






## Aiming for Carbon Neutrality by 2050 While Taking Action to Be Nature Positive\*

The NISSIN FOODS Group environmental strategy, EARTH FOOD CHALLENGE 2030, stipulates specific measures to address climate change and resource issues. We aim to create a sustainable society and increase corporate value by engaging in more advanced environmental measures.

### Challenge to Address Climate Change

|  | 2030 Targets   | 2024 Results  | Major Initiatives   |
|--|--|---------------|---|
| <b>Manufacture With Green Electricity</b><br>                       | CO <sub>2</sub> emissions reduction (Scope 1 + 2) compared to 2020 levels<br><b>-42%</b> | <b>-17.6%</b> | <b>Energy-conserving measures, conversion to fuels with lower environmental impact</b> <ul style="list-style-type: none"> <li>Introduced environmentally friendly equipment using an internal carbon pricing system (ICP)</li> <li>Reduced environmental impact through fuel conversion</li> </ul> <b>Expanded use of renewable energy 51.4% (2023) → 56.0% (2024)</b> <ul style="list-style-type: none"> <li>Installed solar power at plants</li> <li>Procured renewable energy through corporate off-site PPA (Kansai Plant and Shiga Plant)</li> <li>Adopted CO<sub>2</sub>-free options, use of environmental certificates</li> </ul> » <a href="#">p. 44</a> |
| <b>Develop With Green Ingredients</b><br><b>Green Packaging</b><br> | CO <sub>2</sub> emissions reduction (Scope 3) compared to 2020 levels<br><b>-25%</b>     | <b>-5.0%</b>  | <b>Comprehensive initiatives across the entire value chain; in-house efforts centered on CUP NOODLE</b> <ul style="list-style-type: none"> <li>Expanded use of sustainable palm oil</li> <li>Engaged in initiatives to address logistics issues (joint transportation, round-trip transportation, etc.)</li> <li>Supplier engagement</li> </ul> » <a href="#">p. 44</a>   |

### Challenge to Effectively Use Resources

|  | 2030 Targets  | 2024 Results                                     | Major Initiatives  |
|--|---|--|--|
| <b>Environmentally Friendly Procurement</b><br> | Sustainable palm oil procurement ratio<br><b>100%</b>                       | <b>46.1%</b>                                     | <ul style="list-style-type: none"> <li>Procured RSPO-certified palm oil and used satellite monitoring tools to monitor our deforestation risk</li> </ul> » <a href="#">p. 46</a> |
| <b>Conserve Natural Resources</b><br>           | Overall water use<br><b>12.3m<sup>3</sup> per million yen of sales</b>      | <b>9.2m<sup>3</sup> per million yen of sales</b> | <ul style="list-style-type: none"> <li>Reduced water consumption per sales mainly by recycling water and engaging in other initiatives to reduce water consumption</li> </ul>    |
| <b>Create a World Without Waste</b><br>         | Recycling rate in production process (Japan)<br><b>99.5%</b>                | <b>99.9%</b>                                     | <ul style="list-style-type: none"> <li>Continued recycling waste into feed and other resources</li> </ul>  |
|  | Waste from sales and distribution processes (Japan)<br><b>50% reduction</b> | <b>34.6% reduction</b>                           | <ul style="list-style-type: none"> <li>Reduced waste through more accurate sales forecasting and use of food banks</li> </ul>  |

\*Reversal of nature and biodiversity loss

# Challenge to Address Climate Change

The NISSIN FOODS Group aims to manufacture with green electricity, develop with green ingredients, and complete with green packaging. At the same time, we also set targets for reducing CO<sub>2</sub> emissions and take on the challenges of converting electricity to renewable energy and reducing the environmental impact of raw materials.

The Group implements energy conservation measures, adopts renewable energy, and takes other measures to reduce CO<sub>2</sub> emissions to achieve our EARTH FOOD CHALLENGE 2030 environmental strategy CO<sub>2</sub> reduction targets. In November 2022, we also pledged to take action to become Nature Positive, reversing the loss of nature and biodiversity due to deforestation and other factors towards a positive recovery. Our goal is to achieve carbon neutrality by 2050 through net-zero CO<sub>2</sub> emissions.

