

Nippon Soda Group

ESG Data Book 2022



NIPPON SODA CO.,LTD.

ESG Data Book 2022 Contents

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Scope of the Report

The *ESG Data Book* summarizes the CSR and Responsible Care activities of Nippon Soda Co., Ltd. and the major Nippon Soda Group companies (three manufacturing Group companies: Nisso Metallochemical Co., Ltd., Nisso Fine Co., Ltd. and Shinfujii Kaseiyaku Co., Ltd.; and five non-manufacturing Group companies: Nisso Shoji Co., Ltd., Sanwa Soko Co., Ltd., Nisso Engineering Co., Ltd., Nisso Kensetsu Co., Ltd. and Nisso Green Co., Ltd.). This report provides results for FY 2022 (April 1, 2021 to March 31, 2022). The data on occupational accidents are based on results for the period from January 1, 2021 to December 31, 2021. As of this fiscal year, the data in the former *CSR Report* has been updated and published in the *ESG Data Book* and the *Integrated Report*.

Guidelines Used as References

Global Reporting Initiative: Global Reporting Initiative (GRI) Standards
Ministry of the Environment's Environmental Reporting Guidelines 2012
Japanese Standards Association in cooperation with the International Organization for Standardization (ISO 26000: 2010 Guidance on Social Responsibility)

Responsible Care

Responsible Care (RC) was launched in 1985 in Canada. The International Council of Chemical Associations (ICCA) was established in 1989, and today RC is practiced in more than 65 countries and regions around the world.

Editorial Policy

The Nippon Soda Group's basic concept of and initiatives for sustainability management focus on three areas: CSR Activities to Improve Corporate Value, CSR Activities to Protect Corporate Value, and Social Activities. In this report, we are publicizing the results of our CSR initiatives. With a focus on promoting transparency and accountability, we designed this report to help readers readily understand the Nippon Soda Group's CSR activities.

Third-Party Verification

To ensure the transparency and reliability of the information contained in our *Integrated Report 2022* and *ESG Data Book 2022*, a third-party verification is carried out by the Japan Chemical Industry Association. The results of this verification are outlined on page 90 in "Third-Party Evaluations: ESG Verification."

Cautionary note regarding forward-looking statements

The Company's plans, prospects, strategies and other information published in this report, excluding past performance and facts, have been prepared based on currently available information, hypotheses and judgments, and are subject to various risks and uncertainties. Our predictions can be affected by various factors, such as future economic situations and industry trends, and may turn out to be incorrect.

Nippon Soda Group's Sustainability Management

Basic Management Policy

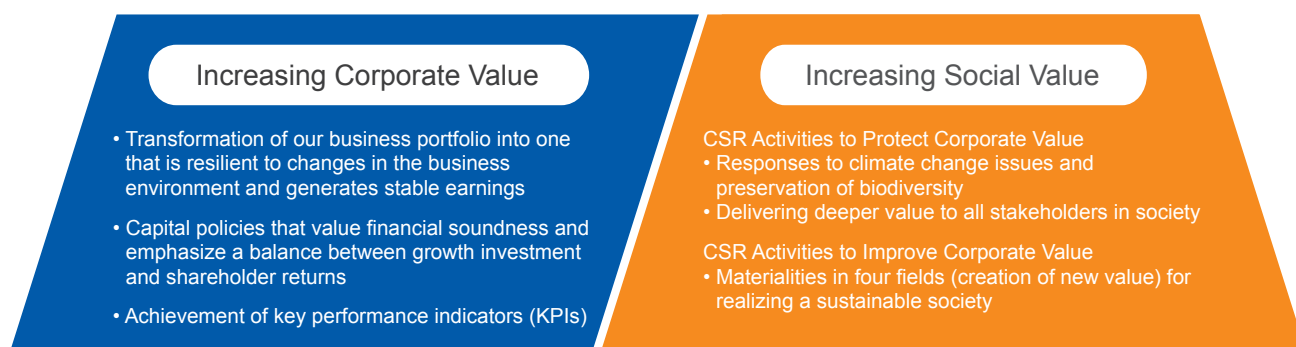
The Nippon Soda Group places primary importance on sound and transparent business management in compliance with law. Our management philosophy is to contribute to social development through chemistry, to meet expectations from stakeholders, including customers, shareholders and investors, business partners, employees and local communities, and to promote environmentally conscious business practices and activities. Under this philosophy, we are committed to growing into a technology-oriented group that develops high-added-value products by making best use of its proprietary technologies and expands its business with a global point of view and a focus on chemistry. Our efforts are also directed at increasing the Group's revenue by developing our business with a focus on the chemicals industry in such areas as trading, logistics and engineering.








Sustainability Policy

The Nippon Soda Group's mission is to "create new value through the power of chemistry and increase corporate value by contributing to society." We will contribute to society by providing the products and services demanded by our stakeholders and the social environment.

We believe that in order for the Nippon Soda Group to fulfill its mission and achieve sustainable growth, it is important to practice management that focuses on increasing both its corporate value and its social value. To increase our social value, we will promote two main initiatives: CSR Activities to Protect Corporate Value and CSR Activities to Improve Corporate Value.

* The content of Nippon Soda Group's Sustainability Policy is synonymous with the long-term vision in its Basic Management Policy.



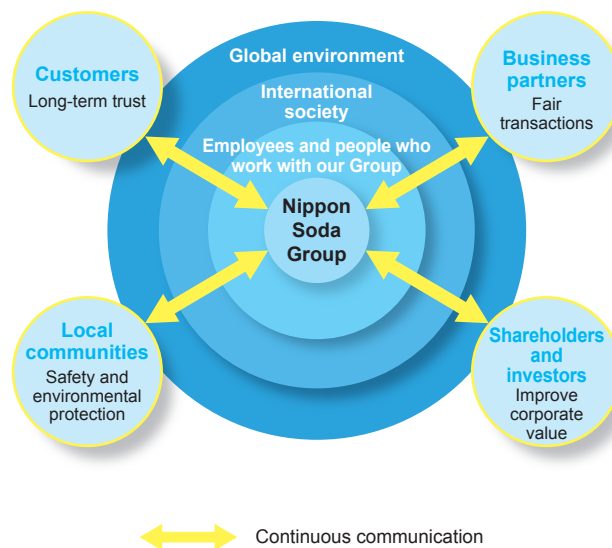
CSR Activities to Protect Corporate Value		CSR Activities to Improve Corporate Value	
As a corporate organization that lives up to the trust of society, we will address three key issues: Initiatives for the Environment, Social Activities, and Governance.		Aiming for the realization of a sustainable society, we are working on material issues in four fields: Agriculture, Healthcare, Environment, and ICT.	
Initiatives for the Environment	<ul style="list-style-type: none"> Tackling climate change Tackling the preservation of biodiversity 	Agriculture	Securing food and achieving sustainable agriculture <ul style="list-style-type: none"> Contribution to the global supply of food Diversification of crop protection Streamlining and improving labor efficiency in farming production 
Social Activities	<ul style="list-style-type: none"> Promoting dialogue with consumers, business partners, and local communities Promoting diversity, work-life balance, and career development programs Conducting constructive dialogue with shareholders and investors and disclosing information in a timely and appropriate manner 	Healthcare	Healthy lives to all people <ul style="list-style-type: none"> Support services for high-performance products and formulation technologies 
Governance	<ul style="list-style-type: none"> Enhancing corporate governance Promoting compliance management 	Environment	Toward a resource recycling society <ul style="list-style-type: none"> Steady supply of water resources Reduction of environmental burden caused by waste Achieving sustainable plant protection Protection of precious trees such as pines from harmful insects    
		ICT	Applying the functionality of chemicals to IT devices <ul style="list-style-type: none"> Supply of high-performance materials that are friendly to the environment and people 

* As a manufacturer of chemical products, the Group's Responsible Care (RC) activities form the foundation of its CSR activities.

Nippon Soda Group's Sustainability Management

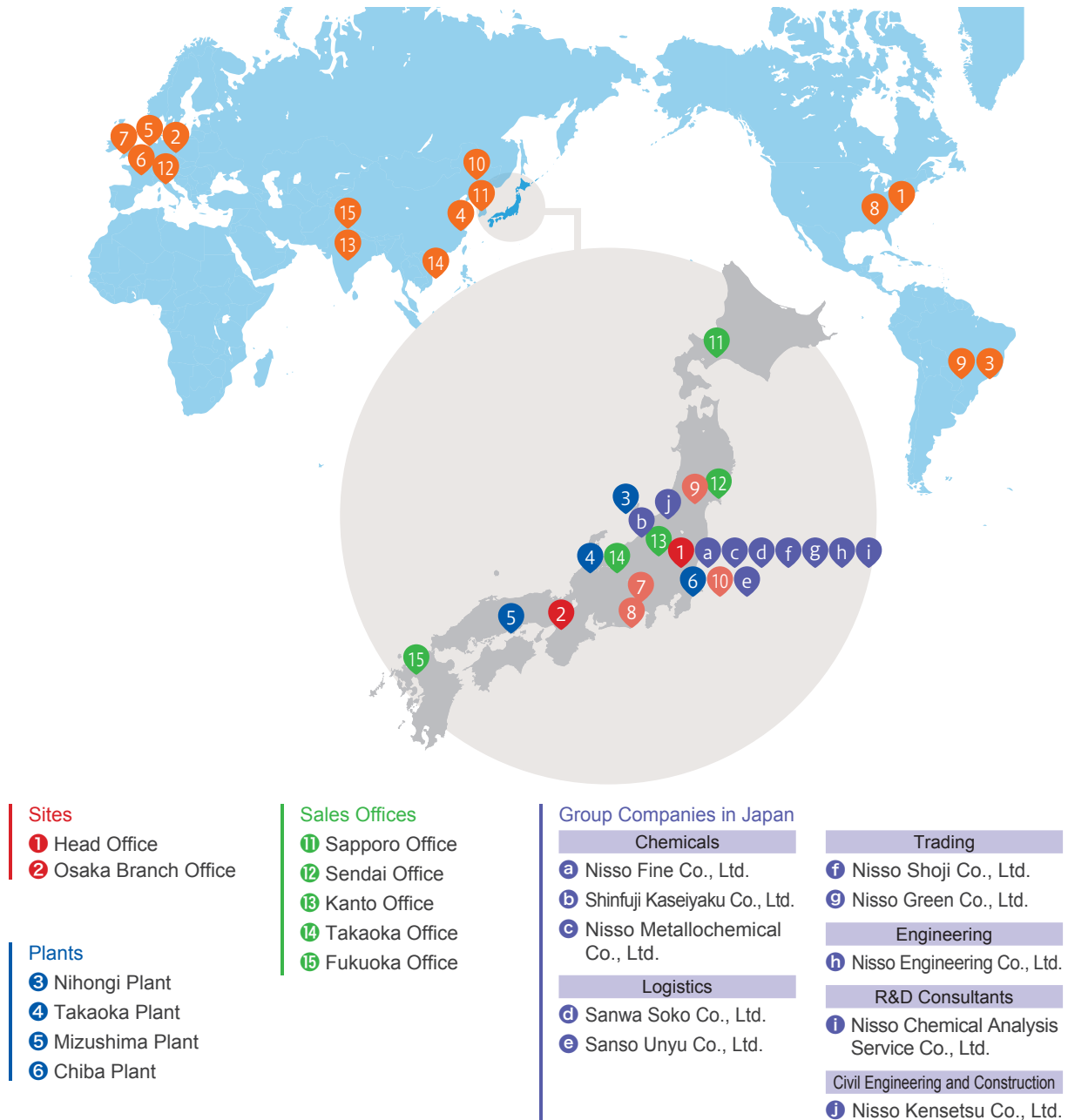
Stakeholders

The management philosophy of the Nippon Soda Group is to meet expectations from stakeholders, including customers, shareholders and investors, business partners, employees and local communities, and promote environmentally conscious business practices and activities. The Nippon Soda Group will continue to play a significant role in realizing the sustainable development of our society. At the same time, the Group is continuing to develop as a sought-after chemical group that meets 21st-century social needs by contributing to the creation of a prosperous society based on its desire to create new value through its unique technologies and products.



Nippon Soda Group's Sustainability Management

Overview of the Nippon Soda Group (As of April 1, 2022)



* Name changed from Certis Europe B.V. on May 23, 2022

Value Creation of the Nippon Soda Group

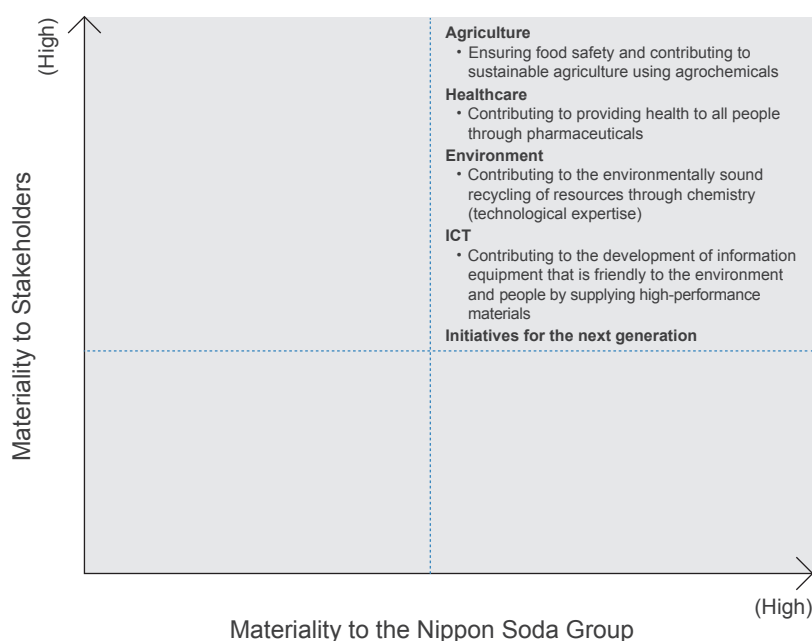
Since its establishment in 1920, the Nippon Soda Group has contributed to the development of society and provided new value through chemicals, and has supported people's everyday lives by delivering a range of chemical products and services.

In May 2020, we identified new materiality (important issues) in the four fields of agriculture, healthcare, environment and ICT to contribute to the creation of a sustainable society and increase corporate value based on the Group's long-term vision, Brilliance through Chemistry 2030, and its medium-term business plan 2020-2022, Brilliance through Chemistry Stage I. As a framework for increasing the effectiveness of the Group's materiality initiatives, we will utilize the monitoring functions of CSR Activities to Protect Corporate Value and CSR Activities to Improve Corporate Value.

● Materiality Identification Process









Sustainable growth and relevance in our long-term vision was discussed and materiality was identified through the following steps:

Step 1	Extracting megatrends, risks and opportunities
Step 2	Extracting materiality for sustainable social development and increasing corporate value (Consideration of megatrends and the value provided by Nippon Soda)
Step 3	Confirmation of conformity with management policy and business strategy for the extracted materiality
Step 4	Approval by the Management Council and the Board of Directors



Value Creation of the Nippon Soda Group

FY 2023 CSR Activity Policy and Targets of the Nippon Soda Group (1/3)

	Field	Materiality	Relevant SDGs	Our Vision 10 Years in the Future	KPI
CSR Activities to Improve Corporate Value	Agriculture	Securing food and achieving sustainable agriculture <ul style="list-style-type: none"> Contribution to the global supply of food Diversification of crop protection Streamlining and improving labor efficiency in farming production 	 Goal 2: ZERO HUNGER End hunger, achieve food security and improved nutrition and promote sustainable agriculture.	A chemical group that addresses agricultural and food issues and is succeeding as a business.	(1) Hosting of seminars (2) Current initiatives
	Healthcare	Healthy lives to all people <ul style="list-style-type: none"> Support services for high-performance products and formulation technologies 	 Goal 3: GOOD HEALTH AND WELL-BEING Ensure healthy lives and promote well-being for all at all ages.	A chemical group that addresses health issues and is succeeding as a business.	(1) Contributions (2) Hosting of seminars
	Environment	Toward a resource recycling society <ul style="list-style-type: none"> Steady supply of water resources Reduction of environmental burden caused by waste 	 Goal 6: CLEAN WATER AND SANITATION Ensure availability and sustainable management of water and sanitation for all.	A chemical group that addresses global environmental issues and is succeeding as a business.	(1) Volume of water contributed (2) Current initiatives
			 Goal 11: SUSTAINABLE CITIES AND COMMUNITIES Make cities and human settlements inclusive, safe, resilient and sustainable.		
			 Goal 12: RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure sustainable consumption and production patterns.		
	ICT*	Applying the functionality of chemicals to IT devices <ul style="list-style-type: none"> Supply of high-performance materials that are friendly to the environment and people 	 Goal 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	A chemical group that supports the development of the information and electronic technology field through materials and is succeeding as a business.	(1) Contributed shipment value
	Initiatives for the Next Generation	Achieving a low-carbon society <ul style="list-style-type: none"> Contribution by supplying low-carbon products Engaging in initiatives aimed at a hydrogen-based society 	 Goal 13: CLIMATE ACTION Take urgent action to combat climate change and its impacts. <ul style="list-style-type: none"> (1) Agriculture Microbial pesticides, microbial biopesticides and biostimulants (2) Healthcare Pharmaceutical additives plant-derived materials (3) Environment Research on hydrogen production and hydrogen storage technologies (4) ICT Secondary batteries Development of materials with low environmental impact 	A chemical group that contributes to the achievement of a low-carbon society by providing low-carbon products and is succeeding as a business.	(1) Current initiatives
			 Goal 17: PARTNERSHIPS FOR THE GOALS Strengthen the means of implementation and revitalize the global partnership for sustainable development.	A corporate group that realizes goals by sharing its values with several companies and organizations and is succeeding as a business.	(1) Current initiatives
				A corporate group that can successfully contribute to society through its products and can succeed as a business.	(1) Status of research and development
		Research and development toward the next generation <ul style="list-style-type: none"> Research and development that enables the continuing development of human society and the global environment, and that leads to business 			
		Developing human resources for the next generation <ul style="list-style-type: none"> Educational system to foster a culture of safety for the future 		A chemical group that is fostering human resources who can successfully manage a business based on its CSR philosophy.	(1) Training initiatives

* Information and communications technology

Value Creation of the Nippon Soda Group

FY 2023 CSR Activity Policy and Targets of the Nippon Soda Group (2/3)

	Field	Action Policies (Concepts)	Item	Target	Target Action	KPI
CSR Activities to Protect Corporate Value	Management System ^{RC} and Organizational Governance ^{CSR}	<p>In order to carry out sound and transparent corporate activities in compliance with laws and regulations, etc., we will continuously implement the PDCA cycle of target setting, improvement and periodic reviews based on RC codes and RC ethics.</p> <p>We will conduct business activities in accordance with the seven social responsibility principles specified in CSR: accountability, transparency, ethical behavior, respect for stakeholder interests, respect for the rule of law, respect for international norms of behavior, and respect for human rights.</p> <p>We will also conduct CSR and RC activities in our overseas operations.</p>	(1) Activities	Proper implementation	- Implement PDCA cycle to make ongoing improvements and to strengthen measures to prevent problems caused by human error.	(1) KPIs for each activity
	Environmental Protection ^{RC/CSR}	<p>We will make efforts to save energy and resources, reduce and recycle waste, reduce emissions of harmful substances and greenhouse gases, conserve water resources, and endeavor to reduce our impact on biodiversity and ecosystems with the goal of minimizing the environmental impact of our business activities.</p>	(1) Environmental abnormalities	Zero events	- Implement measures for reducing risks by evaluating environmental impact. - Plan and implement measures to prevent problems caused by human error.	(1) Number of legal violations
			(2) Energy	① Annual improvement of 1%	① With an eye to meeting the reduction target, ensure that improvements are conducted per unit of production through the setting, implementation, and evaluation of themes for improvement.	(1) Energy consumption (rate)
			② Energy consumption rate in logistics			
			(3) Reduction of greenhouse gas emissions	- Annual 1% reduction in CO ₂ emissions - Eliminating fluorocarbon leakage problems from equipment that uses fluorocarbons	- With an eye to meeting the reduction target, implement improvement measures in conjunction with energy-saving activities. - Conduct periodic inspections and maintenance of equipment that uses fluorocarbons.	(1) Amount of emissions
			(4) Water resources conservation	Monitor water resources and promote efficient water use	① Maintain and improve water quality of wastewater from worksites. ② Consider reduction of the amount of water used.	(1) Number of wastewater environment abnormalities (2) Amount of water used
			(5) Industrial waste	① Annual reduction of 3% in amount of final disposal as landfill ② Continuation of zero emissions	① With an eye to meeting the reduction target, focus efforts to ensure the improvement in the per unit of production waste generation through the setting, implementation, and evaluation of themes for improvement. ② Continue to achieve zero emissions at all worksites by reducing the amount of final disposal at landfills and amount transported.	(1) Amount of final disposal at landfill (2) Zero emissions ratio
			① Amount of final disposal at landfills			
	(6) Emissions of harmful substances into the atmosphere	Annual reduction of 1%	- Plan and implement measures to reduce emissions of hazardous substances.	(1) Amount of emissions		
	(7) Reduction of impact on biodiversity and ecosystems	Continue activities to reduce the impact on biodiversity and ecosystems	- Contribute to the preservation of biodiversity by reducing environmental burden through environmental protection activities. - Promote communication with related parties and strive to collaborate and cooperate to enhance biodiversity.	(1) Current initiatives		
	Process Safety ^{RC} & Disaster Prevention/BCP	<p>We will prevent major accidents at our facilities and promote safe and stable production.</p> <p>We will establish a business continuity plan (BCP) and drive continuous improvement.</p>	(1) Major accidents at facilities	No accidents	- Achieve zero major accidents at facilities. - Reduce the risk of major accidents at facilities in line with BCP.	(1) Number of accidents
			(2) Maintenance and improvement of BCP	Maintenance and improvement of the BCP using the PDCA cycle	- Review BCP periodically and address new risks and other matters.	(1) BCP improvement status
	Occupational Safety and Health ^{RC}	<p>We will create an accident-free working environment in order to provide a healthy and happy working experience.</p>	(1) Occupational accidents resulting in an absence from work or no absence	No accidents	- Reduce risks through risk assessments. - Increase efforts for preventing human error. - Activate safety initiatives (KY, pointing and vocalizing, mutually directing attention, identifying <i>hiyari-hatto</i> (near miss) accidents, 5Ss, improvement activities, campaigns, etc.). - Implement disaster prevention activities for young employees and less experienced employees. - Strengthen hands-on training facilities and training system.	(1) Number of occupational accidents
			(2) Promotion of health management	Improve the ratio of employees that complete thorough medical exams: Annual improvement of 5%	- Follow-up those undergoing periodic medical examinations. - Conduct stress check and follow-up. - Carry out mental and physical health training.	(1) Number of incidences of personal injury and illness (2) Ratio of employees that complete thorough medical exams
	Logistics Safety ^{RC} and Quality Assurance	<p>We will prevent logistics accidents by minimizing hazards, harm and risks of in-transit accidents associated with the transportation and distribution of our products.</p> <p>We will enhance customer satisfaction.</p>	(1) Logistics-related complaints	Zero events	- Provide education and guidance for shipping companies. - Investigate the causes of complaints, and implement thorough recurrence prevention measures.	(1) Number of logistics-related complaints
(2) Product-related complaints			Annual 20% decrease in number of incidents	- Alleviate A and B rank risks through the Companywide introduction of a quality risk assessment system. - Strengthen measures to prevent human error. - Investigate the causes of complaints, and implement thorough recurrence prevention measures.	(1) Number of product-related complaints	
Chemical and Product Safety ^{RC}	<p>We will increase the confidence that customers and society have in us by taking into account possible hazards and harm from chemical substances and products with regard to safety, health and the environment, and we will comply with domestic laws and regulations, international standards, treaties and the like, as well as other regulations that are socially demanded.</p>	(1) Compliance with chemical-related laws and regulations	Zero violations	- Reinforce control of chemical substances through new chemical substance management systems (Switch to the versions of SDS that comply with the revised JIS, domestic and overseas SDS/label system revisions, reinforce examinations and management of products containing chemical substances). - Conduct periodic educational programs on chemical substance control. - Comply with overseas legal reforms.	(1) Status of management (2) Status of educational programs	

Value Creation of the Nippon Soda Group

FY 2023 CSR Activity Policy and Target of the Nippon Soda Group (3/3)

	Field	Action Policies (Concepts)	Item	Target	Target Action	KPI
Social Activities	Together with Our Customers (Consumer Issues ^{CSR})	We will contribute to customer satisfaction through shared recognition of issues.	(1) Consumer issues	Appropriately respond to consumer demand and requests from society	- Respond appropriately to consumer demand and requests from society collected through consulting desk, sales and product promotion activities.	(1) Current initiatives
	Together with Our Employees (Human Rights ^{CSR} and Labor Practices ^{CSR})	We will respect human rights and act in recognition of both their importance and their universality. We will act based on the understanding that socially responsible labor practices are indispensable to social justice and peace, respect for the rule of law, and a fair society.	(1) Embracing diversity	Increase the employment rates of women, disabled people, seniors, and overseas nationals	- Promote the creation of a corporate culture where the abilities of a diverse range of workers can be maximized, and improve the work environment.	(1) Quantitative value for diversity
			(2) Creation of rewarding workplaces that employees can be proud of	Identify and improve employee's satisfaction levels	- Strengthen in-house communications and improve programs for human resources development.	(1) Results of survey on employees' satisfaction with their workplace
	Together with Our Business Partners (Fair Operating Practices)	We will undertake dialogue with business partners to promote, fair, just and sound business transactions. We will promote environment- and society-friendly CSR procurement with the cooperation of business partners throughout the supply chain.	(1) Business partners	① Fair and just business transactions ② Promote environment- and society-friendly CSR procurement	- In the case of the selection of suppliers, conduct a fair comparison and evaluation based on various conditions, including quality, price, delivery terms, technical competence and stability of supply.	(1) Status of compliance with Code of Conduct (2) Current initiatives
	Together with Our Shareholders and Investors	We will undertake fair and timely information disclosure that is accurate and easy to understand.	(1) Shareholders and investors	Constructive dialogue Fair and timely information disclosure	- Engage in dialogue with investors, analysts and shareholders.	(1) Dialogue status
	Together with Our Local Communities (Community Involvement and Social Dialogue ^{RC})	We will make efforts to improve the general public's confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements and improve transparency.	(1) Local gatherings and community involvement	Increase number of times and enrich content of local gatherings and involvement	- Continue to engage in dialogue with concerned local people and relevant organizations and improve content.	(1) Number of dialogue events held and contents
(2) Legal and other requirements			Zero legal violations	- Prepare a list of relevant laws and regulations, check compliance using the PDCA cycle, take measures to prevent recurrence of deviations, and apply these measures to other similar cases.	(1) Status of deviations	
(3) Creation of more opportunities for stakeholder engagement			Once a year at each worksite	- Create more opportunities for stakeholder engagement. Incorporate results from stakeholder engagement activities to improve CSR and RC activities.	(1) Number of engagement events held and contents	
Governance	Corporate Governance	We will adopt the Corporate Governance Code as the basis for our business activities with an emphasis on sound and transparent business management that complies with the law.	(1) System	Maintain and improve the corporate governance structure	- We adopted the Corporate Governance Code as the basis for our business activities and conduct business management that complies with the law and which is highly sound and transparent.	(1) Governance structure
	Compliance	We will ensure corporate activities in compliance with laws, regulations and corporate ethics by ensuring all employees are fully informed of the Nippon Soda Group Code of Conduct.	(1) Legal compliance	Legal compliance system and ongoing education and training	- Implement regular training to make sure employees are fully informed about the Nippon Soda Group Code of Conduct, conduct a survey, and operate a reporting and consultation desk that is always open.	(1) Violations of laws and regulations

Eiji Aga

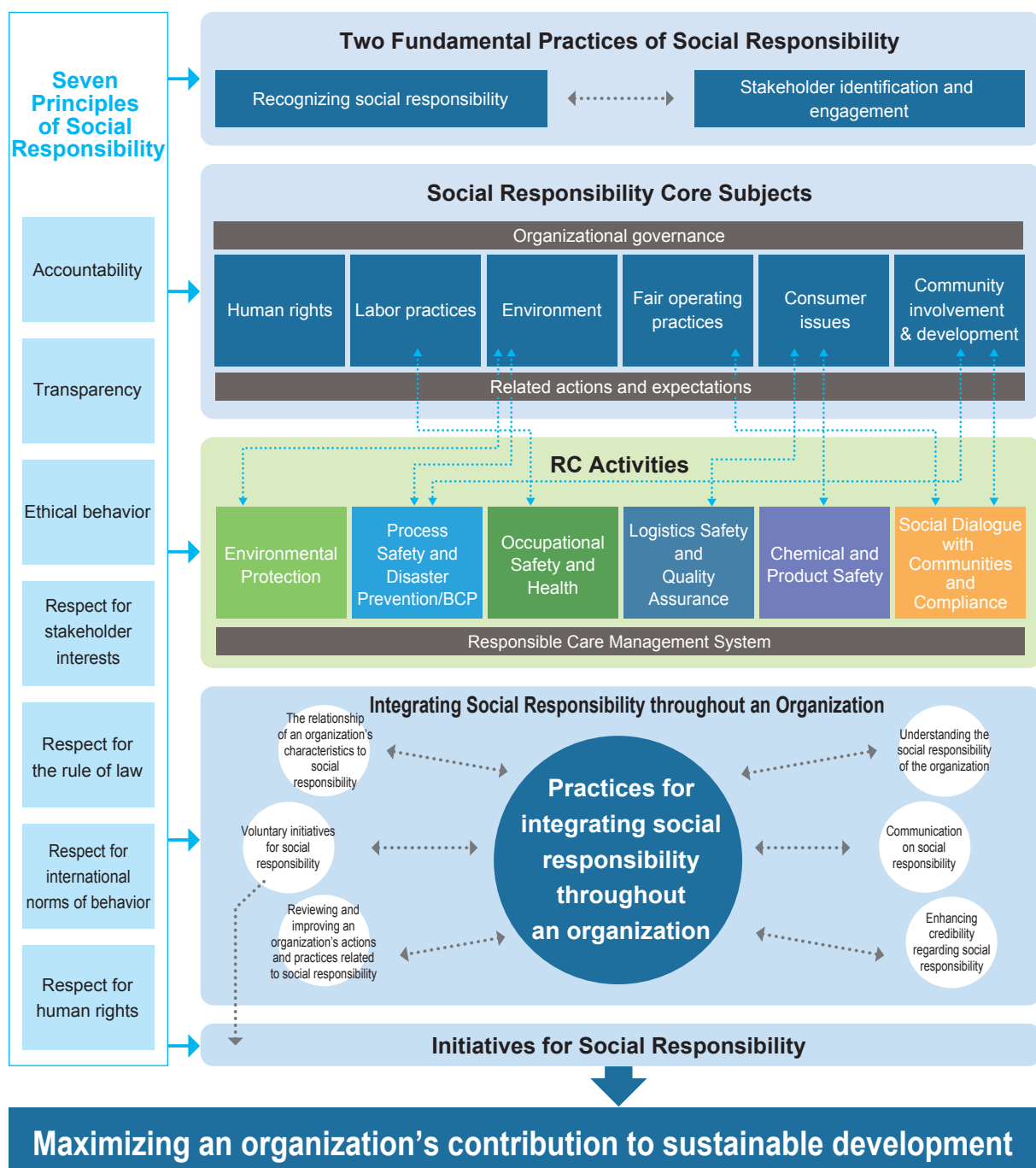
Representative Director, President
Chairman, CSR Administration Meeting
April 1, 2022

CSR Management

CSR Activities

The CSR activities of the Nippon Soda Group include all of the Responsible Care (RC) codes (activity items). All CSR activity items are based on the seven principles of social responsibility described in the ISO 26000 standard and Responsible Care is based on the concepts of “doing what is ethically right” and “implementing proactive measures to reduce risks.” The seven RC codes and the seven core subjects (activity items) of CSR are closely related to each other. The Group integrates these activity items, and on that basis has determined eight policies. (For more details, see the CSR Activity Policy for FY 2023, p.13)

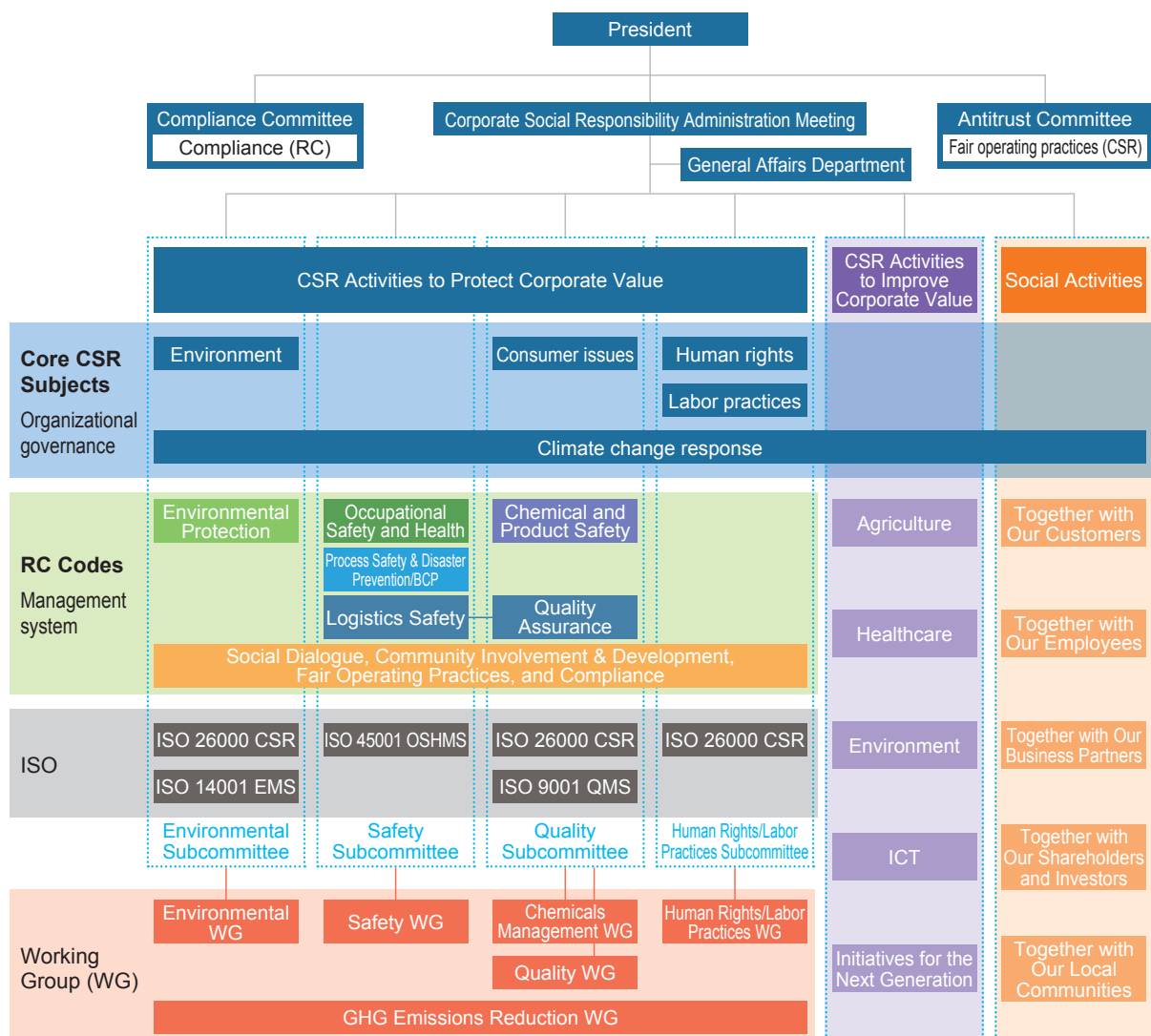
● Relationship between CSR (ISO 26000) and RC



CSR Management

CSR Promotion System

Chaired by the President, the Corporate Social Responsibility (CSR) Administration Meeting is a Group-wide decision-making body that promotes CSR activities, including RC. It sets annual targets to help the PDCA cycle “spiral up” and provides a management-level review of CSR activities. Held twice a year, the CSR Administration Meeting is attended by directors, executive officers and worksite managers.



The following Group companies participate as members in the Corporate Social Responsibility Administration Meeting, subcommittees (Environment, Safety, Quality, Human Rights/Labor Practices), and the GHG Emissions Reduction WG.

Manufacturing: Nisso Metallochemical Co., Ltd., Nisso Fine Co., Ltd., Shinfuji Kaseiyaku Co., Ltd.

Non-manufacturing: Nisso Shoji Co., Ltd., Sanwa Soko Co., Ltd., Nisso Engineering Co., Ltd., Nisso Kensetsu Co., Ltd., Nisso Green Co., Ltd.

