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## Overview and Uses of the Long List and Value Chain Map


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\*Each term is abbreviated in this document.  
NP: Nature Positive  
NPE: Nature Positive Economy  
VC: Value Chain

# Long List of Nature-Related Risks and Opportunities and VC Map by Priority Sectors

- To streamline analysis for companies preparing to commence nature-related disclosures, the Long List of nature-related risks and opportunities and the Value Chain Map have been compiled, organizing the contents of the Long List along the VC for each priority sector characterized by high dependence and impacts on biodiversity, as well as significant industry scale (collectively, the “Long List and the VC Map”).
- These materials can be used not only for information disclosure, but also to facilitate (1) internal communications (with management, operations/sites, and business units), (2) communications with business partners across the VC, and (3) communications with financial institutions and investors.

Locate  
Evaluate

[Legend]  Companies planning to undertake TNFD analysis

 Companies that already have an overview of nature-related risks and opportunities relevant to their sector and their own operations

Assess

Prepare

## VC Map by priority sectors



## Long List of nature-related risks and opportunities by priority sectors



- List some examples of typical risks/opportunities in the three priority sectors
- Organized into two versions: a “Summary Version,” which presents risks and opportunities according to positions along the VC, and a “Detailed Version,” which, in line with the classification of risks and opportunities, lists them as comprehensively as possible.

- Risks, opportunities, and response measures set out in various TNFD and WBCSD guidance documents have been extracted and consolidated into the list.
- The list can be sorted and searched by relevant sector and other parameters, enabling users to identify risks, opportunities, and response measures relevant to their own company and to investee and borrower companies.

- Grasp the overall picture of the risks and opportunities associated with the business models/ sectors
- It can also be used to facilitate dialogue with internal stakeholders (e.g., management, operations/sites, business units) and external stakeholders (e.g., business partners along the VC and investors).

- Designed to streamline analysis when identifying company-specific risks and opportunities and related response measures, thereby saving effort.
- The Long List can be downloaded in Excel format, enabling use cases such as compiling only the risks, opportunities, and other items relevant to the company through custom filtering.

Documents

Features

Usage Scenarios

# How to Use the VC Map

- VC Map consists of three types of materials: **"Summary Version", "Detailed Version", and "VC diagram for reference"** for each priority sector.
- The summary and detailed versions are intended for use as appropriate, with reference to the features described below.

## VC Map: Summary Version

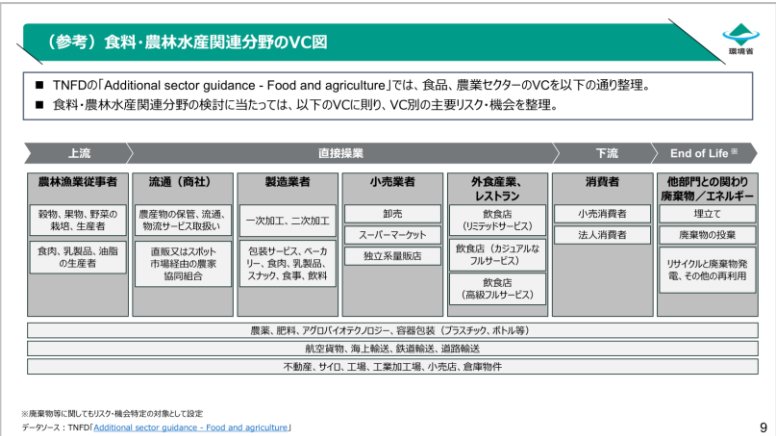
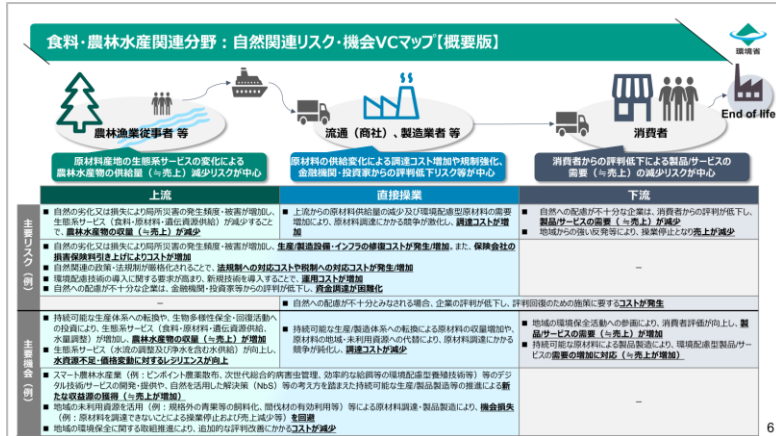
- Risks and opportunities are listed according to their position on the VC (upstream, midstream, downstream), **to support understanding of the overall picture.**

