

TCFDREPORT

2026

Task Force
on Climate-related Financial
Disclosures Report



NIPPON FINE CHEMICAL CO., LTD.

Initiatives in Line with TCFD Recommendations

The Nippon Fine Chemical Group manufactures a wide variety of products, including cosmetic ingredients. The production of these products relies on various fossil-derived and naturally derived raw materials and fuels, the availability and supply of which may be affected by climate change. For this reason, we recognize that climate change risks and opportunities are important management issues, and in December 2021, we expressed our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We use scenario analysis to assess the risks and opportunities of the impact of climate change on our business. Going forward, we will strengthen the resilience of our strategies by recognizing the significance of such risks and opportunities and reflecting such significant in our management measures.

As part of our efforts to achieve a carbon-neutral society, we initially set a target for Nippon Fine Chemical on a standalone basis to reduce Scope 1 and 2 carbon dioxide emissions by 38% by FY2030 compared with FY2013 levels. However, in order to expand these efforts across the Group, we have gradually included our group companies ARBOS and NISSEI BILIS in the initiative. Since FY2024, we have pursued greenhouse gas emission reductions under a new target of reducing carbon dioxide emissions by 41.5% by FY2030 compared with FY2018 levels.

By disclosing these initiatives through this TCFD Report, as well as our annual securities report, Integrated Report, website, and other channels, we aim to enhance corporate transparency and strengthen relationships of trust with our stakeholders.

Governance

Nippon Fine Chemical has established a Sustainability Promotion Committee composed of members selected from each division and our Group companies.

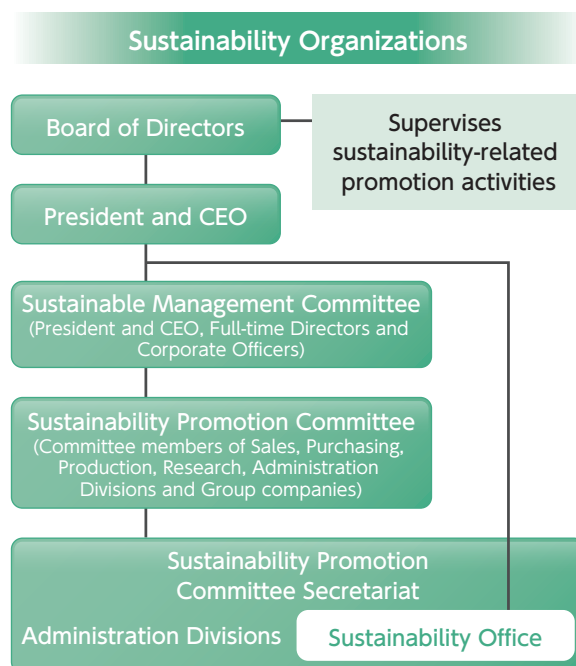
The Sustainability Promotion Committee assesses the significance of risks and opportunities identified based on scenario analysis of issues related to climate change. The Promotion Committee also formulates promotion action plans for issues and manages their progress.

Plans for promoting sustainability-related material issues and risk management are discussed once a year by the Sustainability Promotion Committee. They are then reviewed and approved by the Sustainable Management Committee, which is chaired by our President and CEO and composed of Full-time Directors and Corporate Officers, before being reported to the Board of Directors.

The Sustainable Management Committee oversees and guides four committees, including the Sustainability Promotion Committee and the Risk Management System Promotion Committee, to promote our response to increasingly important sustainability issues.

The progress of sustainability-related activities is checked by the Sustainability Promotion Committee each quarter, in principle, and the results are reported to the Sustainable Management Committee, and to the Board of Directors semi-annually.

Nippon Fine Chemical obtains information on external trends and developments related to climate change from sources such as the websites of relevant organizations and government agencies, as well as publicly available materials and training seminars. This information is shared with the Sustainability Promotion Committee, the Sustainable Management Committee and the Board of Directors.



Goals for promoting the reduction of greenhouse gas emissions are approved by the Board of Directors and then disclosed through various channels, including the annual securities report, the Integrated Report, and our website. In addition, the achievement of material issues, including the reduction of carbon dioxide emissions, is reflected in performance-linked remuneration paid to Directors and Corporate Officers.