Observers: Nisso Namhae Agro Co., Ltd. (South Korea), Alkaline SAS (France)

● Ratio of Nippon Soda Group Manufacturing Facilities with ISO Certification*

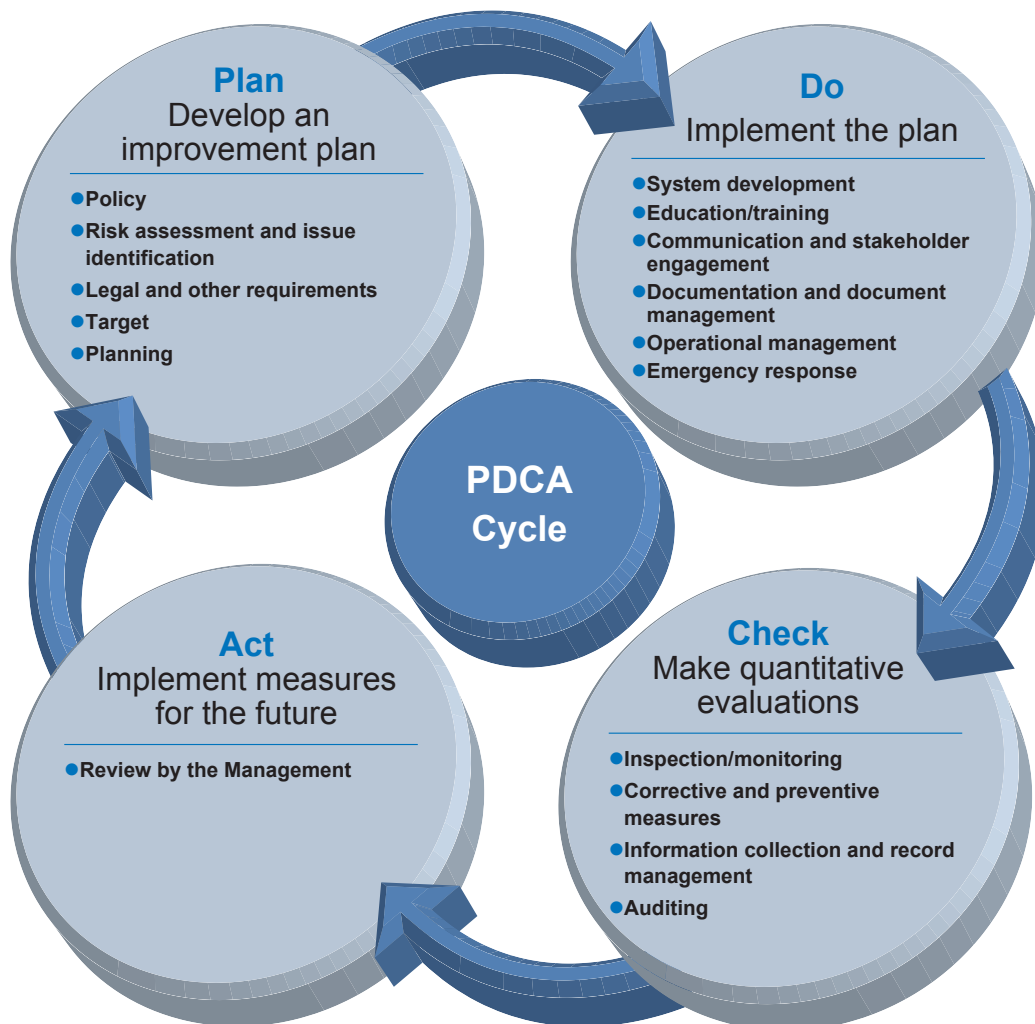
	ISO 14001	ISO 45001	ISO 9001
Nippon Soda	100%	100%	100%
Nippon Soda Group	80.0%	26.7%	93.3%

* Current as of March 31, 2022. Percentage of Nippon Soda and Nippon Soda Group (Nippon Soda and its consolidated subsidiaries) whose manufacturing facilities have acquired ISO certification.

CSR Management

CSR Management System

The management system that promotes the CSR activities of the Nippon Soda Group is designed to “spiral up” the PDCA cycle. Each worksite is required to develop a CSR improvement plan (Plan), implement the developed plan (Do), make quantitative evaluations of both the plan and its implementation (Check), and implement measures based on quantitative evaluation results (Act) in order to continuously improve CSR activities. We also conduct a Group-wide audit to assess the appropriateness of activities. We recommend that the PDCA cycle for CSR Activities to Protect Corporate Value be conducted in one year by design. The CSR Promotion Subcommittee holds a meeting to review the progress of the PDCA cycle twice a year. The progress is also reviewed by management twice a year at Corporate Social Responsibility Administration Meetings.



CSR Management

RC Audits

Internal Audits

We collectively refer to internal audits, such as QMS, EMS and OSHMS, that are conducted at each site of Nippon Soda (plants and research centers) as the “RC audit.” To investigate and verify whether the RC audit is conducted appropriately, whether the level of audit quality is appropriate, and other relevant issues, a representative from each site and staff in charge at the Head Office convene once a year to hold an RC Audit, Verification and Review Meeting. The results of internal audits are reviewed at the Corporate Social Responsibility Administration Meeting.

Regular RC Audits

Nippon Soda's audit team conducts regular (biennial) audits of CSR practices at Group companies.

External Audits/Reviews

All worksites (plants and research centers) and manufacturing Group companies undergo external reviews according to ISO 14001, ISO 9001, and ISO 45001 and diagnosis of disaster prevention capability with emphasis on disaster prevention and occupational safety by an institute specializing in disaster prevention. Based on their results, ongoing improvement efforts are made. We are also subject to appropriate governmental reviews and inspections based on various laws and ordinances, and proactively engage in efforts to address potential areas for improvement.

We proactively welcome audits by customers, who are our stakeholders, and make improvements in response to their feedback. In addition, we also undergo external audits on an as-needed basis.

Special Audits

A special audit is conducted, as needed, in the event of a serious non-conformity or other serious problem under an appropriate audit system that can accommodate the situation.

Audits and Reviews Conducted

● Audits and Reviews Carried Out at the Nippon Soda Group in FY 2022 (Number of times)

Site	Internal	External	
		Received	Conducted
Head Office	13	0	14
Nihongi Plant	8	17	3
Takaoka Plant	5	10	0
Mizushima Plant	4	5	3
Chiba Plant	8	11	3
Odawara Research Center	1	2	0
Nisso Metallochemical Co., Ltd. (Group)	12	45	0
Nisso Fine Co., Ltd. (Group)	16	15	0
Shin Fuji Kaseiyaku Co., Ltd. (Group)	2	6	0
Total	69	111	23

CSR Management

CSR Activity Policy for FY 2023 (Within the ISO 26000 Framework)

1 Management System and Organizational Governance

In order to carry out sound and transparent corporate activities in compliance with laws and regulations, etc., we will continuously implement the PDCA cycle of target setting, improvement and periodic reviews based on RC codes and RC ethics.

We will conduct business activities in accordance with the seven principles of corporate social responsibility: accountability, transparency, ethical behavior, respect for stakeholder interests, respect for the rule of law, respect for international norms of behavior, and respect for human rights.

We will also conduct CSR and RC activities in our overseas operations.

2 Environmental Protection

We will make efforts to save energy and resources, reduce and recycle waste, reduce emissions of harmful substances and greenhouse gasses, conserve water resources, and endeavor to reduce our impact on biodiversity and ecosystems with the goal of minimizing the environmental impact of our business activities.

3 Process Safety and Disaster Prevention/BCP

We will prevent major accidents at our facilities and promote safe and stable production. We will establish a business continuity plan (BCP) and drive continuous improvement.

4 Occupational Safety and Health

We will create an accident-free working environment in order to provide a healthy and happy working experience.

5 Logistics Safety and Quality Assurance

We will strive to prevent logistics accidents by minimizing hazards, harm and risks of in-transit accidents associated with the transportation and distribution of our products. We also contribute to customer satisfaction by providing a safe and secure environment in which our customers can use our high-quality products in a stable manner.

6 Chemical and Product Safety

We will increase the confidence and trust that customers and the general public have in us by taking into account possible hazards and harm from chemical substances and products with regard to safety, health and the environment, and we will comply with domestic laws and regulations, international standards, treaties and the like, as well as other regulations that are socially demanded.

7 Social Dialogue, Community Involvement, Fair Operating Practices, and Compliance

We will make efforts to improve the general public's confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements to improve transparency.

8 Human Rights and Labor Practices

We will respect human rights and act in recognition of both their importance and their universality. We will act based on the understanding that socially responsible labor practices are indispensable to social justice and peace, respect for the rule of law, and a fair society.

CSR Management

Medium-Term CSR Activity Targets (FY 2021–2023)

Targets for CSR Activities to Protect the Corporate Value of the Nippon Soda Group
(FY 2021–2023; New Medium-Term CSR Activity Targets)

1. Management System^{RC} and Organizational Governance^{CSR}		Target (Actions)	Proper implementation Continuous improvement using the PDCA cycle. Strengthening of measures to prevent problems caused by human error.
2. Environmental Protection^{RC/CSR}			
(1) Environmental abnormalities		Target (Actions)	Zero events Implement measures for reducing risks by evaluating environmental impact. Plan and implement measures to prevent problems caused by human error.
(2) Energy			
① Energy consumption rate		Target (Actions)	Annual improvement of 1%, 3% improvement compared to FY 2020 at the completion of the new medium-term plan With an eye to meeting the reduction target, focus on improving the energy consumption rate through setting, implementation, and evaluation of themes for improvement.
② Energy consumption rate in logistics		Target (Actions)	Annual improvement of 1%, 3% improvement compared to FY 2020 at the completion of the new medium-term plan With an eye to meeting energy-saving logistics target, ensure improvements in energy consumption rate in logistics through setting, implementation, and evaluation of themes for improvement.
(3) Reduction of greenhouse gas emissions		Target (Actions)	Annual reduction of CO ₂ emissions by 1%, a 3% reduction compared to FY 2020 at the end of the new medium-term plan Eliminate problems of fluorocarbon leakage from equipment With an eye to meeting the reduction target, implement improvement measures in conjunction with energy-saving activities. Conduct periodic inspections and maintenance of equipment that uses fluorocarbons.
(4) Water resources conservation		Target (Actions)	Monitor water resources and promote efficient water use Maintain and improve water quality of wastewater at business sites, and consider reduction of water usage.
(5) Industrial waste			
① Amount of final disposal at landfill		Target (Actions)	Annual reduction by 3% of the amount of disposal at landfill, a 9% reduction compared to FY 2020 at the end of the new medium-term plan With an eye to meeting the reduction target, focus on improving the waste generation rate through setting, implementation and evaluation of themes for improvement.
② Zero emissions		Target (Actions)	Continuation of zero emissions Continue to achieve zero emissions at all worksites by reducing the amount of final disposal at landfills and amount transported to the industrial waste disposal facility.
(6) Emissions of harmful substances into the atmosphere		Target (Actions)	Annual improvement of 1%, 55% reduction compared to FY 2015 at the end of the new medium-term plan Plan and implement measures to reduce emissions of harmful substances.
(7) Reduction of impact on biodiversity and ecosystems		Target (Actions)	Continue activities related to the reduction of impact on biodiversity and ecosystems Contribute to the preservation of biodiversity by reducing environmental burden through environmental protection activities. Strive to enhance, collaborate, and cooperate in the field of biodiversity through communication with relevant organizations.
3. Process Safety^{RC} & Disaster Prevention/BCP			
(1) Major accidents at facilities		Target (Actions)	No accidents Achieve zero major accidents at facilities. Reduction in the risk of major accidents at facilities in line with BCP.
(2) Maintain and improve business continuity plan (BCP)		Target (Actions)	Maintain and improve BCP using the PDCA cycle Review periodically BCP and address new risks and other matters.
4. Occupational Safety & Health^{RC}			
(1) Occupational accidents resulting in an absence from work or no absence		Target (Actions)	No accidents Conduct risk assessments to reduce risks. Strengthen measures to prevent human error. Revitalize safety activities (KY, pointing and calling, mutual caution, near misses, 5Ss, improvement activities, other campaigns, etc.). Implement disaster prevention activities for young employees and less experienced employees. Enhance hands-on and classroom learning.
(2) Promotion of health management		Target (Actions)	Improve ratio of employees that take thorough medical exams: annual 5% improvement, 92% or more conducted by the end of the new medium-term plan Follow-up those undergoing periodic medical examinations. Conduct stress checks and follow-ups. Carry out mental and physical health education.
5. Logistics Safety^{RC}, Quality Assurance and Consumer Issues^{CSR}			
(1) Logistics-related complaints		Target (Actions)	Zero logistics-related complaints Provide education and guidance to shipping companies. Investigate the causes of complaints, and implement thorough recurrence prevention measures.
(2) Product-related complaints		Target (Actions)	Number of incidents: Annual reduction of 20%, a 60% reduction compared to FY 2020 at the end of the new medium-term plan Reduce A and B ranked risks through quality risk assessment. Strengthen measures to prevent human error. Investigate the causes of complaints, and implement thorough recurrence prevention measures.
(3) Consumer issues		Target (Actions)	Appropriately respond to consumer demand and requests from society Respond appropriately to consumer demand and requests from society collected through consulting desk, sales and product promotion activities.
6. Chemical and Product Safety^{RC}			
(1) Compliance with chemical-related laws and regulations		Target (Actions)	Zero violations Reinforce the management of chemical substances through new chemical substance management systems (Switch to the revised JIS version of SDS, domestic and overseas SDS/label system revisions, reinforce examinations and management of products containing chemical substances). Conduct periodic educational programs on chemical substance control. Comply with overseas legal reforms.
7. Social Dialogue^{RC}, Community Involvement & Development^{CSR}, Fair Operating Practices^{CSR}, and Compliance			
(1) Local gatherings and community involvement		Target (Actions)	Retention of a certain number of local gatherings and improvement of their contents Engage in ongoing dialogue with local related parties and organizations and improvement of their contents.
(2) Legal and other requirements		Target (Actions)	Zero legal violations Prepare a legal regulations confirmation table, carry out confirmation using a PDCA cycle, and cross-develop measures to prevent the recurrence of violations.
(3) Actively implement stakeholder engagement		Target (Actions)	Once a year at each worksite Actively implement stakeholder engagement. Use the evaluations gained from stakeholder engagement to improve CSR activities.
8. Human Rights^{CSR}/Labor Practices^{CSR}			
(1) Embracing diversity		Target (Actions)	Improve hiring ratio for woman, disabled people, seniors and non-Japanese nationals Nurture a corporate culture that optimally utilizes the abilities of diverse human resources and improve the work environment.
(2) Create a rewarding workplace that employees can be proud of		Target (Actions)	Grasp and improve employee satisfaction in the workplace Strengthen in-house mutual communication and enhance programs for human resources development.

Akira Ishii

Representative Director, President
Chairman, CSR Administration Meeting
Nippon Soda Co., Ltd.
April 1, 2020

Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (Activity Policy based on the ISO 26000 Framework)

Item	Targets for FY 2022 (KPI in red)/Plan (P)	Results in FY 2022 (D)	Evaluation (C)	Future Policies (A)	Targets for FY 2023 (P)
1. Management System and Organizational Governance	(1) Proper implementation 1) Continuous improvement using the PDCA cycle 2) Strengthen measures to prevent problems caused by human error	(1) 1) Continued implementation in accordance with the management system. Implemented 7 of 11 items planned for regular Group company RC audit 2) Targets for each worksite and Group company were determined and measures to achieve them were strengthened	● ●	(1) 1) Implement internal audits, ISO maintenance/renewal reviews as planned Adjust dates and implement Group company regular RC audits 2) Continuous correction and education will be promoted throughout the Group to help employees recognize how to prevent human error	(1) Proper implementation 1) Continuous improvement using the PDCA cycle 2) Strengthen measures to prevent problems caused by human error
2. Environmental Protection	(1) Environmental abnormalities: Zero events (2) Energy 1) Energy consumption rate (logistics excluded): Annual improvement of 1% (based on production) 2) Energy consumption rate in logistics: Annual improvement of 1% (based on sales) (3) Reduction of greenhouse gas emissions: Annual reduction of 1% Elimination of fluorocarbon leaks (4) Water resources conservation: Monitor water resources and promote efficient water use (5) Industrial waste 1) Amount of final disposal at landfill: Annual reduction of 3% 2) Continuation of zero emissions (± 2%) (6) Emissions of harmful substances into the atmosphere: Annual reduction of 1% (7) Reduction of impact on biodiversity and ecosystems	(1) Not achieved: 1 environmental abnormality; Takaoka Plant: Wastewater from Sluice Pipe 1 deviated from BOD values (2) 1) Achieved: 0.3666 kL/t (1.2% decrease) (Due to increased production and improved production efficiency at 3 plants) 2) Not achieved: 0.0188 kL/M (1.4% increase) (Due to an overall recovery in transport volume of products for which demand had dropped the previous year due to the pandemic) (3) Not achieved: 189,617 t (1.1% increase) (Due to a rise in energy consumption in line with increased production at 3 plants) (4) Implemented surveys of water usage, etc. (Compliance with regulatory and agreed values, efficient use) (5) 1) Achieved: 51 t (32% decrease) (Takaoka Plant: Promoted waste recycling) 2) Achieved: 0.6% (Takaoka Plant: Promoted waste recycling) (6) Not achieved: 6.7 t (22% increase) (Due to increased production of products using harmful substances) (7) Chiba Plant, Odawara Research Center, Nihongi Plant: Continued implementation Each worksite: Joined Honeybee Friendship Plan	× ● × × ● ● × ●	(1) Continue activities to prevent environmental problems according to the CSR Action Plan (2) 1) Promote energy saving through execution of the plan, and work to achieve a 1% reduction in energy consumption rate Examine calculation method for energy consumption rate for the Nihongi Plant and Takaoka Plant 2) Examine modal shift (truck transport → rail transport) (3) Implement improvement measures in conjunction with energy-saving activities (4) Examine the establishment of specific targets (5) 1) Implement measures to maintain achievement of the reduction target 2) Maintain the ratio of zero waste emissions at < 2.0% (6) Implement reduction measures continuously (7) Develop and implement activity plans	(1) Environmental abnormalities: Zero events (2) Energy 1) Energy consumption rate (logistics excluded): Annual improvement of 1% (based on production) 2) Energy consumption rate in logistics: Annual improvement of 1% (based on sales) (3) Reduction in greenhouse gas emissions: Annual reduction of 1%. Eliminate fluorocarbon leaks (4) Water resources conservation: Monitor water resources and promote efficient water use. Maintain and improve water quality of worksite wastewater. Examine measures to reduce water use (5) Waste 1) Amount of final disposal at landfill: Annual reduction of 3% 2) Continuation of zero emissions (6) Emissions of harmful substances into the atmosphere: Annual reduction of 1% (7) Continue activities that reduce impact on biodiversity and ecosystem
3. Process Safety & Disaster Prevention/BCP	(1) Major accidents at facilities: Zero accidents 1) Achieve zero major accidents at facilities 2) Reduce the risk of major accidents at facilities in line with the Business Continuity Plan (BCP) (2) Maintain and improve BCP: Maintain and improve the BCP using the PDCA cycle 1) Undertake periodic reviews of BCP and implement risk reduction measures	(1) 1) Not achieved: NS: 0 incidents; Group companies: 1 incident (May 23: Isohara Plant, Nisso Fine: Damage to waste gas combustion furnace blower) 2) Diagnosis of disaster prevention capability: Cancelled (to prevent the spread of COVID-19). Safety audit prior to trial operation: 1, Special CSR audits: 1 (2) 1) Revised on April 1, 2021; The 11th version was distributed. Conducted disaster drill and safety confirmation drill using new system at each worksite (January 24, 2022).	× ● ●	(1) 1) Continuous implementation of measures to prevent major facility accidents 2) Continuous implementation of safety audits. Implement special CSR audits when required (2) 1) Periodic revision and response to risks. Formulation of revised version (12th version). Continuous implementation of disaster drills.	(1) Major accidents at facilities: Zero accidents 1) Achieve zero major accidents at facilities 2) Reduce the risk of major accidents at facilities in line with BCP (2) Maintenance and improvement of BCP: Maintain and improve the BCP using the PDCA cycle 1) Undertake periodic reviews of BCP and implement risk reduction measures
4. Occupational Safety and Health	(1) Occupational accidents resulting in an absence from work or no absence: No accidents 1) Conduct risk assessments to reduce risks 2) Strengthen measures to prevent human error 3) Implement activities to ensure safety 4) Implement disaster prevention activities for young employees and less experienced employees Enhance experience-based education facility and system (2) Promote health management: Improve rate of employees undergoing complete physical examinations: Annual improvement of 5% 1) Follow-up of those undergoing periodic medical examinations 2) Mental health checkups and follow-ups 3) Mental and physical health education	(1) Not achieved: Absence from work: 7 (NS: 0, NS partners: 0, Group employees: 6, Group partners: 1) No absence: 8 (NS: 3, NS partners: 1, Group employees: 4, Group partners: 0) 1)2)3)4) Safety patrols conducted at 6 worksites. Meeting of the Central Safety and Health Committee: June 19, November 13 3) Occupational accident prevention survey: Mizushima Plant (December 15) (2) Not achieved: FY 2020 (68.2% 197/289 employees), FY 2021 (92.7% 240/259 employees), FY 2022 (91.2% 238/261 employees) 1)2) Guidance for improvement was offered by healthcare professionals and in-house health personnel 3) Implemented through mental health education and health lectures courtesy of occupational physicians	× ●●●● ● × ●● ●	(1) In FY 2023, each committee will continue to strive for countermeasures against human error and to further raise awareness of safety, and will continue to conduct disaster prevention activities 1)2)3)4) Relevant information will be shared among worksites (2) 1)2) Place greater emphasis on health guidance for those with abnormal findings in medical examinations; implement stress checks and provide care to highly stressed employees at an early stage 3) Examine online lectures by occupational physicians	(1) Occupational accidents resulting in an absence from work or no absence: No accidents 1) Conduct risk assessments to reduce risks 2) Strengthen measures to prevent human error 3) Implement activities to ensure safety 4) Implement disaster prevention activities for young employees and less experienced employees. Enhance experience-based education facility and system (2) Promote health management: Improve rate of employees undergoing complete physical examinations: Annual improvement of 5% 1) Follow-up of those undergoing periodic medical examinations 2) Mental health checkups and follow-ups 3) Physical and mental health education
5. Logistics Safety, Quality Assurance and Consumer Issues	(1) Logistics-related complaints: None 1) Provide training and guidance to shipping companies. Investigate the causes of complaints, and implement thorough recurrence prevention measures (2) Product-related complaints: Annual reduction of 20% 1) 30% reduction in rank A and B risks from the previous fiscal year through introduction of quality risk assessment. Strengthen measures to prevent human error. Investigate the causes of complaints, and implement thorough recurrence prevention measures (3) Consumer issues: Appropriately respond to consumer demand and requests from society 1) Appropriately respond to consumer demand and requests from society collected through consulting service response, sales promotions, and outreach	(1) Achieved: 0 incidents 1) Provided education and guidance to shipping companies, etc. (total of 9 sites). (2) Not achieved: 8 incidents (8 in FY 2021) No decrease 1) Achieved: A Rank: 5 incidents → 0 incidents (100% decrease), B Rank: 337 incidents → 271 incidents (20% decrease) (3) 1) Handled by each business division as part of Social Activities. Promoted efforts to discover needs and enhance customer satisfaction through response to inquiries and sales promotion activities, etc.	● ● × ●	(1) 1) Continue to conduct inspections and audits of and provide education, etc. for shipping companies. Continue to make requests for improvement of delivery methods to lorry shipment customers. Acquire information through industry groups (2) 1) Conduct at each site in a planned manner (3) 1) Continue activities	(1) Logistics-related complaints: None 1) Provide education and guidance to shipping companies Investigate the causes of complaints, and implement thorough recurrence prevention measures (2) Annual decrease of 20% in number of incidents 1) 30% reduction in rank A and B risks from the previous fiscal year through introduction of quality risk assessment Investigate the causes of complaints, and implement thorough recurrence prevention measures (3) Consumer issues: Appropriately respond to consumer demand and requests from society 1) Appropriately respond to consumer demand and requests from society collected through consulting desk, sales and product promotion activities
6. Chemical and Product Safety	(1) Compliance with chemical-related laws and regulations: Zero violations 1) Zero violations 2) Strengthen the management of chemical substances by adopting a new chemical substance control system, etc. (switch to the revised JIS version of SDS, revise domestic and overseas SDS/label system, reinforce investigation and management of products containing chemical substances) 3) Periodic educational programs on chemical substance control 4) Actions to comply with revisions of foreign laws and regulations	(1) 1) Not achieved: 3 violations • Nihongi Plant: Improper hazardous substance display (manufacturer/address) • Takaoka Plant: Missed data in verification test for food additive product • Takaoka Plant: Manufacture and use of stimulant material (phenylacetic acid) 2) Compatibility with revised JIS version: Improved ExESS defects, hosted supplementary briefings, requested SDS revision for all products, implemented SDS revision at all worksites 3) Implementation according to the plan 4) Responded almost according to the plan	× ● ● ●	(1) 1) Prevent violations through continued recurrence prevention measures 2) Switch Japanese SDSs to revised JIS version by May 2022. Create and present templates and examples of revised JIS version SDSs for developed products 3) Continue activities 4) Respond to UK REACH in line with the UK's withdrawal from the EU, and respond to other legal reforms	(1) Compliance with chemical-related laws and regulations: Zero violations 1) Zero violations 2) Reinforce the management of chemical substances through new chemical substance management systems (switch to the revised JIS version of SDS, domestic and overseas SDS/label system revisions, reinforce examinations and management of products containing chemical substances) 3) Conduct periodic educational programs on chemical substance control 4) Comply with overseas legal reforms
7. Social Dialogue, Community Involvement, Fair Business Practices, and Compliance	(1) Local gatherings and community involvement 1) Maintain a certain number of local gatherings and improve their contents (Target: More than 25/ year) (2) Legal and other requirements 1) Zero violations (3) Creation of more opportunities for stakeholder engagement 1) Once a year at each worksite	(1) 1) Not achieved: 0 gatherings (cancelled due to COVID-19) (2) 1) Not achieved: Nippon Soda: 4, Group: 4 Nippon Soda: See 2. (1) and 6. (1) 1) Nisso Fine (Group): Exceeded wastewater values (BOD, pH), violation of fluorocarbon-related law Nisso Metallochemical (Group): Defect on protective tool used to prevent hot water contact (3) 1) Verification of the Integrated Report and ESG Data Book report by the Japan Chemical Industry Association (JCIA) (October 5-8; Head Office, Nihongi Plant). Implementation of occupational accident prevention survey at the Mizushima Plant (December 15). Diagnoses of disaster prevention capability by Sampo Risk Management were cancelled (to prevent the spread of COVID-19)	× × ×	(1) 1) Implement according to the plan and circumstances in the next fiscal year (2) 1) Correct and improve violation matters and share information on the prevention of recurrences among worksites (3) 1) Examine the next fiscal year's Integrated Report and ESG Data Book. Implement diagnoses of disaster prevention capability and occupational accident prevention surveys as planned in line with relevant circumstances (scheduled)	(1) Local gatherings and community involvement 1) Maintain a certain number of local gatherings (continue dialogue with local related parties and organizations) and improve their contents (2) Legal and other requirements 1) Zero violations (3) Creation of more opportunities for stakeholder engagement 1) Once a year at each worksite
8. Human Rights/Labor Practices	(1) Embracing diversity 1) Increase the employment rates of women, disabled people, older people, and overseas nationals 2) Create a corporate culture where the abilities of a diverse range of workers can be maximized and improve the work environment (2) Rewarding workplace that employees can be proud of 1) Assess and improve the level of employee satisfaction 2) Strengthen in-house communications and enhance programs for human resources development	(1) 1) • New graduate hires: 9 new graduates were hired for major career track (1 woman with foreign nationality) • Mid-career: Major career track: 4 persons • Reemployment: 5 people in April, 12 people in October, 100% of applicants • Employment ratio of persons with disabilities: 21.2% 2) • Efforts in the Career Development Support Program: No. of employees filling out our career vision sheet (236) • Conducted awareness program for the Company newsletter (2) 1) • Commenced work-from-home trials (Ohtemachi) (up to two days per week) • Improved wage curve among younger employees • Commenced new evaluation system for management-level employees • Added 1 holiday for plant workers • Introduced by-the-hour annual paid leave system (2 days/year) • Expanded scope of childcare systems • Promoted health management Commenced presenteeism measurement Announced message from the president Announced map of initiatives Acquired White 500 certification for FY 2023 2) • Revised management personnel system: Single-track (management emphasis) → Multi-track (management + high-level specialist) • Efforts in the Career Development Support Program: Conducted career interviews	● ● ● ●	(1) 1) • Continue recruitment taking diversity into account • Strengthen awareness and networks for the employment of people with disabilities 2) • Provide education including the results achieved and human resource placement through the Career Development Support Program • Formulate and implement measures to boost employee engagement • Continue to conduct awareness program in the Company newsletter (2) 1) • Improve work-from-home systems after implementation • Confirm circumstances as necessary • Evaluate after first year of implementation • Determine further expansion based on use • Increase to five days from April 2022 (increase number of paid holidays granted to employees in their first year from April 2022) • Expand further from April 2022 • Launch dedicated organization from April 2022 2) • Confirm circumstances as necessary	(1) Embracing diversity 1) Increase the employment rates of women, disabled people, older people, and overseas nationals 2) Create a corporate culture where the abilities of a diverse range of workers can be maximized and improve the work environment (2) Rewarding workplace that employees can be proud of 1) Assess and improve the level of employee satisfaction 2) Strengthen in-house communications and enhance programs for human resources development

* Achieved ●: ≥ 90% ●: 80-90% ○: 60-80% ×: ≤ 60%



Agriculture



Securing food and achieving sustainable agriculture



The world population is expected to reach ten billion in 2050, and a large amount of food and feed will be required. Also, the global warming megatrend will increase the outbreak of agricultural pests.

The Nippon Soda Group supplies safe and effective agrochemicals that are highly rated around the world. We expect needs for higher levels of safety to continue increasing, so we will create new agrochemicals that are safer and more effective by using advanced synthetic technology to contribute to the world's food supply. Additionally, we will utilize information and communications technology (ICT) and other technologies to support labor-saving pest control work and the production of high-quality crops.

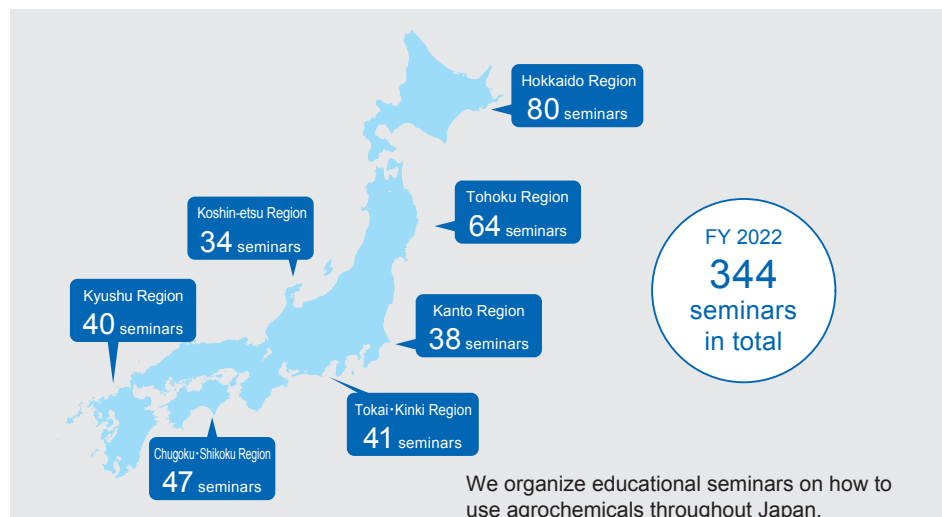
Materiality

Ensuring food safety and contributing to sustainable agriculture using agrochemicals

- Contribution to the global supply of food
- Diversification of crop protection
- Streamlining and improving labor efficiency in farming production

KPI

① Hosting of seminars



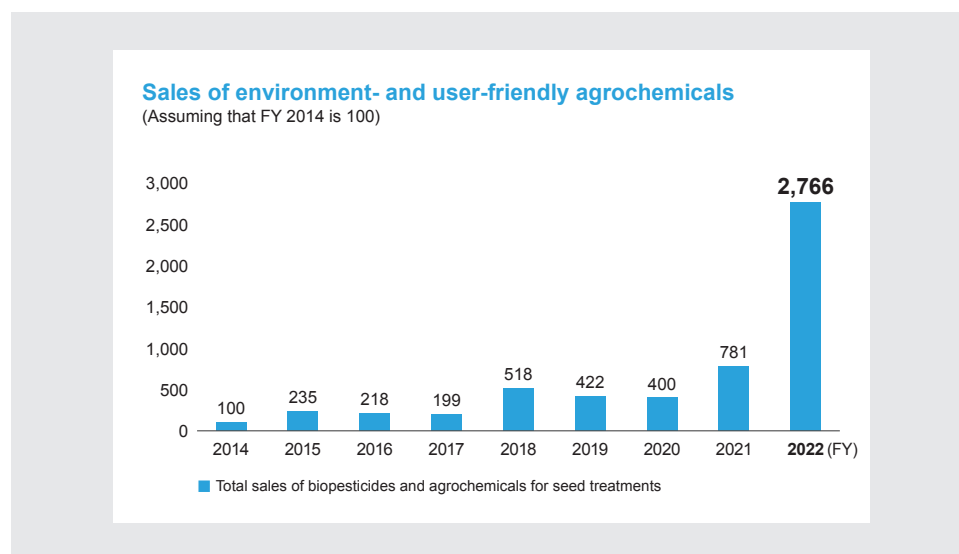
Agriculture

KPI

② -1 Current initiatives: Measures to control bacterial diseases

Nippon Soda acquired three chemical products, AGRIMYCIN, BACTICIDE and MYCOSHIELD, from Zoetis Japan Inc. in September 2018. This has enabled us to provide a greater range of information on how to control bacterial diseases in fruit trees and vegetables. As bacterial diseases are a serious problem, concerns are high. We visit those concerned to hold briefings on measures to control bacterial diseases and research trends.

② -2 Current initiatives: Supply of environment- and user-friendly agrochemicals



We are developing environmentally friendly biopesticides that have minimal impact on ecosystems, and expanding our business to seed treatments that reduce pesticide exposure and in turn improve user safety.

② -3 Current initiatives: Optimizing pest control work through use of ICT

Achievements in FY 2022

- We conducted tests on 15 crops and 10 chemical agents in preparation for drone registration. As a result, a number of prefectural governments and agricultural institutions expressed interest in using drones for one of the crops and two of the chemical agents, and we are currently preparing applications to register use of the drones.
- One employee from sales newly acquired a drone operator license, bringing the total number to 21.
(Breakdown of drone operators)
Nileworks Inc. drone technical training license: 15 (sales employees and research staff)
Yamaha Motor Co., Ltd. drone technical training license: 6 (sales employees, engineers, and research staff)



Healthcare



Healthy lives to all people



In advanced nations, health consciousness and awareness of preventive medicine are increasing due to social security cost issues and concerns about the sustainability of healthcare systems. The demand for pharmaceuticals is also increasing in emerging nations as well due to improvement in living standards. NISSO HPC (hydroxypropyl cellulose), the pharmaceutical additive supplied by the Nippon Soda Group, is widely used domestically and abroad as a binder for pharmaceutical tablets that makes medicines easier to take, and it is also being developed for use in food processing for supplements and other food products. In the future, we will continue to develop support services for high-performance products and formulation technology and actively research and develop products that contribute to improving people's health and life.

Materiality

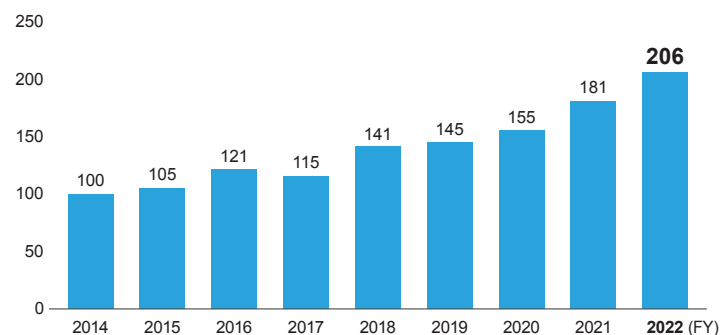
Contributing to providing health to all people through pharmaceuticals

- Support services for high-performance products and formulation technologies

KPI

① Contributions

Volume of NISSO HPC exports (Assuming that FY 2014 is 100)



At present, NISSO HPC is exported to more than 60 countries.

Healthcare

KPI

② Hosting of seminars

Achievements in FY 2022

1. Seminars and experimental sessions at the Cellulose Technical Application Center (CTAC):
2 (10 participants)
(5 in FY 2021 [18 participants])
2. Online in-house seminars and customer interviews: 73 (353 participants)
(38 client visitation seminars in FY 2021 [184 participants])



Environment



Toward a resource recycling society



Achieving a sustainable society is a goal shared around the world. Tackling environmental problems such as global warming and resource depletion will help achieve this goal, and corporations are increasingly expected to lead those efforts.

The Nippon Soda Group utilizes the water treatment technology, resource recycling technology, heavy metal removal technology, and other technologies developed over its long history, to come up with various environmental solutions and develop business. For sustainable plant protection, we are also contributing to the protection of the pine forests that are a feature of the beautiful, unique natural landscapes of Japan.

Materiality

Contributing to the environmentally sound recycling of resources through chemistry (technological expertise)

- Steady supply of water resources
- Reduction of environmental burden caused by waste

KPI

① Volume of water contributed

Volume of water that can be treated with solid chlorine agents sold by Nippon Soda in FY 2022: 18.9 million tons

② Current initiatives

In the field of waste treatment, at Nippon Soda we have developed and supply HIDION, a heavy metal fixing agent for fly ash treatment at waste incineration plants. Approximately 33.3 million tons* of waste is treated annually in Japan, and approximately 1.3 million tons* of fly ash is generated through the incineration process. The high quantities of lead and other heavy metals in this fly ash can pollute the environment when released as metal ions, and so by law, fly ash must undergo insolubilization treatment.

In addition to demonstrating excellent heavy metal fixing performance in this process, HIDION is highly safe to handle, and has therefore received wide acclaim and been used by many incineration plants across Japan for more than twenty years.

* Calculated based on the Ministry of the Environment's "State of Discharge and Treatment of Municipal Solid Waste in FY2022 (March 29, 2022)."

Environment

Materiality

Achieving sustainable plant protection

- Protection of precious trees such as pines and cherry blossoms from harmful insects

KPI

- ① Current initiatives: Contribution to Pine Forest Protection and Contribution to Local Communities

Achievements in FY 2022

1. Forests and Insect Damage Symposium (Cosponsor: Japan Greenery Research and Development Center; Assistance: Forestry Agency)
We hosted an online symposium on forests and insect damage where frontline researchers communicated the latest information on tree wilt and damage to cherry blossom trees caused by red-necked longhorn beetles, both of which have become serious issues in recent years. We welcomed approximately 900 participants from across Japan to the online symposium, including municipal officials, landscapers, and tree surgeons.
2. Using various photographs, we held a presentation about the mechanisms of pine wilt and our prevention initiatives for approximately 100 grade six students from an elementary school in Koto-ku, Tokyo. Hearing about pine wilt for the first time, the students were hugely interested in the topic and learned about the importance of forest protection for the future.
3. Due to an outbreak of pine wilt on an outlying island of Okinawa Prefecture, we dispatched a number of experts to protect the Okinawa pine trees (a designated natural monument) on the island, and hosted a lecture about pine wilt prevention using trunk injection. The initiative was also covered by local media outlets.



Applying the functionality of chemicals to IT devices



In line with the sheer speed of progress in information and communication technologies and the increasing popularity of smart devices, the ICT market is expected to grow significantly in the future.