## VC Map: Detailed Version

- Risks and opportunities are listed according to the classification, **enabling comprehensive understanding.**

## VC diagram for reference\*

- The VC Map specifies the TNFD sector guidance and corresponding VC on which it is based.



\*VCs for the priority sectors are aligned with the following sector guidance:

- Food, Agriculture, Forestry and Fisheries: TNFD「[Additional sector guidance - Food and agriculture](#)」
- Construction and infrastructure-related fields: TNFD「[Additional sector guidance - Engineering, construction and real estate](#)」
- Manufacturing-related fields: TNFD「[Additional sector guidance - Chemicals](#)」

# Scenario1: Use Cases for the Long List

- Guidance for use are as follows. Clicking "Usage Guide" displays detailed instructions, including this slide.

**Number of search results** [リスク/機会 (XXX件)]

**Category Search**

Sub-sector classifications are assigned based on excerpts from the literature. However, the "General" category comprises risks and opportunities considered to fall under the broader sector classification (as determined by the secretariat)

Switch between showing/hiding the original text and source of risks/opportunities and response measures

原文・出所 OFF  ON  [使い方ガイド ?](#)

| (自然への依存・影響を踏まえた) リスク・機会   | 対象拠点                   | (参考) 想定される企業への経済的な影響 (売上・コストの増減) | 対応策             | 開示事例  | (参考) リスク/機会の原文・出所  | (参考) 対応策の原文・出所  |
|---|------------------------|----------------------------------|-----------------|---|--|---|
| <p>・自然の劣化又は損失により、生態系サービス (局所災害の緩和、土壌侵食の抑制) が減少</p> <p>↓</p> <p>・局所災害の発生頻度・被害が増加</p> | 上流<br>直接排<br>通・加<br>売) | 場合、操業停止となり売上が減少                  | ・上流：農林水産物の収量が減少 | <p><b>【リスク/機会】</b></p> <ul style="list-style-type: none"> <li>▶ <a href="#">アサヒグループHD</a></li> <li>▶ <a href="#">明治HD</a></li> <li>▶ <a href="#">サッポロHD</a></li> <li>▶ <a href="#">住友林業</a></li> <li>▶ <a href="#">キリンHD</a></li> <li>▶ <a href="#">王子HD</a></li> <li>▶ <a href="#">森永乳業</a></li> </ul> <p><b>【対応策】</b></p> <ul style="list-style-type: none"> <li>▶ <a href="#">サッポロHD</a></li> <li>▶ <a href="#">キリンHD</a></li> <li>▶ <a href="#">住友林業</a></li> <li>▶ <a href="#">森永乳業</a></li> </ul> | <p>Degradation of nature and subsequent loss of natural protection exacerbates severity of damages from extreme weather such as cyclones, droughts, flooding, and storms. (出典：WBCSD 「<a href="#">Forest Sector Nature-Positive Roadmap</a>」)</p> | <p>Increase in production and sourcing costs due to agricultural product volatility, e.g. tropical storms in the Caribbean affecting sugar cane crops, creating shortages or price increases for the rum industry; heatwaves creating CO2</p> |

**[Legend]**

- : Sector classification
- : Sub-sector classification
- : Risk and Opportunity Classification (high-level)
- : Risk and Opportunity Classification (mid-level)
- : Risk and Opportunity Classification (subcategories)

食料・農林水産 全般

林業 リスク

物理的リスク 急性

Access to the company's disclosure report (Click ▶ to view the company's disclosure text)

WBCSD, TNFD report, AR3T Classification (Avoid, Reduce & Restore, Transform)

Access to a range of guidance including the original text of risks/opportunities and response measures

Identify and understand the risks and opportunities and use them for analysis and for engagement with internal and external stakeholders.

