based on international trends. It is also possible to increase the value of initiatives by enhancing their presence through international dissemination of their initiatives, and to deepen their initiatives by obtaining feedback from domestic and international sources. Furthermore, by participating in public and private initiatives (e.g., WBCSD (World Business Council for Sustainable Development), TNFD Forum, etc.) and contributing to the formulation of various frameworks and rulemaking based on their own practical experience, they can exert their influence.
- By participating in international frameworks, etc., Japanese companies will enhance their presence and contribute to the achievement of the international goal of Nature Positive by 2030, and will also contribute to rulemaking, standards development, and market creation (including infrastructure exports, etc.) so that Japanese companies that are advanced in their efforts will be duly recognized by the international community and contribute to economic growth.
- In addition, from the perspective of science diplomacy and strengthening industrial competitiveness, we will contribute to the formation of international rules from the Asian monsoon region, including Japan, while forming a network pertaining to international data on nature, which will contribute to effective and efficient

information disclosure.

846 <Specific measures>

844

845

857

858

859

860

870

871872

873

874

875

876

877 878

879

880

- Promotion of participation of Japanese experts in scientific assessments, including the "Methodological Assessment of the Impact and Dependence of Business on the Contribution of Biodiversity and Nature" by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and support for such activities [Ministry of the Environment, Japan Ministry of the Environment]
- Contribution to industrial competitiveness of Japanese companies through international rule formation and market creation from the Asian monsoon region, including Japan, while forming an international data network for the international standardization and dissemination of nature-related assessment tools, including national drought risk, etc. [Ministry of the Environment].
 - Information dissemination (including SMEs), knowledge sharing and information networking on nature positive economy in the G7 Alliance for Nature Positive Economy (G7ANPE), etc. established at the G7 Sapporo Ministerial Conference on Climate, Energy and Environment in April 2023 [Ministry of the Environment].
- Promotion of the Japan-ASEAN Green Cooperation Plan, which aims to build a robust and sustainable agriculture and food system in the Asian Monsoon Region, taking into account the special characteristics of natural conditions, etc., and international dissemination of the Japanese version of OECM, which is maintained through agricultural management, etc. [Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment].
- Support for companies and industry associations that participate in the development of ISO standards on biodiversity and make new proposals [Ministry of the Environment, etc.

(building momentum, networking)

<Direction of measures>

- O Fostering and maintaining momentum among consumers, industry peers, and other industries is important not only for capturing markets through risk response and opportunity creation, but also from the perspective of building a system that enables the realization of value creation processes and governance. For example, collaboration in responding to risks and developing new businesses will create a network among companies and human resources, which will lead to the demonstration of solidarity and further human resource development, thereby enabling continuous efforts.
- 881 O Therefore, in order to create a virtuous cycle in which companies that are actively

working toward nature positivity are recognized in the marketplace and further promote their efforts, we will promote the creation of a mechanism that encourages behavioral change among a wide range of stakeholders, including investors, consumers, and local residents, through various networks, to create demand and gather active support for companies and products.

O In the nature area in particular, there are fewer companies involved than in climate change, as evidenced by the difference in the number of companies supporting the TCFD (Task Force on Climate-related Financial Disclosure) and the TNFD, for example, which means there is wide room for utilization and application of existing technologies, and synergies can easily be generated through collaboration between different industries. Therefore, we will operate a platform where companies can search for partners.

<Specific measures>

882

883

884

885

886

887

888

889 890

891

892

893 894

895

896

897

- Steady implementation of the J-GBF (Japan Conference on 2030 Biodiversity Framework) Action Plan, promotion of collaboration and partnership [Ministry of the Environment, J-GBF member ministries].
- J-GBF calls for expansion of Nature Positive Declaration registration [Ministry of the Environment, J-GBF member ministries].
- Promotion of mutual aid and collaboration among companies (including SMEs) through the Sustainable Management Promotion Platform (tentative name) [Ministry of the Environment, reiterated].
- Promoting Sustainable Production and Consumption through the "Awu-no-Wa 2030" 905 Project [Ministry of Agriculture, Forestry and Fisheries of Japan].
- Deepening Initiatives in the Green Infrastructure Public-Private Partnership 907 Platform [Ministry of Land, Infrastructure, Transport and Tourism].
- Promotion of basin flood control that also contributes to the formation of ecosystem networks that utilize the functions of the natural environment in cooperation with all stakeholders in the basin [Ministry of Land, Infrastructure, Transport and Tourism].
- Formation of a network that also contributes to the promotion of information disclosure by companies working on sustainable use of water resources and response to water risks by spreading the concept of "Water Positive" [Ministry of the Environment].
- Promote basin management and other initiatives to maintain or restore a healthy water cycle, build and share best practices for dealing with water risks through model projects to promote the conservation and utilization of a good water cycle and water environment, and evaluate companies that take actions that contribute to a

healthy water cycle [Cabinet Secretariat, Ministry of the Environment].