The Nippon Soda Group uses its precision polymerization technology and organic synthesis technology to provide high-performance polymers for use in materials for next-generation 5G communications devices and photoresists for semiconductors. In order to meet the needs of future technological innovations, we are focusing on developing new materials for use in a wide range of fields.

Materiality

Contributing to the development of information equipment that is friendly to the environment and people by supplying high-performance materials

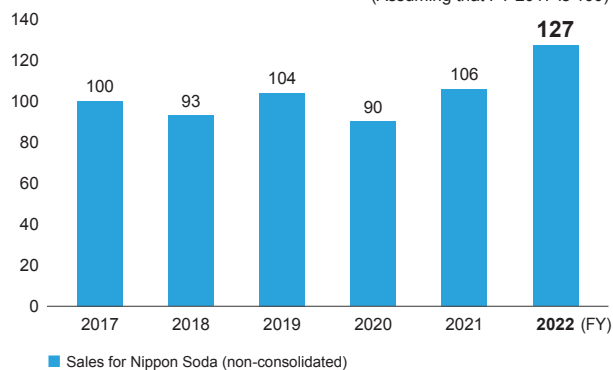
- Supply of high-performance materials that are friendly to the environment and people

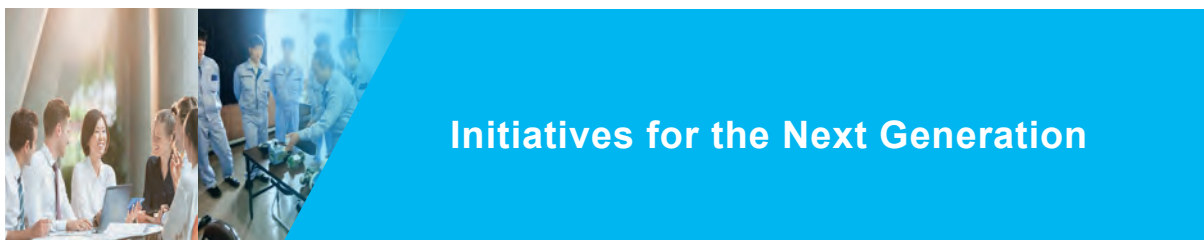
KPI

① Contributed shipment value

Shipment value of products for electronic materials

(Assuming that FY 2017 is 100)





Initiatives for the Next Generation



Next-generation Research and Development

At Nippon Soda, we see climate change as one of the key challenges facing society. As such, in addition to the supply of low-carbon products, we are also focusing our attention on hydrogen, a next-generation clean energy source that does not emit CO₂ when used and that can contribute to a decarbonized society. Aiming to launch new businesses in this field, on top of internal resources, we are also making use of external collaborations with partners from industry and academia to drive research and development.

Materiality

Achieving a low-carbon society

- Contribution by supplying low-carbon products
- Engaging in initiatives aimed at a hydrogen-based society

KPI

① Current initiatives

High-efficiency hydrogen generation electrode using solid-solution alloy nanoparticles

Nippon Soda and Kyoto University became the first to succeed in the synthesis of platinum-tungsten solid-solution alloy nanoparticles. When used in the electrolysis of water, this synthesis technology can generate a hydrogen evolution reaction (HER) that demonstrates the highest level of catalytic activity in the world. The technology makes use of Nippon Soda's metal particulation and dispersion technologies. Moreover, the results of this joint industry-academia research project were published in the Journal of the American Chemical Society, and received wide acclaim from external circles.

Development of a new porous material with Rikkyo University

As part of an industry-academia project with Rikkyo University, we are developing a new metal organic framework (MOF), which is a functional porous material. As MOFs can store hydrogen gas, we are planning to apply them to safe hydrogen gas storage materials, while we also believe they could help to spread and promote hydrogen fuel cell vehicles.

Initiatives for the Next Generation

Materiality

Forming partnerships to achieve goals that cannot be accomplished by the Nippon Soda Group alone

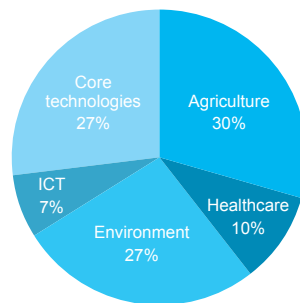
- Sharing philosophies for the goals and cooperating with other companies and organizations

KPI

① Current initiatives

To strengthen and expand our existing businesses, and to create new businesses, it is essential that we engage in open innovation to make use of external research resources and technologies in addition to our own. As such, we are promoting R&D through collaboration with external institutions in industrial and academic circles.

Nippon Soda's collaboration themes with external institutions



In FY 2022, we worked with 21 external research institutes (including 19 universities) to promote a range of R&D themes.

Initiatives for the Next Generation

Materiality

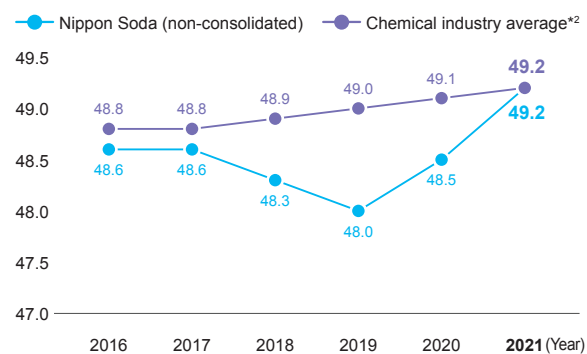
Research and development for the next generation

- Research and development that enables the continuing development of human society and the global environment, and that leads to business

KPI

① Status of research and development

The Nippon Soda Group has positioned agriculture, healthcare, the environment, and ICT as its four key fields of activity, and is aiming to create new businesses in these fields to tackle the issues facing society. We will thus work to invent technologies that lead to high-added-value products and services and apply for patents both in Japan and abroad. Further, by arranging our patented technologies in line with their level of use, we will seek to optimize and raise the quality of our patent portfolio.

Average patent score*¹

Data aggregation period: December 31 each year

*¹ Patent scores are numerical indicators of the level of attention a patent receives. The higher the patent score, the higher its market profile. Further, the higher the average score of a patent portfolio, the higher the quality of said portfolio. Average patent scores have been calculated using Biz Cruncher, a program offered by Patent Result Co., Ltd.

*² Chemical industry averages have been calculated based on the 80 companies listed on the Tokyo Stock Exchange under the Chemicals sector (one of the 33 sectors on the TSE).

Initiatives for the Next Generation

/ Manufacturing training programs with emphasis on experiential learning

Aiming to transfer technologies and develop employees who can maintain the safety and high productivity of manufacturing workplaces, in FY 2016 we launched the Nisso Takaoka Academy at the Takaoka Plant to provide systematic training programs for newly employed manufacturing personnel. Training is mainly provided to personnel newly employed at all Group companies in Japan.

The emphasis of the training is on experiential learning. With their safety assured, participants can experience falling from a high place, encounter water and gas leaks resulting from loose bolts, and come up against other situations that they cannot experience from desk-based learning. Participants are provided with opportunities to experience simulated risks and failures that would not be possible during on-the-job training. The valuable experience they gain through these programs helps increase their awareness of the need for accuracy and safety in their work, which can then be applied to their activities in the workplace.

In FY 2020, we commenced a series of manufacturing training programs with emphasis on experiential learning. These programs were part of a two-year plan to expand educational facilities and increase equipment used for safety education. In April 2021, we established the Nisso Technical Training Center. To further enhance safety awareness, we will provide experiential safety education to other employees in addition to newly employed manufacturing personnel.

Materiality

Developing human resources for the next generation

- Educational system to foster a culture of safety for the future

KPI

① Training initiatives

Manufacturing training programs

In FY 2022, the programs were implemented on a limited basis while adjusting times and numbers of participants to prevent the spread of COVID-19.

July 19–29, 2021: Takaoka Plant (practice)	No. of participants: 17
August 18–24, 2021 (temporarily cancelled due to the state of infections)	
October 4–10, 2021: Takaoka Plant (first-year training)	No. of participants: 6
October 19–28, 2021: Takaoka Plant (second-year training)	No. of participants: 5
November 15–19, 2021: Nihongi Plant (first-year training)	No. of participants: 6
December 6–10, 2021: Nihongi Plant (second-year training [1])	No. of participants: 4
December 13–17, 2021: Nihongi Plant (second-year training [2])	No. of participants: 5

Main training programs for safety

- Safety training: Special safety education for oxygen deficiency, concrete methods related to the four safety cycles, how to handle steam, operation of forklifts, how to handle organic solvents, experience with solvent combustion explosions due to static electricity, experience with exposure to liquid chemicals, and how to handle breathing equipment
- Maintenance/instrumentation training: Machine maintenance, how to read engineering flow design (EFD), electricity, instrumentation/measuring, and how to handle electric tools
- Field work training: How to use tools/instruments correctly, installation/removal of flanges, testing airtightness of pipes, and plumbing assembly/removal
- Practical safety education: simulation of hazards associated with working at heights, slinging work, rotating machines, electricity, and more

Initiatives for the Next Generation

Objective of the session

To acquire basic knowledge and learn about basic machine structure to improve safety awareness.

Safety training



Maintenance/instrumentation training



Field work training



Practical safety education



Environmental Protection

As work to tackle global issues such as global warming and resource depletion advances, shifts in the structure of industry are becoming more apparent. At the Nippon Soda Group, in addition to engaging in environmental protection activities to minimize the negative impact of our own business, by creating new value through the power of chemistry and ensuring the continuous development of our business, we are aiming to achieve a sustainable society and improve our corporate value.

Basic Policy

- Continuing efforts to prevent environmental pollution, complying with laws and regulations, and promoting other environmental activities.
- Reduction of environmental burden associated with business operations (prevention of global warming, and reduction in the amount of waste generated and amount of final disposal at landfills).
- Development of products and processes with less environmental burden.
- Implementation of an environmental management system.
Reduction in the amount of energy consumption while maintaining productivity.
- Water resources conservation.
- Reduction of impact on biodiversity and ecosystems.

Environmental Protection

Responses to Climate Change Issues

Efforts to prevent global warming are critical. Nippon Soda participates in the Carbon Neutrality Action Plan, a voluntary action plan promoted by the Japan Business Federation (Keidanren). Under the action plan, we are promoting energy saving to achieve the CO₂ emissions reduction targets.

► Reduction of energy consumption and greenhouse gas (GHG) emissions

We are engaged in a wide range of measures to reduce our energy consumption rate. These efforts include replacing our aging equipment with high-efficiency equipment, streamlining and increasing labor efficiency in our production process, and implementing energy-saving measures. Further, we use the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain when calculating GHG emissions from our business activities (Scope 1, Scope 2) as well as indirect emissions from outside our business activities (Scope 3). In this way, we work to reduce emissions throughout the supply chain.

Greenhouse Gas Emissions throughout the Supply Chain

Scope 1 emissions	54,663 t-CO ₂	Scope 2 emissions	129,783 t-CO ₂
Scope 3 emissions			
Purchased raw materials/services	191,593 t-CO ₂	Transport and delivery (downstream)	Not calculated
Capital goods	28,709 t-CO ₂	Processing of sold products	Not calculated
Fuel, etc., not included in Scope 1 or 2	None	Disposal of sold products	Not calculated
Transport, delivery (upstream)	33,949 t-CO ₂	Use of sold products	Not calculated
Waste generated from business	Not calculated	Leased assets (downstream)	None
Business trips	427 t-CO ₂	Franchise	None
Employee commuting	270 t-CO ₂	Investment	Not calculated
Leased assets (upstream)	None		

Note: Figures are calculated based on the Ministry of the Environment's "Emission Factor Database (Ver. 3.0) for calculating greenhouse gas emissions, etc., by organizations throughout the supply chain."

► Forestry Activities and CO₂ Absorption

Forests play key roles as carbon sinks in the prevention of climate change. Nisso Shoji Co., Ltd. owns approximately 56 hectares of land near the headwaters of the Keta River, a tributary of the Tenryu River. Here, based on afforestation and superficies rights agreements, Shizuoka Prefecture is engaged in the creation and management of a manmade Japanese cedar and cypress forest. In addition to being designated a headwater conservation forest, the forest has also acquired FSC* certification in recognition of sustainable forest management. In this way, the Group is contributing to healthy forest development.

* The Forest Stewardship Council® is an international non-profit organization that aims to promote responsible management of forests worldwide. FSC certification shows that an independent third-party organization has recognized that appropriate management systems are in place to ensure forest conservation.

Environmental Protection

► Use of renewable energy

The Nihongi Plant draws its industrial water from a river for its production and uses the excess water to generate electricity by using the difference in elevation when returning water to the river. Since the establishment of the hydroelectric facility in 1940, generated electricity has been effectively used for production activities at the plant. We will continue to carefully maintain the power station for the continued generation of renewable energy.



From the hydroelectric power station to the water tank



Small hydropower facilities of the Nihongi Plant

► Promotion of energy saving by the Logistics Department

As a specified consigner designated under the Act on the Rational Use of Energy (Energy Saving Act), Nippon Soda submits a periodic report and a medium- to long-term plan to the Ministry of Economy, Trade and Industry and implements measures to reduce its energy consumption rate.

Nippon Soda has been making efforts to improve logistics efficiency and reduce environmental burden through measures such as modal shifts in transportation, reducing the frequency of trips by using larger transport containers, and adjusting distribution routes. For our modal shift efforts, we were certified in 2013 as an “Eco Rail Mark” company.



Effective Use of Resources and Reduction of Industrial Waste

We participate in the Voluntary Action Plan on the Environment promoted by the Japan Business Federation (Keidanren). Under the action plan, we promote industrial waste reduction to achieve the target amount of reduction in the final disposal of industrial waste at landfill.

► Proper management of industrial waste and reduction of the final disposal of industrial waste at landfill

As one of our efforts to help build a recycling-based society, Nippon Soda reduces the amount of industrial waste emissions from a long-term perspective and, at the same time, promotes the recycling of industrial waste items and implements other measures to reduce the final disposal amount of industrial waste at landfill.

► Zero emissions

Nippon Soda has achieved zero emissions* for 11 consecutive years.

* When the ratio of the amount of final disposal of industrial waste at landfill compared to the amount transported to the industrial waste disposal facility is small. We define “Zero emissions” as when the ratio of landfill waste is 2% or less.

► PCB waste

Each Nippon Soda site properly stores and manages condensers, transformers, mercury lamp ballasts, and other items which contain PCB and disposes of them appropriately one by one in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB (polychlorinated biphenyl) Wastes, which was revised in 2016.

Environmental Protection

Atmosphere and Water Quality Conservation

Nippon Soda implements various measures to conserve the atmosphere and water quality, including measures to reduce releases of chemical substances specified by the PRTR System and to reduce toxic substance emissions to water, in accordance with the Air Pollution Control Act, the Water Pollution Prevention Act, and the latest regulatory trends.

► **Reduction of chemical substances specified by the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR System)**

We are making efforts to reduce emissions of Class I Designated Chemical Substances specified by the PRTR System, one of two sections contained in the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof.

► **Reduction of emissions of harmful substances into the atmosphere**

Twelve chemicals among those categorized as priority substances under the Air Pollution Control Act are designated as voluntarily controlled chemical substances by the Japan Chemical Industry Association (JCIA). Of the twelve chemicals, our Company currently deals with the following six substances: chloroform, dichloromethane, 1,2-dichloroethane, ethylene oxide, 1,3-butadiene and benzene. We are implementing measures to reduce the emissions of these six substances.

► **Reduction of air pollutant emissions**

Nippon Soda promotes the reduction of emissions of sulfur oxide (SOx), nitrogen oxide (NOx), and soot and dust. Emissions of these substances from stationary sources are controlled under the Air Pollution Control Act.

► **Actions to conform to the Fluorocarbons Emission Control Act**

To comply with the Fluorocarbons Emission Control Act, we implement periodic inspections by those with expertise, simplified inspections by the Inspection Manager, measures to prevent fluorocarbon emissions, and other required activities at one worksite at a time.

► **Reduction of harmful substance emissions into rivers and other bodies of water**

Nippon Soda has made its voluntary standards stricter than the national regulatory values and the standard values agreed with local municipalities. Based on these strict values, we manage water quality through the monitoring of pollutants and purification at the wastewater treatment plant.

Preservation of Biodiversity

Nippon Soda has been taking measures to reduce the environmental burden, use water resources effectively, and prevent pollution of air, water, and soil, mainly in areas where its production sites are located. In recent years, we have added conservation of biodiversity as a priority issue and have been carrying out viable activities at each of our worksites.

► **Breeding of killifish originating from the Sakawa river system (Odawara Research Center)**

Odawara City, Kanagawa Prefecture, has been promoting protection activities for killifish, which are listed as an Endangered Species Category II by the Ministry of the Environment. In 1999, we conducted the “Medaka-no Otosan Okasan Sato-oya Seido” (“Killifish Fosterparent Program”), which involves working to protect their habitat and helping to pass their genes down to the next generation.



Breeding of killifish originating from the Sakawa river system

► **Supporting the protection of himekomatsu (Japanese white pine) a critically endangered species (Chiba Plant)**

Since taking over the project in 2016, Chiba Plant is continuing with the “Himekomatsu Supporter” project to protect himekomatsu, an endangered tree species in Chiba Prefecture.



November 2016



May 2021

Environmental Protection

Environmental Protection Activities through the Nippon Soda Group Forest

On the occasion of the 100th anniversary of our establishment, we began initiatives to protect greenery and water sources as a contribution to the achievement of the SDGs. The Nippon Soda Group established the Nippon Soda Group Forest within the Joetsu KUWADORI Community Forest in Joetsu City, Niigata Prefecture, the location of the Company's origin, and continues to make donations to the National Land Afforestation Promotion Organization in order to contribute to the creation of a forest of biodiversity and environmental protection.



Tree planting ceremony (October 20, 2021)



Nippon Soda Group Forest blueprint

► FY 2022 targets and achievement levels (KPIs)

(Achievement levels ●: ≥ 90% ◐: 80-90% ◑: 60-80% ×: ≤ 60%)

- | | |
|---|---|
| 1. Environmental issues: Target: Zero events | Achievement level ×: One event |
| 2 -1. Energy consumption rate:
Target: Annual improvement of 1% | Achievement level ●: 1.2% decrease
(Due to improved production efficiency brought on by increased production volume) |
| 2 -2. Energy consumption rate in logistics:
Target: Annual improvement of 1% | Achievement level ×: 1.4% increase
(Due to an overall recovery in transport volume of products that suffered from a pandemic-induced drop in demand the previous year) |
| 3. Reduction in greenhouse gas emissions:
Target: Annual reduction of 1% | Achievement level ×: 1.1% increase
(Due to an increase in production) |
| 4. Water resources conservation:
Target: Monitor water resources and promote efficient water use | Achievement level ◐: Promoted efficient use of water resources |
| 5 -1. Industrial waste (amount of final disposal at landfill):
Target: Annual reduction of 3% | Achievement level ●: 32% decrease
(Promoted waste recycling) |
| 5 -2. Industrial waste (continuation of zero emissions):
Target: 2% or less | Achievement level ●: 0.6% |
| 6. Emissions of harmful substances into the atmosphere:
Target: Annual reduction of 1% | Achievement level ×: 22% increase
(Due to an increase in production of products using harmful substances) |
| 7. Reduction of impact on biodiversity and Ecosystems | Achievement level ●: Nurtured endangered species at two sites
Joined Honeybee Friendship Plan at each worksite |

► Efforts for the future

We will make continuous efforts to minimize the impact of our business activities on the environment. Our efforts to protect the environment will include energy saving, resource saving, reduction of greenhouse gas emissions, conservation of water resources, preservation of biodiversity, and reduction of the impact on ecosystems.

Process Safety and Disaster Prevention/BCP

At the Nippon Soda Group, recognizing that the continuation of safe, stable production activities and the stable supply of products and services is fundamental to our business activities, we promote process safety and disaster prevention activities. Further, we are constantly working to improve our business continuity plan so that we can quickly recover and restart production activities in the event of a natural disaster or other emergency, and at the same time reinforcing our stable supply structure.

Basic Policy

- Regular inspections, repair and renewal of equipment and training of operators at each manufacturing site.
- Improvement of the risk management system through emergency drills and education to prepare employees for possible accidents and disasters.
- Safety reviews by our internal experts to verify safety when facilities are constructed or renovated. Regular diagnoses of our disaster prevention capabilities by external specialists.
- Regular reviews and improvement of our business continuity plan (BCP), which is designed to ensure preparedness for natural disasters such as large-scale earthquakes and other emergencies that could result in extensive damage.

Process Safety and Disaster Prevention

Risk Management

Risk assessment of process safety and disaster prevention	We conduct risk assessments related to safety and disaster prevention for facilities, machines and manufacturing processes. Identified risks are prioritized and, accordingly, measures to ensure the safety of facilities are implemented and inspections are conducted in sequence.
Establishment of an emergency risk management system	We give the highest priority to preventing accidents and disasters. On the other hand, to prepare for unavoidable accidents and disasters, we have established an emergency risk management system and conduct periodic drills and exercises to maintain the system in a sound condition.
Standards on Emergency Response	The Standards on Emergency Response have been developed to ensure prompt and appropriate communication, response, and instruction in the event of a disaster or accident, and their effectiveness is reviewed and revised periodically, and confirmed through training.

▶ Third-party diagnoses of disaster prevention capabilities

Sompo Risk Management Inc. regularly diagnoses the disaster prevention capabilities of Nippon Soda and its manufacturing Group companies. (Diagnoses were cancelled in FY 2022 to prevent the spread of COVID-19)

Safety Management

▶ Safety audit to confirm the safety of plants

To ensure the safety of processes in the construction and renovation of facilities, the Nippon Soda Group undergoes safety reviews and audits by managers and internal experts. Facilities and operations are inspected for safety, work environment, quality and other factors.

Facilities of Group manufacturing companies undergo periodic RC audits to assess the management conditions of manufacturing facilities, and the results are incorporated into activities to improve process safety and disaster prevention.

▶ Safety audits prior to trial operation by the Head Office

Chiba Plant, July 7, 2021

Safety audits prior to trial operation of pilot testing/manufacturing facility for samples of new specialty polymer SBS.

As a result of document and on-site audits, 32 safety issues were identified. After implementing countermeasures for all of these safety issues, trial operation was complete.

Process Safety and Disaster Prevention/BCP

Education and Drills for Disaster Prevention

Nippon Soda provides a variety of process safety and disaster prevention training for employees to acquire the knowledge and skills to ensure their safety. We will continue to promote safety and disaster prevention activities with the aim of further improving our safety and disaster prevention activities to achieve the target of “no major accidents at facilities.”

► Group training

Each worksite and department conducts continuous education and training in accordance with the CSR action plan. Further, for new employees assigned to our manufacturing sites, we provide manufacturing training programs as a form of new employee training. These programs include experiential education and training related to safety and basic work practices.

In FY 2022, the programs were implemented on a limited basis while adjusting times and numbers of participants to prevent the spread of COVID-19.

July 19–29, 2021: Takaoka Plant (practice)	No. of participants: 17
August 18–24, 2021 (temporarily cancelled due to number of infections)	
October 4–10, 2021: Takaoka Plant (first-year training)	No. of participants: 6
October 19–28, 2021: Takaoka Plant (second-year training)	No. of participants: 5
November 15–19, 2021: Nihongi Plant (first-year training)	No. of participants: 6
December 6–10, 2021: Nihongi Plant (second-year training [1])	No. of participants: 4
December 13–17, 2021: Nihongi Plant (second-year training [2])	No. of participants: 5

Process Safety and Disaster Prevention/BCP

► Disaster prevention system working in cooperation with local communities

Each Nippon Soda site implements regular disaster drills, which include drills conducted in cooperation with other nearby plants and local governments. These drills are conducted taking into account the environment and other characteristics unique to each region so that they can be applied in real settings.



Comprehensive disaster drill
(Chiba Plant/Chiba Research Center, May 21, 2021)



Spring disaster drill
(Nihongi Plant, June 22, 2021)



Environmental abnormality response drill
(Takaoka Plant, October 13, 2021)



Education on firefighting techniques by the
Takaoka Fire Department
(Takaoka Plant, October 29, 2021)



Autumn disaster drill
(Nihongi Plant, November 19, 2021)



Comprehensive disaster drill
(Chiba Plant/Chiba Research Center,
November 25, 2021)



Joint in-plant disaster drill
(Mizushima Plant, December 2, 2021)



Joint Marine Disaster Management Council
emergency report drill
(Chiba Plant, January 14, 2022)



Hazardous material (HCN) leak response drill
(Mizushima Plant, February 16, 2022)



Comprehensive disaster drill
(Chiba Plant/Chiba Research Center, February
17, 2022)



Comprehensive plant disaster drill
(Takaoka Plant, June 8, 2022)

Process Safety and Disaster Prevention/BCP

► Emergency Drills (FY 2022)

	First half (dates of drills)		Second half (dates of drills)	
	Date	Details	Date	Details
Nihongi Plant	June 22, 2021	Spring plant disaster drill	November 19, 2021	Autumn disaster drill
Takaoka Plant	April 22, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	October 13, 2021	Environmental abnormality response drill
	June 8, 2021	Comprehensive spring plant disaster drill	October 18, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
	August 24-27, 2021	Nighttime emergency report drill (Organic Sec. 2, Formulation Sec.)	October 19-26, 2021	Fire drill
	Monthly	119 report and contact drill	October 22, 2021	Emergency contact drill to report high-pressure gas leaks to regional disaster prevention offices
			October 26, 2021	Liquid chlorine tank lorry emergency report drill
			October 29, 2021	Education on firefighting techniques by the Takaoka Fire Department
			November 9, 2021	In-house firefighter training
			December 15, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
			December 22, 2021	Emergency response drill (for Hokusan Koatsu)
			March 9-17, 2022	Fire drill
			March 22, 2022	Nighttime emergency report drill
			Monthly	119 report and contact drill
Mizushima Plant	May 16, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	October 13, 2021	Response drill for accidents during product transportation (paper-based drill)
	July 16, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	November 16, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
	July 16, 2021	Actual power outage drill	December 2, 2021	Joint in-plant disaster/evacuation drill
	July 27, 2021	Harmful substance (NaOH) leak response drill	January 16, 2022	Emergency contact drill (using <i>Otsutae-kun</i>)
	September 16, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	February 16, 2022	Harmful substance (HCN) leak response drill
			March 16, 2022	Emergency contact drill (using <i>Otsutae-kun</i>)
Chiba Plant	April 26, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	October 12, 2021	Report drill (Minami-Kinoene)
	May 21, 2021	Comprehensive joint plant disaster drill for predicted worksite disasters	October 13, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
	August 3, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)	October 25, 2021	Ichihara City public disaster drill (cancelled)
	August 24, 2021	Petroleum complex risk prediction and response drill	November 12, 2021	Environmental abnormality response drill
	August 26, 2021	Disaster drill for predicted nighttime and holiday emergencies	November 25, 2021	Comprehensive joint plant disaster drill for predicted worksite disasters
			January 14, 2022	Joint Marine Disaster Management Council emergency report drill
			February 17, 2022	Comprehensive plant disaster drill (joint disaster drill)
			March 11, 2022	Evacuation drill (for predicted leakage of harmful gases at other companies)
Odawara Research Center			November 4, 2021	Disaster drill (Bandai)
			November 5, 2021	Safety confirmation response drill
			November 5, 2021	Departmental disaster drill (five departments in Odawara)
			November 5, 2021	Group-based disaster drill (five groups in Haibara)
Chiba Research Center	April 26, 2021	Emergency report drill	October 13, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
	May 21, 2021	Comprehensive disaster drill	November 21, 2021	Emergency contact drill (using <i>Otsutae-kun</i>)
	August 3, 2021	Emergency report drill	November 25, 2021	Comprehensive disaster drill
	August 26, 2021	Disaster drill for predicted nighttime disasters	February 17, 2022	Comprehensive disaster drill
	September 2021	Emergency evacuation drill (desk-based training)	March 2022	Emergency evacuation drill (desk-based training)
Head Office			December 2021	Comprehensive disaster drill at the Shin-Otemachi Building (cancelled)
			January 25, 2022	Safety confirmation report drill

Process Safety and Disaster Prevention/BCP

Accident Report

Anhydrous sulfuric acid leakage at delivery destination, Chiba Sales Office, Sanso Unyu Co., Ltd.

1. Date/time of accident: July 19, 2021; around 9:00 am

2. Accident overview

Due to partial damage to the tank of a tank lorry carrying anhydrous sulfuric acid—which is manufactured and sold by Nisso Metallochemical Co., Ltd., and transported by Sanso Unyu Co., Ltd., the transportation department of Sanwa Soko Co., Ltd.—the product leaked on the customer's factory premises, generating a mist and abnormal odor. There were no personnel casualties or injuries, nor was there any negative impact to the environment outside the premises.

3. Cause

Partial damage to the tank of the tank lorry caused by age-related corrosion.

4. Recurrence prevention measures

(1) Manufacture of new tanks

We reviewed tank materials and created a new tank that is resistant to corrosion.

(2) Implementation of risk assessments

We will implement risk assessments to reduce the risk of leakage in every process from the shipment of anhydrous sulfuric acid to delivery.

(3) Review of tank inspection methods

We have reviewed and strengthened our inspection methods for both our existing tanks and new tanks. (Inspection of tank thickness [annually], installation of inspection openings in the relevant areas, inspection of tank pressure prior to filling, etc.)

Nisso Metallochemical, Sanwa Soko, and Sanso Unyu will work together to rebuild their emergency support system and create a response manual that anticipates leakage to ensure quick and accurate sharing of information. Further, the three companies will also carry out annual leakage drills to ensure accurate actions and procedures in the event of a leak.

Business Continuity Plan (BCP)

► Basic concept of the BCP

In the event of a natural disaster such as a large-scale earthquake or other crisis that can result in serious damage to Company worksites, our social responsibility is to ensure the safety of local residents, full-time and temporary employees and partner company employees. Based on this concept, the principles of the BCP are defined as follows:

- ① The highest priority is placed on checking the status and ensuring the safety of Nippon Soda's own employees, partner company employees and temporary employees and their families, and ensuring the safety of residents in communities where the Company's business sites are located.
- ② The consciousness of serving the public and community is shared among all personnel throughout the Company.
- ③ Efforts are focused on protecting the safety of the affected Head Office, plants, research centers, branch offices and sales offices.
- ④ Measures should be taken to establish a system that allows Nippon Soda's employees, partner company employees and temporary employees who are engaged in ensuring safety and security to act flexibly and at their discretion according to the circumstances.

► Continuation of supply of products according to customer needs

The BCP of Nippon Soda aims to ensure, in the event of a natural disaster or other crisis, safety as well as the supply of products to customers as requested. To achieve this objective, improvement is accelerated using the PDCA cycle.

Process Safety and Disaster Prevention/BCP

Efforts for Business Continuity

Following is a flowchart of the procedures for continuing business operations.

1 Policy

2 Planning

- 2.1 Identification of Disasters and Crises to be Included in the Plan
- 2.2 Impact Assessment
 - 2.2.1 Estimation of Suspension Period and Response Capacity
 - 2.2.2 Identification of Critical Business Operations
 - 2.2.3 Determination of Time Required to Achieve Target Recovery
- 2.3 Estimation of Damage to Critical Business Operations
- 2.4 Identification of Critical Elements
- 2.5 Development of Business Continuity Plan
 - 2.5.1 Clarification of Chain of Command
 - 2.5.2 Securement of Functions of the Head Office and Other Key Sites
 - 2.5.3 External Communication and Information Sharing
 - 2.5.4 Information System Backup
 - 2.5.5 Supply of Products and Services
- 2.6 Additional Requirements Concurrent with Business Continuity
 - 2.6.1 Protection of Life and Confirmation of Safety of Individuals
 - 2.6.2 Mitigation of Damage to Offices, Business Sites and Equipment
 - 2.6.3 Secondary Disaster Prevention
 - 2.6.4 Coordination with and Contribution to Local Communities
 - 2.6.5 Mutual Cooperation and Assistance

6 Review by Management

5 Assessment and Corrective Actions

4 Education and Training

3 Implementation

- 3.1 Carry Out Response in Accordance with the BCP
- 3.2 Documentation
 - 3.2.1 Preparation of Plans and Manuals
 - 3.2.2 Preparation of Checklist
- 3.3 Financing
- 3.4 Confirmation of the Practicality of Plans
- 3.5 Importance of Management Decision-Making during Disasters

Disasters and Risks Covered by the BCP

- | | | |
|--|--|---|
| ① Earthquake | ⑧ A large number of affected employees (their houses and families) | ⑭ Suspension of the supply of raw materials (including logistics) |
| ② Typhoon | ⑨ Electric power outage | ⑮ Suspension of product distribution |
| ③ Heavy rainfall, flood, tsunami, heavy snowfall | ⑩ Suspension of industrial water supply | ⑯ Occurrence of quality problems |
| ④ Storm, tornado | ⑪ External communication failure | ⑰ Terrorism |
| ⑤ Volcanic eruption | ⑫ Computer system failure | ⑱ Nuclear power accident |
| ⑥ Abnormal conditions of facilities | ⑬ Emergency at water discharge destinations | ⑲ Missile attack |
| ⑦ Influenza, infectious diseases, etc. | | ⑳ Others |

► FY 2022 targets and achievements (KPIs) (Achievement levels ●: ≥ 90% ◐: 80-90% ◑: 60-80% ×: ≤ 60%)

1. Major accidents at facilities: Target: Zero accidents
Achievement level ×: One major facility accident (Group company)
One Group company (Isohara Plant Unit 1, Nisso Fine: Damage to waste gas combustion furnace blower)
2. Maintenance and improvement of the BCP:
Achievement level ●: The 11th version was distributed and the 12th version was prepared.

► Efforts for the future

We will continue our efforts to achieve the target of “no major accidents at facilities” through the constant improvement of safety management, risk management, education, disaster prevention drills and other measures. We will also improve and review the BCP in a systematic manner.

Occupational Safety and Health

At the Nippon Soda Group, we believe that it is people who enhance the competitive advantage of the Company. We also believe that people are the most important management resource in bringing about sustainable growth. To ensure employee motivation and create workplaces that are full of energy, we strive to prevent occupational accidents and health issues, promoting health management so that both employees and their families can maintain and improve their physical and mental health.

Basic Policy

- Introduction of an Occupational Safety and Health Management System (OSHMS), and implementation of risk assessments. Acquisition of ISO 45001 certification.
- Continuous implementation of PDCA (Plan-Do-Check-Act) to ensure safe and healthy workplaces with the aim of achieving the goal of zero occupational accidents.
- Provision of health guidance based on medical examination results and implementation of measures to reduce incidents of personal injury or illness to help employees maintain and improve their health.
- As a mental healthcare service, we perform stress tests and provide consultation services by qualified mental health specialists. We have established and are operating a system that allow us to take appropriate action.

Occupational Safety and Health

Implementation of Risk Assessment

We are systematically improving the achievement and performance of the targets we have set through the PDCA cycle set out in OSHMS. To integrate OSHMS and Responsible Care (RC) activities effectively, we also emphasize OSHMS risk assessment. Each office (plant or research center) periodically identifies and assesses occupational accident risks and, if they are not acceptable, takes measures to reduce them to permissible levels.

Efforts to Prevent Occupational Accidents

► Establishment of Safety and Health Committees

In line with Article 19 of the Industrial Safety and Health Act, at Nippon Soda we have established Safety and Health Committees at each of our worksites. The committees meet once a month, aiming to prevent occupational accidents and health hazards, and maintain and promote employee health. In addition, we have also established a Central Safety and Health Committee, chaired by the Responsible Care Management Department General Manager. It comprises safety and health supervisors from each department and worksite, and meets in principle twice a year. In addition to the views of management, the central committee incorporates wide-ranging opinions from labor unions and health insurance associations in order to improve working environments.

► Activities to reduce occupational accident risks

Mainly in accordance with activity plans set forth in OSHMS, we are reducing risks through the elimination of near-miss incidents and by drawing on examples of disasters at other worksites and other companies. When new plants are constructed or when plants are expanded, we require safety reviews and audits to reduce disaster risk to an acceptable level before starting test operations.

► Efforts to prevent human error by workers

The 5Ss—*seiri* (sorting), *seiton* (setting-in-order), *seiso* (shining), *seiketsu* (standardizing) and *shitsuke* (sustaining the discipline)—and the 4 safety cycles (KY* before starting operation → Pointing and vocalizing during operation → Mutually directing attention during operation → Identifying *hiyari-hatto* [near miss] accidents after operation) are the concepts that form the basis of safety activities for the Nippon Soda Group. In addition, senior management at each business site takes the initiative in promoting safety awareness among employees so that safety activities are improved through the continuous application of the PDCA cycle.

* A combination of the first letters of two Japanese words, K for *kiken* (danger) and Y for *yochi* (prediction). The KY system is designed to identify latent risks associated with work and take preventive measures before they occur.

► Occupational health and safety survey by a third party

An occupational health and safety survey of Nippon Soda is conducted by Sompo Risk Management Inc. (The Mizushima Plant was surveyed on December 15, 2021)

Occupational Safety and Health

Number of consecutive days (years) without an accident resulting in absence from work, and number of accidents resulting in absence from work of employees

Worksite	Number of consecutive days (years) without an accident resulting in absence from work*1	Number of accidents resulting in absence from work*2
Head Office	462 days (1 year)	0
Nihongi Plant	436 days (1 year)	0
Takaoka Plant	413 days (1 year)	0
Mizushima Plant	10,738 days (29 years)	0
Chiba Plant	6,443 days (17 years)	0
Odawara Research Center	7,832 days (21 years)	0
Aizu Plant, Nisso Metallochemical Co., Ltd.	160 days (0 years)	1
Chiba Plant, Nisso Metallochemical Co., Ltd.	12,843 days (35 years)	0
Koriyama Plant, Nisso Fine Co., Ltd.	3,592 days (9 years)	0
Isohara Plant, Nisso Fine Co., Ltd.	174 days (0 years)	2
Onahama Plant, Nisso Fine Co., Ltd.	2,198 days (6 years)	0
Shin Fuji Kaseiyaku Co., Ltd.	1,199 days (3 years)	0
Nisso Shoji Co., Ltd.	6,880 days (18 years)	0
Sanwa Soko Co., Ltd.	665 days (1 year)	0
Sanso Unyu Co., Ltd.	112 days (0 years)	3
Nisso Engineering Co., Ltd.	6,010 days (16 years)	0
Nisso Kensetsu Co., Ltd.	10,112 days (27 years)	0
Nisso Green Co., Ltd.	8,036 days (22 years)	0

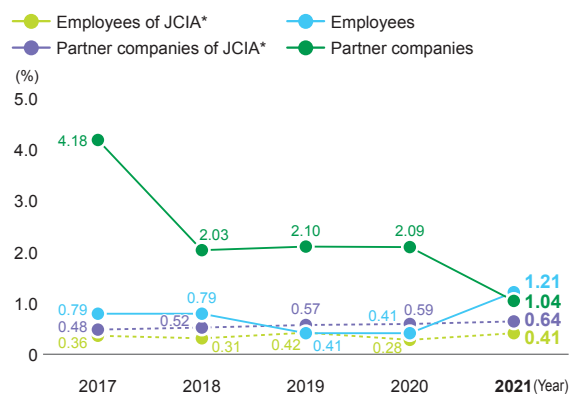
*1 As of 1 April 2022 *2 Data collected from FY 2022 (April 2021-March 2022)

Number of accidents resulting in absence from work among employees of Nippon Soda Group and partner companies

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Nippon Soda	3	0	1	4	0
Nippon Soda's partner companies	4	3	0	3	0
Group companies	0	5	1	2	6
Group companies' partner companies	1	2	3	2	1

Note: Data collected from April 1 to March 31 of each year.