## How to Use the Long List (2) Supplementary Explanation of List of Risks and Opportunities

- The descriptions of each column in the risks and opportunities list are provided in the table below. This table is also included in the Usage Guide; please refer to it as appropriate.

|  |  |
|--|--|
| <b>Risks and opportunities (based on dependence and impact on nature)</b>                            | <ul style="list-style-type: none"> <li>■ Refer to sector-specific guidance issued by the TNFD and WBCSD to identify globally common risks and opportunities in each sector (Similar risks and opportunities were consolidated where appropriate)</li> <li>■ To ensure that the translation takes into account the dependence and impact on nature, the secretariat supplemented the content not specified in the original text in green(e.g., relevant ecosystem services).</li> <li>■ Where the source includes economic impacts for companies, those impacts are incorporated into the risk/opportunity descriptions; the same content is reflected in the economic impact column.</li> </ul>        |
| <b>Positioning within VC</b>   | <ul style="list-style-type: none"> <li>■ The secretariat describes the position within the VC (upstream, direct operation, downstream, end of life). VCs by priority sector are aligned with the sector-specific guidance indicated below; <ul style="list-style-type: none"> <li>➢ Food and agro-forestry-fisheries-related sectors : TNFD[<a href="#">Additional sector guidance - Food and agriculture</a>]</li> <li>➢ Construction and infrastructure-related sectors : TNFD[<a href="#">Additional sector guidance - Engineering, construction and real estate</a>]</li> <li>➢ Manufacturing-related sectors: TNFD[<a href="#">Additional sector guidance - Chemicals</a>]</li> </ul> </li> </ul> |
| <b>(Reference) Expected economic impact on the company (increase or decrease in sales and costs)</b> | <ul style="list-style-type: none"> <li>■ Economic impacts not mentioned in the source are supplemented by the secretariat as reference information.</li> <li>■ Even where a risk or opportunity pertains to a specific VC node, if effects are considered likely to propagate to other nodes, those effects are documented (e.g., reduced yields of agro-forestry-fisheries products upstream may lead to increased procurement costs in direct operations).</li> <li>■ Provided as a reference when examining an industry- or company-specific economic impacts and related matters.</li> </ul>   |
| <b>(Reference) Response measures</b>   | <ul style="list-style-type: none"> <li>■ By referring to sector-specific guidance issued by TNFD and WBCSD, globally applicable measures for each sector were identified.</li> <li>■ Original excerpts were drawn from various sources; the wording was adjusted appropriately by the secretariat to improve clarity.</li> <li>■ As the guidance does not indicate which risks/opportunities each measure addresses, the measure-to-risk/opportunity mapping was prepared by the secretariat.</li> </ul>   |
| <b>(Reference) Disclosure Examples</b>   | <ul style="list-style-type: none"> <li>■ Impact assessment results for risks and opportunities commonly organized across many companies are presented as reference information.</li> <li>■ The definition of impact evaluation results (large, medium, and small thresholds, etc.) varies by company; the source reports should be consulted.</li> <li>■ As of December 2024, the survey population was defined as Japanese companies that were TNFD Early Adopters and had published TNFD-related disclosures.</li> </ul>   |
| <b>(Reference) Original texts and source of risks/opportunities</b>                                  | <ul style="list-style-type: none"> <li>■ The original English text is quoted as it appears in the source documents.</li> </ul>   |
| <b>(Reference) Original texts and source of response measures</b>                                    | <ul style="list-style-type: none"> <li>■ For consolidated items, original English excerpts from all relevant sources are included.</li> </ul>  |

## How to Use the Long List (3) Overview of Ecosystem Services and How to Search the Long List

- To ensure that the risks and opportunities reflect dependencies on and impacts on nature, content not explicitly stated in the references has been supplemented by the secretariat in green; **ecosystem services deemed relevant are likewise shown in green text.**
- The Millennium Ecosystem Assessment (MA), led by the United Nations, classifies ecosystem services into four categories: provisioning, regulating, habitat, cultural and amenity services (for details, see [here](#)).
- The Long List includes **supplementary wording in the table below**; therefore, **the page (or Excel) search function can be used to search for risks and opportunities** by relevant ecosystem service.