## Manufacture With Green Electricity

### CO<sub>2</sub> Reduction Initiatives

The NISSIN FOODS Group pursues initiatives at the corporate level and across our value chain, aiming to achieve our 2030 CO<sub>2</sub> reduction target and become carbon-neutral by 2050. We contribute to our own decarbonization (Scope 1, 2) through the ICP system, which we adopted in 2023. At the same time, we are expanding our use of renewable energy, steadily reducing

CO<sub>2</sub> emissions compared to 2020 levels. We have been proactive in the use of renewable energy, including solar power generation systems at the Plant in Hungary. In June 2025, we implemented the first corporate off-site PPA in the Group at the NISSIN FOOD PRODUCTS Kansai and Shiga Plants. As of 2024, our procurement ratio of renewable energy stood at 56.0%. To reduce CO<sub>2</sub> emissions across our value chain (Scope 3), we procure RSPO-certified palm oil and pursue initiatives related to containers. As a result of our efforts, we achieved a 5% reduction in 2024 compared to the base year. In addition to our own efforts in containers and the use of alternative technologies, we want to work with more suppliers in the future to reduce CO<sub>2</sub> emissions across the entire value chain.

## Green Packaging

The NISSIN FOODS Group participates in various initiatives, aiming for all Group products to be packaged in environmentally friendly containers\*1.

## Changing and Reducing Containers

**Eliminated plastic lid seals on CUP NOODLE (REGULAR/BIG) (NISSIN FOOD PRODUCTS)**



Design at time of change

**Transitioned to paper cups for CUP NOODLES (NISSIN FOODS U.S.A.)**



Using renewable paper for cups reduces the amount of plastic used

**Switched materials to composite cups for CUP NOODLES, tailoring packaging to the European environment trends and enabling the separation of plastic and paper containers (NISSIN FOODS Europe)**



**GOROGURA plant-based packaging Environmentally friendly paper packaging using biomass ink (NISSIN CISCO)**



## Collecting Containers

**Public-private partnership project with Kobe City to collect and recycle plastic waste (NISSIN FOODS HOLDINGS, NISSIN YORK)**

NISSIN FOODS HOLDINGS and NISSIN YORK entered a collaborative agreement with Kobe City for the Lactobacillus Beverage Container Collection and Recycling Project as part of the working group activities of the Japan Clean Ocean Material Alliance.



## Recycling Containers

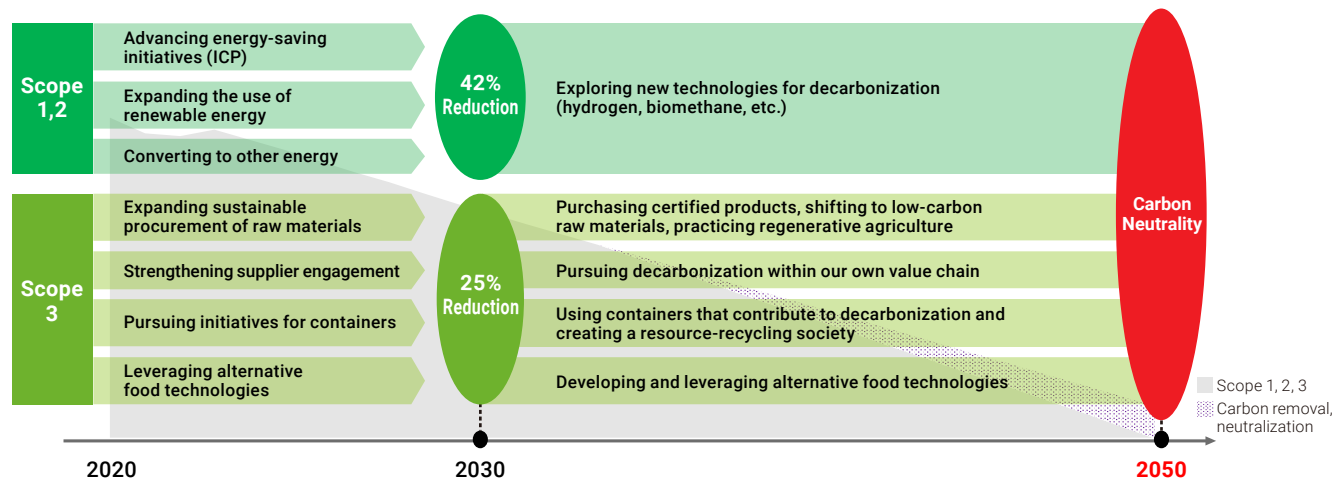
**Chemically recycled\*2 PSP (polystyrene foam sheet) cups (NISSIN FOOD PRODUCTS)**

The NISSIN FOODS Group succeeded in developing the first prototype of a chemically recycled PSP cup for instant noodle containers in February 2024. This cup uses chemically recycled materials for the PSP cup, and is expected to lead to the effective use of resources.