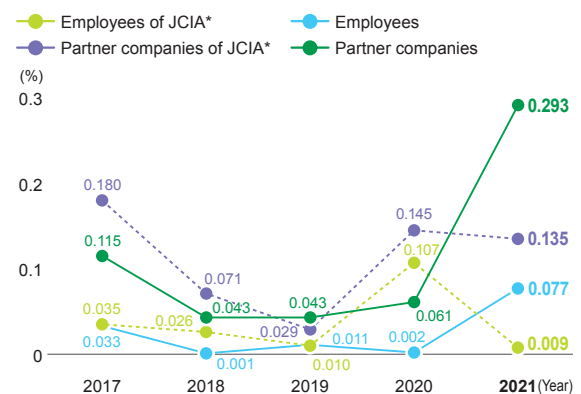
Occupational accident frequency rate



* JCIA stands for Japan Chemical Industry Association.

Occupational accident frequency rate: Casualties caused by occupational accidents ÷ Total actual working hours × 1,000,000
Data collected from January 1 to December 31 of each year.

Severity rate of occupational accidents



Severity rate of occupational accidents: Total working days lost ÷ Total actual working hours × 1,000
Data collected from January 1 to December 31 of each year.

Number of occupational accidents within the above period that led to an employee's death (number of deceased): 0 (0)

Number of occupational accidents at partner companies within the above period that led to an employee's death (number of deceased): 0 (0)

Occupational Safety and Health

Proactive Health Management for Workers

Health and productivity management

In March 2022, Nippon Soda was recognized in the 2022 Certified Health & Productivity Management Organization Recognition Program (White 500) for the fifth year in a row under the recognition program jointly undertaken by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi. This program recognizes large enterprises that promote outstanding health and productivity management. Recognition is based on an assessment of the company's effectiveness in addressing health-related issues in local communities or their health promotion activities as promoted by the Nippon Kenko Kaigi.

Recognizing the importance of health maintenance and improvement in business management, Nippon Soda, in cooperation with the Nisso Health Insurance Association and the labor union, promotes efforts geared toward supporting physical and mental health. We support employees and their families in their health management and proactively promote health management so that we can provide better value to the public through business activities conducted by healthy and lively employees.

From FY 2021, the promotion of health management has been set forth in the Nippon Soda Group's CSR Activity Policy, as a management resource that increases corporate competitiveness and brings about the capacity for sustainable growth. We will continue to support the health maintenance of employees, which is essential to the safety of manufacturing sites and stable operations, through constant monitoring. We will also work to improve the rate of employees undergoing complete physical examinations, follow-up on those undergoing periodic medical examinations with a target of a 5% annual improvement, conduct stress checks and follow ups, and provide mental and physical health education.

► Health & Productivity Management Organization Recognition Program Certification System
https://www.meti.go.jp/english/press/2022/0309_002.html



About Health Management

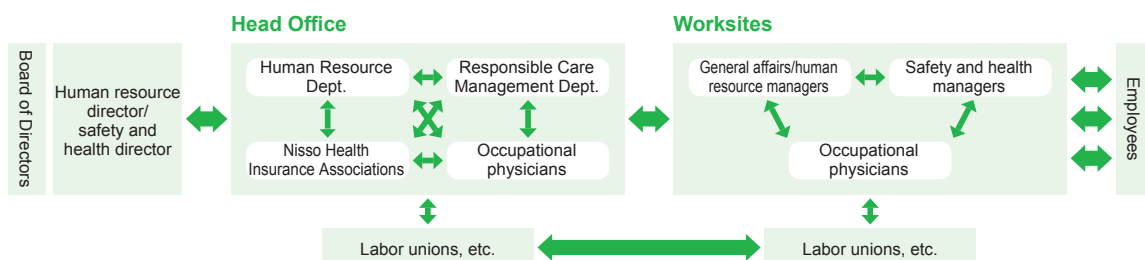
Health Management Promotion Declaration

The Group considers *people* to be the most important corporate resource for enhancing corporate competitiveness and achieving sustainable growth.

It is fundamentally important to maintain health, both physically and mentally, to create a workplace where individual employees can work willingly and actively. In this context, we implement and promote health management as an important issue in business management.

To maintain and promote the good health of employees and their families, the Company, the Nisso Health Insurance Association, the labor union, and the employees' association will make concerted efforts to take various proactive measures.

In order to actualize our Health Management Promotion Declaration, under the supervision of the human resource director and safety and health director, we will promote cooperation between the Head Office and each worksite, and implement various measures.



To date, we have sought to prevent lifestyle-related diseases through the promotion of complete physical examinations, specific examinations, and specific health guidance. We have also worked to educate employees on the importance of influenza vaccinations and provide them with opportunities to receive them. More recently, we have offered employees education and guidance on ways to further enhance measures to prevent lifestyle-related diseases, and are carrying out more than the legally required number of health examination initiatives. For example, we are working to secure opportunities for employees to undergo health examinations, and ensuring thorough supervision of overtime work to ensure a proper work-life balance and maintain employees' health.

Occupational Safety and Health

Message from the President

Since our establishment in 1920, we have continued to use chemistry to provide new value to society, continuing our business activities so that we can contribute to the development of society. To ensure business continuity and development, to date we have considered our employees' health mainly through occupational safety and health measures.

Meanwhile, there is currently growing concern that declining birthrates and aging populations, soaring social security costs, and other issues will have a major impact on social systems. Therefore, in addition to occupational safety and health, more than ever before corporations are being called upon to maintain and promote their employees' health.

Moreover, maintaining and improving health is incredibly important to enhancing the quality of life for our employees. Healthy employees can also boost motivation and bring energy to their respective organizations, and in turn lead to improved company achievements. As such, health is vitally important to the company.

And so, to enhance our corporate value over the medium to long term by maintaining and improving our employees' health, on top of our existing initiatives, we will proactively drive health management through efforts to prevent absenteeism and presenteeism, and the implementation of measures that can improve job satisfaction and fulfillment.

Eiji Aga
Representative Director, President
Nippon Soda Co., Ltd.

Mental health care

Our mental healthcare program consists of ① Self-care, ② Care by administrators in the workplace, ③ Care by occupational healthcare staff and other specialists at each workplace, and ④ Care by external parties.

A stress check is conducted once a year to support ① self-care by employees and ③ care by occupational healthcare staff and other specialists at each workplace. To improve care by administrators in the workplace ②, lectures on mental health given by external specialists are organized.

Consultations with qualified mental health specialists by phone or face-to-face are also available as part of efforts to provide care by external parties ④. In addition, lectures on mental health are provided by an external organization to help employees manage their own mental health.

Education and lectures on occupational safety



Heatstroke prevention education
(Takaoka Plant, May 18, 2021)



Heatstroke prevention class
(Takaoka Plant, May 21, 2021)



Traffic safety class
(Takaoka Plant, June 3, 2021)



Heatstroke prevention class
(Mizushima Plant, June 4, 2021)



Health lecture
(Mizushima Plant, September 29, 2021)



Experiential education relating to the dangers
of chemical substances
(Takaoka Plant, November 19, 2021)

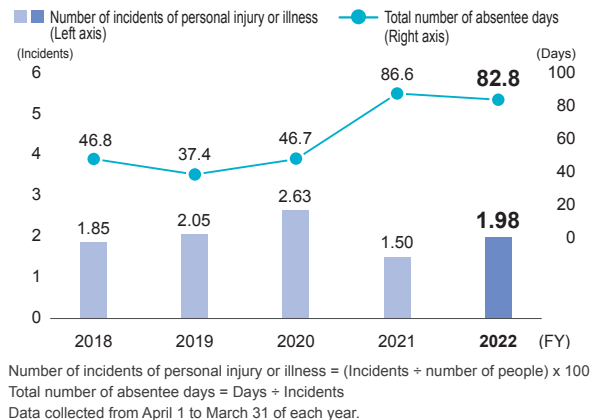


Mental health supervisor education
(Takaoka Plant, December 16, 2021)



Self-care seminar
(Chiba Plant, February 10, 2022)

Occupational Safety and Health

Number of incidents of personal injury or illness (per 100 persons)
and total number of absentee days (per incident)

► FY 2022 targets and achievement levels (KPIs)

(Achievement levels ●: ≥ 90% ●: 80-90% ○: 60-80% ×: ≤ 60%)

1. Occupational accidents resulting in an absence from work or no absence:

Target: No accidents

Achievement level ×: Seven cases resulting in absence (Nippon Soda employees: 0, partner company employees: 0, Group company employees: 6, Group partner company employees: 1)
 Eight cases involving no absence (Nippon Soda employees: 3, partner company employees: 1, Group company employees: 4, Group partner company employees: 0)

2. Promotion of health management:

Target: 5% annual increase in the ratio of employees undergoing complete physical examinations

Achievement level ×: 1.6% decrease between FY 2021 (92.7%) and FY 2022 (91.2%)

► Efforts for the future

With the aim of achieving the goal of zero occupational accidents, we will continue our efforts to reduce risks through continuous risk assessment, strengthen measures to prevent human error, and enhance safety activities. To help employees maintain and improve their health, we provide them with medical examinations, conduct follow-ups of employees undergoing stress tests, and continue good health maintenance activities.

Logistics Safety and Quality Assurance

At the Nippon Soda Group, to ensure the safe and stable delivery of products to our customers, we work to minimize distribution risks and prevent any logistics accidents in advance. Further, by providing environments in which customers can use our high-quality products and services in a safe manner and with peace of mind, we are striving to improve customer satisfaction.

Basic Policy

- Reduction of the risk of hazards, toxicity and accidents during transportation of products. Ensuring the safety of our customers, those involved in the distribution process and local residents, and protect the environment.
- Provision of information that helps customers use high-quality products safely, comfortably and in a stable manner.

Logistics Safety

Measures to ensure safe transportation of dangerous goods

► Logistics risk assessment

The Nippon Soda Group takes measures to reduce risks from various perspectives to prevent accidents involving workers and products caused by traffic accidents during forklift loading, unloading and trans-shipment of products, as well as during truck transportation.

► Promotion of Yellow Cards*¹ and Container Yellow Cards (product labels)*²

The Nippon Soda Group promotes the use of Yellow Cards and Container Yellow Cards mainly for products that are classified as hazardous materials. Product labels are revised to reflect the latest legal information, including revisions to relevant laws, in a timely manner. We constantly implement wording that complies with the GHS*³ requirements and appropriate pictograms and take other measures so that we are prepared in the event of a disaster to respond quickly to prevent damage from spreading.

*¹ A Yellow Card is an emergency information card with information about procedures that drivers, fire and police personnel, and other concerned parties should take in the event of a spill, fire, explosion or other incident that may occur during transportation. It also contains emergency contacts. The issuance and carrying of Yellow Cards are required by the Poisonous and Deleterious Substances Control Law and other laws.

*² A Container Yellow Card is a label that is affixed to containers with the United Nations number and guide number defined by the Emergency Response Guidebook.

*³ Globally Harmonized System of Classification and Labelling of Chemicals (GHS): A worldwide system for the international standardization of classification and labeling of chemicals, which was agreed upon by the United Nations Economic and Social Council. It is a system of international hazard classification standards and labeling methods (product labeling and SDS) for chemical hazards.

Logistics safety in value chains

► Proposals for improvement of customers' facilities

In the event that there is a problem with the safety of the transport company or the customer's workers at the customer's product receiving facility, or if there is a potential risk of foreign matter entering the facility or spills, etc., the Nippon Soda Group makes proposals for improvement and works to prevent accidents and disasters.

Logistics Safety and Quality Assurance

Quality Assurance

Efforts to ensure quality management

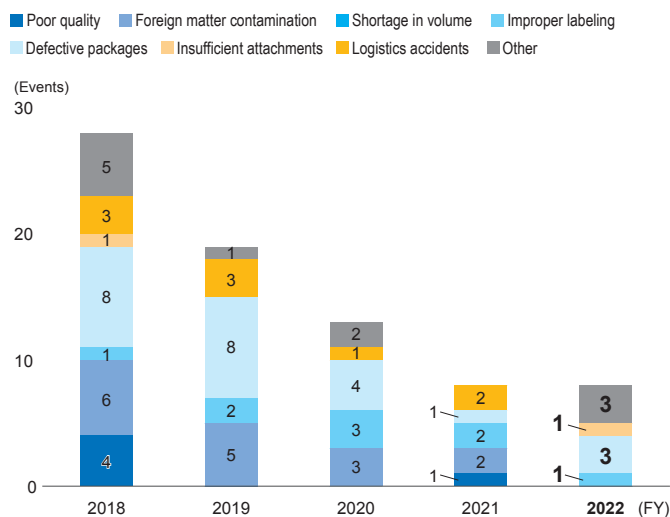
► Quality risk assessment

Nippon Soda actively engages in quality risk assessment with the goal of preventing the occurrence of product-related complaints and the recurrence of such complaints. We make continuous efforts to identify quality-related risks from each manufacturing site and reduce the risks, especially the high-risk A and B grades.

Efforts to achieve zero product-related complaints

To eliminate product-related complaints, we conduct quality risk assessments to identify and reduce risks. We are also working to reduce product-related complaints due to human error through human error prevention training for employees.

Number of product-related complaints



► FY 2022 targets and achievement levels (KPIs)

(Achievement levels ●: ≥ 90% ●: 80-90% ○: 60-80% ×: ≤ 60%)

1. Logistics-related complaints: Target: Zero events Achievement level ●: Zero events
2. Product-related complaints: Target: 20% annual reduction in number of complaints
Achievement level ×: Eight events (0% reduction over the previous year)

► Efforts for the future

To reduce logistics- and product-related complaints, we constantly improve our activities to ensure logistics safety and quality assurance, including inspections and audits of logistics companies, risk assessment, and implementation of measures to prevent human error.

Chemical and Product Safety

The Nippon Soda Group takes into consideration the potential environmental, safety and health impacts related to the hazards and toxicity of chemical substances and products, complying with laws and regulations and international standards, while also complying with regulations based on social demands, so as to earn the trust of customers and society and in turn ensure sustainable business activities.

Basic Policy

- Compliance with domestic laws and regulations, international standards, and treaties, etc., giving due consideration to the environmental, safety and health impacts related to the hazards and toxicity of chemical substances and products.
- Compliance with social restrictions that are not covered by law to maintain and ensure trust from customers and the general public.
- Specific measures to ensure the safety management of chemical substances, including activities and periodic educational programs regarding chemical and product safety.

Safety of Chemicals

Strengthening management of chemical substances using ExESS, a chemical substance control system

We are strengthening the management of chemical substances through the use of the chemical substance management system (ExESS),*¹ which we use to create SDSs*² and Yellow Cards. We prepare and revise SDSs and Yellow Cards to comply with revisions to laws in Japan and overseas. We also adopt GHS*³ for SDS and product labels for Europe, the United States, China, Taiwan, South Korea, Southeast Asia, Turkey, and other countries outside of Japan. In FY 2022, to transfer Japanese SDSs to the revised Japanese Industrial Standard (JIS) version, we conducted improvement work on ExESS, and briefed the personnel of each relevant worksite. Further, we completed transfer of Japanese SDSs to the revised JIS version by the revision deadline of May 24, 2022.

*¹ Developed by Lisam Systems Company (Belgium).

*² SDS (Safety Data Sheet) documents describing information on chemical substances, product names, suppliers, hazards, precautionary safety measures, emergency response, etc.

*³ Globally Harmonized System of Classification and Labelling of Chemicals (GHS): A system for the international standardization of classification and labeling of chemicals, which was agreed upon by the United Nations Economic and Social Council. It is a system of international hazard classification standards and labeling methods (product labeling and SDS) for chemical hazards.

Regular training programs on chemical substance control

We provide employees who handle chemical substances with education on how to comply with Japanese and overseas laws and regulations regarding the management of chemicals.

In FY 2022, programs were held online to prevent the spread of COVID-19.

Product Safety

Actions to comply with laws and regulations

The Nippon Soda Group takes actions to comply with domestic and overseas laws and regulations (including the EU REACH regulations*⁴) and conducts audits of poisonous and deleterious substances at sales offices and branches.

In FY 2022, programs were held online to prevent the spread of COVID-19.

*⁴ REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): European chemicals regulations. European regulations state that businesses that manufacture or import one ton or more of products per year are required to register the substances they handle and submit safety test data, and that substances for which data is not submitted (registered) cannot be sold.

Chemical and Product Safety

Communication of safety information on chemicals

The Nippon Soda Group participates in GPS/JIPS^{*5} activities. We have prepared safety summary reports on four substances, including caustic soda and hydrochloric acid, which have been registered on the ICCA^{*6} portal page and made publicly available.

^{*5} GPS (Global Product Strategy): A voluntary industry initiative based on risk assessment and risk management with a global product strategy as the basic concept, taking into account the supply chain

JIPS (Japan Initiative of Product Stewardship): ICCA's Product Stewardship (PS), an international initiative

^{*6} ICCA (International Council of Chemical Associations)

► FY 2022 target and achievement levels (KPIs)

(Achievement levels ●: ≥ 90% ◐: 80-90% ◑: 60-80% ×: ≤ 60%)

1. Compliance with chemical-related laws and regulations: Target: Zero violations
Achievement level ×: Three violations at Nippon Soda (Nihongi Plant: Improper labeling hazardous substance; Takaoka Plant: Partially missing measurement data from verification test for food additive product, Manufacture and use of stimulant material [phenylacetic acid])

► Efforts for the future

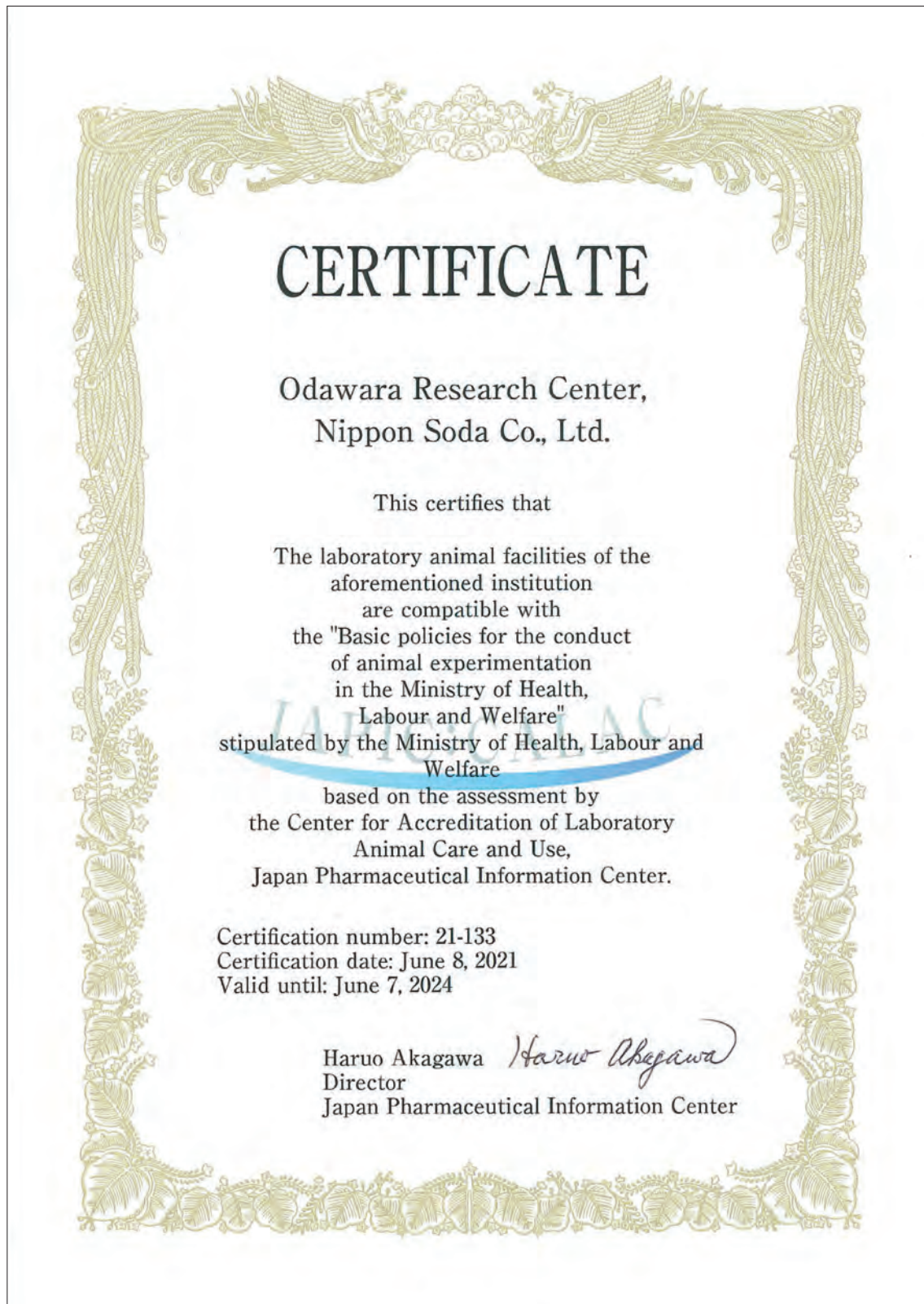
With a target of compliance with chemical-related laws and regulations (zero violations), we will reinforce the management of chemical substances through new chemical substance management systems, make domestic and overseas SDS/product label revisions, and reinforce examination and management of products containing chemical substances. We will continue to provide regular training programs on chemical substance control, such as training for new/transferred employees and explanatory sessions on revisions of laws and regulations, as well as explanatory sessions on revisions to relevant laws and regulations of foreign countries.

Consideration in Animal Experiments

The Odawara Research Center has formulated its own regulations for animal experimentation and other relevant standards based on the Act on Welfare and Management of Animals, the Ministry of the Environment's Standards Relating to the Care and Keeping and Reducing Pain of Laboratory Animals, the Ministry of Agriculture, Forestry and Fisheries' The Basic Policy on Animal Experimentation Performed at Research Institutions, and the Science Council of Japan's Guidelines for Proper Conduct of Animal Experiments. These activities are validated by an external organization (the Japan Pharmaceutical Information Center^{*7}) and the facility was certified in June 2018 as a facility that conducts animal experiments in a proper manner (certification was renewed in June 2021).

^{*7} The Japan Pharmaceutical Information Center (JAPIC) has taken on certified businesses from the Japan Health Sciences Foundation, which was disbanded in March 2021.

Chemical and Product Safety



Together with Our Customers (Consumer Issues)

The Nippon Soda Group provides products with functions that satisfy our customers, and makes efforts toward ensuring safety during the use of our products.

Basic Policy

- Provision of safe and reliable products and services that satisfy customers' needs.
- Working together with our customers in continuing to create new value that is sought after by society, through the development and provision of products.

Improve Customer Satisfaction

Services by the customer consultation office (Agro Products Division)

The regional salespersons and the section handling inquiries at our Head Office appropriately answer inquiries about the usage of our products and agrochemicals.

Persons in charge of answering customer inquiries are assigned to the Public Relations Section of our Product Promotion Department. Inquiries are answered under the motto of providing "swift, accurate and easy-to-understand answers."

Requests and inquiries from customers are logged into our in-house database and the information is shared with our plants, research centers and sales departments. Based on this information, we improve our products and expand the scope of application of our agrochemicals. With regard to complaints about product quality and requests for quality improvement, efforts are made to prevent recurrence and to make improvements for each individual product.

Sales promotion activities with our customers in mind (Chemicals Business Division)

We exhibit actively at trade fairs, conferences and other venues, conduct interviews using our online meetings system, and seek opportunities to have discussions with our customers in other ways so that our products will be considered by more customers.

Promotion activities rooted in the local community (Agro Products Division)

We visit contracted wholesalers, agricultural co-ops and farmers in Japan to introduce our products and explain the appropriate methods of use. Outside of Japan, we host seminars on our products and the appropriate methods of use for local stores and farmers and invite them to visit agricultural fields where our products are used.

Together with Our Customers (Consumer Issues)

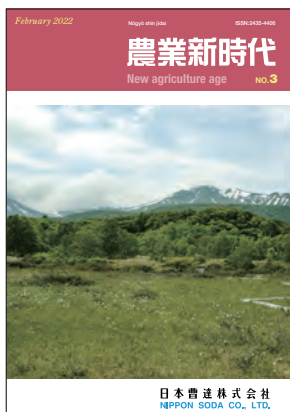
Communication with Customers

Sending out information to our users (Agro Products Division)

In response to various kinds of inquiries from our customers, we provide information on registered agrochemicals and the expansion of their scope of usage in a timely manner, while complying with the Agricultural Chemicals Control Act and other related laws, rules and regulations. On the Japanese-only Product Guide page* of our website, we regularly provide easy-to-understand pest control manuals for agrochemical users, product introduction videos, and other content.



Website

Technical informational magazine,
New Agriculture Age

Product pamphlet

Special fungicide TOPSIN M
website

Product Guide page (Japanese only)

<https://www.nippon-soda.co.jp/nougyo/index.html>

Nippon Soda provides information on its agrochemicals on "Diagnose Your Crops with AI!", a smartphone app developed by Nihon Nohyaku Co., Ltd. and NTT Data CCS Corporation that uses an AI learning model. The convenient app allows users to diagnose pests and weeds on their crops using a smartphone camera.



Cellulose Technical Application Center (CTAC)

We established the Cellulose Technical Application Center (CTAC) inside the Chiba Research Center (Ichihara City, Chiba Prefecture) in October 2019. It is a facility for collaborating with customers on joint development of new value for pharmaceutical additive NISSO HPC and NISSO SSF.

Before the establishment of CTAC, we conducted support activities for customer product development using NISSO HPC and NISSO SSF in ways such as responding to inquiries and providing data through scientific meetings and seminars. Now, through CTAC, we are able to reflect our practical experience, making it possible to conduct trial manufacture based on mutual ideas from meetings and study content, as well as to conduct analysis and assessment. Also, we hosted online technical seminars and have been conducting training via live broadcasts so that we can respond to an even greater number of questions from customers, and have bolstered the distribution of technical videos through our website, CTAC online (available in Japanese, English, and Chinese).* We will strengthen the formulation assessment function through the use of this state-of-the-art facility, and work to expand sales of NISSO HPC and NISSO SSF over the long term by providing solutions that match customer needs.

* CTAC online

<https://www.nissoexcipients.com/>

Together with Our Customers (Consumer Issues)

Development of Products Useful to Society

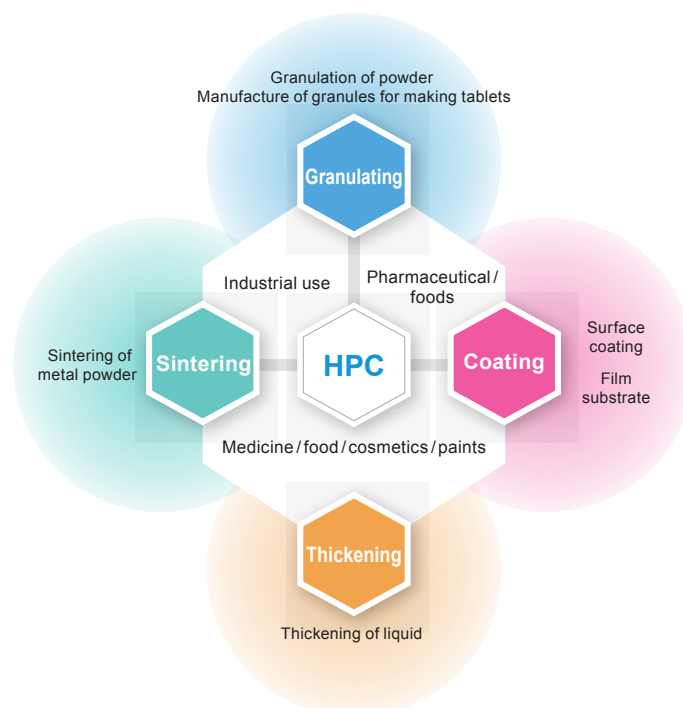
Responding to the requests of our customers (Chemicals Business Division)

NISSO HPC (hydroxypropyl cellulose) is used widely throughout the world as an additive that is essential for formulating pharmaceuticals. Since its launch in 1969, we have continued to respond to the needs of pharmaceutical companies, who are our customers. As a result, we now offer 12 grades with different viscosities and particle sizes for the domestic market and 14 grades for the overseas market.

Currently, we are aggressively promoting research and development for enhancing the functionality of pharmaceuticals, both in and outside of Japan, by working with our customers to develop new grades that are in line with our customers' needs, and by maintaining NISSO HPC's status as a frontline product in pharmaceutical formulation.

We sell NISSO HPC in the food market under the brand name CELNY as it is ideally suited to food processing due to its safety and outstanding functionality. For nutritional supplements, CELNY has enabled the formulation of lactic acid bacteria (live bacteria) tablets—which are garnering attention for their immune-boosting properties—at low pressure, preventing the decrease in live bacteria that occurs under high pressure. CELNY also helps to prevent cracks and damage to large tablets such as chewables, which make it easier to take medicine. In this way, CELNY is helping to improve the functionality and quality of nutritional supplements.

NISSO HPC is also playing a role in countermeasures against the COVID-19 virus, having been used as a thickening agent in gel-type alcohol disinfectants and in the coolants used when transporting COVID-19 vaccines.



Together with Our Employees (Human Rights and Labor Practices)

The Nippon Soda Group's long-term vision—Brilliance through Chemistry 2030, has identified “Enhancement of cost competitiveness and efficiency,” “Expansion of overseas businesses,” and “Promotion of new product development and entry into new businesses” as key issues. In implementing related strategies, our people are one of our most important management resources. We need to transform ourselves into an organization that further promotes innovation while fully utilizing the strengths we have built up over the years. We are committed to promoting diversity, developing human resources, and creating a rewarding workplace that employees can be proud of, with the aim of building an environment and organization that allows each and every one of our diverse employees to maximize his or her abilities, to grasp changes in society's circumstances, and to work with a positive mindset.

Basic Policy

- Respect for the dignity and human rights of all people.
- Understanding the diversity of cultures, customs, and values and having no tolerance for actions that result in discrimination.
- With particular emphasis on promoting diversity and the creation of rewarding workplaces that all employees can be proud of, we proactively review our personnel and operation systems to ensure the constant improvement of these systems.

Respect for Fundamental Human Rights

At the Nippon Soda Group, we support and respect international frameworks related to the protection of human rights—such as the ISO 26000 guidance on social responsibility—and ensure thorough compliance with human rights laws in each country, including those related to the prohibition of child labor and forced labor. We also understand workers' rights to collective bargaining, and through discussions between labor and management we are building trustworthy, healthy cooperative relationships.

Promotion of Diversity

Diversity is one of our primary strategies for maintaining a high level of global competitiveness and sustainable growth. We believe that the creation of such a diverse work environment and organization that allows each and every one of our employees to demonstrate their abilities to the fullest extent, to grasp changes in the environment, and to work with a positive mindset will lead to the creation of new innovation.

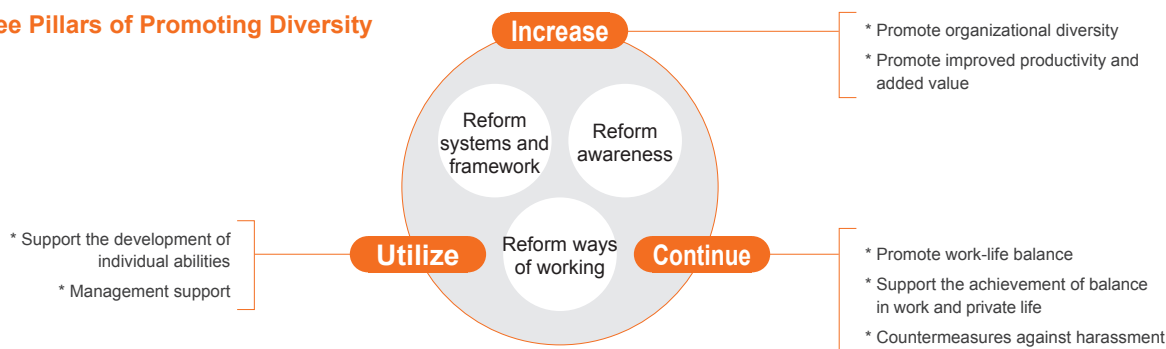
① Diversity policy

The aim of our Diversity Policy is to develop the Company by bringing together diverse people, regardless of gender, age, nationality, race, religion, and presence or absence of disability, while providing opportunities to gather and exchange ideas.

At Nippon Soda, we believe that having a workforce with diverse values is essential for generating new innovations and increasing global competitiveness. In this context, we recognize the promotion of diversity as an important management strategy.

As part of these efforts, we are building a foundation with both tangible and intangible measures, including a shift to a personnel system that makes the most of diverse human resources, improvement of organizational climate, and improvement of the workplace environment. We aim to be a company where motivated and capable people from around the world can thrive and shine, and continuously grow and develop.

Three Pillars of Promoting Diversity



Together with Our Employees (Human Rights and Labor Practices)

Major Activities in FY 2022

Utilize Career Development Support Program

Objective

- To increase each individual's motivation to take on challenges and help achieve autonomous career development by respecting their aptitudes and personalities and supporting their growth
- To maximize organizational capacity through the proper assignment of employees according to their growth

Results

- Conducted a presentation on the career development support system (July 2021)
- Career training (June 2021)
- Creation of career vision sheet, supervisor interviews (August–October 2021)
- Promotion of communication between supervisors and subordinates, career interviews (September–October 2021)

Promotion of Women's Active Participation

- At Nippon Soda, in addition to promoting the creation of a workplace in which women can work comfortably, we are also aiming to build a working environment in which they can thrive. The General Employer Action Plan was prepared based on the Act on Promotion of Women's Participation and Advancement in the Workplace. As a result of efforts under the action plan, we were certified as an "Eruboshi" company in August 2018.

Continue

- Continuous publication of articles on diversity in in-house newsletter (November 2016 onwards)
- Provision of harassment prevention training (all year)
- Provision of work-life balance lectures as part of level-specific training programs (all year)
- Development of measures to promote acquisition of paid leave at each worksite
- At Nippon Soda, we work to promote a healthy work-life balance. Based on the Act on Advancement of Measures to Support Raising Next-Generation Children, we formulated an action plan to support a balance between work and childcare, and as a result we acquired the Kurumin certification in October 2020

Increase

- Enhanced recruitment (all year)
- Employment information meeting for women, update of the recruitment website, employment of disabled people



Articles on diversity in company newsletters



What Is an Open
Workplace?
Psychological Safety



Communication Tips



Diversity Data



Unconscious Bias
Something We All Have

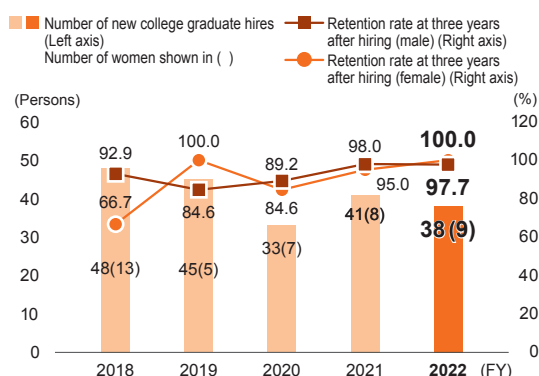
Together with Our Employees (Human Rights and Labor Practices)

② Embracing diversity

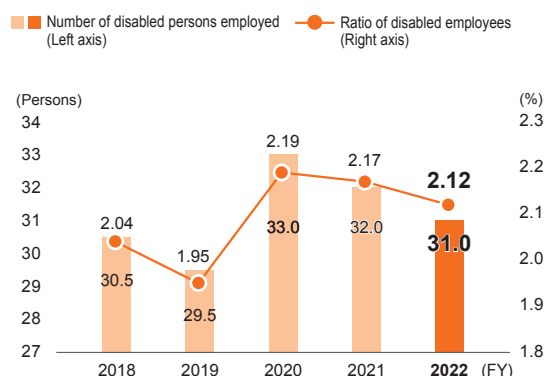
We place emphasis on employing diverse candidates regardless of gender, age, nationality, race, religion, ability or disability, and regardless of whether they are new graduates or mid-career hires, so as to create a more diverse organization. A group consisting of people with different values should give its members the impetus to broaden their outlook and change their viewpoint.

We provide workplace diversity training programs designed for directors and executive officers, as well as other specific positions, with the aim of raising diversity awareness and to help them recognize diverse values and to empower individuals and organizations.

Number of hired persons (by gender) and retention rate



Number of disabled persons employed and ratio of disabled employees



③ Human rights initiatives at workplaces

The Nippon Soda Group Code of Conduct, which sets out the requirements that all employees of the Nippon Soda Group must follow, clearly states our commitment to respecting human rights and nondiscrimination, and declares that we respect the individuality and personal characteristics of every employee and do not take any action that would result in discrimination. To maintain a healthy work environment free from harassment, we provide employees with position-based training on relevant issues. A harassment complaints office is also available.

Employee training

In FY 2022, we offered lectures on harassment prevention as part of the training programs offered to new appointments at all levels.

Complaints desk

At each worksite we have established a harassment consultation desk. Further, in April 2020, we newly established an external consultation desk, the Nisso Harassment and Relationships Hotline, which we set up as a means to enhance reporter privacy.