Sustainability Promotion Committee	
Materiality-related items	
April 2025	Confirmation of the results of activities relating to FY2024 numerical goal achievement plan
July 2025	Confirmation of first quarter progress of FY2025 numerical goal achievement plan
October 2025	Confirmation of semiannual progress of FY2025 numerical goal achievement plan
	Discussion on proposed numerical goals for FY2026
January 2026	Confirmation of third quarter progress of FY2025 numerical goal achievement plan
	Discussion on FY2026 numerical goal achievement plan
TCFD-related items	
April 2025	Report on the results of the FY2024 TCFD scenario analysis
March 2026	Confirmation of business impact assessments and countermeasures
	Discussion on the draft TCFD Report 2026

●FY2025 Climate Change-Related Meetings

Board of Directors	
Materiality-related items	
May 2025	Report on results of activities relating to FY2024 numerical goal achievement plan
November 2025	Report on semiannual progress of FY2025 numerical goal achievement plan
December 2025	Approval of proposed numerical goals for FY2026
TCFD-related items	
May 2025	Report on the draft TCFD Report 2025
Sustainable Management Committee	
Materiality-related items	
May 2025	Report on the results of activities relating to FY2024 numerical goal achievement plan
July 2025	Disclosure of progress of FY2024 numerical goal achievement plan
	Disclosure of numerical goals for FY2025
August 2025	Report on first quarter progress of FY2025 numerical goal achievement plan
November 2025	Report on semiannual progress of FY2025 numerical goal achievement plan
December 2025	Deliberation on proposed numerical goals for FY2026
February 2026	Report on third quarter progress of FY2025 numerical goal achievement plan
	Approval of FY2026 numerical goal achievement plan
TCFD-related items	
May 2025	Report on the draft TCFD Report 2025
June 2025	Disclosure of TCFD Report 2025

Risk Management

We have established an organizational structure for our Risk Management System (RMS). Basic risk management policies, plans, implementation activities, improvements to the RMS, and other RMS-related issues are deliberated by the RMS Promotion Committee and then by the Sustainable Management Committee, which is chaired by Nippon Fine Chemical's President and CEO. Of these matters, the basic policy and major risks are approved by the Board of Directors, while all other matters are approved by the Sustainable Management Committee. Based on the priority risks identified by each department, the RMS Secretariat prepares a risk map, using the "impact on business activities" and "frequency of occurrence" as evaluation axes to propose major risks, which are discussed by the RMS Promotion Committee before being reported to the Sustainable Management Committee. Company-wide major risks deliberated by the Sustainable Management Committee are approved by the Board of Directors.

Risk management for sustainability-related matters is referred to the Sustainability Promotion Committee, which identifies material issues based on the degree of importance to stakeholders and the degree of importance to our group. The Sustainability Promotion Committee considers climate change-related risks to be one of our environmental materialities, and identifies and evaluates risks and opportunities based on the following evaluation axes to determine the level of importance. The Promotion Committee formulates measures that should be taken as a Group and creates promotion action plans for items that are assessed as having a large impact in terms of risks and opportunities. The Promotion Committee also manages the progress of the formulated plans and activities and reports such progress to the Sustainable Management Committee. The Sustainable Management Committee deliberates management plans and business strategies based on the state of current initiatives and other factors, and such plans and strategies are then approved by the Board of Directors.

●Assessment Axes for Climate Change Risks and Opportunities

- 1 Identify risks and opportunities related to climate change that may affect the Group with reference to the TCFD Final Report
- 2 Evaluate identified risks and opportunities from the perspective of their impact on the Group's business activities, customers, suppliers, etc., and the likelihood of their occurrence
- 3 Evaluate the impact of each item from both a qualitative and a quantitative perspective using scenario analysis to determine relative importance

Strategy

With regard to the impact of climate change on Nippon Fine Chemical (Functional Products business) and our Group companies, ARBOS (Environmental Hygiene Products business) and NISSEI BILIS (Pharmacological and Safety Testing business), we set 2030 and 2050 as the time frame for our considerations, and analyzed scenarios for “risks and opportunities associated with the transition to a low-carbon economy” and “risks and opportunities associated with the physical impact of climate change” in a “1.5°C world” in which climate change measures have progressed and the Paris Agreement targets have been realized and in a “4°C world” in which no new climate change measures are taken and greenhouse gases have increased.