| Classification        | Items  |
|-----------------------|--|
| Provisioning Services | Food   |
|                       | Water  |
|                       | Raw materials                                      |
|                       | Genetic resources                                  |
|                       | Medicinal resources                                |
|                       | Ornamental resources                               |
| Regulating Services   | Air quality regulation                             |
|                       | Climate regulation                                 |
|                       | Moderation of extreme events                       |
|                       | Regulation of water flows                          |
|                       | Waste treatment                                    |
|                       | Erosion prevention                                 |
|                       | Maintenance of soil fertility and nutrient cycling |
|                       | Pollination  |
| Biological control    |  |

| Classification                | Items   |
|-------------------------------|---|
| Habitat Services              | Maintenance of life cycles of migratory species |
|                               | Maintenance of genetic diversity                |
| Cultural and Amenity Services | Aesthetic information                           |
|                               | Opportunities for recreation and tourism        |
|                               | Inspiration for culture, art and design         |
|                               | Spiritual experience                            |
|                               | Information for cognitive development           |

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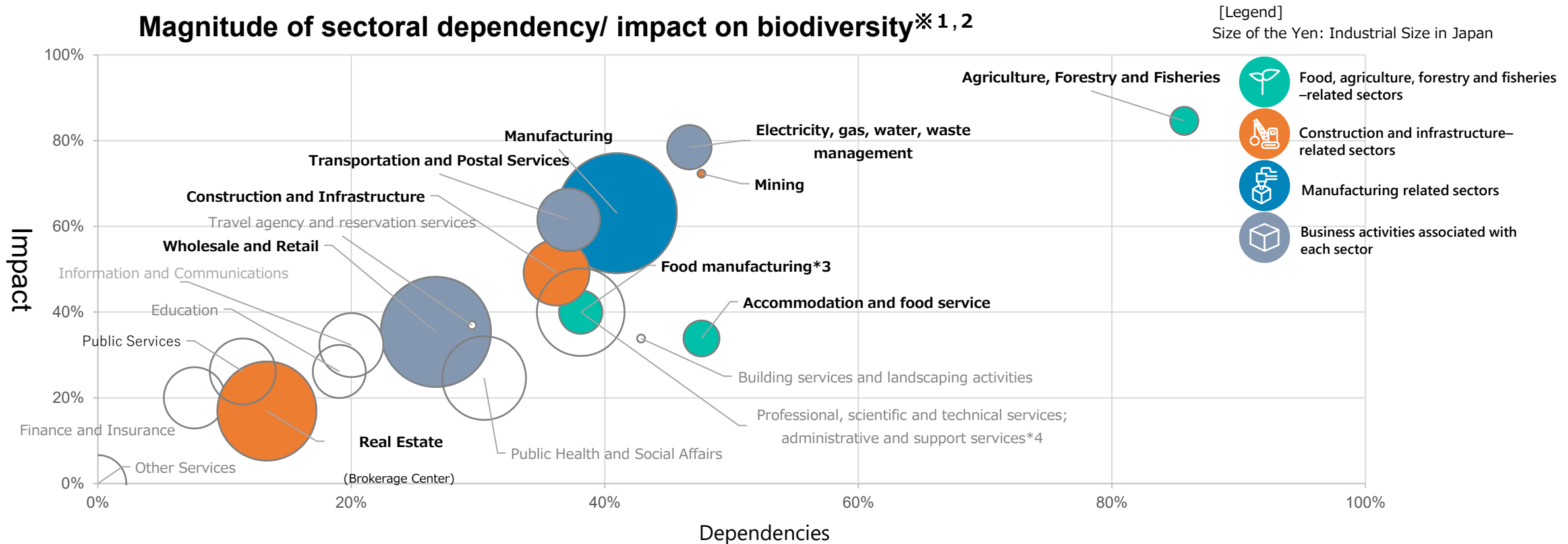
## References

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# Identification of priority sectors (1)

- Economic activity sectors were analyzed along three axes: (i) dependency on biodiversity, (ii) impact on biodiversity, and (iii) industry size in Japan.
- Based on the analysis, the following were identified as priority sectors; **Food, agriculture, forestry and fisheries –related sectors (agriculture, forestry and fisheries; accommodation and food services)**, **Construction and infrastructure–related sectors (construction, real estate, mining)**, **Manufacturing-related sectors (manufacturing, mining)**.