Together with Our Employees (Human Rights and Labor Practices)

Nippon Soda Group's Human Resources Development

In order for Nippon Soda to continue to grow in the future, the development of human resources is essential. The foundation of human resources development is education and training. In addition to on-the-job training (OJT) at the workplace, the Company conducts a variety of programs, including position-based training, management training, specialized training by job type, and support for self-development to improve language skills and obtain qualifications as well as other programs.

Educational programs (position-based training)

Position	Position-based training	Training for line managers	Career development support	Self-development support		
Executives	Executives training			e-Learning	Correspondence Training	Language Training
Managers	Level 3 Training	Department Managers Training				
	Level 2 Training	Section Managers Training				
	Level 1 Training					
Assistant Managers	Assistant Managers Training	Team Managers Training				
Staff Employees			Career Training (Advanced) (At 10 years of employment)			
	Follow-up Training		Career Training (Basic) (At 5 years of employment)			
New Employees	Orientation Training		Tutor Instruction (Specialized work) On-site Practical Training (Administrative work)			

① Career Development Support Program

At Nippon Soda, we believe that a strong desire among each employee for continuous skills development is essential to achieving sustainable growth in this era of rapid change. We have thus created a Career Development Support Program to aid in these efforts. As part of the program, which is mainly for new and mid-career employees, participants are helped to envision where they want to be in five to ten years' time. Employees are then offered support to ensure they efficiently manage their own skills development plan and achieve their targets. Specifically, the program comprises three elements: Career Training, which aims to improve their awareness of career development; a Career Vision Sheet, through which employees can draw and review their ideal image once a year; and a Career Interview, through which employees can communicate their thoughts and clarify their vision. Through this program, not only do we want to help employees develop, we also aim to nurture personnel who can create value for the future of the company.

② Overseas study/training for R&D personnel

We offer overseas research and study programs to enable our personnel to learn about state-of-the-art technologies and to develop a global network. As part of these programs, we dispatch employees to overseas labs engaged in research on organic synthesis, polymer technologies, and molecular biology. By working hard alongside researchers overseas, our own researchers have been able to enhance their own skill levels. We also anticipate the creation of collaborative projects with these labs overseas.

Moreover, we offer overseas training programs to help employees experience what is necessary to drive business in different cultures. Trainees who pass the relevant selection tests spend one year studying the language abroad and engaging in practical training at a related overseas company. Trainees who have taken part in the programs have used the wide-ranging perspectives and career views gained overseas to succeed in their individual departments.

Although overseas study and training programs have currently been suspended due to COVID-19, we plan to implement initiatives to increase opportunities for overseas work experience to develop leaders for the next generation.



A trainee (right) alongside his supervisor (left) supporting an exhibition during his overseas training at Novus International Inc.

Together with Our Employees (Human Rights and Labor Practices)

Rewarding Workplaces That Employees Can Be Proud Of

① Improving employee satisfaction

The Nippon Soda Group focuses proactive efforts on creating a work environment in which each and every employee feels a sense of fulfillment and can maximize their abilities. We support employee growth, and encourage independent career development. At the same time, we gather feedback from labor unions and other channels on what systems and work environments are desirable to support employee growth, strive to reduce overtime, and take measures to address these issues. In addition, we also provide platforms for reviews so that those in management can work more efficiently. In these and other ways, we are working to build a better workplace environment.

Number of employees who take childcare and nursing care leave

	Employees taking childcare leave		Employees taking family care leave	
	Men	Women	Men	Women
FY 2017	2	3	1	0
FY 2018	3	4	0	0
FY 2019	5	10	1	0
FY 2020	4	4	0	0
FY 2021	8	6	1	0
FY 2022	9	9	0	0

Number of employees taking maternity and childcare leave and the return to work/retention rate

	Employees taking maternity and childcare leave		Rate of employees returning to work (%)		Retention rate (%)	
	Men	Women	Men	Women	Men	Women
FY 2017	2 (1,138)	3 (152)	100	100	100	100
FY 2018	3 (1,130)	6 (159)	100	75	100	100
FY 2019	5 (1,143)	12 (168)	100	100	100	100
FY 2020	4 (1,143)	4 (170)	75	100	100	100
FY 2021	8 (1,220)	6 (176)	100	100	100	100
FY 2022	9 (1,216)	9 (179)	100	100	100	100

The number of employees who have taken the leave is counted in the period in which they started maternity/postpartum leave and childcare leave.
The numbers in parentheses are the total numbers of men and women, respectively, at the end of each period.
Retention rate is for employees who in that period were in their third year since returning to work.

Total annual working time per employee

Scheduled working hours	Early start and overtime hours	Holiday working hours	Paid annual leave days taken	Other paid leave days taken	Total annual working hours per person
1,818.6	85.7	3.8	14.5	3.5	1,765.3

* Calculation period: FY 2022 (April 2021-March 2022)

② Promoting work-life balance

We are working to create a workplace environment where our employees can continue working despite various lifestyle changes, such as childbirth, raising a child, and providing nursing care for ailing family members. We are revising our work regulations and advancing working style reforms in order to create a workplace where our employees can pursue their work without compromising their health, and achieve a good balance between their work and private lives.

③ Measures to maintain and improve health

Nippon Soda conducts various initiatives related to health maintenance and improvement in order to ensure our employees work with healthy bodies and minds.

Physical health

We implement health programs jointly with the corporate health insurance society. Specifically, with the cooperation of occupational physicians, we conduct specific health examinations, specific health guidance, and health checkups for lifestyle-related diseases.

Mental health

Since prior to the 2015 amendment to the Industrial Safety and Health Act, Nippon Soda has been providing stress checks for all employees, and has a consultation service available through specialized physicians, clinical psychologists, and external organizations.

④ Labor-management relations and improvement of working conditions

The Company views negotiations with labor unions as an opportunity to engage in dialogue with its employees, and to discuss how to create working conditions that are consistent with the times. We are creating an environment in which employees and management can discuss issues and problems in the workplace.

Number of labor union members

	Number of labor union members (Persons)	Average age (Years)	Average length of service (Years)	Percentage of members (%)
FY 2017	820	39.3	17.6	63.3
FY 2018	824	37.9	15.8	62.7
FY 2019	840	37.7	15.6	63.7
FY 2020	853	37.9	15.8	65.0
FY 2021	940	39.1	16.7	67.4
FY 2022	969	39.3	16.6	69.5

* Nippon Soda (non-consolidated)

Together with Our Business Partners (Fair Operating Practices)

At the Nippon Soda Group, we have formulated the Nippon Soda Group Code of Conduct, specifying matters to be observed to ensure sound corporate activity, while we also ensure strict compliance with relevant laws and regulations. Further, as a member of international society, in addition to engaging in fair and impartial business transactions, we are aiming to create an environment- and society-friendly sustainable supply chain based on constructive dialogue with our business partners.

Basic Policy

- Interaction with our business partners with decency and honesty, and handling transactions in a fair and just manner.
- Regarding the procurement of raw materials and other purchasing activities, maintaining stable relationships of trust with our business partners based on our purchasing policy.

Initiatives in Purchasing

► Purchasing policy

- Thoroughly comply with purchasing laws and ordinances (Antimonopoly Law, Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors, etc.). Participate in internal and external training regarding law and ordinance expertise. Select suppliers who comply with laws, regulations, and social norms in each country and region.
- Purchase raw materials that contribute to stable production and enhanced cost competitiveness.
- Promote environment- and society-friendly raw material procurement.^{*1, 2}
- Secure multiple material procurement sources and undertake appropriate inventory management to ensure a robust Business Continuity Plan (BCP).

^{*1} Environment friendly

Includes the promotion of climate change countermeasures, including the reduction of GHG emissions; the prevention of environmental pollution; the protection of global and regional environments, including the maintenance of biodiversity and ecosystems; the promotion of resource- and energy-saving measures; and the reduction of waste.

^{*2} Society friendly

Includes the elimination of child labor, forced labor, excessive labor, and discrimination; respect for freedom of association and the right to collective bargaining; the protection of workers' rights, including matters related to equal opportunity, minimum wage, and living wage; and the guarantee of safe, hygienic workplace environments.

► The Nippon Soda Group Code of Conduct

At the Nippon Soda Group, we ensure thorough compliance with the Nippon Soda Group Code of Conduct, which outlines the following standards for transactions with suppliers.

- When selecting a supplier from among multiple vendors, we determine the most appropriate business partner by comparing and assessing quality, price, delivery period, technical capability, supply stability, and other criteria in a fair and just manner.
- When outsourcing manufacture to an external business, we only conclude contracts and complete transactions following thorough understanding of the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors.

► Cooperative purchasing activities

By gathering information from trading companies, who serve as our purchasing intermediaries, and carrying out local audits with the quality management departments of each plant, we conduct purchasing activities while confirming the safety and environmental and social impact of the handling of our chemicals from the point of manufacture to the point of delivery.

Through the exchange of diverse information, we aim to build mutually beneficial relationships with our business partners, and while furthering understanding and gaining further cooperation with regards to our purchasing policy, we aim to undertake sustainable procurement.

► Raw material quality management

We regularly visit suppliers of pharmaceutical raw materials to conduct GMP* audits.

* When manufacturing pharmaceuticals, not only is it important to check conformity with predetermined quality standards, the manufacturing process itself must be appropriately managed to ensure constant manufacture of outstanding, high-quality products. Good Manufacturing Practices (standards for pharmaceutical manufacturing and quality management) are a set of conditions for the manufacture of high-quality pharmaceuticals.

► Environment- and society-friendly supply chain

- From a sustainability standpoint, when procuring industrial salt and pulp, two of our main natural raw materials, we monitor our suppliers (document-based and on-site monitoring) in order to confirm the following.
 - (1) Compliance with laws, ordinances, and social norms, and fair transactions
 - a. Compliance with relevant laws, ordinances, and social norms
 - b. Compliance with in-house rules related to business entertainment and gifts, and prevention of bribery and other forms of corruption
 - c. Appropriate management of private/personal information related to transactions

Together with Our Business Partners (Fair Operating Practices)

- (2) Environmental considerations
 - a. Conservation of ecosystems and the global/regional environment
 - b. Prevention of environmental pollution
 - c. Promotion of efforts to reduce GHG emissions and address climate change
 - d. Promotion of resource- and energy-saving measures
 - e. Reduction of waste
- (3) Social considerations
 - a. Efforts to coexist with local communities and contribute to society
- (4) Considerations for human and worker rights protection
 - a. Maintenance of a safe, healthy workplace environment
 - b. Elimination of child/forced labor and discrimination
 - c. Thorough respect for workers' rights through appropriate management of wages and working hours, etc.
- (5) Raw material traceability
 - a. Compliance with laws pertaining to harvesting and tree felling
 - b. Absence of serious social conflict surrounding raw materials

• The fulfillment rate* in the FY 2022 monitoring of our suppliers was 97.9%.

* Fulfillment rate is calculated based on the average values for each question from each company, based on a five-point scale related to the status of initiatives in place. Five (sometimes four) is the highest and equates to 100%, and one is the lowest and equates to 20% (sometimes 25%).

Dialogue with Business Partners

▶ Improve awareness on safety and disaster prevention together with our partner companies

We provide education on the safe use of agricultural machinery to companies to whom daily field maintenance is consigned at various agricultural fields under the jurisdiction of the Odawara Research Center.

In cooperation with our partner companies, we aim to achieve zero accidents by involving all relevant people. We implement various measures to raise awareness on safety and disaster prevention among employees of partner companies who work within our facilities, such as the development of a list that clarifies who has qualifications for operating agricultural machinery and equipment and the management of operations.

▶ Educating transportation companies on logistics safety

The Nippon Soda Group regularly provides education targeting transportation companies. Our programs not only provide training to prevent accidents caused by our workers and during transport, but also information on past complaints regarding logistics. We share such information to ensure the safe delivery of our products to our customers.



Logistics safety education (education on product handling)
(Chiba Distribution Center, Sanwa Soko Co., Ltd., November 5, 2021)

Declaration of Partnership Building

As we aim to create a sustainable supply chain, at Nippon Soda we are engaging in constructive dialogue with our business partners to promote environment- and society-friendly business activities.

Moreover, we are working with our supply chain business partners and value creation companies to ensure "co-existence and co-prosperity," and as part of the Declaration of Partnership Building, announcing our key measures to build new partnerships.

▶ Declaration of Partnership Building

https://ssl4.eir-parts.net/doc/4041/ir_material3/192602/00.pdf
(Japanese only)



Together with Our Shareholders and Investors

The Nippon Soda Group discloses information in a timely and appropriate manner in order to enhance management transparency and to meet the expectations of and honor the trust that we receive from our stakeholders. We strive to hold constructive dialogue with the aim of realizing continuous growth and improving corporate value.

Basic Policy

- Maintaining constructive dialogue with our shareholders and investors is essential to achieving continuous growth and improving corporate value over a medium- to long-term period. As such, the President and responsible directors and executive officers engage in dialogue as necessary.
- Information is disclosed in a timely manner, with importance placed on fairness and accuracy, in accordance with the Timely Disclosure Rules of the Tokyo Stock Exchange.
- Requests and comments received from our shareholders and investors through dialogue are communicated at Board meetings as necessary so that we can reflect them in management.

Communication

Dialogue with Our Shareholders

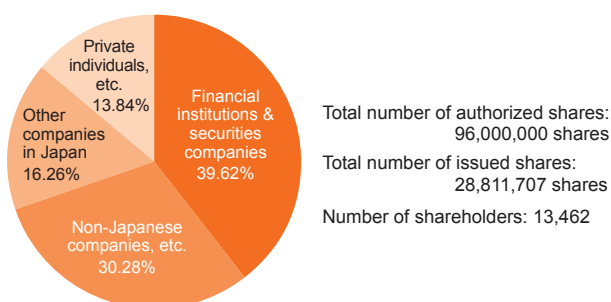
The Nippon Soda Group holds an ordinary general meeting of shareholders in June every year, viewing it as an important opportunity to engage in direct conversation with shareholders.

We strive to deliver the notice of convocation of the General Meeting of Shareholders at an early date so that our shareholders may acquire a good understanding of the issues that will be reported and the matters for resolution at the shareholders' meeting. We also provide pre-delivery disclosure of information on Nippon Soda's website and at the Tokyo Stock Exchange website, before the notice of convocation of the General Meeting of Shareholders is sent out.

Voting rights may be exercised not only in writing but also via the Internet.

We issue our business reports (annual report and interim report) twice a year in order to inform our shareholders of the Company's current situation. In addition, these business reports (in Japanese only) are posted on the Nippon Soda website to make them widely available to those other than our shareholders.

Share distribution by type of shareholder (As of March 31, 2022)



* Figures have been rounded off to the nearest second decimal point
* Treasury shares are included in "Private individuals, etc."

Dialogue with Investors and Analysts

The Nippon Soda Group actively engages in dialogue with investors and analysts to help deepen their understanding of business details and our business performance.

We hold financial results briefings twice a year for institutional investors and securities analysts, and also answer their requests for individual interviews. Our President and responsible directors explain in person the performance of the Nippon Soda Group and the growth scenario. Further, in addition to hosting live broadcasts of our briefings since FY 2021 to enable more people to attend, we also post videos of the briefings on our website.

In addition to providing a summary of our financial results and briefing materials in English for institutional investors outside Japan on our website, we send them a copy of our English-language integrated report every year. The director responsible for investor relations visits Europe and Asia to give explanations individually to institutional investors in those regions. (There were no visitations between FY 2021 and FY 2022 due to measures to prevent the spread of COVID-19.)

The questions and comments received through dialogue with investors and securities analysts are logged into our in-house database and reflected in the management of our Group where appropriate.

Together with Our Shareholders and Investors

Basic Policy on Shareholder Returns

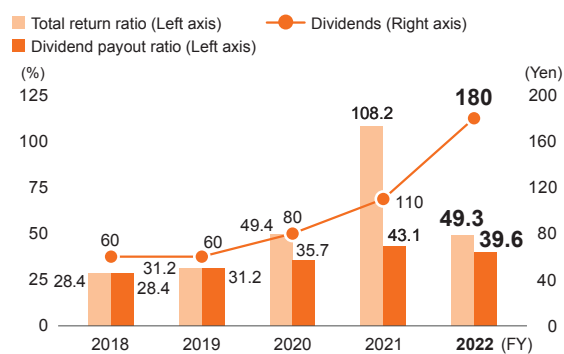
The Nippon Soda Group makes decisions on profit distribution based on revenue trends and by comprehensively considering such issues as providing stable dividends, enhancing shareholders' equity, and improving our financial standing. Our basic policy is to provide dividends twice a year, at the middle and end of the fiscal year.

Retained earnings are used for improving corporate value, such as by advancing the development and achieving early market launches of new products, and for allotment to growth investment such as M&As and business partnerships, as well as for maintenance and upgrade investments to support stable and continuous growth.

As for return of profits to our shareholders, we strive to provide stable and continuous dividends with the target of realizing a dividend payout ratio of 40% (however, with a lower limit to the per share annual dividend of 80 yen) based on the shareholders' return policy stated in the medium-term business plan—Brilliance through Chemistry Stage I for FY 2021 to FY 2023.

We will also adopt a flexible stance on repurchasing treasury shares as a shareholder return measure to complement dividends.

Shareholder returns



Together with Our Local Communities (Community Involvement / Development and Social Dialogue)

To coexist with our local communities as a corporate citizen and achieve sustainable development, at the Nippon Soda Group we proactively participate in community activities, exchange opinions with local citizens, and engage in various social contribution activities. Communicating with our local communities enables us to enhance our understanding of their values and various needs with regard to the environment, safety, and health, and use this information to engage in even better business activities.

Basic Policy

- Promotion of social contribution activities based on the concept of “contributing to the sustainable development of society through our business activities,” from the viewpoints of “contributing to resolving global environmental issues,” “a harmonious relationship with local communities,” and “contributing to the development of local communities.”
- Development of good relationships with local residents through various activities that meet the needs of local communities and that are designed and implemented by each business site and Group company.

Harmonious Relationship with Local Communities

► Contribution to local employment

Nippon Soda contributes to creating local employment opportunities through its worksites throughout Japan.

Further, to ensure a healthy work-life balance and enhance job satisfaction, we communicate with labor unions to formulate working conditions in line with current trends. As a result, not only does our standard minimum wage continue to be above legal minimum wage in all areas we conduct business, we are also contributing to raising income levels in our regions.

Comparison of the standard minimum wage to the local minimum wage in the year ended March 2022

Site	Location (Prefecture)	Local minimum wage (Yen/hr)	Our Company's standard minimum wage* (Yen/hr)	Comparison with the minimum wage (%)
Head Office	Tokyo	1,041	1,176	112.9
Odawara Research Center	Kanagawa	1,040	1,176	113.0
Chiba Research Center	Chiba	953	1,173	123.1
Nihongi Plant	Niigata	859	1,173	136.6
Takaoka Plant	Toyama	877	1,173	133.8
Mizushima Plant	Okayama	862	1,173	136.1
Chiba Plant	Chiba	953	1,173	123.1

* Standard minimum wages for the Company were calculated based on the starting salary (same for men and women) for those joining the Company at the age of 18 in the manufacturing and non-manufacturing groups. Wages have been rounded down to the nearest yen.

► Participation in community cleanup activities

To fulfill our role and responsibilities as a corporate citizen, we regularly conduct cleanup activities in the neighborhoods of our worksites. We also actively participate in cleanup activities, such as eco-walks and cleanup campaigns, that are conducted together with people from local communities.

Number of community cleanup activities

	FY 2019	FY 2020	FY 2021	FY 2022
Nihongi Plant	2	1	2	1
Takaoka Plant	2	2	2	2
Mizushima Plant	0	1	1	1
Chiba Plant & Chiba Research Center	3	4	4	4
Odawara Research Center	2	2	1	1

Together with Our Local Communities (Community Involvement / Development and Social Dialogue)

Dialogue with Local Communities

►Communication activities at major worksites

Nippon Soda holds local gatherings and regularly conducts tours of plants and research centers for residents in areas where worksites are located in order to provide information on CSR activities and exchange views and comments.

External communication events at major sites (Frequency)

	Site	Local gatherings	Site tours	RC Committee regional dialogue of the Japan Chemical Industry Association	Other
FY 2019	Nihongi Plant	26	5	0	17
	Takaoka Plant	6	34	0	101
	Mizushima Plant	15	1	1	42
	Chiba Plant	1	2	0	10
	Odawara Research Center	1	39	0	9
	Chiba Research Center	0	7	0	0
FY 2020	Nihongi Plant	26	2	0	16
	Takaoka Plant	6	25	2	86
	Mizushima Plant	11	0	2	25
	Chiba Plant	0	2	0	14
	Odawara Research Center	2	39	0	4
	Chiba Research Center	1	5	0	1
FY 2021	Nihongi Plant	3	2	0	7
	Takaoka Plant	0	6	0	60
	Mizushima Plant	0	0	0	22
	Chiba Plant	0	0	0	2
	Odawara Research Center	0	0	0	2
	Chiba Research Center	0	5	0	0
FY 2022	Nihongi Plant	0	2	0	10
	Takaoka Plant	0	0	1	74
	Mizushima Plant	0	0	0	19
	Chiba Plant	0	0	1	41
	Odawara Research Center	0	4	0	3
	Chiba Research Center	0	3	0	0

►Dissemination of information on CSR activities

The Nippon Soda Group disseminates information on its CSR activities in the following ways:

Anyone can read about our CSR activities in our *Integrated Report* as well as in the *ESG Data Book* on our corporate website. Also, we submit an implementation report and plan to the Japan Chemical Industry Association, and announce the report and plan in dialogue with local communities and other settings.

Each of our worksites provides information on our activities through regular tours and other gatherings.

In FY 2022, regional social gatherings and numerous other events were cancelled to prevent the spread of COVID-19.

►Dialogue with local residents

Regular gatherings are held at our worksites to give us an opportunity to hear the opinions of local residents.

►External communication

The Nihongi Plant conducts environmental monitoring in cooperation with five residents living near the plant, and the Takaoka Plant does the same with 12 residents in its vicinity. In FY 2022, we were provided with information on four incidents (one of which was unrelated to environmental monitoring), dealt with the situations properly, explained our response to those who provided the information, and gained their understanding.

Together with Our Local Communities (Community Involvement / Development and Social Dialogue)

Major Social Contribution Activities of Nippon Soda

Nippon Soda conducts social contribution activities to build harmonious relationships with local communities and support their development.

Participation in local events

FY 2022				
Site	Name of local event	Date	Summary	Number of participants
Nihongi Plant	Eco-Walk	April 11, 2021	Litter picking in Nakago Ward	23 managers and family members
	Itabashi Neighborhood Association Spring Festival	April 17, 2021	Shrine ritual	1
	Satomaru School Councilor Meeting and General Meeting	April 23, 2021	Inaugural Satomaru School meeting	1
	Midori no Hane Community Chest	June 3, 2021	Fundraising by Nakago Junior High School students outside the plant's main gate	1
	Nakago Junior High School grade 2 plant tour	July 9, 2021	Implemented in place of the Dream Challenge (work experience) program	18 students and 3 guides
	Itabashi Neighborhood Association Autumn Festival	August 23, 2021	Shrine ritual	1
	Fujisawa Neighborhood Association Autumn Festival	August 24, 2021	Shrine ritual	4
	Nakago Elementary School grade 3 plant tour	September 14, 2021	Educational tour of local company as part of curriculum	20 students and 2 guides
	Echigo TOKImeki Railway tangible cultural property briefing	October 14, 2021	Recognized as a registered national tangible cultural property alongside Nihongi Station	3 (plant manager, general affairs manager, general affairs section chief)
	Nippon Soda Group Forest signboard unveiling ceremony/commemorative tree-planting ceremony	October 20, 2021	Signboard unveiling and tree-planting ceremony at the Nippon Soda Group Forest	4 (managing directors and plant managers)
	Red Feather Community Chest fundraising	November 9, 2021	Fundraising by Nakago Elementary School students outside the plant's main gate	1
	Sekigawa Fishery Cooperative new office opening ceremony	November 28, 2021	Attended as a guest the opening ceremony following move to new office	1
	Nakago Ward New Year celebration	January 8, 2022	Attended as a guest the new year celebration hosted by the town development association	2
Takaoka Plant	Traffic safety guidance on the street	April 9, 2021	Traffic safety guidance for plant surroundings and nearby roads	23
	Maintenance of environment around the plant	June 25, 2021	Environmental maintenance for plant surroundings and nearby roads	172
	Traffic safety guidance on the street	September 27, 2021	Traffic safety guidance for plant surroundings and nearby roads	24
	Maintenance of environment around the plant	October 22, 2021	Environmental maintenance for plant surroundings and nearby roads	141
	Nisso "Thanking Local Residents" event		Plant tour, chemistry experiments for children, panel displays	Cancelled
	Meeting with environmental monitors		Exchange of opinions with environmental monitors	Cancelled
	Meeting with local residents		Exchange of opinions with local residents	Cancelled
Mizushima Plant	Maintenance of environment around the plant	May 14, 2021	Environmental maintenance activity for plant surroundings and nearby roads	17
	Cherry blossom party with local residents' associations		Networking with local companies and executives of the local residents' association	Cancelled
	Honjo Ground Golf Competition		Ground golf competition, including networking with local companies and the Honjo school district	Cancelled
	Social gathering with local residents' associations		Social gathering with local residents' association officers	Cancelled
	Bon dance festival with local residents' association		Bon dance festival, including networking with local companies and the local residents' association (four areas over three days)	Cancelled
	Kissho-in (Iou Inari Grand Festival)		Shrine ritual	Cancelled
	Honjo Ground Golf Competition		Ground golf competition, including networking with local companies and the Honjo school district	Cancelled
	End-of-year joint party with Honjo residents' associations/Kinyo-kai		Networking with local companies and executives of the local residents' association	Cancelled
	Honjo District rice cake making event		Networking with local companies and executives of the local residents' association	Cancelled
	Regular meeting/end-of-year party of Kinyo-kai		Networking with local companies and executives of the local residents' association	Cancelled
	Tsuitachi-kai "New Year's Greeting Exchange"		Networking with local companies and executives of the local residents' association	Cancelled
	Nisui-kai "New Year's Greeting Exchange" January		Networking with local companies and executives of the local residents' association	Cancelled

Together with Our Local Communities (Community Involvement / Development and Social Dialogue)

FY 2022				
Site	Name of local event	Date	Summary	Number of participants
Chiba Plant	Chiba District RC Meeting	June 4, 2021	Approaches to regional discussions and interaction	1
	Goi Rinkai Festival	June 6, 2021	Local residents coming together at Ichihara Ryokuchi Park	Cancelled
	Wakamiya Hachiman Shrine Grand Festival	July 18, 2021	Wakamiya Hachiman Shrine Grand Festival	Cancelled
	Yoro Shrine Summer Grand Festival		Yoro Shrine Summer Grand Festival	Cancelled
	Dezu Bon Dance Festival		Dezu-cho Association Bon Dance Festival	Cancelled
	Kashi Bon Dance Festival		Kashi-cho Association Bon Dance Festival	Cancelled
	Iwasaki Bon Dance Festival		Iwasaki Bon Dance Festival at Ryokuchi Sports Park	Cancelled
	Tamasaki Summer Festival		Summer festival at the plaza in front of the Tamasaki Community Building	Cancelled
	Matsugashima Summer Festival		Matsugashima Town Council Summer Festival	Cancelled
	Volunteer support program	June 9, 2021 September 8, 2021 November 10, 2021 February 9, 2022	Cleanup alongside National Route 16	35 35 40 40
Odawara Research Center	Local community cleanup	October 27, 2021	Cleanup of roads near Odawara Research Center	21
	Organizers' association for the Sakabe District Corporate Social Gathering Association (Haibara)		Discussion of the content of the general meeting of the Corporate Social Gathering Association	Cancelled
	General meeting of the Sakabe District Corporate Social Gathering Association (Haibara)		Social gathering with local companies and residents in the Sakabe District	Cancelled
Chiba Research Center	Volunteer Support Program	June 9, 2021	Cleanup alongside National Route 16	Included in the number of people reported by the Chiba Plant
		September 8, 2021		Included in the number of people reported by the Chiba Plant
		November 10, 2021		Included in the number of people reported by the Chiba Plant
		February 9, 2022		Included in the number of people reported by the Chiba Plant

Each worksite is engaged in a range of activities in line with regional needs, and strives to build sound relationships with their communities.



Eco-walk
(April 11, 2021, Nihongi Plant)



Environmental maintenance for plant surroundings
(May 14, 2021, Mizushima Plant)



Volunteer support program
(June 9, 2021, Chiba Plant/Chiba Research Center)



Environmental maintenance for plant surroundings
(June 25, 2021, Takaoka Plant)



Nakago Junior High School grade 2 plant tour
(July 9, 2021, Nihongi Plant)



Nakago Elementary School grade 3 plant tour
(September 14, 2021, Nihongi Plant)



Nippon Soda Group Forest signboard unveiling ceremony
(October 20, 2021, Nihongi Plant)



Nippon Soda Group Forest commemorative tree-planting ceremony
(October 20, 2021, Nihongi Plant)



Local community cleanup
(October 27, 2021, Odawara Research Center)

Together with Our Local Communities (Community Involvement / Development and Social Dialogue)

Echigo TOKImeki Railway Train Wrap

In February 2020, Nippon Soda celebrated the 100th anniversary of the Company's founding. As one of our commemorative projects, we teamed up with the Echigo TOKImeki Railway in Niigata Prefecture to decorate trains running along the Myoko-Haneuma Line between Naoetsu Station and Myoko Kogen Station. The trains were wrapped using designs from students at Nakago Junior High School, and ran for a total of five years from 2016. We will continue activities to develop alongside our regional communities across the next 100 years.

Stakeholder Engagement

We engage in dialogue with stakeholders to deepen our understanding of society's needs and values, and promote business activities that meet the expectations of local communities.

►Received the highest environmental responsibility rating from the DBJ

In March 2020, Nippon Soda Co., Ltd. received a loan from the Development Bank of Japan under the bank's DBJ Environmentally Rated Loan Program for our "environmental management systems and initiatives, including our especially progressive approach to environmental awareness," the highest possible rating (Rank A).



►Selected among the brands in the SOMPO Sustainability Index for two consecutive years



►Selected among the brands in the FTSE Blossom Japan Sector Relative Index



►Efforts to prevent occupational accidents

As part of our efforts aimed at stakeholder engagement, our Mizushima Plant underwent an occupational accident prevention survey (diagnosis) by Sompo Risk Management Co., Ltd. (December 15, 2021)

►Diagnosis of disaster prevention capability

In FY 2022, we had planned disaster prevention capability diagnoses by Sompo Risk Management Inc. at our Nihongi Plant, Takaoka Plant, Chiba Plant, Odawara Research Center, Chiba Research Center (currently part of the Odawara Research Center), and two Group company plants. However, the diagnoses were cancelled to prevent the spread of COVID-19.

Signing of and support for economic, environmental and other initiatives, social charters, and principles

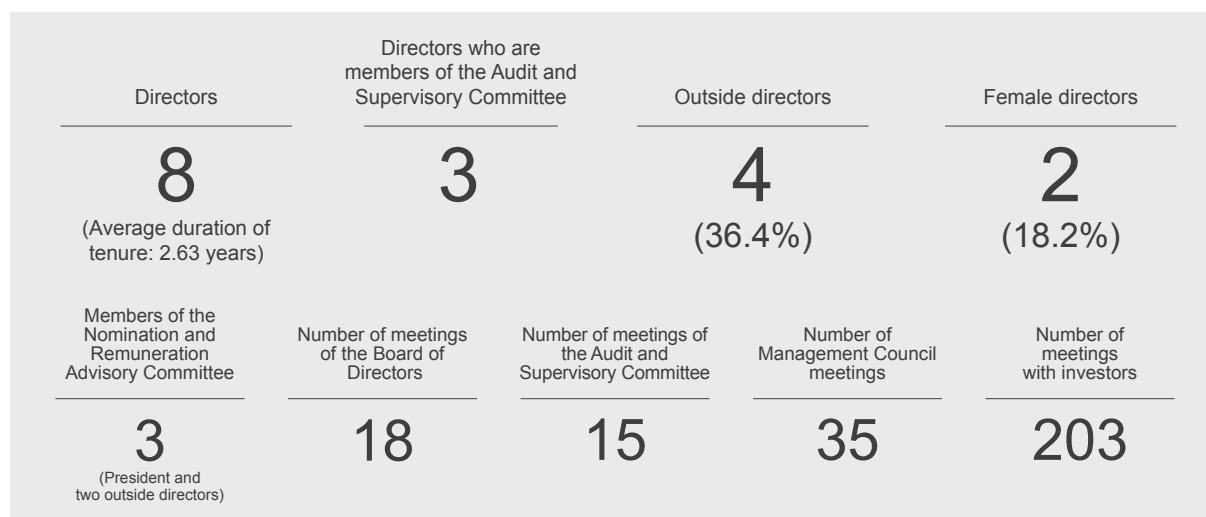
Title	Applicable countries	Applicable worksites	Signature date	Voluntary/ Mandatory
Declaration on the Promotion of Responsible Care Activities	Worldwide	All offices, consolidated subsidiaries	October 30, 1998	Voluntary
Declaration on the Promotion of CSR Activities	Worldwide	All offices, consolidated subsidiaries	April 1, 2012	Voluntary
Responsible Care Global Charter	Worldwide	All offices, consolidated subsidiaries	December 5, 2014	Voluntary
Task Force on Climate-related Financial Disclosures (TCFD)	Worldwide	All offices, consolidated subsidiaries	September 16, 2022	Voluntary

Membership categories at advocacy organizations and institutions in Japan and abroad

Advocacy institutions	Applicable countries	Membership
International Council of Chemical Associations (ICCA)	Worldwide	Participating as a corporate member of JCIA
Japan Chemical Industry Association (JCIA)	Japan	Corporate member
Global Product Strategy (GPS)	Worldwide	Participating as a corporate member of JCIA
Japan Initiative of Product Stewardship (JIPS)	Japan	Participating as a corporate member of JCIA
Japan Soda Industry Association (JSIA)	Japan	Member

Corporate Governance

Corporate Governance Highlights



Basic Concept

Nippon Soda places primary importance on sound and transparent business management in compliance with the law. Our management philosophy is to contribute to social development by providing superior products through chemistry, to meet expectations from stakeholders, including shareholders, investors, business partners, employees and local communities, and to promote environmentally conscious business practices and activities.

Under this philosophy, we are committed to growing into a technology-oriented group that develops high-added-value products by making best use of its proprietary technologies and expands its business with a global point of view centered on chemistry.

In addition, we recognize that the enhancement of corporate governance is an important management issue for realizing our management philosophy and responding quickly and appropriately to rapid changes in the business environment.

► Corporate Governance Report (Japanese only)

https://www.nippon-soda.co.jp/environment/pdf/governance_report.pdf

A History of Strengthening Governance

Aiming to Strengthen Governance

- Strengthen management supervision and improve operational agility
- Increase the diversity of the Board of Directors
- Enhance management transparency and fairness
- Strictly comply with laws and regulations and corporate ethics

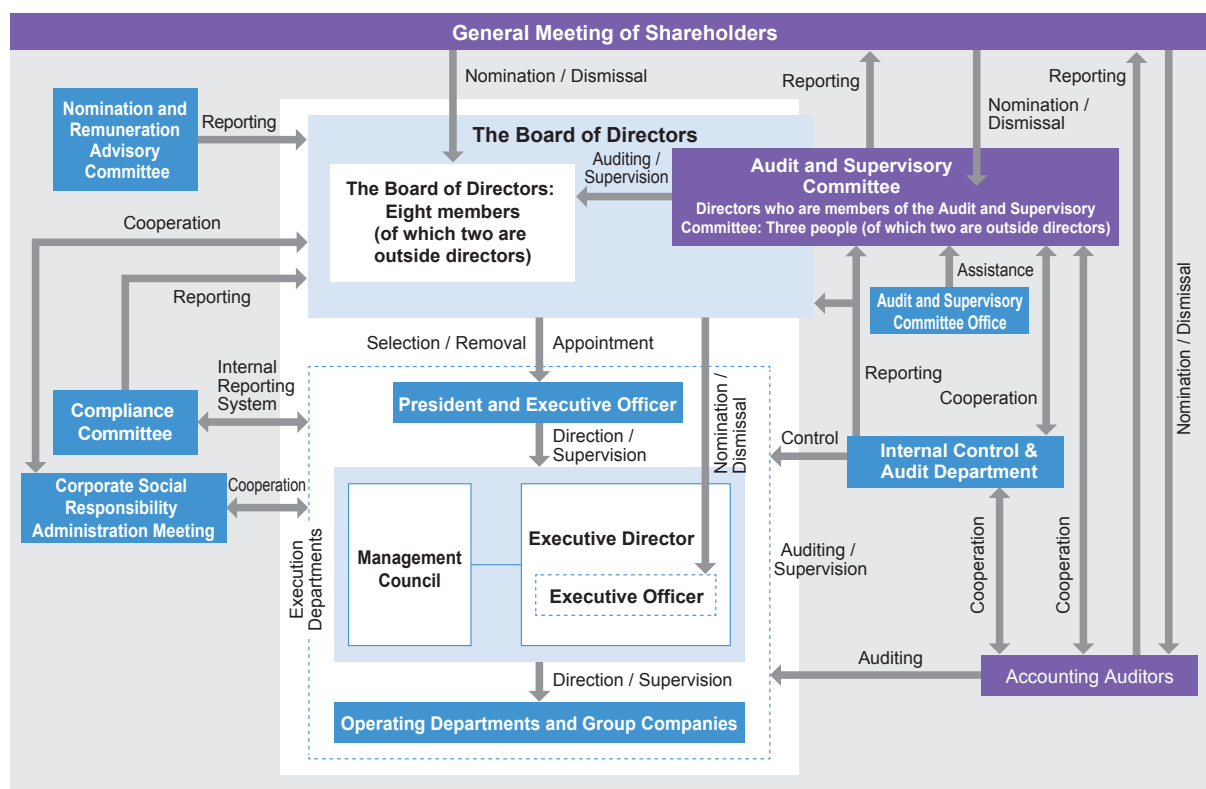
- FY 2013 Established CSR Administration Meeting
Abolished the executive retirement benefit system
- FY 2014 Introduced an executive officer system (number of directors reduced from 14 to 7)
Nominated 1 outside director
- FY 2016 Nominated 2 outside directors (increased by 1 person, including 1 woman)
Started effectiveness assessment of the Board of Directors
- FY 2017 Reviewed the executive remuneration system (introduced a performance-based stock remuneration plan, board benefit trust (BBT))
- FY 2018 Established Remuneration Advisory Committee
- FY 2019 Established Nomination and Remuneration Advisory Committee
Utilized external organization for effectiveness assessment of the Board of Directors
- FY 2021 Transitioned to a company with an audit and supervisory committee
- FY 2023 Reviewed the executive remuneration system (introduced transfer restricted stock remuneration system (RS))

Corporate Governance

Corporate Governance System

The Nippon Soda Group is fully aware of its fiduciary responsibility in accordance with Japan's Corporate Governance Code and is committed to enhancing its corporate governance structure.