We found that under the 1.5°C scenario, there will be significant business risks arising from policies and regulations aimed at reducing emissions, such as carbon taxes, and from concerns regarding the procurement of naturally derived raw materials due to fluctuations in production and demand. At the same time, there will be opportunities to sell materials for perovskite solar cells. We found that under the 4°C scenario, there will be significant business risks arising from the impact of crude oil price fluctuations on raw material prices and concerns regarding the procurement of naturally derived raw materials. At the same time, as in the 1.5°C scenario, there will be opportunities to sell materials for perovskite solar cells.

We investigated the impact on direct operations of

flooding caused by sea level rise and increasingly severe torrential rainfall at each facility location. As a result, we found that the risks are low under the 1.5°C scenario, but moderate under the 4°C scenario. At sites currently identified as being at risk, measures have been implemented to raise floor levels in certain buildings, including warehouses and manufacturing facilities. We will continue to monitor developments in water-related risks.

The Nippon Fine Chemical Group is working to reduce Scope 1 greenhouse gas emissions by switching to fuels with lower carbon dioxide emission coefficients, upgrading aging equipment to improve energy efficiency, replacing company vehicles with hybrids and EVs, and reviewing manufacturing processes. We will continue to explore additional measures going forward. In addition, Nippon Fine Chemical and ARBOS reduced their Scope 2 emissions by switching all purchased electricity to renewable energy by FY2023. In the future, we will promote Scope 2 reductions by expanding this switch to other Group companies. With regard to Scope 3, we are working to reduce carbon dioxide emissions by switching from fossil-derived raw materials to naturally derived raw materials, using lower-emission rail transport, and adopting biomass bottles.

Achieving carbon neutrality by 2050 will require the use of carbon-free energy and the adoption of carbon capture technologies. We regularly monitor and gather information on these developments.

● Development of Materials for Perovskite Solar Cells

Perovskite solar cells, which are being developed as next-generation solar cells, are Thin, Light, and Flexible. Their ability to generate electricity not only from outdoor sunlight but also from indoor light allows them to be used in a wide range of applications.

Nippon Fine Chemical is working on the development and commercialization of Spirokite™-NS and other hole transport materials with excellent quality and stability for use in perovskite solar cells, which are attracting significant attention as a new renewable energy source.

Results of 1.5°C and 4°C Scenario Analysis (affected items)