## Magnitude of sectoral dependency/ impact on biodiversity※ 1, 2



\*1 After linking the ISIC (Worldwide Standard Industrial Classification) Section to Japan's Economic Activity Classification, the largest number of the Group and Class Encore indicators (Dependence: 21 indicators, Impact: 13 indicators) linked to each section is extracted, and the degree of dependence and influence is calculated by subtracting it from the maximum value of the index. Dependent indicators related to cultural services are set to be excluded from calculation because they are indicators under development.

















\*2 Please note that the industrial classification of Japan and the ISIC (Worldwide Standard Industrial Classification) do not fully correspond to each other.

\*3 Among the manufacturing industries, the "food manufacturing industry" is subdivided.

\*4 Among the specialty, science and technology, and business support service industries, "travel industry, travel reservation business", and "services to buildings and landscape activities" are subdivided. In addition, with regard to the two subdivided categories, detailed figures could not be obtained from the Cabinet Office data, so the size of the yen does not reflect the actual industrial scale. Professional, scientific and technical services; administrative and support services

# Identification of Priority Sectors (2)

[Legend] I.: Food, agriculture, forestry and fisheries, II.: Construction and infrastructure-related fields, III.: Manufacturing-related fields

| Applicable Fields   |   |   | Classification of economic activities<br>(18 categories in total)                         | Analytical axis   |   |                                 |
|---|---|---|---|---|---|---------------------------------|
| I   | II  | III   |   | Dependence on biodiversity*1<br>(top 6 classifications) | Degree of impact on biodiversity*1<br>(top 6 classifications) | GDP ratio<br>(Top 6 categories) |
|  |   |   | <b>Agriculture, Forestry and Fisheries</b>  | 86% (①)   | 85% (①)   | 1.0%                            |
|  |    |  | <b>Electricity, gas, water, waste management</b>  | 47% (④)   | 78% (②)   | 2.4%                            |
|   |    |  | <b>Mining</b>   | 48% (②)   | 72% (③)   | 0.1%                            |
|   |   |  | <b>Manufacturing</b>  | 42% (⑥)   | 68% (④)   | 19.2% (①)                       |
|  |    |  | <b>Transportation and Postal Services</b>   | 37%   | 62% (⑤)   | 4.7%                            |
|   |    |   | <b>Construction</b>   | 36%   | 49% (⑥)   | 5.2% (⑥)                        |
|   |   |   | Professional, scientific and technical services;<br>administrative and support services*2 | 38%   | 40%   | 9.1% (④)                        |
|   |   |   | Travel agency and Reservation services  | 30%   | 37%   | —                               |
|  |    |  | <b>Wholesale and Retail</b>   | 27%   | 35%   | 14.3% (②)                       |
|  |   |   | <b>Accommodation and food service</b>   | 48% (②)   | 34%   | 1.6%                            |
|   |   |   | Building services and landscaping activities  | 43% (⑤)   | 34%   | —                               |
|   |   |   | Information and Communication   | 20%   | 32%   | 4.9%                            |
|   |   |   | Education   | 19%   | 26%   | 3.4%                            |
|   |   |   | Public Services   | 11%   | 26%   | 5.2% (⑥)                        |
|   |   |   | Health and Social Affairs   | 30%   | 25%   | 8.3% (⑤)                        |
|   |   |   | Finance and Insurance   | 8%  | 20%   | 4.5%                            |
|   |  |   | <b>Real Estate</b>  | 13%   | 17%   | 11.6% (③)                       |
|   |   |   | Other Services  | 0%  | 0%  | 3.9%                            |

\*1 After linking the ISIC (Worldwide Standard Industrial Classification) section to the Japanese economic activity classification, the largest number among the Group and Class Encore indicators (dependence: 21 indicators, impact: 13 indicators) linked to each section (e.g., in the case of agriculture, forestry and fisheries, the number with the highest degree of dependence and influence among the indicators of agriculture, forestry, and fisheries) is extracted and combined. Calculate the degree of dependence and influence by subtracting it from the maximum value of the indicator. Dependent indicators related to cultural services are set to be excluded from calculation because they are indicators under development.