6. Future Initiatives - Toward the Realization of a World in Harmony with Nature

(1) Future Issues

- O This Strategy embodies the elements that companies should keep in mind and the national policies that support them with regard to Basic Strategy 3 "Realization of Nature Positive Economy" of the National Biodiversity Strategy with the target year of 2030. The vision for 2050 in the Kunming-Montreal Biodiversity Framework is "a world in harmony with nature," and it may be necessary to further deepen the measures while observing the progress of the results.
- O The Nature Positive Economy Study Group, which has been discussing the formulation of this Strategy, has discussed various issues from this perspective. The following is a summary of some of the discussions that have not yet taken place, but that should be continued in the future, taking into account international trends. The relevant ministries and agencies, led by the Ministry of the Environment, will continue to study these issues over the medium term, including the pros and cons of their implementation.

① Economic instruments such as credits, offsets, etc. related to natural capital and biodiversity

While carbon credit initiatives in Japan and abroad are taking the lead, there are requests to realize credits and offsets related to natural capital and biodiversity, mainly from industries that deal with resources extracted outside of Japan. Credits could be utilized when companies set a goal of restoring natural capital (i.e., creating positive effects). The BBOP³⁴ standard, a democratically-led global standard for offsets, was published in 2012, and the United Kingdom and France have recently established an international panel on credits (³⁵), in which Japan is also participating by soliciting opinions and other means. In light of these developments, we will discuss the role of a crediting or offsetting system in Japan, paying attention to the uniqueness of the Japanese ecosystem (a diverse ecosystem on a small area of land, underuse rather than overuse of terrestrial areas is generally analyzed as a problem³⁶) and the relationship with carbon credits. In parallel, it is necessary to examine the ideal crediting or offsetting system in Japan, while at the same time promoting information dissemination to

³⁴ Business and Biodiversity Offset Programme

³⁵ International Advisory Panel on Biodiversity Credits

³⁶Comprehensive Assessment of Biodiversity and Ecosystem Services 2021 (JBO3) (Study Group on Comprehensive Assessment of Biodiversity and Ecosystem Services, 2021)

increase literacy³⁷ related to offsetting and credits, so that Japanese companies that wish to use foreign or global offsetting schemes can do so appropriately.

② Utilization of natural capital valuation in various national and local government projects, etc.

In order to encourage the spread and expansion of products and services with low impact on natural capital, it is conceivable to utilize natural capital value assessment in various projects of the national and local governments. Various certified products are already included in the evaluation of the value of natural capital, and it would be effective to consider the use of these certified products in public procurement. On the other hand, the cost of certification is high due to the need to conduct rigorous screening at the very upstream of the production site, and in some cases, the products and services themselves are also expensive, which poses a hurdle to market diffusion. The costs required to trace back to the upstream of the value chain to understand the impacts on natural capital and local communities are essentially necessary costs and should be internalized into the prices of products and services through behavior change of each actor in the value chain by making the effects visible, promoting information disclosure, and so on. On the other hand, it would be possible to efficiently incorporate the valuation of natural capital into the value assessment, in combination with ensuring traceability and improving monitoring technology.

③ Grand designs for the conservation, restoration, and rehabilitation of nature in land use and land use

The "Sixth National Land Use Plan (National Plan)³⁸" states that the issues surrounding national land use include the deterioration of the land management level due to population decline and aging, and the deterioration of the natural environment and landscape. The basic policy of national land use includes "optimal use and management of national land for the benefit of the entire region" and "use and management of national land that leads to the preservation of a healthy ecosystem. In the appropriate use of national land, not only by the government but also by various entities, including companies that use Japan's national land, will enhance the predictability of the companies themselves regarding the sustainable use and conservation of natural capital.