		Risk/Opportunity Category	1.5°C World	4°C World
Transition Risks and Opportunities	Policies / Regulations	Carbon price and carbon tax	- Carbon taxes will be introduced to achieve the 1.5° C target, carbon prices will rise, and global emission credits and other initiatives will expand. Procurement, manufacturing, sales, and transportation costs will increase as a result.	- Efforts related to carbon pricing will not have progressed and remain largely unchanged from the current situation.
		Carbon emission targets/ policies in each country (Introduction of plastics regulations) (Palm oil production volume and price)	- Global trend of imposing tax on virgin plastics will continue. As a result, the use of additional recycled materials will be necessary and research and development costs, procurement, and manufacturing costs will increase. The development of resource-saving containers, the use of bioplastics as an alternative raw material, and recycling efforts will also increase. - Global regulations on palm plantation development will be strengthened, palm oil supplies will be constrained, supply and demand will tighten, and procurement prices will increase.	- Plastic taxation will not be introduced and the utilization rate of recycled plastic will not increase. - Palm oil supplies from newly developing countries will grow and supply and demand will remain stable.
	Industry / Market	Fluctuations in the price of raw materials (Petrochemical raw materials)	- Crude oil prices will decline in both 2030 and 2050 as a result of a significant drop in demand due to low-carbon technology innovation and policies to reduce carbon dioxide emissions.	- While oil demand will increase mainly in the petrochemical, aviation, and shipping sectors due to the lack of restrictions on fossil fuels, overall the demand for oil will peak before 2030 and gradually decline thereafter, largely due to the fall in demand in the road transportation sector following the shift to electric vehicles.
		Development of new products and services through R&D and innovation (Expansion of earnings through development of solar cells and other raw materials)	- Globally, solar power generation facility capacity is expected to be 3.3 times the current level in 2030 and 11.2 times in 2050, which will increase the demand for raw materials.	- Globally, solar power generation facility capacity is expected to be 2.2 times the current level in 2030 and 6.4 times in 2050, which will increase the demand for raw materials.
Physical Risks and Opportunities	Chronic	Increase in average temperature/ changes in precipitation and temperature patterns (Wool grease production volume and price) (Production volumes and prices of soybean oil, rapeseed oil, sugarcane, feed crops, etc.)	- Demand for wool and raw wool production will decrease due to rising average temperatures. As a result, the amount of wool grease available for purchase will decrease and procurement prices will increase.	- Demand for wool will decrease due to rising average temperatures.The production of raw wool will fall due to factors such as feed shortages caused by frequent and prolonged droughts, higher feed prices, and lower sheep birth rates due to the heat. As a result, the amount of wool grease available for purchase will decrease significantly and procurement prices will increase.
			- There will be no change in the supply of rapeseed oil due to higher average temperatures, and procurement prices will remain virtually unchanged.	- The production of crop-derived raw materials, including rapeseed oil, will decline due to rising average temperatures, and procurement prices will increase.
	Acute	Intensification of extreme weather	- Flooding caused by torrential rainfall and drought associated with climate change will result in production stoppages at some facilities.	- Flooding caused by torrential rainfall and drought associated with climate change will result in production stoppages at some facilities.

Main Scenarios Referenced

	1.5°C Scenario	4°C Scenario
Transition-related Risks and Opportunities	International Energy Agency (IEA) IEA NZE2050	International Energy Agency (IEA) IEA STEPS*
Physical impact-related Risks and Opportunities	Intergovernmental Panel on Climate Change (IPCC) SSP1-1.9	Intergovernmental Panel on Climate Change (IPCC) SSP5-8.5

*Substitute due to there being no 4°C scenario

Addressing Climate Change Risks and Opportunities

Financial Impact

Degree of Impact	Financial Impact	Risks	Opportunities
Small	Less than 100 million yen		
Medium	100 million yen to less than 500 million yen		
Large	500 million yen or more		

Period Setting

Term	Timing	Reason for Adoption
Medium-term	Until FY2030	Measure in line with FY2030 41.5% reduction target for carbon dioxide emissions.
Long-term	Until FY2050	Measure in line with FY2050 carbon neutrality goal.

Target Business

F: Functional Products business
E: Environmental Hygiene Products business
P: Pharmacology and Safety Testing business