\*1 Containers made with reduced weight, reduced volume, biomass, paper, material recycling, chemical recycling, recycled materials, etc.  
\*2 The chemical breakdown of waste plastics into reusable materials such as cracked oil, syngas, monomers, and other chemical raw materials.

## Transition Plan to Become Carbon-Neutral




The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board, a group of central banks and finance ministries from major countries, to examine the proper disclosure of climate-related and other information. The NISSIN FOODS Group endorses the TCFD recommended disclosures of information on governance, strategy, risk management, and metrics and targets. We also became a member of the TCFD Consortium<sup>\*1</sup>, which was established in May 2019.

<sup>\*1</sup> A meeting to discuss how companies should disclose information effectively in support of the TCFD recommendations and how financial institutions and others may use disclosed information to make appropriate investment decisions.

## Climate Change Scenario Analysis

To understand the impact of climate change on our business activities, the Group established a project team in FY 3/2020 to conduct a scenario analysis and impact assessment based on the TCFD recommendations. The team conducted the analysis under several different conditions, including the 2°C scenario required by the TCFD, using the Intergovernmental Panel on Climate Change (IPCC) scenarios regarding the progression of global warming (representative concentration pathway (RCP))<sup>\*4</sup> and socioeconomic scenarios (shared socioeconomic pathway (SSP)). The accompanying table summarizes the results of the analysis. In November 2022, we declared our commitment to becoming carbon neutral through net zero CO<sub>2</sub> emissions and absorption by the year 2050.

<sup>\*4</sup> The analysis used three scenarios: RCP2.6 (approximate 1°C increase based on 1986-2005); RCP6.0 (approximate 2°C increase), and RCP8.5 (approximate 4°C increase).

 Please see our website for more about the analysis results.  
[>> Climate Change | Responding to the Task Force on Climate-related Financial Disclosures \(TCFD\)](#)

## The NISSIN FOODS Group Approach to Disclosures Recommended by the TCFD

|                            |  |
|----------------------------|--|
| <b>Governance</b>          | In April 2020, we established the Sustainability Committee, chaired by the president and CEO, to identify risks and opportunities posed by climate change, as well as to consider responses as a group. The committee formulated an environmental strategy, EARTH FOOD CHALLENGE 2030, which was approved by the Management Committee and submitted to the board of directors.<br>In April 2021, we established the Sustainability Advisory Board as an advisory body to the board of directors. This board provides an opportunity for internal management and outside experts to discuss environmental, social, and governance issues affecting the NISSIN FOODS Group. We publish the details of discussions on our website and incorporate the same into management policies and other measures. |
| <b>Strategy</b>            | As an environmental strategy, EARTH FOOD CHALLENGE 2030 includes numerical targets for CO <sub>2</sub> emissions, water usage, and waste based on the results of a climate change scenario analysis conducted in FY 3/2020. In addition to reducing the risk of climate change through the achievement of these targets, we pursue business opportunities through the development and use of plant-based meat alternatives, as well as the development and use cultured meat and other raw materials having a low environmental impact.  |
| <b>Risk Management</b>     | We established a Risk Management Committee under the supervision of the board of directors. The committee monitors the management of various risks, including environmental risks, endeavoring to avoid potential damage to corporate value.   |
| <b>Metrics and Targets</b> | EARTH FOOD CHALLENGE 2030 includes targets to reduce Scope 1 and 2 <sup>*2</sup> emissions by 42% and Scope 3 <sup>*3</sup> emissions by 25% by FY 3/2031 (compared to 2020). In addition, we have established metrics for waste, raw material procurement, and water usage.   |



Refer to the corresponding website for more details. [>> EARTH FOOD CHALLENGE 2030](#)

<sup>\*2</sup> Scope 1 emissions are greenhouse gas emissions mainly from the use of fossil fuels by a company (direct emissions). Scope 2 emissions are greenhouse gas emissions mainly from the use of electricity and steam purchased by a company (indirect emissions).

<sup>\*3</sup> Scope 3 emissions include greenhouse gases emitted mainly throughout a company's value chain (such as raw materials procurement, transportation, and disposal), excluding Scope 1 and Scope 2 emissions.