• Corporate Governance Structure



General Meeting of Shareholders

The Nippon Soda Group holds an ordinary general meeting of shareholders in June every year, viewing it as an important opportunity to engage in direct dialogue with our shareholders. We deliver the notice of convocation of the General Meeting of Shareholders at an early date so that our shareholders may acquire a good understanding of the issues that will be reported and the matters for resolution at the shareholders' meeting.

We also provide pre-delivery disclosure of information on Nippon Soda's website and at the Tokyo Stock Exchange website, before the notice of convocation of the General Meeting of Shareholders is sent out. Voting rights may be exercised not only in writing but also via the Internet.

Board of Directors

The Board of Directors is responsible for making important management decisions (based on clear standards, such as amounts above a certain level) as stipulated by laws and regulations, the Articles of Incorporation, and the Board of Directors Rules, as well as supervising the execution of each director's duties. The tenure of directors (excluding directors who are members of the Audit and Supervisory Committee) is set at one year to ensure that they are able to respond quickly to changes in the environment and to clarify their management and operational responsibilities.

Corporate Governance

Audit and Supervisory Committee

Two of the three directors who are members of the Audit and Supervisory Committee are outside directors. Directors who are also members of the Audit and Supervisory Committee not only attend Management Council meetings, but also inspect important documents (approval requests) and receive explanations of important matters directly from the relevant directors, executive officers, department, or subsidiary in an effort to gain an accurate understanding of corporate information throughout the Group while also monitoring and verifying whether or not related departments are handling and responding to the situation and whether or not internal controls are being legally and appropriately executed. In addition to this, they work closely with the accounting auditors to ensure the reliability of our financial statements, in particular, by receiving regular reports from them and attending some of their on-site audits.

Nomination and Remuneration Advisory Committee

In order to enhance the fairness and objectivity of executive personnel and executive remuneration, we have established a Nomination and Remuneration Advisory Committee consisting of two outside directors and the President. The Committee advises and makes recommendations to the Board of Directors on executive personnel and remuneration.

Management Council

In accordance with the Management Committee Operation Rules, Nippon Soda's Management Council, consisting of the President, directors who concurrently hold the position of executive officer, and others requested to attend by the President, generally meets once a week (with auditors). It discusses important issues involving business execution other than issues that must be discussed by the Board of Directors, in order to make quick decisions on issues related to business execution.

Compliance Committee

Nippon Soda operates a Compliance Committee, which reports directly to the President, to ensure corporate activities in compliance with laws, regulations and corporate ethics throughout the Group. The Compliance Committee comprises executive officers. At each department, branch, worksite and Group company, a staff member in charge of compliance is appointed.

Corporate Social Responsibility Administration Meeting

Chaired by the President and Executive officer, the Corporate Social Responsibility Administration Meeting serves as the chief Company-wide decision-making body to promote CSR activities, including Responsible Care (RC). Held twice a year, the Corporate Social Responsibility Administration Meeting is attended by all Nippon Soda directors, executive officers, plant managers, and officers from our main domestic Group companies. Through these meetings, management set CSR targets, assess results, and revise the targets as necessary to ensure continuous improvement in line with the PDCA cycle.

Director Nomination Policy

Decisions on the nomination of director candidates and the selection and dismissal of senior management are made by resolution of the Board of Directors based on the advice and recommendations of the Nomination and Remuneration Advisory Committee. Also, candidates for the position of director who are members of the Audit and Supervisory Committee are determined by the Board of Directors after obtaining approval from the Audit and Supervisory Committee.

To ensure that they are suitable for their responsibilities, candidates for directors and senior management are selected in accordance with the following criteria:

- | | |
|---|----------------------------------|
| (1) Extensive business experience | (4) Proper character and insight |
| (2) Excellent managerial sense | (5) Healthy in body and mind |
| (3) Leadership, drive and planning skills | |

Candidates for outside directors are nominated in accordance with the requirements of the Companies Act and the Tokyo Stock Exchange, and include those with expertise and extensive experience who can be expected to provide constructive and candid views and comments on the Company's management.

In the event of any impropriety or significant violation of relevant laws, regulations or the Articles of Incorporation in the performance of duties by senior management, or any other reason that makes it difficult for them to properly perform their duties, they shall be removed from their position.

Corporate Governance

Outside Directors

Nippon Soda has four highly independent outside directors (including two directors who are also members of the Audit and Supervisory Committee) in an effort to enhance the ability of the Board of Directors to contribute to the Company's sustainable growth and to increase medium- and long-term corporate value. Regarding independent outside directors, in accordance with the requirements of the Companies Act and the Tokyo Stock Exchange regarding independence, the Company nominates individuals who are unlikely to have conflicts of interest with general shareholders and who are able to ensure objectivity and rationality in the Company's decision-making and contribute to increasing corporate value. Specifically, none of the following must apply to the person:

- | | |
|---|--|
| <p>(1) A person who does business with the Company or its subsidiaries as a principal customer or an executive thereof</p> <p>(2) A primary business partner of the Company or its subsidiaries or an executor of such business</p> <p>(3) A consultant, certified public accountant, lawyer or other professional who has received a large amount of money or other assets from the Company or its subsidiaries in addition to director's remuneration</p> <p>(4) A person who has fallen into any of the above categories (1) to (3) in the past year</p> | <p>(5) The spouse or a relative within the second degree of kinship of the following persons:</p> <p>1. a person who falls under (1) to (4) on the left</p> <p>2. a person who is, or has been in the past one year, an executive of the Company or its subsidiaries</p> <p>3. a person who is currently, or has been in the past one year, a non-executive director of the Company or a subsidiary of the Company</p> |
|---|--|

Skills Matrix

At the Nippon Soda Group, the mission we have set in our long-term vision (FY 2021–FY 2030) is to “Create new value through the power of chemistry and increase corporate value by contributing to society.” To achieve this mission, and to ensure appropriate and quick decision-making on important management matters such as basic strategies, capital policies, and sustainability management, as well as supervision of directors' execution of duties, we have identified the skills required of the Board of Directors as below.

These required skills will be revised as necessary in line with changes in external environments and internal conditions.

Directors				Specialist expertise and experience						
Name	Gender	Position	Director tenure	Corporate management	Finance / accounting	Business strategy / portfolio	R&D / production technology	Internationality	ESG / sustainability	Legal affairs / risk management
Akira Ishii	Male	Director Chairman (Representative Director)	13 years	●		●				
Eiji Aga	Male	Director President (Representative Director)	2 years	●		●		●		
Atsuo Watanabe	Male	Director Executive Managing Officer	New appointment				●		●	
Osamu Sasabe	Male	Director Managing Officer	1 year		●	●				
Osamu Shimizu	Male	Director Managing Officer	New appointment		●			●	●	
Mitsuaki Tsuchiya	Male	Director	2 years	●	●					
Yuko Watase	Female	Director	New appointment		●	●		●		
Nobuyuki Shimoide	Male	Director	3 years	●		●				
Nobuyuki Hori	Male	Director Audit and Supervisory Committee member (Full-time)	New appointment		●					●
Yoko Waki	Female	Director Audit and Supervisory Committee member	2 years							●
Hayato Yoshida	Male	Director Audit and Supervisory Committee member	New appointment		●					●

Corporate Governance

• Reasons for Appointment of Outside Directors

Name	Attendance at meetings of the Board of Directors and the Audit and Supervisory Committee		Reason for nomination
	Board of Directors (18 meetings)	Audit and Supervisory Committee (15 meetings)	
Mitsuaki Tsuchiya	18 times	—	We believe that by having him apply the knowledge and experience he has gained over many years in the banking business and his involvement in the management of other companies, he will be able to further strengthen the Company's management structure.
Yuko Watase	(New appointment)	—	We believe that she can use her specialist expertise and international experience in accounting audits as a certified public accountant, as well as her long-term involvement in work related to cross-border M&As and business portfolio strategies, to help reinforce the Company's governance and contribute to its sound growth and development.
Yoko Waki	18 times	15 times	Although she has never been directly involved in corporate management, we believe that she can use her extensive knowledge and insight on corporate law as an attorney and her experience as an outside director of other companies to audit the Company's management.
Hayato Yoshida	(New appointment)	(New appointment)	Although he has never been directly involved in corporate management, we believe that he can use his abundant experience and advanced expertise in corporate accounting as a certified public accountant, as well as his international experience and other wide-ranging knowledge, to audit the Company's management.

Executive Remuneration

Policy on decisions

Nippon Soda's executive remuneration is determined based on a balance of common practices, company performance and employee salaries. A resolution was passed on June 26, 2020, at the 151st Ordinary General Meeting of Shareholders to set the total amount of remuneration for directors (excluding directors who are members of the Audit and Supervisory Committee) and directors who are members of the Audit and Supervisory Committee at no more than ¥350 million and no more than ¥100 million per year, respectively.

Director remuneration shall be determined within the limits of the total amount of remuneration approved by the General Meeting of Shareholders, and shall be discussed and decided by the Board of Directors based on the advice, recommendations and findings of the Nomination and Remuneration Advisory Committee. The Board of Directors entrusts decisions regarding directors' basic remuneration, as well as directors' (excluding outside directors') performance-linked remuneration, evaluation remuneration, and stock-based remuneration, to the Representative Director and President. We believe that the representative directors are most suited to evaluating the departments of each director while considering overall business performance and other factors. The appropriateness of decisions made regarding remuneration are confirmed in advance by the Nomination and Remuneration Advisory Committee.

Executive remuneration for FY 2022 was discussed by the Nomination and Remuneration Advisory Committee on June 23, 2021. Based on their findings, director remuneration and share benefit trust points were discussed and determined at the Board of Directors' Meeting on June 23, 2021. Audit and Supervisory Committee member remuneration was determined following discussions at an Audit and Supervisory Committee meeting, within the total amount of remuneration approved by the General Meeting of Shareholders.

Following confirmation that methods for determining remuneration were in line with the decision policy, that the resulting remuneration conformed to the decision policy discussed at the Board of Directors' meeting, and that the findings of the Audit and Supervisory Committee were respected, we have determined that individual director remuneration for FY 2022 is in line with the decision policy.

As stipulated in the Articles of Incorporation, the number of directors (excluding those who are members of the Audit and Supervisory Committee) is limited to 10, and the number of directors who are members of the Audit and Supervisory Committee is limited to five.

Corporate Governance

• Total Amount of Remuneration

Classification	Total amount of remuneration (Millions of yen)	Total amount of remuneration by type (Millions of yen)			Number of eligible persons
		Basic remuneration	Performance-linked remuneration	Stock-based remuneration	
Directors (excl. Audit and Supervisory Committee members) (Outside directors)	252 (21)	153 (21)	83 (—)	16 (—)	9 (2)
Directors (Audit and Supervisory Committee members) (Outside directors)	49 (21)	49 (21)	— (—)	— (—)	3 (2)
Total (Outside directors and outside auditors)	302 (43)	203 (43)	83 (—)	16 (—)	12 (4)

*1 The above remuneration is based on the executive remuneration system used up until the 153rd Ordinary General Meeting of Shareholders held on June 29, 2022, when it was determined that the executive remuneration system would be revised.

*2 The above number of persons and amount of remuneration includes that of one director who retired on June 29, 2021, due to the expiration of their term of office.

*3 The above performance-linked remuneration has been calculated using the following formula and indices that show results and achievements from this fiscal year.

Prior-fiscal year performance-linked remuneration + Adjustment of performance-linked remuneration for the current fiscal year*

* Adjustment of performance-linked remuneration for the current fiscal year: Calculations are based on two indices: Increase/decrease in consolidated ordinary profit and increase/decrease in non-consolidated operating margin.

These two indices measure the level of achievement of consolidated and non-consolidated business results. As they are appropriate indices to evaluate the achievements and level of contribution of each executive, they have been selected as indices for performance-linked remuneration.

For executives of sales departments, in addition to these indices, the performance of their relevant departments are also taken into consideration. Increase/decrease in consolidated ordinary profit and increase/decrease in non-consolidated operating margin for FY 2022 were as follows:

- Increase/decrease in consolidated ordinary profit: ¥3,768 million
- Increase/decrease in non-consolidated operating margin: 17.2%

*4 For the above stock-based remuneration, we have introduced a Board Benefit Trust system. BBT works on a position-based points system, and points are awarded using the following formula.

Formula: Standard points based on position × Index coefficient for the current fiscal year

Index coefficient for the current fiscal year is determined within a range of 0% to 150% using a matrix table with the following two indices:

ROE for the current fiscal year and increase/decrease in consolidated operating profit (the amount of increase/decrease in the current fiscal year's actual results compared to the average of the previous three years). The results for each index in FY 2022 were as follows:

- ROE: 8.4%
- Increase/decrease in consolidated operating profit: ¥3,256 million

Revision of remuneration system

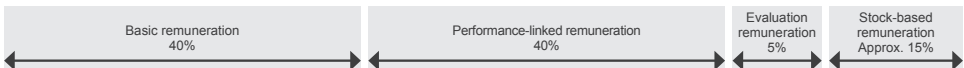
We have revised our executive remuneration system to further promote the sharing of value with our shareholders and boost incentive among executives to improve our corporate value. At the 153rd Ordinary General Meeting of Shareholders held on June 29, 2022, a resolution was passed to introduce a transfer restricted stock remuneration system and, based on this system, to pay directors (excluding directors who are members of the Audit and Supervisory Committee, outside directors, and part-time directors) a monetary remuneration claim equivalent to the amount to be paid for transfer restricted stock. Further, in line with the approval of this system, we abolished the Board Benefit Trust stock-based remuneration system as of the conclusion of the above Ordinary General Meeting of Shareholders.

Individual director remuneration consists of (1) basic remuneration, (2) performance-linked remuneration, (3) evaluation remuneration, and (4) stock-based remuneration, the ratios of which are shown in the following table (Overview of Decision Policy on Individual Remuneration: (e) Decision policy on ratio of remuneration by type). Note that outside directors, part-time directors, and directors who are members of the Audit and Supervisory Committee are paid only basic remuneration and are not subject to performance evaluation.

• Overview of decision policy on individual remuneration (Revised remuneration system)

- Decision policy on basic remuneration: The amount is determined based on the role and position of the director.
- Decision policy on performance-linked remuneration: Calculated by the following formula, using an index that shows the results and performance of the current fiscal year
Policy on decisions (formula)
Prior-fiscal year performance-linked remuneration + Adjustment of performance-linked remuneration for the current fiscal year*¹ + Performance-linked amount for the current fiscal year*²
*1 Adjustment of performance-linked remuneration for the current fiscal year:
Calculated based on three indices: (1) Increase/decrease in consolidated net profit for the current fiscal year;
(2) Increase/decrease in consolidated ROE; and (3) Increase/decrease in non-consolidated operating margin
*2 Performance-linked amount for the current fiscal year
Calculated based on the following formula: Standard points based on position × Index coefficient for the current fiscal year (%) *³ × Prior-fiscal year average share price
*3 Index coefficient for the current fiscal year
Determined within a range of 0% to 150% using a matrix table with the two indices below:
(1) ROE for the current fiscal year; and (2) Increase/decrease in consolidated operating profit (the amount of increase/decrease in the current fiscal year's actual results compared to the average of the previous three years)
These indices enable highly accurate measurement of the level to which we have improved our corporate value, something we have committed to in our long-term vision. As such, we have determined that they are appropriate indices to measure the achievements and level of contribution of company executives, and have selected them as indices for performance-linked remuneration.

Corporate Governance

c. Decision policy on evaluation remuneration	Calculated based on the level of achievement of the targets set by each officer at the beginning of the term.
d. Decision policy on stock-based remuneration	In addition to further sharing value with our shareholders, we have introduced a transfer restricted stock remuneration system (RS) as an incentive linked to the medium- to long-term improvement of our corporate value. Through this system, a certain quantity of transfer restricted stock is granted to each position depending on their roles and responsibilities.
e. Decision policy on ratio of remuneration by type	Approximate ratios Basic remuneration: Performance-linked remuneration: Evaluation remuneration: Stock-based remuneration 40%: 40%: 5%: 15%
	
f. Decision policy on period and conditions of remuneration	Fixed monthly remuneration includes basic remuneration, performance-linked remuneration, and evaluation remuneration. For transfer restricted stock remuneration, which is non-monetary remuneration, transfer restricted stock is granted every year based on an allotment agreement. Transfer restrictions are lifted when an executive retires or resigns from their final position in the Company.
g. Decisions on individual remuneration	Based on decisions by the Board of Directors regarding basic remuneration, performance-linked remuneration, evaluation remuneration, and stock-based remuneration, decision-making authority on individual remuneration belongs to the President. To ensure that this authority is appropriately exercised, prior to making a decision on the relevant amount, the President briefs and holds discussions with the Nomination and Remuneration Advisory Committee and seeks their approval.

Effectiveness Assessment of the Board of Directors

At Nippon Soda, to improve the Board of Directors' decision making on appropriate execution of duties and to strengthen their supervisory functions, since FY 2016, all directors have been asked to complete self-assessments in the form of questionnaires. We also regularly commission an external organization to conduct interviews and analyze and assess the results. Most recently, these interviews were conducted in FY 2019 and FY 2022. In FY 2022, questionnaires put together by the external organization and comprising the topics below were given to all directors, including directors who are Audit and Supervisory Committee members. Based on these results, the external organization held interviews with all directors, and the Board of Directors examined and discussed current conditions in line with the details of these interviews.

Survey topics

- (1) Board of Director functions (enhancement of discussions on medium- to long-term management strategies and fulfillment of supervisory functions for matters related to nomination and remuneration)
- (2) Board of Director composition and size (number of directors and independent outside director ratio, and level of skill and diversity)
- (3) Operation of the Board of Directors (number of meetings, frequency, time; provision of materials; meeting proceedings, etc.)
- (4) Supervision of auditing functions (Audit and Supervisory Committee members' and outside directors' collaboration with auditing bodies, etc.)
- (5) Outside directors' performance of functions (creation of systems to help outside directors perform their functions, provision of information to outside directors, etc.)
- (6) Relationship with shareholders and investors (systems for dialogue with shareholders and investors, shareholder and investor feedback on Board of Directors, etc.)

As a result, overall, it was confirmed that the Board of Directors was functioning effectively. Regarding Board of Director composition, it was found that the Board of Directors possesses the necessary skills and diversity to realize the Company's management strategies, and that an appropriate environment is in place for healthy discussions and other board proceedings. Among its other strengths, the Board of Directors was also found to promote the open provision and sharing of information to outside directors in order to enable their active participation in discussions. However, issues were found regarding the further enhancement of discussions on medium- to long-term management strategies and the reinforcement of supervisory functions for matters related to nomination and remuneration.

We will continue to find ways to improve the operation of the Board of Directors and further enhance its effectiveness.

Compliance

Basic Policy

The Nippon Soda Group ensures corporate activities are undertaken in compliance with laws, regulations and corporate ethics by making all employees aware of the Nippon Soda Group Code of Conduct. Our efforts to ensure business management that emphasizes regulatory compliance include the establishment of the Compliance Committee and proper implementation of the internal reporting system. Through these efforts, we enhance the internal control system and continue to be a company trusted by society.

• The Nippon Soda Group Code of Conduct

1. Compliance with laws, rules, regulations and corporate ethics	(1) Fair behavior (2) Compliance with corporate ethics (3) Prompt corrective action and strict disciplinary action in response to the violation of a law, rule or regulation
2. Relationship with society	(1) Contribution to society (2) Compliance with all applicable laws (3) Restrictions on political and other donations (4) Severance of relationships with antisocial forces (5) Environmental preservation and protection (6) Compliance with laws and regulations related to security trade control and imports and exports
3. Relationship with customers, business partners and competitors	(1) Safety of products (2) Compliance with the Antimonopoly Act (3) Compliance with suppliers' guidelines for fair transactions and the Subcontract Act (4) Prevention of unfair competition (5) Business entertainment and gifts (6) Prevention of bribery of foreign public officials (7) Appropriate advertising
4. Relationship with shareholders and investors	(1) Disclosure of management information (2) Prohibition of insider trading
5. Relationship with individuals	(1) Respect for human rights and prohibition of discrimination (2) Prohibition of harassment (3) Protection of privacy (4) Safety and hygiene at worksites (5) Compliance with labor laws
6. Relationship with the Company and its assets	(1) Compliance with working regulations (2) Proper accounting (3) Conflicts of interest (4) Prohibition of political and religious activities (5) Management of corporate secrets (6) Appropriate use of corporate assets (7) Appropriate use of information systems (8) Protection of intellectual property
7. Supplementary provisions	(1) Scope of application of this Code of Conduct (2) Revision and abolition of this Code of Conduct (3) Violation consultation hotline (4) Penalties

Compliance Promotion System

Nippon Soda has a Compliance Committee, which reports directly to the President, to ensure corporate activities in compliance with laws, regulations and corporate ethics throughout the Group. The Compliance Committee comprises executive officers as its members. At each department, branch, worksite and Group company, a staff member in charge of compliance is appointed.

The Nippon Soda Group has established a consultation desk, whereby an employee of the Group who has committed an infraction or becomes aware of an infraction by another employee, can consult directly with the Compliance Committee Secretariat, an outside attorney or an Audit and Supervisory Committee member.

• Composition of the Compliance Committee

Committee Members

Officers



Compliance Managers

Departments



Branches



Worksites



Group companies



Compliance Promotion and Education

We have formulated the Nippon Soda Group Code of Conduct, which specifies matters to be observed by the Nippon Soda Group in order to carry out sound corporate activities. This Code of Conduct is distributed to the executives and all employees of the Company and its consolidated subsidiaries, and we provide ongoing training to ensure thorough compliance with laws and regulations. We conduct legal education and training related to our operations once a year or more, and in FY 2022, we conducted a total of 13 major compliance training sessions for the Company and major Group companies. In addition, we conduct an annual compliance survey of all employees to determine their understanding of the Code of Conduct.

Compliance

Education on laws and regulations related to chemical and product safety

Nippon Soda provides educational and explanatory sessions on laws and regulations related to the management of chemical substances on a regular basis.

No.	Programs and contents	Site and date	Number of participants
1	Education for new/transferred employees (Content: Chemical substances laws and regulations, Agricultural Chemicals Regulation Law, Poisonous and Deleterious Substances Control Act, UN Recommendations on the Transport of Dangerous Goods, product labels, SDS, YC, internal rules, etc.)	Head Office First session: August 2 and 17, 2021 Second session: August 20 and 24, 2021	24 22
2	Veterinary pharmaceuticals education for new/transferred employees (Content: Management system, internal standards, laws and regulations, etc.)	Head Office May 12, 2021	1
3	Pharmaceuticals education for new/transferred employees (Content: Fundamental pharmaceuticals education, Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices violations, and recurrence prevention measures)	Head Office May 7, 2021	4
4	Pharmaceuticals education (Content: Responsibilities, management system, changes to certificate of approval for manufacture and sale, revisions to internal standards, FY 2021 achievements and FY 2022 plans, safety management information, etc.)	Head Office and Nihongi Plant June 8, 2021	21
5	Supplementary briefing on new JIS version of SDS for ExESS	Nihongi Plant, Takaoka Plant, Mizushima Plant, and Chiba Plant May 6, 2021	10
6	Briefing on revisions to laws and ordinances (Content: Revisions to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Health and Safety Act, the Poisonous and Deleterious Substances Control Act, the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, the Fire Service Act, and the Food Sanitation Act, revisions to JIS for SDS and product labels, and revisions to overseas laws, etc.)	Head Office February 15 and 21, 2022 4 plants and 2 research centers January 19, February 10 and 18, 2022	57 79

Significant fines for violation of laws and regulations related to the provision or use of products and services

No relevant events occurred.

Political contributions

As outlined in the Nippon Soda Group Code of Conduct, political contributions are only made in compliance with relevant laws and ordinances and using appropriate methods and procedures.

Nippon Soda's political contributions in FY 2022 were ¥9,091.

Risk Management

Status of Establishment of Internal Audit System

- (1) In accordance with the basic policy regarding system development necessary to ensure proper business operation, Nippon Soda establishes and implements systems that ensure compliance and efficient and sound company management, and provides information on relevant rules throughout the Company.
- (2) We promote CSR (corporate social responsibility) practices in order to maintain the trust of society needed to continue our business activities.

Regulations on the Risk Management of Losses and Other Systems

- (1) We ensure corporate activities are in compliance with laws, regulations and corporate ethics by ensuring all employees are fully informed of the Nippon Soda Group Code of Conduct.
- (2) We have established a Corporate Social Responsibility Administration Meeting chaired by the President and executive officer to promote business activities taking into account environmental protection, occupational safety and health, process safety and disaster prevention/business continuity plan (BCP), logistics safety, and chemical and product safety. In addition, we implement risk management in accordance with Company regulations such as the Environmental Management Regulations and Security Management Regulations to prevent accidents from occurring.
- (3) Should a serious accident occur, an accident response headquarters is established in accordance with corporate rules, including the Security Management Regulations, to address the accident in a cross-sectional and systematic way.
- (4) If a natural disaster, such as a large earthquake, or any other crisis that could have disastrous consequences occurs, we shall respond appropriately according to the BCP.
- (5) Other risks associated with business execution are appropriately addressed by responsible departments in accordance with response manuals and other documents.
- (6) The Internal Control & Audit Department has been established independently from business departments to assess the appropriateness and efficiency of business activities and the reliability of financial reports and to promote the appropriate functioning of the internal control system in business processes.

Internal Control Audits

The Company's Internal Control & Audit Department, which is independent of the operating divisions, works closely with the directors who are also members of the Audit Committee, to assess the appropriateness and efficiency of business activities and the reliability of financial reports. The directors who are also members of the Audit and Supervisory Committee keep abreast of developments throughout the Nippon Soda Group and monitor and verify the proper execution of internal controls. Furthermore, to ensure the reliability of financial information and other information, they work in close cooperation with the accounting auditors, who report regularly and attend some of the audits.

Status of Establishment of Risk Management System

- (1) Nippon Soda operates a Compliance Committee, which reports directly to the President, to ensure corporate activities in compliance with laws, regulations and corporate ethics throughout the Group.
- (2) The Compliance Committee is comprised of executives. Also, each department, branch, worksite and Group company has its own compliance staff in place.
- (3) The requirements that allow the Group to conduct sound business activities are specified in the Nippon Soda Group Code of Conduct, which is distributed to the management and all employees of Nippon Soda and its Group companies. In addition, training based on the Code of Conduct is regularly provided.
- (4) A consultation hotline is available to employees of Nippon Soda and its Group companies who have violated internal policies or who have discovered violations committed by others to assist them in directly consulting with the Office of the Compliance Committee or an external lawyer or member of the Audit and Supervisory Committee.

Risk Management

Information Disclosure to Stakeholders

- (1) We disclose management information, such as financial conditions and the status of business activities, in a timely and appropriate manner. As well, we provide clarifications on the Company's management philosophy and policy.
- (2) The director in charge of general affairs is responsible for investor relations, and plays a leading role in constructive communication with shareholders and investors to achieve the sustainable growth of Nippon Soda and improve its medium- to long-term value. If necessary, the Company offers opportunities for communication with the Representative Director & President, directors in charge and/or executive officers.
- (3) Requests and opinions from investors and shareholders are conveyed to the Board of Directors and/or those concerned, as necessary, and reflected in business management.
- (4) We have our own internal insider trading management rules. The Information Manager is primarily responsible for information disclosure.

CSR Activities

Nippon Soda's basic policy is to contribute to society through its business activities by effectively using the technologies, knowledge and human resources accumulated since its foundation. Based on this policy, we engage in CSR practices to continue our business activities while earning the trust of society.

At every stage of the product lifecycle, from manufacturing to disposal, we practice Responsible Care (RC) to take environmental protection, occupational safety and health, logistics safety, and chemical and product safety into account in our business activities.

Information Security Management

Appropriate management and protection of our information assets is one of the priority issues in managing our business. Nippon Soda promotes information security management under the supervision of the director in charge of the Information Technology Department. In addition to the development of internal regulations such as the Information Security Policy, we are working to raise awareness of the importance of information assets by advocating the appropriate use of information systems in the Nippon Soda Group Code of Conduct. We are taking measures to strengthen the information security management system of the entire Group, including training at Group companies on how to deal with suspicious emails to prevent external viruses from infecting our computers.

Proper Management of Personal Information

In response to the adoption of the My Number system in January 2016, Nippon Soda developed the Basic Policy for Proper Handling of Specific Personal Information and the Specific Personal Information Handling Regulations to ensure the proper handling of personal information as an organization.

We collect, use, store and handle individual numbers (My Numbers) of executives, employees and their dependents in an appropriate manner, in compliance with laws and regulations related to the handling of personal information and individual numbers, and within the scope of use specified in the basic policy and handling regulations.

Risk Management

Business and Other Risks

1. Market risks

- (1) Some of the Group's businesses include products and services that are subject to economic fluctuations. Therefore, if market conditions fluctuate significantly due to changes in the economic environment, the Group's results of operations could be significantly affected.
- (2) In the Agro Products Business, earnings tend to increase in the fourth quarter due to the seasonal nature of demand. In addition, the Group's business results may be significantly affected by weather fluctuations, as the Group's businesses tend to be susceptible to weather conditions.
- (3) Predominantly through the Chemicals Business and the Agro Products Business, the Group conducts business on a global scale. Moreover, around 55% of our sales in the Chemicals Business and the Agro Products Business are overseas. As such, unforeseen changes in local laws and regulations in each country or region; large-scale epidemics; geopolitical risks such as wars, riots, or terror, or other unexpected factors; trade wars caused by national or regional conflict; and/or other factors could have a significant impact on our business performance. Tasked with collecting information on risks and analyzing business trends in each country and region we conduct business, we have therefore established local subsidiaries to act as our hubs in those areas.

2. Exchange rate fluctuation risks

- (1) The Group operates on a global basis and foreign currency fluctuations affect net sales and materials procurement costs in foreign currencies. For this reason, we seek to mitigate the impact on operating results through forward foreign exchange contracts.
- (2) Since the yen-translated figures of overseas consolidated subsidiaries and equity-method affiliates in the consolidated financial statements are influenced by foreign exchange rates, dramatic fluctuations in foreign exchange rates may have a significant impact on the Group's performance.

3. Raw materials procurement risks

If the Group is unable to secure the materials used in its products, or if the price of materials fluctuates drastically, the Group's performance could be significantly affected. For this reason, we strive to ensure stable procurement of materials and reduce the impact of rising material prices on our business performance by implementing measures such as lowering the cost of our products and appropriately shifting the costs to sales prices.

4. Legal and regulatory risks

While the Group conducts its business activities in compliance with the laws and regulations in Japan and abroad, growing global environmental awareness tends to tighten regulations on chemical products. Therefore, if environmental regulations become more stringent than expected and require substantial additional investments in the future, our business performance could be significantly affected.

5. Research and development risks

The Group invests a large amount of management resources in the development of new products. However, in research and development, particularly in the Agro Products Business, the development and period for validating the efficacy and safety of a product may take a long time, and the research and development costs and commission fees for studies involved in up-front investment are significant, so if the research theme is not put to practical use, the Group's results of operations may be significantly affected.

6. Product liability risks

As a manufacturer of chemical products, the Group is working on Responsible Care (RC) activities (voluntary risk reduction activities) for quality management, and in particular, we are striving to improve management based on ISO 9001. In addition, we conduct product liability (PL) risk assessments prior to the sale of new products and

make quality improvements in accordance with ISO 9001 to ensure that PL problems are avoided. However, there is no guarantee that all products will be defect-free and free of PL issues. For this reason, the Group carries product liability insurance to protect itself in the event of an accident. However, if an unanticipated serious quality defect occurs, the Group's business performance could be significantly affected.

7. Accident and disaster risks

As a manufacturer of chemical products, the Group is acutely aware of the risks associated with manufacturing. We engage in Responsible Care activities with respect to quality, environmental protection, occupational safety & health, process safety and disaster prevention, logistics safety, chemical and product safety, etc., and strive to prevent accidents at our production facilities and chemical product storage facilities. Nevertheless, if an unforeseen accident or a large-scale natural disaster were to cause damage to personnel or property at our manufacturing facilities, or if damage were to occur in the areas in the vicinity of our plants, there may be a significant impact on our business results due to a loss of trust from society in the Group, the cost of measures to deal with the accident and disaster, and lost opportunities due to the suspension of production activities.

8. Application of impairment accounting risks

If the value of the Group's business assets substantially declines, or if the Group does not expect to recover its investment due to a decline in profitability or other factors, recording an impairment loss could have a material impact on the Group's results of operations.

9. Retirement benefit obligations risks

The Group's employee retirement benefit costs and obligations are calculated based on actuarial assumptions, such as the rate of return on plan assets and the discount rate, so if the actual results differ substantially from the assumptions due to abrupt changes in the market environment or other factors, the Group's results could be significantly affected.

10. Intellectual property infringement risks

The Group manages its intellectual property rights strictly. However, it may not be able to fully protect its intellectual property rights in certain countries and may not be able to completely prevent infringement by third parties, which could have a significant impact on the Group's business results.

11. Information security risks

The Groups holds a wide range of confidential and other information related to its businesses. Although we have a thorough information management system in place, in the event that an unforeseen circumstance causes this information to be leaked outside the company, the resulting stagnation in business activity and loss of trust could have a significant impact on the Group. We have thus formulated a set of internal rules regarding information management, and educate employees on these rules to boost their management awareness and promote understanding of information handling rules. We have also concluded non-disclosure agreements with stakeholders with whom we share our confidential information, and are striving to reinforce our information management system in other ways.

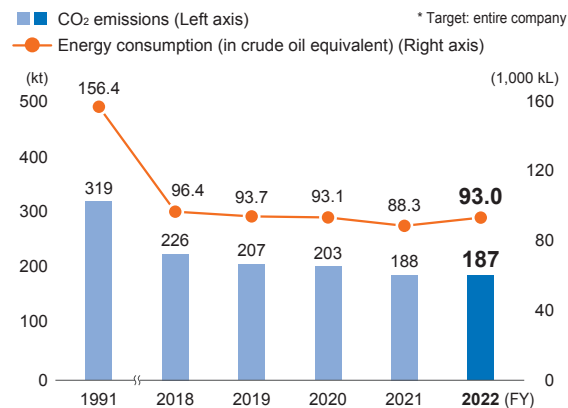
12. COVID-19 pandemic risks

As some of the Group's businesses include products and services that are affected by economic fluctuations, significant fluctuations in market conditions due to changes in the economic environment caused by COVID-19, as well as stagnation of our business activities caused by the spread of infection among employees, could have a significant impact on the Group's business results. In addition to accurately ascertaining and analyzing market trends, with employee safety as our foremost priority, we will implement telework systems and other measures to prevent the spread of infection, so that we can maintain our business activities.

ESG Data

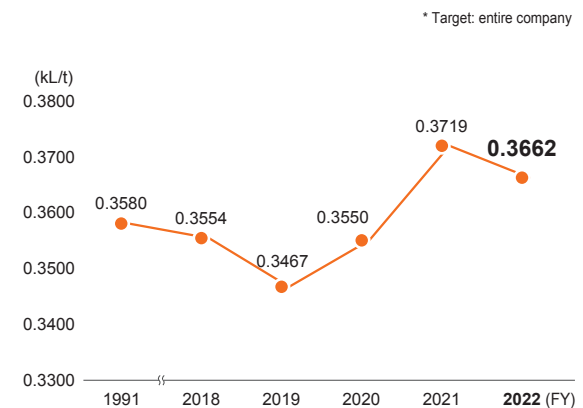
Environmental Data of Nippon Soda

Energy consumption (in crude oil equivalent) and carbon dioxide (CO₂) emissions



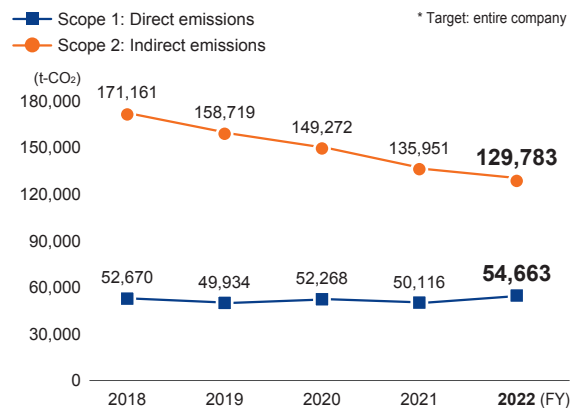
Note: In FY 2010 and later years, the amounts of consumption at the Head Office, branches and other offices were included. The scope of data collection at Chiba Plant was changed.

Change in energy consumption rate



Note: Since FY 2017, the energy consumption rate calculation method of a section of the plant was changed from the "simple production output method" to the "standard product conversion method."

Scope 1 and 2 GHG emissions



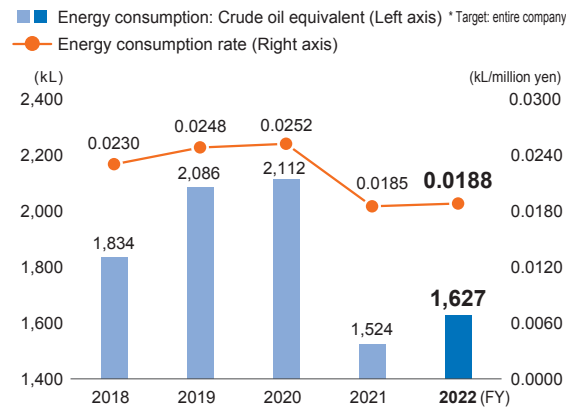
Greenhouse gas emissions throughout the supply chain

Scope 3 emissions			
Purchased raw materials/services	191,593t-CO ₂	Transport and delivery (downstream)	Not calculated
Capital goods	28,709t-CO ₂	Processing of sold products	Not calculated
Fuel, etc., not included in Scope 1 or 2	None	Disposal of sold products	Not calculated
Transport, delivery (upstream)	33,949t-CO ₂	Use of sold products	Not calculated
Waste generated from business	Not calculated	Leased assets (downstream)	None
Business trips	427t-CO ₂	Franchise	None
Employee commuting	270t-CO ₂	Investment	Not calculated
Leased assets (upstream)	None		

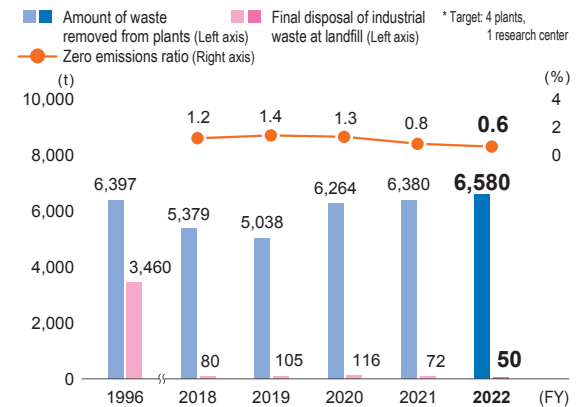
Note: Figures are calculated based on the Ministry of the Environment's "Emission Factor Database (Ver. 3.0) for calculating greenhouse gas emissions, etc., by organizations throughout the supply chain."