\*2 Among the specialty, science and technology, and business support service industries, "travel industry, travel reservation business", and "services for buildings and landscape activities" are subdivided. Professional, scientific and technical services; administrative and support services

## Documents Cited for Risks/Opportunities and Response Measures (1)

- Sector-specific guidance published by TNFD, WBCSD, and others was consulted to identify globally common risks and opportunities.
- In addition, recognizing Japan's Asia monsoon climate, TNFD reports by Japanese companies were reviewed to identify risks, opportunities, and response measures from a Japanese corporate perspective.

| Organizations  | Data   | Extraction Policy   |
|--|--|---|
| Japanese companies <sup>*1</sup>                               | TNFD-related analysis and disclosure results by each company                   | (1) Identification of dependencies, impacts, and risks: Extracted from the "strategies" section of each company's TNFD report<br>(2) Response measures (opportunities): Extracted from the "strategies" section of each company's TNFD report |
| TNFD <sup>※2</sup>   | Sector-specific Additional Guidance  | (1) Identification of dependencies, impacts, and risks: Extracted from the "Examples of risks and opportunities" of each guidance<br>(2) Response measures (opportunities): Extracted from the "Example response actions" of each guidance    |
| WBCSD <sup>※2</sup>  | Sector Roadmaps  | (1) Identification of dependencies, impacts, and risks: Extracted from the "Risk and opportunity matrix" of each guidance<br>(2) Response measures (opportunities): Extracted from the "Priority actions matrix" of each guidance             |
| Ministry of the Environment (relevant ministries and agencies) | Outcomes from the NPE expert panel and roundtable discussion in previous years | The overall review drew on the NPE Transition Strategy, "Challenges and Measures for the Transition to a Nature-Positive Economy — with policy support from the relevant ministries" among other materials.                                   |

\*1 As of December 2024, the survey population was defined as Japanese companies that were TNFD Early Adopters and had published TNFD-related disclosures.

\*2 Included in scope were guidance and related documents on priority sectors that had been finalized and published at the outset of compiling the long list and developing the transition; drafts and similar materials were excluded.).

## Documents Cited for Risks/Opportunities and Response Measures (2)

- The sector guidance sets out in the table below was consulted to identify globally common risks and opportunities. In the Long List, **sub-sector is assigned based on the guidance from which the risks and opportunities were extracted**, whereas items considered applicable across the priority sectors are classified as **“General.”**
- The guidance below should therefore be consulted even **for sectors not directly linked to a specific guidance (e.g., electronics; automotive).**

| Priority Sectors※ <sup>1</sup>               | Sub-sectors※ <sup>2</sup>       | Related Guidance |   |
|--|---------------------------------|------------------|---|
| Food and Agriculture, Forestry and Fisheries | Agriculture                     | TNFD             | <a href="#">Additional sector guidance – Food and agriculture</a>   |
|  |                                 |                  | <a href="#">Additional sector guidance – Beverages</a>  |
|  | Forestry                        | WBCSD            | <a href="#">Roadmap to Nature Positive: Foundations for the agri-food system – row crop commodities subsector</a> |
|  |                                 | TNFD             | <a href="#">Additional sector guidance – Forestry, pulp and paper</a>   |
|  | Fisheries                       | WBCSD            | <a href="#">Forest Sector Nature-Positive Roadmap</a>   |
|  |                                 | TNFD             | <a href="#">Additional sector guidance – Aquaculture</a>  |
| Construction and Infrastructure              | –                               | TNFD             | <a href="#">Additional sector guidance – Engineering, construction and real estate</a>                            |
|  |                                 |                  | <a href="#">Additional sector guidance – Construction materials</a>   |
|  |                                 | WBCSD            | <a href="#">The Roadmap to Nature Positive: Foundations for the built environment system</a>                      |
| Manufacturing                                | Chemistry                       | TNFD             | <a href="#">Additional sector guidance – Chemicals</a>  |
|  | Biotechnology & Pharmaceuticals | TNFD             | <a href="#">Additional sector guidance – Biotechnology and pharmaceuticals</a>                                    |
|  | Apparel                         | TNFD             | <a href="#">Additional sector guidance – Apparel, accessories and footwear</a>                                    |

\*1: The ISIC (International Standard Industrial Classification) section is linked to Japan's economic activity classification. The Long List can be filtered by sector classification.