## Key Risks, the Degree of Impact on Business, and Response Measures

|                        | Key Risks  | Anticipated Impact on Business   | Main Measures (Financial Impact Mitigation)   |
|------------------------|--|--|---|
| <b>Transition Risk</b> | Carbon tax, carbon border tax, and other regulations | We calculated the impact of not working toward the SBT target WB2°C (global temperature rise well below 2°C above pre-industrial levels) at ¥3,747 million per year in 2030 and ¥7,323 million per year in 2050.<br>If we achieve the SBT target WB2°C, we calculate the impact to be ¥2,623 million per year in 2030 and ¥1,465 million per year in 2050. | Installation of energy-saving equipment and systems in manufacturing plants, increased adoption of renewable energy, and sales of environmentally friendly products |
| <b>Physical Risk</b>   | Water risk   | <b>Flooding:</b> Four domestic and one overseas manufacturing sites considered at high risk  | Multifaceted analytical study of water risk in manufacturing plants, etc.   |
|                        |  | <b>Storm surge:</b> Four manufacturing sites in Japan considered at high risk  |   |
|                        |  | <b>Drought:</b> Sites in South America and Europe considered to be at increased risk by 2055 and 2090 compared to the time of the assessment   |   |
|                        |  | <b>Water stress:</b> Four sites in Japan, seven sites overseas   | Efficient use of water in manufacturing plants, including water reuse   |
|                        | Changes impacting raw materials suppliers            | <b>Wheat:</b> Area unit yield for wheat in Australia was projected to increase compared to 2000 under RCP 2.6 and RCP 6.0; no change in the U.S. and Canada  | Development of plant substitutes, cultured meats, etc.; development of products using plant substitutes, cultured meats, etc.; procurement of sustainable palm oil  |
|                        |  | <b>Soybeans:</b> Area unit yield increased under RCP 2.6 compared to 2000 and decreased under RCP 6.0 and RCP 8.5  |   |
|                        |  | <b>Shrimp and squid:</b> No significant change under RCP 2.6; catch decreased under RCP 8.5  |   |
|                        |  | <b>Palm oil:</b> Concerns about reduced harvest under RCP 2.6; reduced harvest under RCP 8.5   |   |

# Challenge to Effectively Use Resources

We set targets to source sustainably, conserve natural resources, and create a world without waste. At the same time, we take on the challenge to use resources effectively through procurement that entails less environmental impact and that reduces waste.



## Sustainable Procurement Policy

We aim for the sustainable procurement of raw materials while addressing issues that include the prevention of deforestation in production areas, conservation of biodiversity and resources, and consideration for worker human rights and safety. In 2007, the NISSIN FOODS Group instituted the Basic Policy on Green Procurement, and continues to engage in environmentally friendly procurement. In 2017, we created the NISSIN FOODS Group Sustainable Procurement Policy for the procurement of raw materials produced in consideration of sustainability, respect for the global environment, human rights, and food safety. The cooperation of our suppliers is essential to achieving this policy. Therefore, we established the NISSIN FOODS Group Policy on Sustainable Procurement in May 2025. This code of conduct applies to all NISSIN FOODS Group suppliers and their affiliates, contractors, and sales agents. We require these entities and their employees to make active efforts toward compliance with the code.

## Sustainable Procurement Initiatives

The NISSIN FOODS Group takes advantage of certification systems and ensures the traceability of raw materials to achieve sustainable procurement. For example, all soybeans used by NISSIN FOOD PRODUCTS for fried tofu are certified by the U.S. Soybean Export Council (USSEC), proving that the soybeans were produced sustainably. We also source all cabbage and green onions from contracted and in-house plantations, ensuring 100% traceability back to the relevant plantation.

Another area in which the NISSIN FOODS Group makes active efforts is the sustainable procurement of palm oil, which we use to deep fry instant noodles. Oil palm, the base of palm oil, is mainly grown in tropical regions such as Indonesia and Malaysia. However, certain plantations face tropical rainforest and peatland destruction, human rights violations of plantation

workers, and various other challenges.

In response to these challenges, the NISSIN FOODS Group EARTH FOOD CHALLENGE 2030 environmental strategy includes a target to achieve 100% sustainable palm oil procurement by 2030 across the group from sources we confirm as sustainable. The strategy also describes a target of 100% sustainable palm oil procurement by 2025 for the Domestic Instant Noodles Business from sources we confirm as sustainable. We are working to achieve these targets as quickly as possible.

In 2022, we established guidelines to comply with our Commitment to the Procurement of Sustainable Palm Oil. These guidelines also address our NDPE policy<sup>\*1</sup>. Specifically, we are improving traceability using a mill list that consolidates the names and locations of palm oil mills, and, with the help of the *Satelligence* satellite monitoring tool, verifying the risk of forest and peatland destruction in areas where mills and surrounding oil palm plantations are located. For mills identified as high-risk, we verify matters with the oil and fat processing manufacturer from which the mill purchased oil and explore

improvement measures. For plantations surrounding high-risk mills, we conduct a series of field surveys through questionnaires and dialogues with outside experts to monitor in detail impacts on the environment and workers' human rights in production areas.