ESG Data

Energy consumption and energy consumption rate related to transport



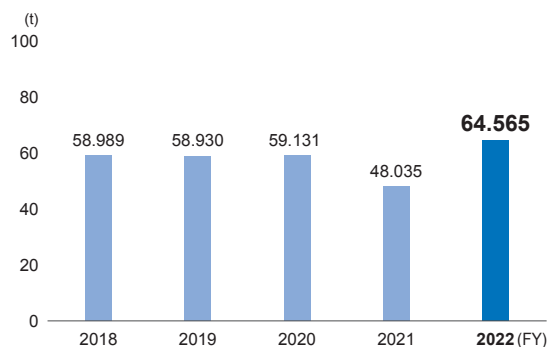
Amount of industrial waste generated



Note: Base year of the amount of waste removed from plants: FY 1996
Base year of the amount of final disposal at landfill: FY 1997
The amount of waste removed from plants does not include the waste sludge of the activated sludge process at Takaoka Plant (which is treated with microbial autolysis at an external facility).

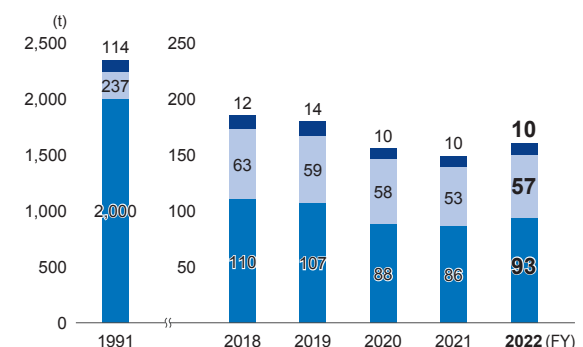
Emissions of Class 1 chemical substances specified by the PRTR system

* Target: 4 plants, 1 research center



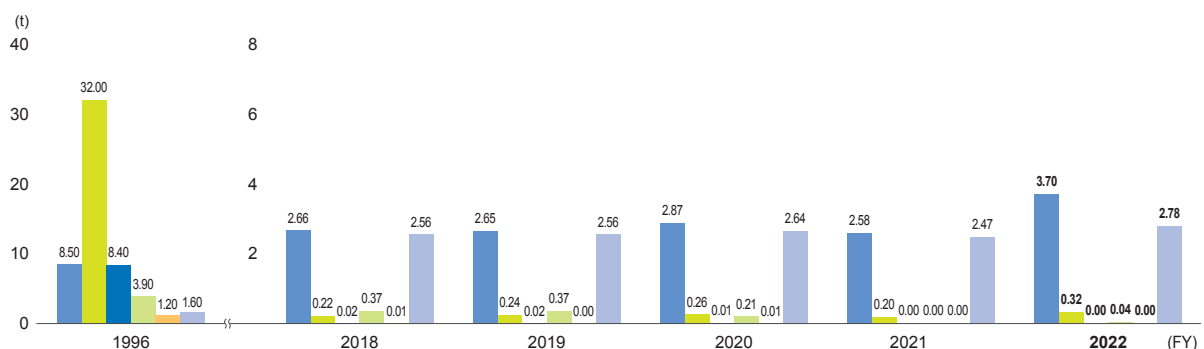
Amount of emissions of substances subject to the Air Pollution Control Act

■ SOx ■ NOx ■ Soot and dust * Target: 4 plants



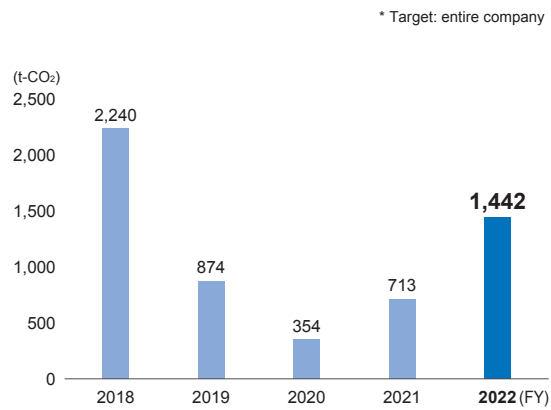
Atmospheric emissions of main voluntarily controlled chemical substances (aimed at reducing emissions of VOCs)

■ Chloroform ■ Dichloromethane ■ 1,2-dichloroethane ■ Ethyleneoxide ■ Benzene ■ 1,3-butadiene * Target: 4 plants, 1 research center

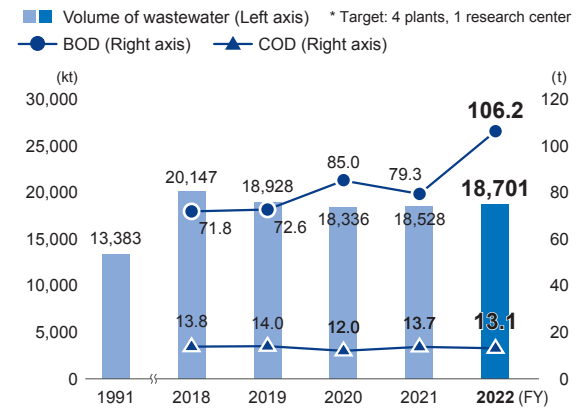


ESG Data

Calculated emissions of fluorocarbons



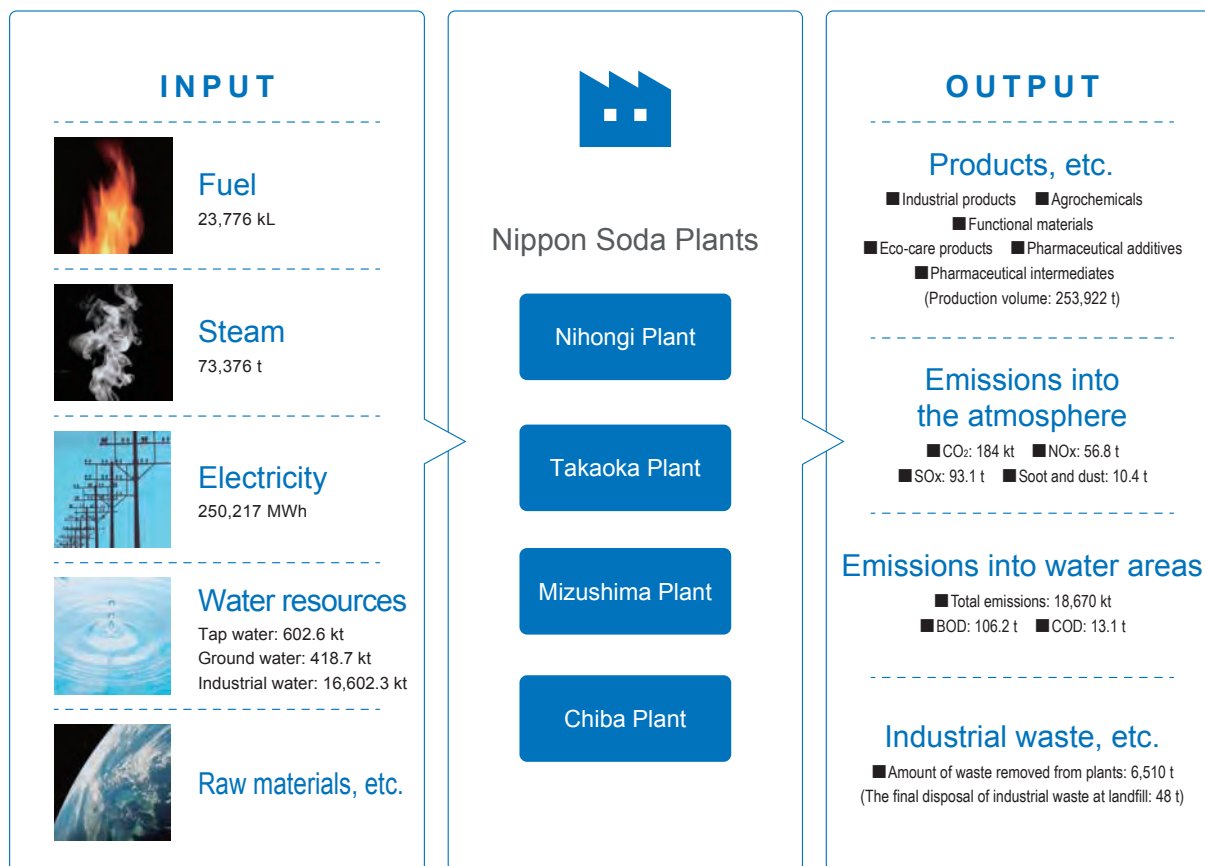
Total volume of wastewater and of BOD and COD



ESG Data

Major Environmental Impact Data

The environment impacts of Nippon Soda's four major plants in Japan in FY 2022 are shown in the figure below:



Deviations from environmental laws and regulations

(Nippon Soda)

October 27, 2021, Takaoka Plant, wastewater in excess of regulated values:

Confirmation of a water quality analysis report revealed that the daily average biochemical oxygen demand (BOD) values were in excess of those outlined in the prefectural pollution prevention ordinance and the values agreed with the city. We investigated the cause (due to the discharge of wastewater from system one in a short space of time, there was insufficient dilution and processing of wastewater from other systems) and implemented countermeasures and measures to prevent recurrence. We will continue with educational activities and other initiatives to ensure that the occurrence of this incident is not forgotten.

(Group companies)

August 7, 2021, Nisso Fine Co., Ltd., Isohara Plant, wastewater in excess of standard values:

A fault with an electromagnetic valve caused the discharge of sulfuric acid used to neutralize wastewater, and as a result the pH of the wastewater was in excess of standard values. We notified the relevant authorities and implemented emergency measures, and following the incident, we investigated the cause, implemented countermeasures and measures to prevent recurrence, and restored the electromagnetic valve.

October 26, 2021, Nisso Fine Co., Ltd., Koriyama Plant, violation of the fluorocarbon emissions control act:

When disposing of a water cooler, which is class 1 specified equipment under the fluorocarbon emissions control act, we did not pass on the fluorocarbon refrigerant to a fluorocarbon filling and collecting provider. After confirming the relevant facts, we notified the relevant authorities, and following the incident, we investigated the cause and implemented countermeasures and measures to prevent recurrence.

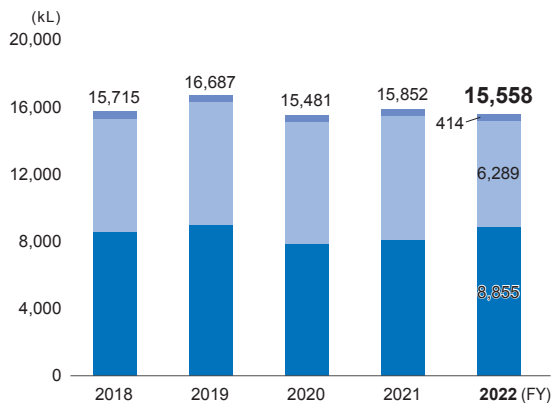
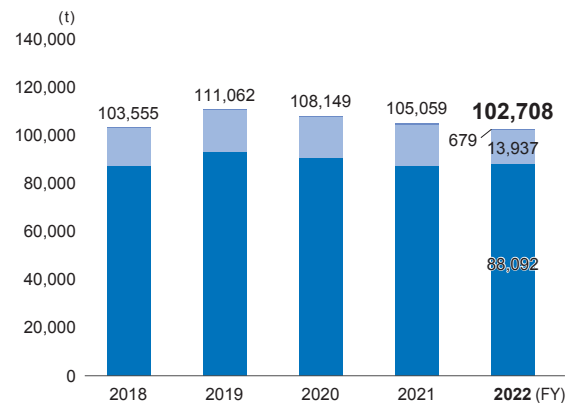
ESG Data

Environmental Data of Group Companies

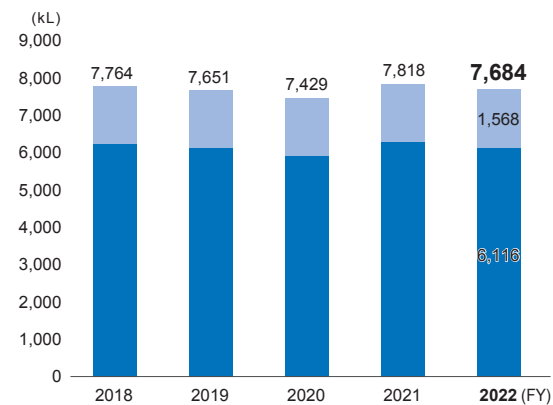
Manufacturing Group Companies

■ Nisso Metallochemical Co., Ltd. ■ Nisso Fine Co., Ltd. ■ Shinfuji Kaseiyaku Co., Ltd.

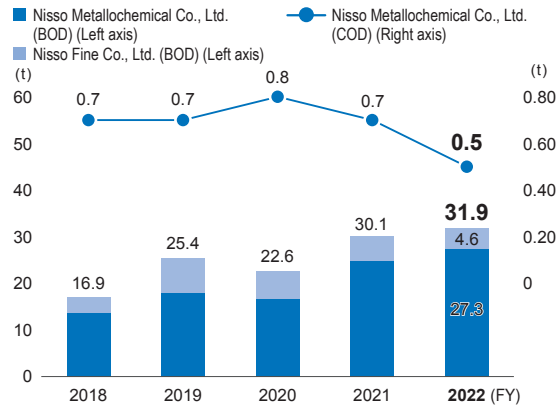
Energy consumption (in crude oil equivalent)


Amount of carbon dioxide (CO₂) emissions


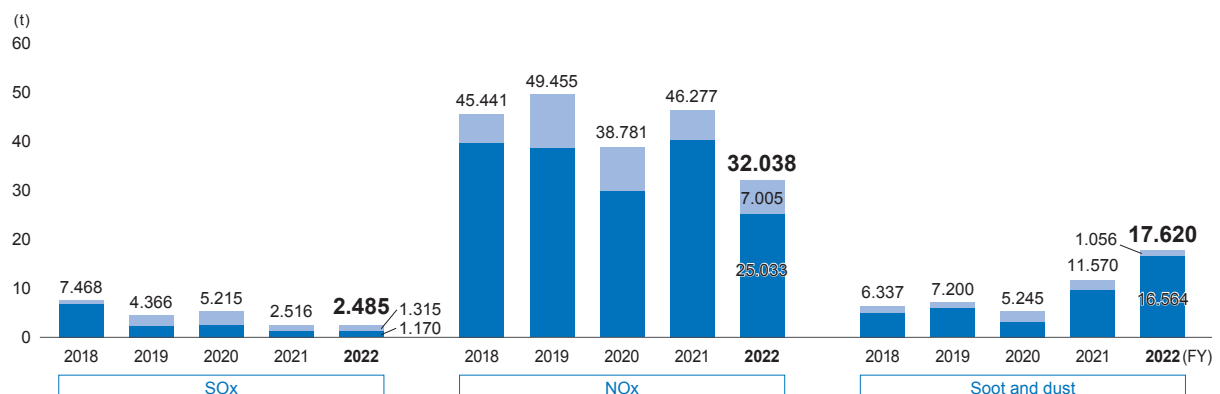
Total volume of wastewater



BOD and COD of wastewater

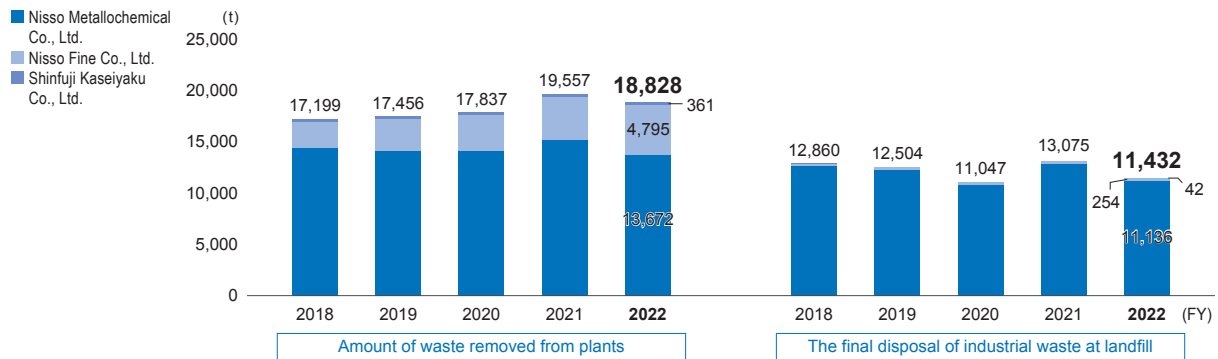


Amount of emissions of substances subject to the Air Pollution Control Act

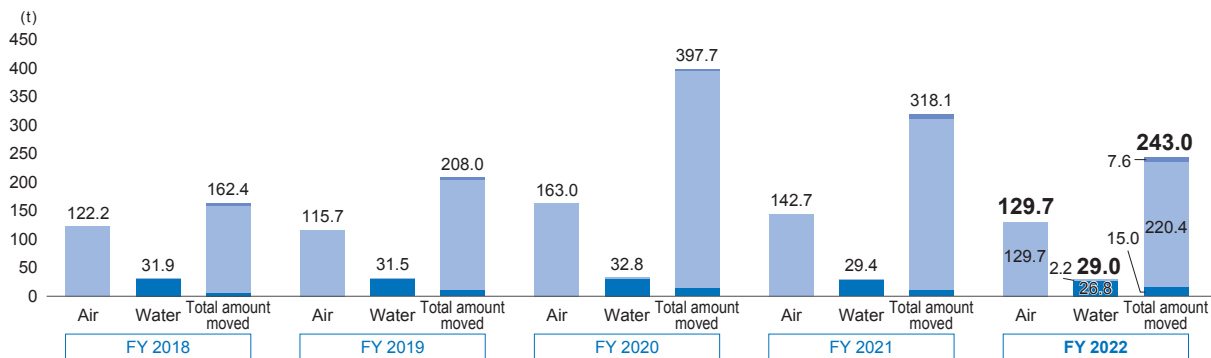


ESG Data

Amount of industrial waste emissions



Emissions of substances specified by the PRTR system

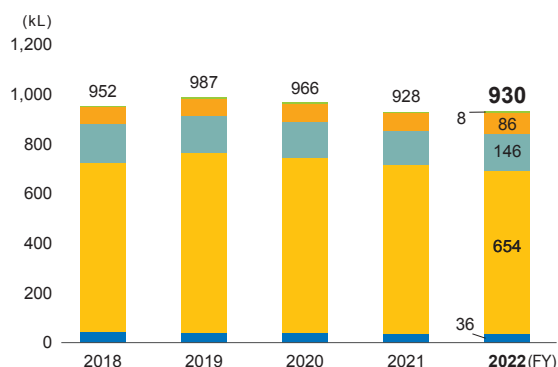


Overseas Manufacturing Group Companies

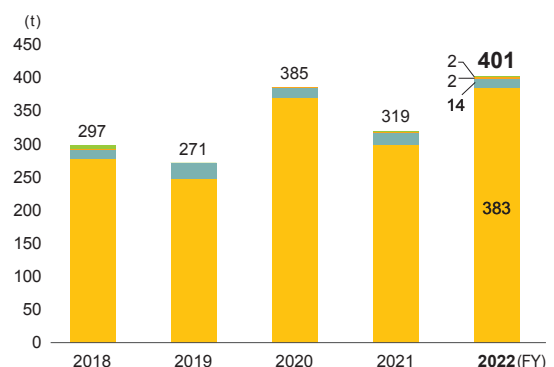
		2017	2018	2019	2020	2021
Alkaline SAS (MSSA)	Energy consumption: MWh	289,841	299,119	285,083	273,505	286,101
	Total volume of wastewater: m ³	230,615	239,734	222,539	213,712	188,543
		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Nisso Namhae Agro Co., Ltd.	Energy consumption (in crude oil equivalent): kL	1,761.83	1,646.67	1,957.98	2,052.58	2,173.50
	Carbon dioxide (CO ₂) emissions: kt	3.48	3.25	3.89	4.06	4.31
	Total volume of wastewater: kt	90.78	77.30	78.20	72.79	79.27

Non-manufacturing Group Companies

Energy consumption (in crude oil equivalent)



Amount of industrial waste emissions

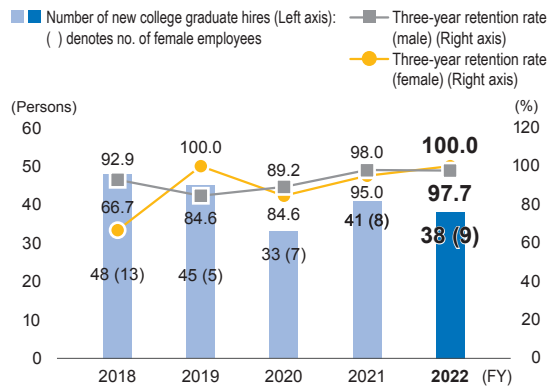


Note: The amount of waste generated at Nisso Shoji Co., Ltd. is not included.

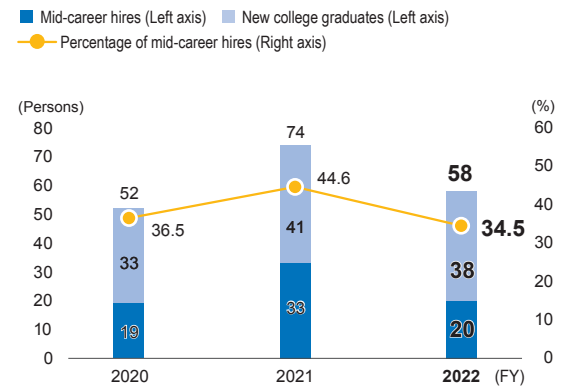
ESG Data

Social Data of Nippon Soda

Number of hired persons (by gender) and retention rate



Percentage of mid-career hires among hired regular employees

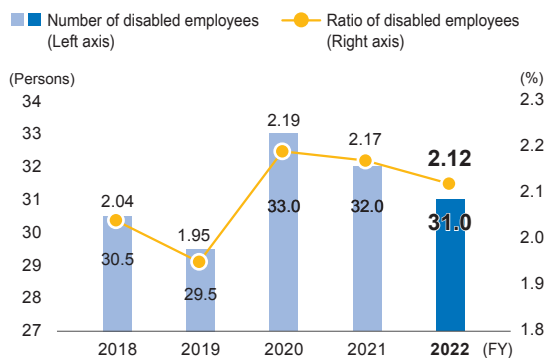


Employment conditions (regular employees/non-regular employees)

Regular employees		Non-regular employees				Total
		Contract employees	Temporary employees	Subtotal		
(Persons)	(%)	(Persons)	(Persons)	(Persons)	(%)	(Persons)
1,279	87.4	101	83	184	12.6	1,463

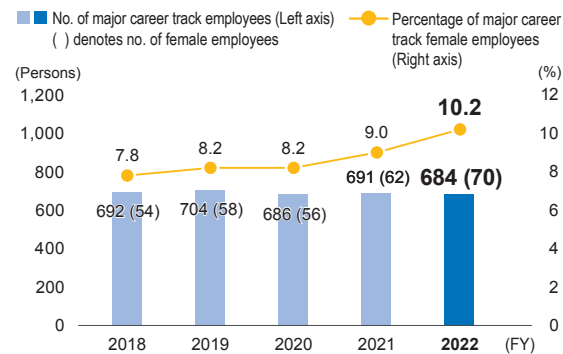
* As of March 31, 2022; Nippon Soda (non-consolidated)

Number of disabled persons employed and ratio of disabled employees



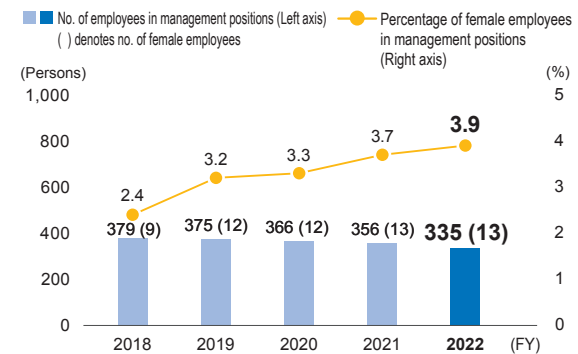
ESG Data

Number and percentage of major career track female employees



* As of March 31 each year; Nippon Soda (non-consolidated; includes those seconded to Group companies)

Number and percentage of female employees in management positions



Number of employees who take childcare and family care leave

	Employees taking childcare leave		Employees taking family care leave	
	Men	Women	Men	Women
FY 2017	2	3	1	0
FY 2018	3	4	0	0
FY 2019	5	10	1	0
FY 2020	4	4	0	0
FY 2021	8	6	1	0
FY 2022	9	9	0	0

Number of employees taking maternity and childcare leave and return to work/retention rate

	Employees taking maternity and childcare leave		Rate of employees returning to work (%)		Retention rate (%)	
	Men	Women	Men	Women	Men	Women
FY 2017	2 (1,138)	3 (152)	100	100	100	100
FY 2018	3 (1,130)	6 (159)	100	75	100	100
FY 2019	5 (1,143)	12 (168)	100	100	100	100
FY 2020	4 (1,143)	4 (170)	75	100	100	100
FY 2021	8 (1,220)	6 (176)	100	100	100	100
FY 2022	9 (1,216)	9 (179)	100	100	100	100

* The number of employees who have taken the leave is counted in the period in which they started maternity/postpartum leave and childcare leave.
() denotes the total numbers of men and women respectively at the end of each period.
Retention rate is the percentage of employees who in this period are in their third year since returning to work.

Total annual working time per employee

Scheduled working hours	Early start and overtime hours	Holiday working hours	Paid annual leave days taken	Other paid leave days taken	Total annual working hours per person
1,818.6	85.7	3.8	14.5	3.5	1,765.3

* Data collected in FY 2022 (April 2021-March 2022)

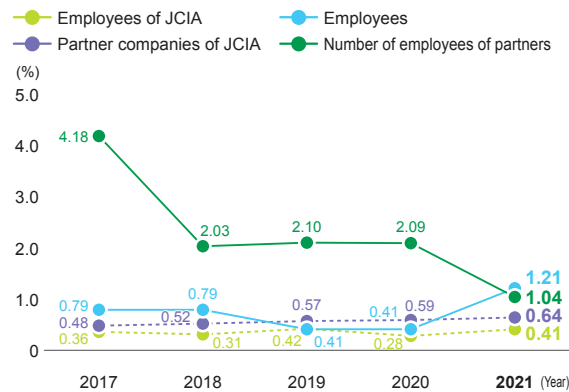
Number of labor union members

	Number of labor union members (Persons)	Average age (Years)	Average length of service (Years)	Percentage of members (%)
FY 2017	820	39.3	17.6	63.3
FY 2018	824	37.9	15.8	62.7
FY 2019	840	37.7	15.6	63.7
FY 2020	853	37.9	15.8	65.0
FY 2021	940	39.1	16.7	67.4
FY 2022	969	39.3	16.6	69.5

* Nippon Soda (non-consolidated)

ESG Data

Occupational accident frequency rates

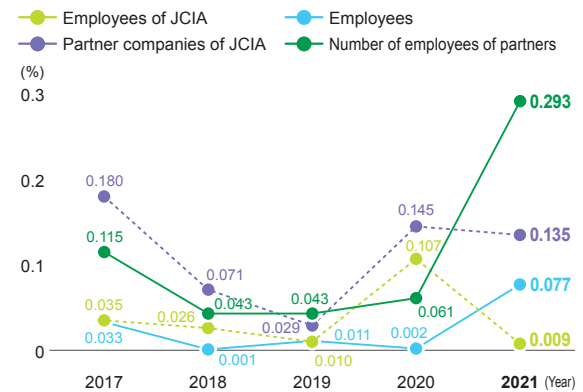


Note: JCIA stands for Japan Chemical Industry Association.

Occupational accident frequency rate: Casualties caused by occupational accidents ÷ Total actual working hours × 1,000,000
The data is for January 1 to December 31 of each year.

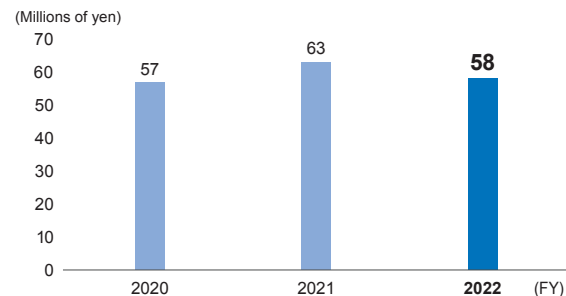
Number of occupational accidents within the above period that led to an employee's death (number of deceased): 0 (0)
Number of occupational accidents at partner companies within the above period that led to an employee's death (number of deceased): 0 (0)

Severity rate of occupational accidents



Severity rate of occupational accidents: Total working days lost ÷ Total actual working hours × 1,000
The data is for January 1 to December 31 of each year.

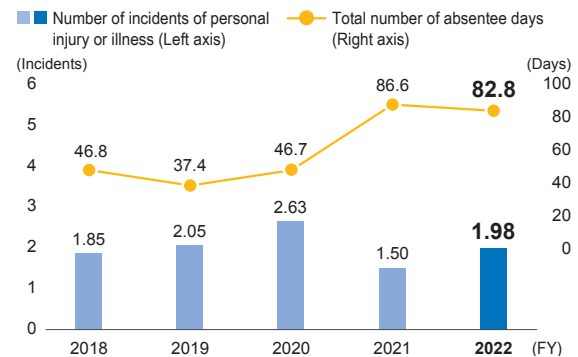
Expenditure on social contributions (donations)



Note 1: Includes fundraising activities for the National Land Afforestation Promotion Organization, which began at the same time as the creation of the Nippon Soda Group Forest, established to celebrate the company's 100th anniversary.

Note 2: Values under one million yen have been rounded off.

Number of incidents of personal injury or illness (per 100 persons) and total number of absentee days (per incident)



Number of incidents of personal injury or illness = (Incidents ÷ number of people) × 100
Total number of absentee days = Days ÷ Incidents
Data collected from April 1 to March 31 of each year.

Ratio of Nippon Soda Group manufacturing facilities with ISO certification*

	ISO 14001	ISO 45001	ISO 9001
Nippon Soda (non-consolidated)	100%	100%	100%
Nippon Soda Group (consolidated)	80.0%	26.7%	93.3%

* As of March 31, 2022. Percentage of Nippon Soda and Nippon Soda Group (Nippon Soda and its consolidated subsidiaries) whose manufacturing facilities have acquired ISO certification.

CSR Activities at Plants

Nihongi Plant

950 Fujisawa, Nakago-ku, Joetsu, Niigata 949-2392

TEL: +81-255-81-2300 FAX: +81-255-81-2341

Major products manufactured

Caustic potash, alcoholate, NISSO HPC, faropenem sodium, MOSPILAN, NISSORUN, NISSO HI-CHLON, HIDION, etc.

Number of employees

312 (As of the end of March 2022)

Partner companies

205 employees (As of the end of March 2022)

ISO 14001: Certified in March 2000

ISO 9001: Certified in August 1995

ISO 45001: Transitioned in September 2020 (Certified in April 2009 with OHSAS 18001)


Teruo Tachibana, Executive Officer, Nihongi Plant Manager

The Nihongi Plant is located at the foot of the nature-rich Mt. Myoko—one of the 100 Famous Japanese Mountains—and began operations in February 1920 as the very origins of the Nippon Soda Group, celebrating its 100th anniversary on February 1, 2020. We have continued our operations while giving full consideration to the natural environment and gained the understanding and support of local communities and stakeholders through various exchange programs.

We conduct CSR activities involving all employees, and contribute to realizing a vibrant society through business activities that consider not only process safety and disaster prevention, but also safety and health, environmental conservation, and quality assurance. Our efforts are also focused on being a plant that is trusted by local residents, as well as everyone working at the plant. In recent years, we have participated in a project to create a new type of community together with the Nakago-ku General Office, the community development association, elementary and junior high schools, and other local residents.

In August 2020, on the Nippon Soda website we announced our intention to implement fundamental structural reforms in our caustic potash and related businesses, and we suspended production of the relevant products in March 2022. In light of this announcement, our plant policy for 2022 is Reborn. To set out on a new path for the next 100 years, we will evolve our business structure from one centered on predominantly inorganic industrial chemicals to one driven by new products with high-added-value, such as agrochemicals, pharmaceuticals, pharmaceutical additives, and functional chemicals.

Environmental data for FY 2022

Unit: t/year (volume of wastewater: kt/year, CO₂: kt/year) Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Emissions into water areas			Emissions into the atmosphere				Final disposal of industrial waste at landfill
Volume of wastewater	BOD	COD	CO ₂	NO _x	SO _x	Soot and dust	
7,390 (+19)	11.2 (+1.2)	—	70 (+1)	19.6 (-2.6)	1.4 (0.0)	9.8 (0.0)	1.8 (+0.3)

FY 2022 amount of PRTR system substance emissions

Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Substance	Emission amount		Transported amount
	Air	Water	
Toluene	32.13 (+9.15)	0.00 (0.00)	0.00 (0.00)
Fluorine	0.00 (0.00)	0.00 (0.00)	1.94 (+0.44)
Chloroform	3.46 (+1.09)	0.00 (0.00)	0.00 (0.00)

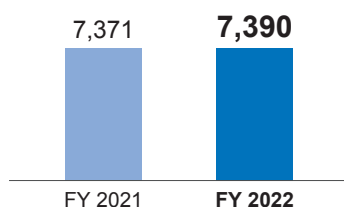
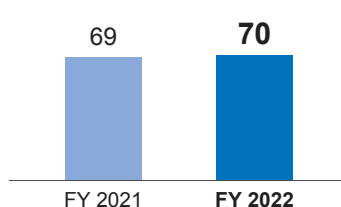
PRTR substances: 15 substances

Total emission amount: 37.64 t

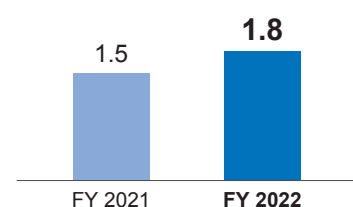
Total amount transported: 1.94 t

Emissions into water areas

Volume of wastewater (kt)


Emissions into the atmosphere
CO₂ (kt)
Final disposal of industrial waste at landfill

Volume (t)



CSR Activities at Plants

Takaoka Plant

300 Mukaino-honmachi, Takaoka, Toyama 933-8507
TEL: +81-766-26-0206 FAX: +81-766-26-0300

Major products manufactured

Caustic soda, hydrochloric acid, TODI, phosphorous chloride, organotitanium, secondary battery materials, TOPSIN-M, TRIFMINE, pesticide formulation products, etc.

Number of employees

349 (As of the end of March 2022)

Partner companies

146 employees (As of the end of March 2022)
ISO 14001: Certified in November 2000
ISO 9001: Certified in June 1995
ISO 45001: Transitioned in November 2020
(Certified in November 2005 with OHSAS 18001)



Kazunori Akatsuka, Executive Officer, Takaoka Plant Manager

Takaoka Plant started operation in 1934 by the Oyabe River in Takaoka City, Toyama Prefecture. The area sits amid the Tateyama mountain range, the Hida mountains and the Hakusan mountain range, which provide abundant water, and by Toyama Bay, which is rich in natural resources. Supported by abundant water and electricity, we manufacture basic chemical products through the electrolysis of sodium chloride (salt), which is the basis of the chemical industry. Using these chemical products as ingredients, we also manufacture functional chemicals and agrochemicals, essential items in modern society.

There are many issues associated with the process of manufacturing these products, including large amounts of electricity consumption and the generation of waste. Taking these issues seriously, we have been engaged in various efforts for conserving the environment, such as energy reduction and waste recycling. Since Takaoka Plant is a chemical plant, all employees working here handle hazardous substances professionally and safely. We also place strong emphasis on ensuring safety and disaster prevention so that even if an accident does occur we can minimize damage and prevent any impact on the environment or on residents in nearby communities.

We recognize that it is the responsibility of our plant and our company to ensure the safety and security of the environment of Toyama Bay, one of the most beautiful bays in the world, as well as the local communities.