\*2: Wording is defined based on the names of each related guidance. The Long List can be filtered by sector classification

## Documents Cited for Risks/Opportunities and Response Measures (3)

- The table below lists Japanese companies that consulted TNFD reports and related materials when identifying risks, opportunities, and response measures from a Japanese corporate perspective
- The review focused on Japanese TNFD Early Adopters that had published TNFD-related disclosures as of December 2024.

| Company Name                                       | Company Name Stated in the Long List | Food and Agriculture, Forestry and Fisheries | Construction and Infrastructure | Manufacturing |
|--|--------------------------------------|--|---------------------------------|---------------|
| <a href="#">Ajinomoto Co., Inc.</a>                | 味の素                                  | ○  | —                               | —             |
| <a href="#">Asahi Group Holdings, Ltd.</a>         | アサヒグループHD                            | ○  | —                               | —             |
| <a href="#">Coca-Cola Bottlers Japan Inc.</a>      | コカ・コーラ ボトラーズジャパン                     | ○  | —                               | —             |
| <a href="#">Kirin Holdings Company, Ltd.</a>       | キリンHD                                | ○  | —                               | —             |
| <a href="#">Meiji Co., Ltd.</a>                    | 明治HD                                 | ○  | —                               | —             |
| <a href="#">Morinaga &amp; Co., Ltd.</a>           | 森永乳業                                 | ○  | —                               | —             |
| <a href="#">Oji Holdings Corporation</a>           | 王子HD                                 | ○  | —                               | —             |
| <a href="#">Sapporo Holdings Limited</a>           | サッポロHD                               | ○  | —                               | —             |
| <a href="#">Sumitomo Forestry Co., Ltd.</a>        | 住友林業                                 | ○  | —                               | —             |
| <a href="#">Kanadevia Corporation</a>              | カナデビア                                | —  | ○                               | —             |
| <a href="#">LIXIL Corporation</a>                  | LIXIL                                | —  | ○                               | —             |
| <a href="#">Resorttrust, Inc.</a>                  | リゾートトラスト                             | —  | ○                               | —             |
| <a href="#">Sekisui House, Ltd.</a>                | 積水ハウス                                | —  | ○                               | —             |
| <a href="#">Shimizu Corporation</a>                | 清水建設                                 | —  | ○                               | —             |
| <a href="#">Taisei Corporation</a>                 | 大成建設                                 | —  | ○                               | —             |
| <a href="#">Takenaka Corporation</a>               | 竹中工務店                                | —  | ○                               | —             |
| <a href="#">Tokyu Fudosan Holdings Corporation</a> | 東急不動産HD                              | —  | ○                               | —             |
| <a href="#">Konica Minolta, Inc.</a>               | コニカミノルタ                              | —  | —                               | ○             |
| <a href="#">Sekisui Chemical Co., Ltd.</a>         | 積水化学工業                               | —  | —                               | ○             |
| <a href="#">Sony Corporation</a>                   | ソニーグループ                              | —  | —                               | ○             |
| <a href="#">Sumitomo Rubber Industries, Ltd.</a>   | 住友ゴム工業                               | —  | —                               | ○             |
| <a href="#">Yamaha Corporation</a>                 | ヤマハ                                  | —  | —                               | ○             |
| <a href="#">TSUMURA &amp; CO.</a>                  | ツムラ                                  | —  | —                               | ○             |
| <a href="#">TORAY Industries Corporation</a>       | 東レ                                   | —  | —                               | ○             |

## List of Additional References and Resources

- Although not among the sources used to extract risks and opportunities for the Long List and the VC Map prepared for this assessment, the publications listed below may be consulted, as appropriate.