In addition to these efforts, we expect to ensure traceability to oil palm plantations by 2030, providing comprehensive support for plantations to produce palm oil in an environmentally and human rights-friendly manner. We are also making progress in the development of a complaint-handling mechanism<sup>\*2</sup> for small-scale farmers, and we will be working with third-party organizations to identify, investigate, and resolve issues and complaints received from these farms. We also plan to introduce a forest footprint<sup>\*3</sup> over time, working from areas where the risk of forest and peatland destruction and the risk of community rights violations are particularly high.

<sup>\*1</sup> NDPE = No Deforestation, No Peat, No Exploitation.

<sup>\*2</sup> Mechanism for receiving reports on cases of human rights violations and providing remedies to correct and improve the situation

<sup>\*3</sup> Total area of forests and peatlands affected by a company's supply chain or financial institution's investments and financing.

## Medium- to Long-Term Palm Oil Procurement Initiative Guidelines

|                  | Supply Chain                           | Initiative Policy  |   |
|------------------|--|--|---|
|                  |  | Current  | ~2030   |
| Focused Approach | Oil Palm Plantations                   | <ul style="list-style-type: none"> <li>Determine and engage with the risk of deforestation and peatland destruction through satellite monitoring tools</li> <li>Conduct field surveys (including interviews with NGOs)</li> <li>Implement programs to support small farmers</li> </ul> | <ul style="list-style-type: none"> <li>Ensure traceability back to the plantations</li> <li>Establish a grievance response mechanism</li> </ul> |
|                  | Palm Oil Mills                         | <ul style="list-style-type: none"> <li>Manage information using mill lists</li> <li>Monitor with satellites and engage to identify risks of forest and peatland destruction</li> </ul>   | <ul style="list-style-type: none"> <li>Create a forest footprint (focused on high-risk areas)</li> </ul>  |
|                  | Primary Refining Plant                 | <ul style="list-style-type: none"> <li>Manage information using mill lists</li> <li>Monitor status updates and engage through primary suppliers</li> </ul>   |   |
|                  | Processing and Refining of Oil and Fat | <ul style="list-style-type: none"> <li>Cooperate daily (compliance checks, problem sharing, local mill and plantation status updates)</li> </ul>   |   |

Assessing Nature-Related Risks and Opportunities

The NISSIN FOODS Group must conserve and recover biodiversity to help achieve the Nature Positive initiative to reverse nature and biodiversity loss. With this in mind, the Group participates in the TNFD Forum, a network that supports the TNFD<sup>\*1</sup>, a framework for assessing and disclosing dependencies and impacts related to natural capital. We also registered as a TNFD Adopter<sup>\*2</sup> in 2023 as a company that makes TNFD information disclosures.

Also in 2023, we conducted a trial assessment of nature-related risks and opportunities using the LEAP approach<sup>\*3</sup> recommended by the TNFD and disclosed the results. In 2024, we reviewed the raw materials subject to assessment and conducted a more detailed assessment of nature-related risks and opportunities based on the disclosure items in the final TNFD recommendations v1.0.

At the January 2025 meeting of the Sustainability Advisory Board, an advisory body to the board of directors, we invited external experts in to discuss the results of our TNFD assessment and address the future decline in palm oil yield, disease risk, and the potential of regenerative agriculture.

Target Selection and Assessment Methods

- The main business of the NISSIN FOODS Group is the manufacture and sale of food products, and we are particularly dependent on natural capital through the procurement of raw materials, which has a diverse impact on biodiversity. Accordingly, we targeted raw materials procured upstream in the value chain for assessment. We comprehensively evaluated nine major raw materials used based on biodiversity indicators, and selected four (palm oil, cacao, wheat, and shrimp) for analysis after the “Locate” part of the LEAP approach.
- By combining ENCORE<sup>\*4</sup> with more than 150 species of natural capital-related big data (e.g., carbon sequestration data and bee species count data), we qualitatively and quantitatively assessed nature-related dependencies and impacts of production for the four target materials, taking into account the

- geographical characteristics of the procurement locations.
- We considered three indicators in our identification of priority locations<sup>\*5</sup> for the four target materials: Production area, biodiversity importance<sup>\*6</sup>, and ecosystem integrity. For palm oil, in particular, we have established traceability to the mills upstream in the supply chain, so our analysis consists of an area with a 50-kilometer radius around the mills.
  - We conducted scenario analysis for palm oil, which is of particular importance to our business due to nature-related dependency and impact. To understand the impact on local biodiversity and business continuity, we investigate changes in biodiversity indicators and palm oil yield over time based on multiple scenarios.