Environmental data for FY 2022

Unit: t/year (volume of wastewater: kt/year, CO₂: kt/year) Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Emissions into water areas			Emissions into the atmosphere				Final disposal of industrial waste at landfill
Volume of wastewater	BOD	COD	CO ₂	NOx	SOx	Soot and dust	
9,249 (+215)	95.0 (+25.7)	—	94 (+2)	32.4 (+6.5)	91.8 (+6.9)	0.6 (-0.1)	37.8 (-18.6)

FY 2022 amount of PRTR system substance emissions

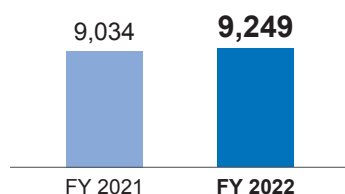
Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Substance	Emission amount		Transported amount
	Air	Water	
Toluene	0.67 (+0.23)	0.00 (0.00)	123.41 (+28.60)
Chlorobenzene	10.72 (+3.87)	1.37 (+0.45)	311.65 (+177.02)
Chloroform	0.15 (-0.04)	0.01 (0.00)	69.24 (-12.00)

PRTR substances: 21 substances Total emission amount: 14.62 t Total amount transported: 538.22 t

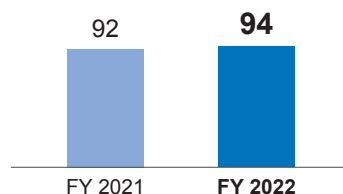
Emissions into water areas

Volume of wastewater (kt)



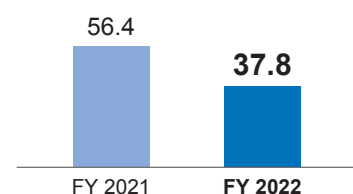
Emissions into the atmosphere

CO₂ (kt)



Final disposal of industrial waste at landfill

Volume (t)



CSR Activities at Plants

Mizushima Plant

2767-12 Kojima-shionasu, Kurashiki, Okayama 711-0934
TEL: +81-86-475-0036 FAX: +81-86-475-0039

Major products manufactured

Sodium cyanide, potassium cyanide, NISSO DAMN (diaminomaleonitrile)

Number of employees

55 (As of the end of March 2022)

Partner companies

24 employees (As of the end of March 2022)

ISO 14001: Certified in October 2001

ISO 9001: Certified in January 1999

ISO 45001: Transitioned in January 2021

(Certified in January 2009 with OHSAS 18001)



Hiroshi Sumiya, Mizushima Plant Manager

Mizushima Plant started operations in 1969 in the Mizushima Industrial Area, which extends from the mouth of the Takahashi River in Okayama Prefecture and has access to abundant supplies of industrial water, oil, and electricity, while being conveniently located for land and sea transportation. In its early days, the plant was supplied with raw materials from neighboring companies. Keenly aware of the highly toxic cyanide that the plant uses during production, all employees working at the plant, including those of partner companies, work with the necessary awareness and confidence required for the safe handling of hazardous materials. Further, we also engage in CSR activities in compliance with requirements, including handling ingredients and products, correctly wearing protective clothing, and working safely.

The key goal in our plant's policy is to achieve zero accidents and disasters. Continuous efforts have been made to achieve this goal, such as inspection patrols, emergency drills and other activities to ensure occupational safety and health. To further improve the plant's CSR activities, all plant personnel share information on the progress of CSR activities at the plant through the Mission Visualization (MV) project, based on which they make concerted efforts to achieve improvement.

Environmental data for FY 2022

Unit: t/year (volume of wastewater: kt/year, CO₂: kt/year) Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Emissions into water areas			Emissions into the atmosphere				Final disposal of industrial waste at landfill
Volume of wastewater	BOD	COD	CO ₂	NOx	SOx	Soot and dust	
530 (-2)	—	2.2 (-0.2)	9 (-2)	4.8 (-0.3)	0.0 (0.0)	0.0 (0.0)	6.2 (-1.9)

FY 2022 amount of PRTR system substance emissions

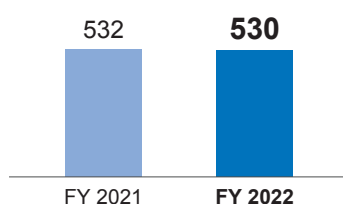
Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Substance	Emission amount		Transported amount
	Air	Water	
Inorganic cyanides	0.28 (+0.08)	0.003 (-0.001)	0.01 (0.00)
Acetonitrile	0.00 (0.00)	0.00 (0.00)	0.38 (+0.05)
Xylene	0.00 (0.00)	0.00 (0.00)	0.03 (0.00)

PRTR substances: 4 substances Total emission amount: 0.28 t Total amount transported: 0.42 t

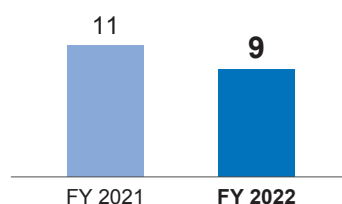
Emissions into water areas

Volume of wastewater (kt)



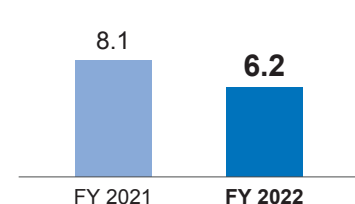
Emissions into the atmosphere

CO₂ (kt)



Final disposal of industrial waste at landfill

Volume (t)



CSR Activities at Plants

Chiba Plant

12-8 Goiminami-kaigan, Ichihara, Chiba 290-8530

TEL: +81-436-23-2007 FAX: +81-436-22-6588

Major products manufactured

NISSO-PB, VP-POLYMER, TITA BOND, D-90,
TAKE-ONE

Number of employees

150 (As of the end of March 2022)

Partner companies

66 employees (As of the end of March 2022)

ISO 14001: Certified in July 2000

ISO 9001: Certified in August 1997

ISO 45001: Transitioned in February 2021

(Certified in February 2008 with OHSAS 18001)



Yasuyuki Miyazawa, Executive Officer, Chiba Plant Manager

The plant started operations in 1969 as Nissou Kasei Co., Ltd., in a section of the Keiyo Industrial Zone, which faces the east side of Tokyo Bay. In 1999, it became the Nippon Soda Chiba Plant, which it has remained to the present. Rather than large-scale generic petrochemical products for general use, the Chiba Plant produces chemicals with a focus on specialty chemicals at mid-sized plants. Common applications for our products include liquid polybutadiene as a raw material in acrylic paints used in smartphones, and for printing plates, and color developer for thermal paper used for cash register receipts and tickets.

As a chemical plant located in the greater Tokyo region, a great deal is required of us. Our foremost priority is to ensure zero accidents and zero disasters, and with safety and reliability as our watchwords, all who work at the plant engage in activities for environmental protection, process safety and disaster prevention, and safety and health. By providing a stable supply of various products that support people's lives, our aim is to become a plant that is valued by all.

Environmental data for FY 2022

Unit: t/year (volume of wastewater: kt/year, CO₂: kt/year) Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Emissions into water areas			Emissions into the atmosphere				Final disposal of industrial waste at landfill
Volume of wastewater	BOD	COD	CO ₂	NOx	SOx	Soot and dust	
1,501 (-59)	—	10.9 (-0.4)	13 (0)	—	—	—	2.5 (-1.1)

FY 2022 amount of PRTR system substance emissions

Note: The figures in parentheses represent the difference from results in the previous fiscal year. "+" denotes an increase, while "-" denotes a decrease.

Substance	Emission amount		Transported amount
	Air	Water	
Toluene	4.58 (-1.14)	0.00 (0.00)	0.15 (0.00)
n-hexane	3.59 (+0.63)	0.00 (0.00)	0.00 (0.00)
1,3-butadiene	2.78 (+0.31)	0.00 (0.00)	0.00 (0.00)

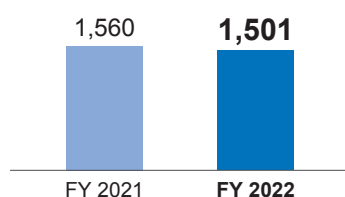
PRTR substances: 11 substances

Total emission amount: 11.07 t

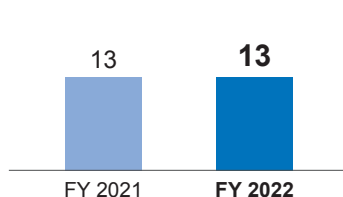
Total amount transported: 21.04 t

Emissions into water areas

Volume of wastewater (kt)

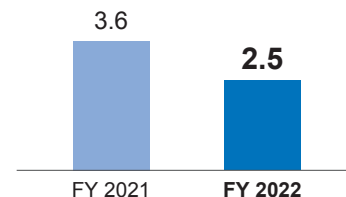


Emissions into the atmosphere

CO₂ (kt)


Final disposal of industrial waste at landfill

Volume (t)



Third-Party Evaluations: ESG Verification

Japan Chemical Industry Association Third-Party Verification of the Nippon Soda Group Integrated Report 2022 and ESG Data Book 2022



**Nippon Soda Group Integrated Report 2022
and ESG Data Book 2022
Third Party Verification Report**

To Eiji Aga
Representative Director and President
Nippon Soda Co., Ltd.

October 17, 2022

■ Objectives of Verification
This verification is performed by the Responsible Care Verification Center—who are experts in the chemical industry—for the purpose of expressing its opinions with respect to the following matters reported in the Nippon Soda Group Integrated Report 2022 and ESG Data Book 2022 (the "Reports"), which was prepared by Nippon Soda Co., Ltd.:

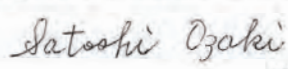
- 1) Reasonableness of the methods used to calculate and aggregate performance indicators (numerical values), and the accuracy of numerical values
- 2) Accuracy of reported information other than numerical values
- 3) Details of Responsible Care (hereinafter referred to as "RC") activities and CSR activities
- 4) Characteristics of the Reports

■ Verification Procedures

- At the Head Office, an assessment of the reasonableness of methods used to calculate numerical values reported by each site (business offices and plants), as well as the accuracy of information other than numerical values, was conducted. The assessment was performed by interviewing managers responsible for operations and those who were responsible for the preparation of the Reports, and by receiving presentations and explanations of materials from these managers.
- Verification at the Chiba Plant was carried out via an online conference between the Head Office and the Chiba Plant. The reasonableness of methods used to calculate numerical values reported to the Head Office and the accuracy of numerical values and the information described in the Reports were assessed. The assessment was performed by interviewing managers responsible for operations, and those who were responsible for the preparation of the Reports, and by receiving presentations and explanations of materials presented as evidence.
- Numerical values and information provided in the Data Book were verified by sampling.

■ Views and Comments

- 1) Reasonableness of methods used to calculate and aggregate performance indicators (numerical values), and accuracy of numerical values
 - We confirmed that the Head Office and the Chiba Plant applied rational methods to accurately calculate and aggregate performance values. Moving forward, we look forward to the Nippon Soda Group continuing efforts to accurately apply the relevant calculation methods and formulas, and making every effort to ensure the methods remain transparent.
- 2) Accuracy of reported information other than numerical values
 - We confirmed that the Information described in the Reports was accurate. At the draft stage, we pointed out some parts that needed to be improved in terms of the appropriateness of expressions and the comprehensibility of sentences. In these Reports, however, these points have been rectified, and there are no significant matters that should be revised.
- 3) Responsible Care (RC) activities and CSR activities
 - As part of its long-term vision—Brilliance through Chemistry 2030—the Group has identified materialities in the four fields of agriculture, healthcare, the environment, and ICT, as well as in next-generation initiatives. We highly commend its efforts to proactively promote sustainability management through a balance between CSR Activities to Improve Corporate Value, and CSR Activities to Protect Corporate Value based on Responsible Care activities. This year, the Group goes into more detail about the status of its progress for each materiality. We look forward to further enhancement of these CSR activities and the continued benefits they will bring.
 - We applaud the Group's efforts to create fulfilling workplaces that employees can be proud of, be it through level-based training programs for personnel development, employee questionnaires, self-reporting schemes, and supervisor interviews. The fact that employees can work within the context of their self-developed growth plans for five and ten years down the line has created a base for the Group to achieve its long-term vision in line with its management policy.
 - At the Chiba Plant, the Group is engaging in thorough efforts to visualize the 5Ss, which are fundamental to safety; identifying hazards and implementing and making improvements to risk assessments; thoroughly pointing out near misses; proposing ideas for improvement; and preventing human error by mapping the characteristics of employees' behavior. We highly commend these initiatives and their contribution to building an accident-free workplace.
- 4) Characteristics of the Reports
 - Since 2020, the Group's Integrated Report has contained a comprehensive explanation of its value creation story, while its ESG Data Book has provided detailed descriptions of its RC and CSR activities, as well as the relevant data. This year, these Reports have described the Group's activities in a more understandable manner, making them more reader-friendly than before.
 - Further, with the inclusion of negative information such as details on accidents and problems, as well as information on the necessary countermeasures, the Reports offer a high level of transparency on the Group's management and initiatives.


OZAKI Satoshi
 Chief Director, Responsible Care Verification Center
 Japan Chemical Industry Association

Third-Party Evaluations: CSR Verification

Sompo Risk Management Inc. Opinion on Disaster Prevention Assessment Survey

Although in FY 2022 we had planned disaster prevention capability diagnoses by Sompo Risk Management Inc., at our Nihongi Plant, Takaoka Plant, Chiba Plant, Odawara Research Center, Chiba Research Center (currently part of the Odawara Research Center), and two Group company plants, the diagnoses were cancelled to prevent the spread of COVID-19.



May 7, 2020

Akira Ishii

Representative Director and President
Nippon Soda Co., Ltd.

Written Opinion on Property Loss Control Survey

Dear Mr. Ishii,

■Survey objective

The objective of the property loss control survey is to confirm site conditions and provide recommendations for improvement that are aimed to enhance each facility's voluntary disaster prevention level. Main items confirmed on-site include fire risks, disaster prevention equipment and fire protection management.

■Survey flow

The surveys focused on the following aspects: "surrounding environment", "building", "fire risk", "disaster prevention equipment", "fire protection management" and "natural hazards".

Survey schedule and surveyed properties for FY 2019

Nippon Soda Co., Ltd., Nihongi Plant	HFC Group, Utility Group	2019/11/21-22
Nippon Soda Co., Ltd., Takaoka Plant	Industrial Chemicals Group	2019/9/26-27
Nippon Soda Co., Ltd. Chiba Plant	Eco Care Group of Manufacturing 2nd Section	2019/6/7
Nippon Soda Co., Ltd. Mizushima Plant	Plant No.1, Plant No.2	2019/9/12-13
Nisso Metallochemical Co., Ltd. Aizu Plant	1st Environment Group, 2nd Environment Group	2019/5/30-31
Nisso Fine Co., Ltd., Isohara Plant	Isohara Plant No.1, Isohara Plant No.2	2019/6/20-21

■Survey observation and opinion

[Overall]

We recognize that Nippon Soda Group has implemented action guidelines for prompt and appropriate communication, response, and commanding in the event of a disaster and/or accident, and that the guidelines are regularly reviewed, revised, and evaluated for its efficacy by drill.

Good practices and improvement recommendations for each facility are as follows:

- 【Nippon Soda, Nihongi Plant】 High fire risk areas at the Extension Building is protected by dry chemical fire extinguishing systems. The discharge nozzles are installed above each tank. Electrostatic discharge can occur due to the resultant potential difference when the ground wire installed at the pipe flange becomes loose or breaks. Thus it is important to inspect the ground wire and ensure proper bonding connection.
- 【Nippon Soda, Takaoka Plant】 Projected beam type smoke detectors are installed on the walls of the Electrolysis Plant as a fire protection measure for the electrolysis equipment. When the fire hydrant pump is interlocked to the manual fire alarm push button located several meter away from the hydrant, it is recommended to clearly post the location of the manual fire alarm push button and its function to avoid confusion and delayed response during a fire.
- 【Nippon Soda, Chiba Plant】 Dust collectors are installed at various locations inside the workplace to reduce its exposure to dust fire and explosion. Gap between plug and outlet should be eliminated to avoid fire risk from electrical tracking, which can occur when a gap exist between the plug and outlet.
- 【Nippon Soda, Mizushima Plant】 Risk of fire from electrostatic discharge is reduced by installation of earth reel to all containers carrying hazardous materials. A warning on the use of carbon dioxide extinguishers in small confined spaces should be posted due to the adverse health effects such as dizziness and nausea when oxygen is displaced.
- 【Nisso Metallochemical, Aizu Plant】 Sprinkler system is installed to the new pretreatment pit to enhance its fire protection capability. Surveillance cameras that face away from high fire risk facilities should be re-adjusted to enable monitoring of these facilities, which will help avoid delayed fire response and reduce risk of fire spread.
- 【Nisso Fine, Isohara Plant】 Relative humidity inside the Plant is maintained by regularly sprinkling the floor with water and monitoring with a hydrometer. This significantly reduces the risk of fire from electrostatic discharge. Combustibles stored near the forklift charging area will allow fire spread in the event that hydrogen gas generated during charging is ignited. To avoid this, it is recommended to maintain a minimum clearance of 1.5m between combustibles and the charging station.

Sincerely,

President and Chief Executive Officer
Sompo Risk Management Inc.

Third-Party Evaluations: CSR Verification

Sompo Risk Management Inc. Opinion on the Occupational Health and Safety Survey



October 07, 2022

Eiji Aga

Representative Director and President
Nippon Soda Co., Ltd.**Written Opinion on Occupation Health and Safety Survey**

Dear Mr. Aga,

■ Survey Objective

This survey was carried out with the objective to reduce the risk of occupational accidents at Nippon Soda's Mizushima Plant Manufacturing Division Manufacturing Section. The survey included interviews with relevant personnel about health and safety management and an on-site survey to identify unsafe conditions and unsafe work practices, and provided suggestions for improvement.

■ Survey Flow

The survey, consisting of the following items, was carried out on December 15, 2021 and a summary of the findings was given on the same day.

Interview: Confirmation of "safety management system" and "relevant documents related to safety management" during pre-meeting.
On-site survey: Confirmation of "good practices", "unsafe conditions", and "unsafe work practices".

■ Safety Management System

As the Plant does handle cyanide compounds, a highly toxic substances, all employees, including the management, have demonstrated a strong commitment to workplace safety, especially in the following areas.

- The appropriate management of Safety Management System and Education/Training Program Implementation Framework was confirmed by reviewing documents such as "Application for Change of Equipment", "Standards Review Meetings", "Standard Operating Procedures", "Kiken Yochi (Hazard Identification) Training documents", and "Education and Training plans".
- Prior to irregular operations, hazard identification is carried out on-site by related workers in addition a to fulfilling off-site hazard identification before the beginning of the operation as one of measures to not only mitigate the risk of accidents but also to raise safety awareness of the staff.
- As the Plant does handle hydrogen cyanide, hands-on training on wearing air respirators is carried out once every two months to ensure that staff can respond calmly in the event of an emergency.

■ On-site survey findings

The following high-level good practice was observed on-site.

- Regarding handling of toxic substances, the Plant has established rules including items on cleaning of protective gear after use and management of protective gear.

The following are recommendations for further improvement of workplace safety.

- It is recommended that safety patrols be conducted by different members rather than by the same members every time in order to inspect the workplace from a fresh perspective.
- It is recommended to post specific instructions on how to use the eyewash at the eyewash station so that the staff are informed of the proper use of the eyewash. An example would be when chemical solution were to get into the eye, use fingers to hold the eyelids open while washing the eyes.
- It is recommended to apply measures to areas exposed to fall risk such as modifying the location of guard rails and workstations or install anti-slip strips, etc.

Sincerely,

President and Chief Executive Officer
Sompo Risk Management Inc.

Guidelines

Comparative Table with GRI Standards

This report is prepared with reference to the GRI Content Index and in accordance with the Core Option of the GRI Standards.

GENERAL DISCLOSURES		
GRI 102: GENERAL DISCLOSURES 2016		ESG Data Book or Integrated Report (IR) publication page / corresponding items
102-1	Name of the organization	Company Information (IR p.70)
102-2	Activities, brands, products, and services	The Nippon Soda Group's Businesses (IR p.26-27)
102-3	Location of headquarters	Company Information (IR p.70)
102-4	Location of operations	Overview of the Nippon Soda Group (p.4) Company Information (IR p.70) Company Information/Global Network Web
102-5	Ownership and legal form	Company Information (IR p.70)
102-6	Markets served	Stakeholders (p.3) History of Value Creation (IR p.4-5) The Nippon Soda Group's Businesses (IR p.26-32)
102-7	Scale of the organization	Overview of the Nippon Soda Group (p.4) The Nippon Soda Group's Businesses (IR p.26-27) 10-year Financial and Non-financial Highlights (IR p.58-59) Company Information (IR p.70)
102-8	Information on employees and other workers	Social Data of Nippon Soda (p.83-85) Company Information (IR p.70)
102-9	Supply chain	Together with Our Business Partners (Fair Operating Practices) (p.56-57)
102-10	Significant changes to the organization and its supply chain	—
102-11	Precautionary principle or approach	Value Creation of the Nippon Soda Group (p.5) Compliance (p.72-73) Risk Management (p.74-75) Message from the President (IR p.14-19) The Nippon Soda Group's Efforts to Reduce Its Environmental Impact (IR p.24-25) Our Approach to Sustainability-focused Management (IR p.34) Environmental Strategy (IR p.36-37) Process Safety and Disaster Prevention (IR p.43) Corporate Governance (IR p.47-51)
102-12	External initiatives	Together with Our Local Communities (Community Involvement/ Development and Social Dialogue) (p.64)
102-13	Membership of associations	Together with Our Local Communities (Community Involvement/ Development and Social Dialogue) (p.64)
102-14	Statement from senior decision-maker	To Our Stakeholders (IR p.2-3) Message from the President (IR p.14-19) Our Approach to Sustainability-focused Management (IR p.34)
102-15	Key impact, risks, and opportunities	Value Creation of the Nippon Soda Group (p.5-8) Medium-Term CSR Activity Targets (FY 2021–2023) (p.14) Value Creation Model (IR p.6-7) Message from the President (IR p.14-19) Our Approach to Sustainability-focused Management (IR p.34) Business and Other Risks (IR p.54)
102-16	Values, principles, standards, and norms of behavior	CSR Activities (p.9) Health Management Promotion Declaration (p.40) The Nippon Soda Group Code of Conduct (p.72) Source of Value Creation—DNA of Nippon Soda (IR p.10-11)
102-17	Mechanisms for advice and concerns about ethics	Human Rights Initiatives at Our Workplaces (p.53) Compliance (p.72-73)
102-18	Governance structure	CSR Promotion System (p.10) Corporate Governance System (p.66)
102-19	Delegating authority	CSR Promotion System (p.10) Corporate Governance System (p.66)
102-20	Executive-level responsibility for economic, environmental, and social topics	CSR Promotion System (p.10) Corporate Governance System (p.66) Our Approach to Sustainability-focused Management (IR p.34)
102-21	Consulting stakeholders on economic, environmental, and social topics	CSR Promotion System (p.10) Corporate Governance System (p.66)
102-22	Composition of the highest governance body and its committees	Corporate Governance (p.65-71) Directors and Executive Officers (IR p.56-57)
102-23	Chair of the highest governance body	Corporate Governance System (p.66)
102-24	Nominating and selecting the highest governance body	Corporate Governance (p.66-71)
102-25	Conflicts of interest	Compliance (p.72-73) Risk Management (p.74-75) Corporate Governance Report (Japanese only)
102-26	Role of highest governance body in setting purpose, values, and strategy	Materiality Identification Process (p.5) CSR Promotion System (p.10)
102-27	Collective knowledge of highest governance body	CSR Promotion System (p.10)
102-28	Evaluating the highest governance body's performance	Corporate Governance (p.66-71)
102-29	Identifying and managing economic, environmental, and social impact	Value Creation of the Nippon Soda Group (p.5) CSR Promotion System (p.10)
102-30	Effectiveness of risk management processes	CSR Promotion System (p.10) Corporate Governance System (p.66-67) Risk Management (p.74-76)
102-31	Review of economic, environmental, and social topics	CSR Promotion System (p.10) Corporate Governance System (p.66-67)
102-32	Highest governance body's role in sustainability reporting	CSR Promotion System (p.10) Corporate Governance System (p.66-67)
102-33	Communicating critical concerns	CSR Promotion System (p.10) Corporate Governance System (p.66) Compliance (p.72) Risk Management (p.74-75)
102-34	Nature and total number of critical concerns	—
102-35	Remuneration policies	Executive Remuneration (p.69-70)

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102-36	Process for determining remuneration	Executive Remuneration (p.69-70)
102-37	Stakeholders' involvement in remuneration	—
102-38	Annual total compensation ratio	Executive Remuneration (p.69-70)
102-39	Percentage increase in annual total compensation ratio	—
102-40	List of stakeholder groups	Stakeholders (p.3)
102-41	Collective bargaining agreements	Together with Our Employees (Human Rights and Labor Practices) (p.55)
102-42	Identifying and selecting stakeholders	Stakeholders (p.3) CSR Activities (p.9)
102-43	Approach to stakeholder engagement	Third-Party Verification (p.1) Together with Our Local Communities (Community Involvement/ Development and Social Dialogue) (p.60-64)
102-44	Key topics and concerns raised	—
102-45	Entities included in the consolidated financial statements	Scope of the Report (p.1) Company Information (IR p.70)
102-46	Defining report content and topic boundaries	Scope of the Report (p.1) Editorial Policy (IR p.1) Company Information (IR p.70)
102-47	List of material topics	Value Creation of the Nippon Soda Group (p.5-8) Our Approach to Sustainability-focused Management (IR p.34)
102-48	Restatements of information	N/P
102-49	Changes in reporting	—
102-50	Reporting period	Scope of the Report (p.1)
102-51	Date of most recent report	—
102-52	Reporting cycle	—
102-53	Contact point for questions regarding the report	Web
102-54	Claims of reporting in accordance with the GRI Standards	—
102-55	GRI content index	Guidelines (p.93-96)
102-56	External assurance	Third-Party Verification (p.1) Third-Party Evaluations: ESG Verification (p.90)
MATERIAL TOPICS		
GRI 103: MANAGEMENT APPROACH 2016		
103-1	Explanation of the material topic and its boundary	Value Creation of the Nippon Soda Group (p.5-8) Value Creation Model (IR p.6-7) Materialities at the Nippon Soda Group (IR p.22-23) Materiality (IR p.35)
103-2	The management approach and its components	Value Creation of the Nippon Soda Group (p.5-8) CSR Management (p.9-15)
103-3	Evaluation of the management approach	CSR Management (p.9-15)
ECONOMIC		
GRI 201: ECONOMIC PERFORMANCE 2016		
201-1	Direct economic value generated and distributed	The Nippon Soda Group's Businesses (IR p.26-27) 10-year Financial and Non-financial Highlights (IR p.58-59)
201-2	Financial implications and other risks and opportunities due to climate change	—
201-3	Defined benefit plan obligations and other retirement plans	Retirement Benefits (Annual Securities Report p.81-82) (Japanese only)
201-4	Financial assistance received from government	—
MARKET PRESENCE		
GRI 202: MARKET PRESENCE 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Contribution to local employment (p.60)
202-2	Proportion of senior management hired from the local community	—
INDIRECT ECONOMIC IMPACT		
GRI 203: INDIRECT ECONOMIC IMPACT 2016		
203-1	Infrastructure investments and services supported	—
203-2	Significant indirect economic impact	—
PROCUREMENT PRACTICES		
GRI 204: PROCUREMENT PRACTICES 2016		
204-1	Proportion of spending on local suppliers	—
ANTI-CORRUPTION		
GRI 205: ANTI-CORRUPTION 2016		
205-1	Operations assessed for risks related to corruption	—
205-2	Communication and training about anti-corruption policies and procedures	—
205-3	Confirmed incidents of corruption and actions taken	—
ANTI-COMPETITIVE BEHAVIOR		
GRI 206: ANTI-COMPETITIVE BEHAVIOR 2016		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	—
TAX		
GRI 207: TAX 2019		
207-1	Approach to tax	—
207-2	Tax governance, management, and risk management	—
207-3	Engagement with stakeholders with regard to tax-related matters and addressing concerns	—
207-4	Reporting by country	—
MATERIALS		
GRI 301: MATERIALS 2016		
301-1	Materials used by weight or volume	—
301-2	Recycled input materials used	—
301-3	Reclaimed products and their packaging materials	—
ENERGY		
GRI 302: ENERGY 2016		
302-1	Energy consumption within the organization	ESG Data (p.77-85)
302-2	Energy consumption outside of the organization	—
302-3	Energy intensity	ESG Data (p.77-85)
302-4	Reduction of energy consumption	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15) Environmental Protection (p.28-31) ESG Data (p.77-85)

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302-5	Reductions in energy requirements of products and services	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15) Environmental Protection (p.28-31) ESG Data/Energy consumption and energy consumption rate related to transport (p.78)
WATER		
GRI 303: WATER and WASTEWATER 2018		
303-1	Reciprocal action with water as a shared resource	Atmosphere and Water Quality Conservation (p.30-31) ESG Data (p.77-85)
303-2	Management of impact related to drainage	Atmosphere and Water Quality Conservation (p.30-31) ESG Data (p.77-85)
303-3	Water intake	—
303-4	Discharged water	—
303-5	Water consumption	—
BIODIVERSITY		
GRI 304: BIODIVERSITY 2016		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	—
304-2	Significant impact of activities, products, and services on biodiversity	Chemical and Product Safety (p.45-47) Agro Products (IR p.30-31)
304-3	Habitats protected or restored	Environmental Protection (p.30-31) Chemical and Product Safety (p.45-47)
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—
EMISSIONS		
GRI 305: EMISSIONS 2016		
305-1	Direct (Scope 1) GHG emissions	Environmental Protection (p.28) ESG Data (p.77-82)
305-2	Energy indirect (Scope 2) GHG emissions	Environmental Protection (p.28) ESG Data (p.77, 80)
305-3	Other indirect (Scope 3) GHG emissions	Environmental Protection (p.28)
305-4	GHG emissions intensity	—
305-5	Reduction of GHG emissions	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15) ESG Data (p.77)
305-6	Emissions of ozone-depleting substances (ODS)	ESG Data (p.78-79)
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	ESG Data (p.78-79)
WASTE		
GRI 306: WASTE 2020		
306-1	Significant impact of waste generation and waste-related matters	Environmental Protection (p.29)
306-2	Management of significant impact of waste-related matters	Environmental Protection (p.29)
306-3	Generated waste	Environmental Protection (p.29) ESG Data (p.78, 80, 82)
306-4	Waste that was not disposed of	—
306-5	Waste that was disposed of	—
ENVIRONMENTAL COMPLIANCE		
GRI 307: ENVIRONMENTAL COMPLIANCE 2016		
307-1	Non-compliance with environmental laws and regulations	Compliance (p.73), ESG Data (p.80)
SUPPLIER ENVIRONMENTAL ASSESSMENT		
GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016		
308-1	New suppliers that were screened using environmental criteria	—
308-2	Negative environmental impact in the supply chain and actions taken	—
EMPLOYMENT		
GRI 401: EMPLOYMENT 2016		
401-1	New employee hires and employee turnover	Together with Our Employees (Human Rights and Labor Practices) (p.51-53)
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—
401-3	Parental leave	Together with Our Employees (Human Rights and Labor Practices) (p.55)
LABOR/MANAGEMENT RELATIONS		
GRI 402: LABOR/MANAGEMENT RELATIONS 2016		
402-1	Minimum notice periods regarding operational changes	—
OCCUPATIONAL HEALTH AND SAFETY		
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018		
403-1	Occupational health and safety management system	CSR Promotion System (p.10) Occupational Safety and Health (p.38-39)
403-2	Hazard identification, risk assessment, and incident investigation	CSR Management (p.10-12) Process Safety and Disaster Prevention/BCP (p.32-37) Occupational Safety and Health (p.38-42)
403-3	Occupational health services	CSR Management (p.10-12) Process Safety and Disaster Prevention/BCP (p.32-37) Occupational Safety and Health (p.38-42)
403-4	Worker participation, consultation, and communication on occupational health and safety	CSR Management (p.10-12) Process Safety and Disaster Prevention/BCP (p.32-37) Occupational Safety and Health (p.38-42)
403-5	Worker training on occupational health and safety	CSR Management System (p.11) Initiatives for the Next Generation (p.23-27) Process Safety and Disaster Prevention/BCP (p.32-37) Occupational Safety and Health (p.38-42)
403-6	Promotion of improved worker health	Occupational Safety and Health (p.38-42)
403-7	Prevention and mitigation of business relationships having a direct influence on occupational health and safety	Logistics Safety and Quality Assurance (p.43) Chemical and Product Safety (p.45-46) Together with Our Business Partners (Fair Operating Practices) (p.57)
403-8	Workers to whom the occupational health and safety management system applies	CSR Management (p.10-12) Process Safety and Disaster Prevention/BCP (p.32-37) Occupational Safety and Health (p.38-42)

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403-9	Work-related injuries	Occupational Safety and Health (p.38-42) Together with Our Employees (Human Rights and Labor Practices) (p.54)
403-10	Work-related illness or poor health	Occupational Safety and Health (p.38-42)
TRAINING AND EDUCATION		
GRI 404: TRAINING AND EDUCATION 2016		
404-1	Average hours of training per year per employee	—
404-2	Programs for upgrading employee skills and transition assistance programs	Initiatives for the Next Generation (p.23-27) CSR Activities to Protect Corporate Value (p.32-46) Together with Our Employees (Human Rights and Labor Practices) (p.54) Compliance (p.72-73)
404-3	Percentage of employees receiving regular performance and career development reviews	—
DIVERSITY AND EQUAL OPPORTUNITY		
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016		
405-1	Diversity of governance bodies and employees	Together with Our Employees (Human Rights and Labor Practices) (p.51-55) Corporate Governance Highlights (p.65) ESG Data (p.83-84) Value Creation Model (IR p.7)
405-2	Ratio of basic salary and remuneration of women to men	—
NON-DISCRIMINATION		
GRI 406: NON-DISCRIMINATION 2016		
406-1	Incidents of discrimination and corrective actions taken	—
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING		
GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING 2016		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—
CHILD LABOR		
GRI 408: CHILD LABOR 2016		
408-1	Operations and suppliers at significant risk for incidents of child labor	—
FORCED OR COMPULSORY LABOR		
GRI 409: FORCED OR COMPULSORY LABOR 2016		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—
SECURITY PRACTICES		
GRI 410: SECURITY PRACTICES 2016		
410-1	Security personnel trained in human rights policies or procedures	—
RIGHTS OF INDIGENOUS PEOPLES		
GRI 411: RIGHTS OF INDIGENOUS PEOPLES 2016		
411-1	Incidents of violations involving rights of indigenous peoples	—
HUMAN RIGHTS ASSESSMENT		
GRI 412: HUMAN RIGHTS ASSESSMENT 2016		
412-1	Operations that have been subject to human rights reviews or impact assessments	—
412-2	Employee training on human rights policies or procedures	Together with Our Employees (Human Rights and Labor Practices) (p.53)
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—
LOCAL COMMUNITIES		
GRI 413: LOCAL COMMUNITIES 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	Together with Our Local Communities (Community Involvement/ Development and Social Dialogue) (p.60-64)
413-2	Operations with significant actual and potential negative impact on local communities	—
SUPPLIER SOCIAL ASSESSMENT		
GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016		
414-1	New suppliers that were screened using social criteria	—
414-2	Negative social impact in the supply chain and actions taken	—
PUBLIC POLICY		
GRI 415: PUBLIC POLICY 2016		
415-1	Political contributions	Compliance (p.73)
CUSTOMER HEALTH AND SAFETY		
GRI 416: CUSTOMER HEALTH AND SAFETY 2016		
416-1	Assessment of the health and safety impact of product and service categories	—
416-2	Incidents of non-compliance concerning the health and safety impact of products and services	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15) Compliance (p.73)
MARKETING AND LABELING		
GRI 417: MARKETING AND LABELING 2016		
417-1	Requirements for product and service information and labeling	Chemical and Product Safety (p.45-46)
417-2	Incidents of non-compliance concerning product and service information and labeling	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15)
417-3	Incidents of non-compliance concerning marketing communications	Evaluation Results for FY 2022 and CSR Activity Policies for FY 2023 (p.15)
CUSTOMER PRIVACY		
GRI 418: CUSTOMER PRIVACY 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	N/P
SOCIOECONOMIC COMPLIANCE		
GRI 419: SOCIOECONOMIC COMPLIANCE 2016		
419-1	Non-compliance with laws and regulations in the social and economic area	N/P

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Comparative Table with ISO 26000

Core subjects	Issues	Activities
Organizational Governance	Organizational Governance	Value Creation of the Nippon Soda Group
		CSR Management
		Governance/ Compliance/ Risk Management
Human Rights	Due Diligence	—
	Human Rights Risk Situations	Respect for Human Rights
	Avoidance of Complicity	Respect for Human Rights
		Strengthening Relationships with Our Business Partners (Efforts in Procurement)
		Code of Conduct
	Resolving Grievances	Risk Management
		External Communication
	Discrimination and Vulnerable Groups	Respect for Human Rights
	Civil and Political Rights	Promotion of Diversity
	Economic, Social and Cultural Rights	Code of Conduct
Labor Practices	Employment and Employment Relationship	Respect for Human Rights
		Code of Conduct
		Human Resources Development
	Conditions of Work and Social Protection	Promotion of Diversity
		Promotion of Diversity
		Improving Employee Satisfaction
	Social Dialogue	Labor-Management Relations and Improvement of Working Conditions
		Employee Satisfaction Survey
	Health and Safety at Work	Occupational Safety and Health
		Process Safety and Disaster Prevention/BCP
Environment	Prevention of Pollution	Logistics Safety
		Special Feature: Initiatives for the Next Generation
	Sustainable Resource Use	Nippon Soda Group's Human Resources Development
		Environmental Protection: Atmosphere and Water Area Protection
	Climate Change Mitigation and Adaptation	ESG Data (Environment)
		Environmental Protection: Effective Use of Resources and Reduction of Waste
Fair Operating Practices	Protection of the Environment, Biodiversity and Restoration of Natural Habitats	ESG Data (Environment)
		Environmental Protection: Responses to Climate Change Issues
	Anti-Corruption	ESG Data (Environment)
		Preservation of Biodiversity
	Responsible Political Involvement	Compliance
		Code of Conduct
	Fair Competition	Code of Conduct
		Efforts in Procurement
	Promoting Social Responsibility in the Value Chain	Code of Conduct
		Occupational Safety and Health
Consumer Issues	Respect for Property Rights	Process Safety and Disaster Prevention/BCP
		Efforts in Procurement
	Fair Marketing, Factual and Unbiased Information and Fair Contractual Practices	Chemical and Product Safety
		Dialogue with Business Partners
	Protecting Consumers' Health and Safety	Dialogue with Investors, Analysts and Shareholders
		Code of Conduct
	Sustainable Consumption	Communication with Customers
		Logistics Safety and Quality Assurance
	Consumer Service, Support, and Complaint and Dispute Resolution	Chemical and Product Safety
		Special Feature: Healthcare
Community Involvement and Development	Consumer Data Protection and Privacy	Special Feature: Agriculture
		Special Feature: Environment
	Access to Essential Services	Consideration in Animal Experiments
		Quality Assurance
	Education and Awareness	Chemical and Product Safety
		Improve Customer Satisfaction
	Community Involvement	Proper Management of Personal Information
		Improve Customer Satisfaction
Community Involvement and Development	Employment Creation and Skills Development	Special Feature: Agriculture
		Improve Customer Satisfaction, Communication with Customers
	Technology Development and Access	Harmonious Relationship with Local Communities
		Dialogue with Local Communities
	Wealth and Income Creation	CSR Activities
		—
Community Involvement and Development	Health	Development of Products Useful to Society
		Contribution to Local Employment
	Social Investment	CSR Activities
		CSR Activities