Scenario	Risk/Opportunity	Target Business	Impact on Business	Financial Impact	Countermeasures	Term
1.5°C	Carbon tax and carbon price	F/E/P	- The introduction of a carbon tax may increase carbon and electricity prices, expand emission credits and other initiatives globally, and increase response costs in terms of procurement, manufacturing, sales, and transportation.	 Large	- Nippon Fine Chemical and ARBOS reduced their carbon dioxide emissions by switching all purchased electricity to renewable energy by 2023. - Reduce carbon dioxide emissions by switching boiler fuel from heavy oil to city gas. Currently being implemented - Promote the switch to renewable energy sources for purchased electricity at Group companies. - Systematically replace lights with LED lighting. - Promote energy conservation by upgrading aging equipment. - Promote product production by introducing flow reactors and using enzymes, improvements to existing product production processes, and the development of new products. - Reduce carbon dioxide emissions by replacing company vehicles with hybrid vehicles and EVs. - Reduce costs and carbon dioxide emissions by streamlining transportation and using rail transportation. Scheduled to be implemented - Use a carbon neutral natural gas or e-methane heat source. - Introduce heat source equipment that uses energy that does not emit carbon dioxide. - Introduce carbon dioxide capture and separation technology.	Already implemented
	Carbon emission targets/policies in each country	E	- Taxes on virgin plastics may promote the use of recycled plastics, bioplastics, and resource-saving containers, and recycling efforts and increase research and development, procurement and manufacturing costs.		- Use concentrated products to reduce the number of containers. - Transition from reduced size bottles to pouches. - Introduce bioplastic containers. - Reduce the quantity of virgin plastic purchased and promote the purchase of recycled plastic.	Long-term
1.5°C 4.0°C	Development of new products and services through R&D and innovation	F	- Demand for raw materials may increase following an increase in global solar power generation facility capacity.	 Large	- Develop materials for perovskite solar cells and establish production and sales expansion systems.	Medium-term
	Increase in average temperature/changes in precipitation and temperature patterns	F	- Reduced demand for wool as a result of rising average temperatures. The production of raw wool will fall due to factors such as feed shortages caused by frequent and prolonged droughts, higher feed prices, and lower sheep birth rates due to the heat. As a result, the amount of wool grease available for purchase will decrease and procurement prices may increase.	 Large	- Maintain profitability by increasing the value of wool grease-related products and improving production efficiency.	Long-term
		F	- Increased frequency of torrential rainfall may cause manufacturing equipment to be flooded, resulting in operational shutdowns and lost business opportunities.	 Medium	- Raise building floor levels to mitigate flood risk.	Long-term

Metrics and Targets

The greenhouse gas emitted by the Nippon Fine Chemical Group is mostly energy-derived carbon dioxide. In October 2021, the Japanese government published a global warming countermeasures plan which called for a 46% reduction in Japan's overall GHG (greenhouse gas) emissions by FY2030 compared to FY2013 levels. Within this overall goal, the industrial sector's target is a 38% reduction in energy-derived carbon dioxide. Nippon Fine Chemical has therefore set a target of reducing Scope 1 and 2* carbon dioxide emissions by 38% from FY2013 levels by FY2030 and has begun initiatives to achieve this goal. Subsequently, we expanded the scope of calculation to include Group companies ARBOS and NISSEI BILIS. Starting in FY2024, we adopted FY2018 as the new base year, when Group-wide emissions could be fully calculated, and set a new target of reducing greenhouse gas emissions by 41.5% from FY2018 levels by FY2030. We are actively working to achieve this target. We will also work to achieve carbon neutrality by 2050. The achievement of materiality issues, including the reduction of carbon dioxide emissions, is reflected in the performance-linked remuneration of Directors and Corporate officers.

Our carbon dioxide reduction activities have included switching boiler fuel from heavy oil to city gas, improving manufacturing (t-CO₂e) efficiency, switching to LED lighting, and transitioning to renewable energy for purchased electricity. We will continue to explore further expansion of LED lighting and the transition to renewable energy sources. As a

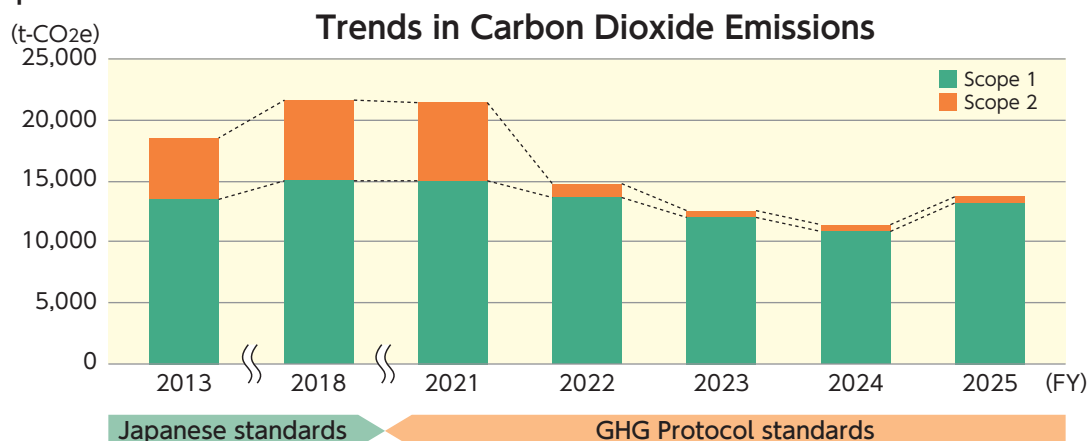
result of these initiatives, Scope 1 and 2 emissions were reduced year on year through FY2024 (see "Scope 1 and 2 Emissions Trends" on p. 7). However, Scope 1 emissions increased in FY2025 compared with the previous fiscal year due to increased production of energy-intensive products at Nippon Fine Chemical. Demand for these products is expected to continue growing, and we plan to explore more efficient ways to reduce the carbon dioxide emissions associated with their production.