Assessment Results

For both palm oil and cacao production areas, we observed challenges specific to the tropics, particularly the monoculture of plantation crops, which creates an environment conducive to infection and the spread of diseases such as basal stem rot. For wheat, the assessment confirmed that rainwater (natural precipitation) is used in the locations in question, providing

assurance regarding production water shortages in Western Australia. Our analysis related to shrimp indicated that, based on historical research data, anthropogenic activities may be causing declines in catches.

<sup>\*1</sup> Taskforce on Nature-related Financial Disclosures (TNFD): An international initiative to develop a framework for private companies and financial institutions to ensure the appropriate assessment and disclosure of risks and opportunities related to natural capital and biodiversity.

<sup>\*2</sup> Companies that have registered the intention on the TNFD website to make disclosures based on TNFD recommendations. Registered companies will be required to disclose information based on FY 3/2025 or FY 3/2026 results.





<sup>\*3</sup> A process proposed by the TNFD to assess nature-related risks and opportunities systematically on a scientific basis. The LEAP approach is a four-step approach through which we, after selecting the scope of the analysis, **Locate** connections with nature, **Evaluate** to diagnose nature-related dependencies and impacts, **Assess** significant nature-related risks and opportunities, and **Prepare** to address these risks and opportunities and report them to stakeholders.

<sup>\*4</sup> ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is a tool developed jointly by the Natural Capital Finance Alliance (NCFA), the United Nations Environment Programme World Conservation Monitoring Center (UNEP-WCMC), and other organizations. The tool helps entities assess the dependencies and impacts of corporate activities on nature.

<sup>\*5</sup> Priority locations are defined under the TNFD recommendations as either material locations (locations with identified nature-related dependencies, impacts, risks, and opportunities that are important to an entity) or sensitive location (areas bordering areas that are important for biodiversity, areas of high ecological integrity, etc.).

<sup>\*6</sup> Importance of biodiversity in a location where raw materials are produced or secured. Refers to a ranking of priority locations for conservation based on the distribution and rarity of each biological group.

Summary of Assessment Results (Four Target Raw Materials)

| Initiative Details   | Palm Oil   | Cacao  | Wheat    | Shrimp  |
|--|---|---|---|--|
| Scoping<br>Review target raw materials                                   | Conservation priority <sup>*7</sup> , area required for production, and MSA <sup>*8</sup><br>Top in all metrics   | Top in conservation priority and MSA, but small areas required for production               | Largest terrestrial area required for production, but MSA and conservation priority are low   | Conservation priority ranks at the highest level, with concerns regarding fishing pressure   |
| Locate<br>Identify priority areas  | Malaysia<br>Indonesia   | Ecuador<br>Ghana  | Australia   | India  |
| Evaluate<br>Understand the relationship between dependencies and impacts | Concerns regarding use (impact) and disease control (dependence) on terrestrial ecosystems  | Concerns regarding use (impact) and disease control (dependence) on terrestrial ecosystems  | Concerns regarding water use (impact); but reports that while Western Australia experiences water shortages, we get much water from rainwater | Concerns about marine resource utilization (impact)  |
| Assess<br>Analyze risks and explore actions through scenario analyses    | Malaysia<br>Indonesia<br>• Decrease in palm oil yield due to climate change and increased rate of disease<br>• Degradation of local biodiversity due to expansion of palm forests | Not subject to scenario analysis  | Not subject to scenario analysis  | Not subject to scenario analysis   |

<sup>\*7</sup> Conservation priority refers to a ranking of priority areas for conservation based on the distribution and rarity of each biological group.


<sup>\*8</sup> Mean Species Abundance (MSA) is the rate of biodiversity loss to pristine nature due to the production and catch of raw materials.



## Scenario Analysis for Palm Oil

We also conducted a scenario analysis on palm oil, which has a high degree of nature-related dependencies and impacts, while being important to our business from the perspective of procurement volume. Through this analysis, we explored the risks and opportunities we face in palm oil related to priority locations. The results of our analysis indicated the potential for significant future yield declines in Sabah, Malaysia and Riau, Indonesia, due to a combination of multiple factors, including rising temperatures and the spread of disease. Our analysis also revealed that land use conversion (from forest or peatland to agricultural land) could lead to the loss of biodiversity and yield reductions of between 30% and 40% by the year 2070 if plantations are expanded without disease control measures in place. Looking at the areas analyzed, we estimate that more than 90% of biodiversity was conserved prior to 1992, when palm plantations began to expand, but that biodiversity has decreased to about 85% in Sabah and 65% in Riau as of 2023 due to the expansion of palm plantations.