| Issuer                                      | Related Sectors  | Literature   |
|---|--|--|
| TNFD  | Electricity, gas, water, waste management                      | <a href="#">Additional sector guidance – Water utilities and services</a>  |
|   |  | <a href="#">Additional sector guidance – Oil and gas</a>   |
|   |  | <a href="#">Additional sector guidance – Electric utilities and power generators</a>                               |
|   | Transportation and postal services                             | <a href="#">Additional sector guidance – Marine transportation and cruise lines</a>                                |
|   | Agriculture, forestry and fisheries                            | <a href="#">Additional sector guidance – Fishing</a>   |
|   | Mining   | <a href="#">Additional sector guidance – Metals and mining</a>   |
| Finance and insurance                       | <a href="#">Additional guidance for financial institutions</a> |  |
| WBCSD                                       | Manufacturing  | <a href="#">Roadmaps to Nature Positive: Foundations for the pharmaceutical sector</a>                             |
|   | Electricity, gas, water, waste management                      | <a href="#">Roadmap to Nature Positive: Foundations for the energy system</a>                                      |
| WEF<br>(World Economic Forum)               | Transportation and postal services                             | <a href="#">Nature Positive: Role of the Automotive Sector</a>   |
|   | Manufacturing  | <a href="#">Nature Positive: Role of the Cement and Concrete Sector</a>  |
|   |  | <a href="#">Nature Positive: Role of the Chemical Sector</a>   |
|   | Other services   | <a href="#">Nature Positive: Role of the Household and Personal Care Products Sector</a>                           |
|   | Mining   | <a href="#">Nature Positive: Role of the Mining and metals sector</a>  |
|   | Electricity, gas, water, waste management                      | <a href="#">Nature Positive: Role of the Offshore wind sector</a>  |
| Transportation and postal services          | <a href="#">Nature Positive: Role of the Port sector</a>       |  |
| Japan Electrical Manufacturers' Association | Manufacturing  | <a href="#">Map of the relationship between business activities of electrical and electronics and biodiversity</a> |

# Nature-Related Risk Categories



| Major categories | Middle Category  | Subcategories | Overview  |
|------------------|------------------|---------------|---|
| Risks            | Physical Risks   | Acute risk    | Occurrence of short term, specific events that change the state of nature. For example, oil spills, forest fires or pests affecting a harvest.  |
|                  |                  | Chronic risk  | Gradual changes to the state of nature. For example, pollution stemming from pesticide use or climate change.   |
|                  | Transition risks | Policy        | Changes in the policy context due to new (or enforcement of existing) policies to create positive impacts on nature or mitigate negative impacts on nature.   |
|                  |                  | Market        | Changing dynamics in overall markets, including changes in consumer preferences, which arise from changing physical, regulatory, technological and reputational conditions and stakeholder dynamics. For example, the market value of a company is affected by assets that have decreased in value because there is insufficient freshwater for the production process, or the value of the business's production process is reduced by the emergence of new technologies that require less water to operate. |
|                  |                  | Technology    | Substitution of products or services with a reduced impact on nature and/or reduced dependency on nature. For example, the replacement of plastics with biodegradable containers.   |
|                  |                  | Reputation    | Changes in perception concerning an organization's actual or perceived nature impacts, including at the local, economic and societal level. This can result from direct company impacts, industry impacts and/or impacts of activities upstream and/or downstream in a value chain.   |
|                  |                  | Liability     | Liability risks that arise directly or indirectly from legal claims. As laws, regulations and case law related to an organization's preparedness for nature action evolves, the incident or probability of contingent liabilities arising from an organization may increase.  |

# Nature-related opportunity categories



| Major categories | Middle Category            | Subcategories                                      | Overview  |
|------------------|----------------------------|--|---|
| Opportunities    | Business performance       | Markets  | Changing dynamics in overall markets, such as access to new markets or locations, that arise from other opportunity categories as a result of changing conditions, including consumer demands, consumer and investor sentiment and stakeholder dynamics   |
|                  |                            | Capital Flows and Financing                        | Access to capital markets, improved financing terms or financial products connected to positive nature impacts or the mitigation of negative impacts.   |
|                  |                            | Resource Efficiency                                | Actions an organization can take within its own operations or value chain to avoid or reduce impacts and dependencies on nature (for example, by using fewer natural resources), while achieving co-benefits such as improved operational efficiency or reduced costs (for example, micro-irrigation, which maximizes plant health, reduces water use and reduces costs). |
|                  |                            | Products & Services                                | Value proposition related to the creation or delivery of products and services that protect, manage or restore nature, including technological innovations.   |
|                  |                            | Reputational Capital                               | Changes in perception concerning a company's actual or perceived nature impacts, including the consequent impacts on society and engagement of stakeholders.  |
|                  | Sustainability Performance | Sustainable use of natural resources               | Substitution of natural resources by recycled, regenerative, renewable and /or ethically responsibly sourced organic inputs.  |
|                  |                            | Ecosystem protection, restoration and regeneration | Activities that support the protection, regeneration or restoration of habitats and ecosystems, including areas both within and outside the organization's direct control.  |