In addition, in FY2023 we began calculating Scope 3* upstream categories in order to reduce carbon dioxide emissions throughout our supply chain. Since FY2024, these calculations have been conducted by Nippon Fine Chemical, ARBOS, and NISSEI BILIS (see "Scope 3 Emissions" on p. 7). However, we have not yet implemented downstream category calculations due to the difficulty involved. Scope 3 (categories 1 to 8) emissions at Nippon Fine Chemical, ARBOS and NISSEI BILIS in FY2025 totaled 111 thousand t-CO₂e, with category 1 (purchased products and services) accounting for the majority (91%) of Scope 3 emissions. This figure has increased slightly from FY2024. With regard to Scope 3, we will continue to investigate raw materials that are expected to have lower carbon dioxide emissions, including naturally derived raw materials. We are also working to reduce carbon dioxide emissions through changes in transportation methods and reductions in waste volumes, etc.

*Scope 1: Direct GHG emissions from an operator's own fuel combustion
Scope 2: Indirect GHG emissions from the use of electricity and heat supplied by other companies
Scope 3: Indirect emissions not included in Scope 1 and Scope 2
(emissions by other companies related to the company's activities)

Carbon Dioxide Emissions

Scope 1 and 2 Emissions Trends



Note - Japanese standards: calculated based on Act on the Rational Use of Energy and Act on Promotion of Global Warming Countermeasures
- GHG emissions from FY2021 onward are calculated based on GHG Protocol standards

Scope	Company	2013	2018	2021	2022	2023	2024	2025
1	Nippon Fine Chemical	13,514	13,766	13,351	11,998	10,462	9,437	11,804
	ARBOS	-	-	335	329	311	288	286
	NISSEI BILIS	-	1,350	1,342	1,362	1,282	1,100	1,137
2	Nippon Fine Chemical	5,071	6,049	5,866	431	25	26	31
	ARBOS	-	-	109	164	59	61	68
	NISSEI BILIS	-	713	512	562	496	507	441
Total		18,585	21,878	21,515	14,846	12,635	11,419	13,767

Scope 3 Emissions

Category	Definition	FY2024		FY2025	
		Emissions (t-CO ₂ e)	Emission percentage(%)	Emissions (t-CO ₂ e)	Emission percentage(%)
1	Purchased goods and services	99,464	88	101,161	91
2	Construction and building of capital goods	6,929	6	3,216	3
3	Energy and energy-related activities not included in Scope 1 and 2	2,317	2	2,479	2
4	Transportation, distribution (upstream)	2,607	2	2,604	2
5	Waste generated in operations	687	<1	737	<1
6	Business travel	323	<1	349	<1
7	Employees commuting	761	<1	781	<1
8	Leased assets (upstream)	0	0	0	0
9~13	Downstream categories have not been calculated due to the difficulty involved	-	-	-	-
14	Franchise	-	-	-	-
15	Investment	-	-	-	-
Total		113,088		111,326	

Note - Combined total for Nippon Fine Chemical, ARBOS, and NISSEI BILIS

[Calculation method]

FY2025 figures were calculated based on the GHG Protocol and the Ministry of the Environment and Ministry of Economy, Trade and Industry's Emission Intensity Database for Calculating Greenhouse Gas Emissions of Organizations through Supply Chains (Ver. 3.5).