We expect that improving biodiversity within plantations (e.g., disease-resistant agricultural land use) will be effective for disease control and yield improvement. Our analysis for Riau, on the other hand, indicated that controlling new deforestation is even more important for biodiversity conservation than improving biodiversity within plantations, when taking into account the characteristics of the land in question.

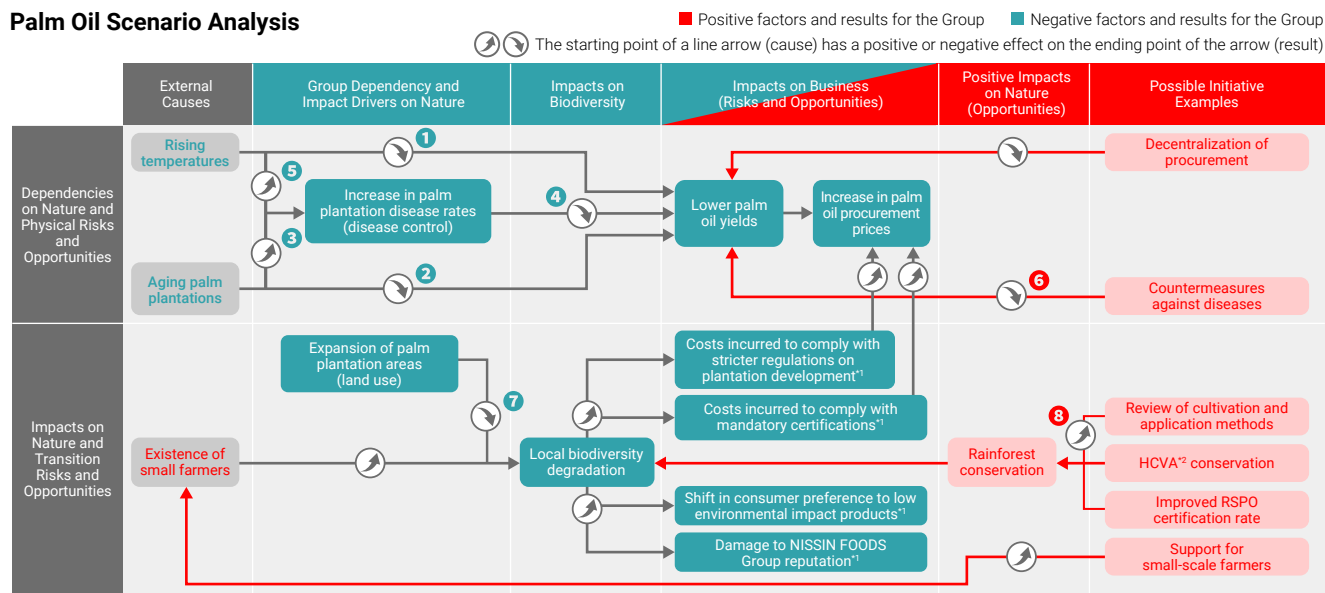
 Please see our website for more about the assessment results.  
[>> Biodiversity | Disclosure Based on the Taskforce on Nature-related Financial Disclosures \(TNFD\) Recommendations](#)

## Overview of Palm Oil Dependencies, Impacts, Risks, and Opportunities

|  |                                     |  |
|--|-------------------------------------|--|
| Impacts on Nature and Physical Risks and Opportunities   | <b>Dependencies</b>                 | Root rot and other diseases are less likely to spread in forests where biodiversity is maintained; however, these diseases are more likely to spread in monocultures where only plantation crops are grown   |
|  | <b>Dependent ecosystem services</b> | Disease control (control of epidemics in plants, animals, and humans via ecosystems)   |
|  | <b>Physical risk</b>                | Potential for significant yield declines in Sabah, Malaysia, and Riau, Indonesia, due to a combination of temperature increases, the spread of disease in palm plantations, and other factors  |
|  | <b>Opportunities</b>                | <ul style="list-style-type: none"> <li>• Support for small-scale plantations on newly created land in mountainous regions with relatively low risk</li> <li>• Priority support in Sabah, where many small plantations are located</li> <li>• Support in identifying and reforesting palm plantations in low-elevation areas where disease has spread</li> </ul>                      |
| Impacts on Nature and Transition Risks and Opportunities | <b>Impacts</b>                      | The expansion of palm plantations without measures, as they are now, will result in significant biodiversity loss by 2070 due to changes in land use (from forest and peatland to agricultural land)   |
|  | <b>Impact driver</b>                | Land use (use of terrestrial ecosystems)   |
|  | <b>Transition risk*</b>             | <ul style="list-style-type: none"> <li>• Tightening regulations on farmland development and fertilizer use, mandatory certifications, carbon taxes, etc., will lead to costs in response, limited palm oil supply, and increased palm oil prices</li> <li>• Increased demand for palm oil as a substitute for fossil fuels could lead to supply shortages and price hikes</li> </ul> |
|  | <b>Opportunities</b>                | <ul style="list-style-type: none"> <li>• Palm plantations cultivated in a disease-resistant manner increase the potential for biodiversity recovery by 2070 compared to the status quo</li> </ul>  |