956

957958

959

960

961

962

963

964 965

966967

968

969970

971 972

973

974975

976

977978

979

980

981

982

983

984 985

986

987

988

³⁷ Unlike carbon dioxide, there can be no true offsetting of ecosystems in terms of compatibility and irreversibility, and offsets should be limited to offsetting impacts related to the mitigation hierarchy, i.e., impacts that remain after reducing the impacts of business activities to the greatest extent possible. Offsetting should be limited to the mitigation of impacts that remain after reducing the impacts of business activities to the greatest extent possible.

³⁸ Cabinet decision in July 2023

(2) Deepening Policies

- O This Strategy is a concrete implementation of the Basic Strategy 3 of the National Biodiversity Strategy, and progress toward the realization of Nature Positive as a whole³⁹ will be confirmed through the "Liaison Conference of Relevant Ministries and Agencies of the National Biodiversity Strategy", a forum for collaboration among relevant ministries and agencies related to the overall National Biodiversity Strategy, including ministries other than those that formulated this Strategy, as part of follow-up to the National Biodiversity Strategy.
- On the other hand, since the domestic and international trends in this field are rapidly changing and related measures are widely developed, the Ministry of the Environment, in close cooperation with related ministries and agencies, will actively promote further concretization and brushing up of measures and consideration and deepening of additional measures as needed.
 - Note that some members of the Nature Positive Economy Study Group and some members of the Core Member Council established under it cited the need for "appropriate regulations" regarding land use, information disclosure, and other issues. In a parallel questionnaire survey, about half of the respondents also cited "appropriate regulation" as one of their expectations of the government. In the field of nature, especially since COP10⁴¹, companies have been making voluntary efforts based on various public and private or private initiatives. It is important to reward these early adopters and maintain and improve the international competitiveness of Japan as a whole through initiatives that contribute to nature positivity. While developing measures to expand the number of early adopters (initial few adopters) to the early majority (initial many adopters) in accordance with the transition management approach ⁴³, we will deepen the measures, including appropriate

³⁹ Reference: Action goals in the National Biodiversity Strategy 2023-2030

³⁻¹ Promote quantitative assessment of dependence and impact on biodiversity by companies, analysis of current status, science-based target setting, and information disclosure, as well as develop a foundation to promote investment and financing by financial institutions and investors and promote activities to conserve and restore biodiversity from the perspective of investment and financing

³⁻² Promote support for technologies and services that contribute to biodiversity conservation.

³⁻³ Implement ABS associated with the use of genetic resources.

³⁻⁴ Expand sustainable, environmentally friendly agriculture, forestry, and fisheries, including reduction of chemical pesticide use (risk conversion) and chemical fertilizer use and promotion of organic farming, as stated in the Green Food System Strategy

⁴⁰ According to a biodiversity awareness survey conducted by the Ministry of the Environment in FY2023, 49.8% of respondents answered, "appropriate regulations" to the question, "What do you expect from national policies for biodiversity conservation?

⁴¹ Held in Nagoya in 2010.

⁴² One testament to this is the fact that the number of Japanese companies that have committed to early disclosure as early adopters of TNFD (announced in January 2024) is the 80th largest in the world.

⁴³ The idea is to identify technological niches that contribute to a sustainable society, and by trying them out on a small scale in the field, to confront the technological niches with the conventional socioeconomic structure to reveal contradictions, and to bring about recursion (a state in which the socioeconomic structure can be easily changed by the stimulus of stakeholders who have pioneeringly changed their awareness and behavior) in the socioeconomic structure that dominates stakeholders. The idea is to bring about recursion (a state in which the socioeconomic structure is more easily transformed by the stimulus of the stakeholders who have pioneeringly transformed their awareness and behavior), ultimately leading to a sustainable society in which

regulations as necessary, after assessing the effects of the progress of the measures and taking into account the impact on economic activities.

1018
1019
1020
(Fin.)

the technological niche becomes the "norm". In other words, the idea is not to seek consensus on the transformation of the socioeconomic structure of the stakeholders who have played a central role under the conventional socioeconomic structure from the stage of starting the transition, but to build consensus under the situation where the new normal has become more widespread in society. (Ministry of the Environment summary from the website of Professor Masahiro Matsuura, Full-time Professor, Meiji University: https://www.mmatsuura.com/research/transition/)