\* Transition risk based on the results of the TNFD trial assessment conducted in 2023; not considered in the analysis in the latest assessment (2024) based on final TNFD recommendations Version v1.0

## Palm Oil Scenario Analysis



\*1 Trial analysis results

\*2 High Conservation Value Areas (HCVAs): Natural habitats with significant environmental, socioeconomic, biodiversity, or scenic value (HCV); particularly areas recognized as having outstanding importance or significance

### Overview of Causal Relationships (1) to (8)

#### 1 Relationship between rising temperatures and yield

- Palm oil yields plummet when annual average temperature exceeds 27.5°C
- Yield reductions of about 40% in Riau and about 30% in Sabah are projected by 2070

#### 2 Relationship between tree age and yield

- Yield increases up to nine years of age, flattens after 10 years, and decreases after 18 years
- The palm planting cycle is typically 25 to 30 years
- Most of the trees in Sabah are over 20 years old; most of the trees in Riau are under 10 years old

#### 3 Relationship between tree age and disease incidence (basal stem rot)

- Morbidity increases significantly with tree age
- Sabah has many old forests, and the risk of disease spread is high

#### 4 Relationship between disease incidence and yield

- Disease has caused yields in Sabah to peak in 2015 and could reduce yields by up to 40% in the future
- Riau, a province with many young forests, may begin to decline after 2030

#### 5 Combined effects of disease incidence and rising temperatures

- In Sabah, disease and rising temperatures threaten to reduce yields to half of peak levels
- In Riau, yields will increase until around 2030, after which yields will decrease

#### 6 Yield improvement through disease control

- Disease control measures are expected to increase yields in Sabah and reduce declines in Riau

#### 7 Biodiversity loss due to land use change

- Expansion of palm plantations has a negative impact on biodiversity
- Estimated biodiversity decline between 1992 and 2023 is approximately 85% in Sabah and 65% in Riau

#### 8 Biodiversity improvement through revised cultivation methods

- We expect the introduction of disease-resistant cultivation methods during palm replanting season will restore biodiversity in Sabah
- Riau is still undergoing deforestation, and coastal peatlands are at high risk of storm surges and disease, making the control of illegal logging even more important

### NISSIN FOODS Group Targets as a Result of Scenario Analysis

- NISSIN FOODS Group: Raise procurement rate for palm oil deemed sustainable to 100% by FY 3/2031
- Domestic Instant Noodles Business: Raise the procurement rate for palm oil deemed sustainable to 100% by FY 3/2026

## Impact on NISSIN FOODS Group Strategy and Finances

We will continue measures to address identified nature-related risks and opportunities in line with our EARTH FOOD CHALLENGE 2030 environmental strategy and other strategies to achieve carbon neutrality and nature positive. We will continue to work with stakeholders in connection with palm oil—a particularly important raw material—to ensure sustainable procurement. In addition to engagement with oil and fat processors, we will work to ensure traceability to mills, analyze deforestation risk using satellite monitoring, and support small-scale farmers.

We intend to hold further discussions on the impact of these nature-related risks and opportunities on the NISSIN FOODS Group business model, value chain, strategy, and financial plans, as well as the details of the transition plans and analyses. In addition to calculating financial impact, we understand the importance of the next steps in organizing systems for responding to identified risks and opportunities in line with international frameworks (e.g., AR3T<sup>3</sup>, etc.) and creating transition plans aimed at becoming nature positive.

\*3 The SBTs for Nature action framework systematically organizes a series of steps for entities to address indirect causes of nature loss while avoiding (or reducing) negative impacts on nature and contributing to the restoration and rehabilitation of nature.